

# 2011 Forsyth County Community Health Assessment Report



**Forsyth County Department of Public Health**  
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## Preface

This report describes the participants, process, and outcomes of the 2011 Forsyth County Community Health Assessment (CHA). Although this process takes place every four years, the fundamental findings are based on population-based measures and they often change little in such a relatively short period. Some of the critical findings of this process that remain important are:

- (a) Forsyth County residents experience a high level of preventable disease and death from tobacco use, unhealthy dietary habits, and inadequate physical exercise;
- (b) Forsyth County residents experience a disproportionately high rate of pregnancy loss and infant death; and
- (c) Health disparities are even greater in Forsyth County than in the State.

These findings were confirmed in the recent Forsyth County Health Rankings Report which indicated that the strongest predictors of better or poorer health status are better or poorer socioeconomic conditions respectively. The racial differences in socioeconomic status, neighborhood residential conditions, and access to medical care are important contributors to health disparities.

The priority health problems identified four years ago are still central issues. They are: Health Promotion (poor dietary practices, inadequate physical activity, and tobacco use); Infant Mortality (preventing repeat premature births.); Environmental Health (illegal dumping); Community Health ( economic justice); Injury (domestic violence); and Mental Health (homelessness & access to care). These priority focus areas have been somewhat reformulated as the result of the current process into the following list of new priority focus areas:

- Physical Activity and Nutrition with emphasis on Healthy Families
- Physical Activity and Nutrition with emphasis on Tobacco Prevention & Cessation
- Physical Activity and Nutrition with emphasis on Nutrition
- Physical Activity and Nutrition with emphasis on Physical Activity
- Chronic Disease with emphasis on Chronic Disease Management
- Maternal and Infant Health with emphasis on Breastfeeding Initiative
- Social Determinants of Health with emphasis on Translating Social Determinants Messages for Lay Audiences

These priority concerns, and the bases for their identification, are discussed at length in the body of this document. The Forsyth County Healthy Community Coalition, which led the process of the CHA along with the Department of Public Health, will continue its efforts to improve the health of our community – through better collaboration with both hospitals, community partners, policymakers and other leaders in our community. The strategies are outlined in the Community Health Action Plans.

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# Executive Summary

## Introduction

Every four years, Forsyth County Healthy Community Coalition, Forsyth County Department of Public Health and community partners conduct a comprehensive community wide assessment to identify priority health issues and plan interventions to improve the health of the community. It is required for local Health Department accreditation through the NC Health Department Accreditation Board. During this cycle, we have collaborated with both hospitals: Forsyth Medical Center and Wake Forest Baptist Health to meet the Affordable Care Act/IRS 990 Schedule H Requirements for Not for Profit Hospitals. This document will serve as the basis for prioritizing the community's health needs, and culminate in planning to meet those needs.

## Forsyth County Highlights from the Community Data Overview

- Cancer, heart disease, chronic lower respiratory diseases and stroke are the leading causes of death.
- African Americans continue to experience higher death rates for Diabetes, Heart disease, Stroke and Kidney Disease compared to Whites
- Whites experience higher death rates for Chronic Lower Respiratory Disease and Suicide compared to African Americans.
- Homicide deaths are 3.1 times higher among African Americans than Whites and 5.0 times higher among males compared to females and the leading cause of death among Hispanics.
- Prostate cancer deaths among African Americans are 2.3 times that of white men.
- Since 2005 to 2009, the non-Hispanic black babies die a rate of almost three times that of white babies
- In 2010, one in every five babies was born to a Hispanic mother and 10.6% were born to teen mothers
- 45,010 Forsyth County residents are uninsured
- In FY 2010, over 50% of Emergency department visits ( both hospitals) were by uninsured persons
- There are five(5) dentists per 10, 000 residents
- In FY 2010, more than 1,175 emergency department visits were due to dental care
- 11,000 Adults and 4,200 children were served at Center Point for mental health, developmental disabilities, and/or substance abuse, in FY 2011
- 27% of Forsyth County residents reported that they had one or more poor mental health days in the past 30 days, according to the 2009 Behavioral Risk Factor Surveillance System
- "Outpatient mental health services are needed for adolescents. Alternatives are needed to prisons or institutions" 2011 Stakeholders Interview Report
- In 2011, 21% of middle school students surveyed reported feeling sad or hopeless almost every day for two weeks or more in a row to the extent they stopped doing some usual activities; 13% reported having made a suicide plan and 19% had seriously considered attempting suicide.
- In 2011, 26% of high school students surveyed reported feeling sad or hopeless almost every day for two weeks or more in a row to the extent they stopped doing some usual activities; 12% reported having made a suicide plan and 14% had seriously considered attempting suicide in the past year.
- In 2011, 264 WFUBMC emergency department visits were due to attempted suicide.
- In 2011, 26% of middle school students and 27%of high school students surveyed reported that they were slightly or very overweight.

## Ranking Priority Focus Areas

On March 26, 2012, forty-five (45) individuals representing health care, mental health, public health, community members/leaders, education and faith community leader attended the CHA Priority Setting meeting. They were randomly assigned into eight (8) groups to prioritize the seven (7) focus areas. Random assignments allowed members to share their diverse knowledge, experience and challenges in addressing each priority area. They were presented with data specific to each priority area; and copies of the 2010 State of the County Health Report as well as other pertinent data materials for each priority area to facilitate group discussion. They were asked to review and rank each priority area based on the following five criteria:

- *Magnitude*: Proportion of the population affected or vulnerable.
- *Severity*: Impact on mortality, morbidity, disability and quality of life
- *Intervention Effectiveness*: Proven interventions exist that are feasible from a practical, economic and political viewpoint
- *Public Concern*: Degree of public concern and/or awareness
- *Urgency*: Need for action based on degree and rate of growth (decline); Potential for affecting and amplifying other health or socioeconomic issues; Timing for public awareness, collaboration, and funding is present.

The rankings were as follows:

1. Physical Activity & Nutrition
2. Chronic Disease Prevention
3. Maternal & Infant Health
4. Social Determinants of Health
5. Access to Care
6. Mental Health
7. Substance Abuse Prevention

## Recommendations

Four (4) action planning teams were formed based on the top four health issues, Physical Activity & Nutrition, Chronic Disease Prevention, Maternal & Infant Health and Social Determinants of Health. Examples of recommended actions are listed below:

### *Physical Activity & Nutrition*

- Focus on chronic disease prevention by targeting children/healthy families and efforts to reduce hospital readmissions and tailor intervention to seniors
- Create and encourage partnership among community agencies/organizations to strengthen their commitment and initiatives related to nutrition and physical activity.
- Mobilize and support specific partners such as YMCA and include Transformation Nation; FC Department of Public Health with Step up Forsyth

### *Chronic Disease Prevention*

- Review evidence-based intervention such as the Pregnancy care model for Chronic disease management
- Focus intervention with high mental health conditions or complications with those with chronic disease management complications

### *Maternal & Infant Health*

- Promote a breast feeding policy through media campaign and presentation to businesses, hospital clinicians, and private practice physicians. According to emerging research, breastfeeding reduces infant mortality by 29%. Breastfeeding needs to be promoted as the norm for infant feeding in Forsyth County.

### *Social Determinants of Health*

- Convene different community and business leaders to increase awareness of this issue
- Mobilize and support specific partners such as businesses, Forsyth Future, CHANGE

## **2011 Forsyth County Community Health Action Plans**

The action planning working groups developed seven (7) community action plans and strategies to address our top priority issues/concerns:

- Physical Activity and Nutrition with emphasis on Healthy Families
- Physical Activity and Nutrition with emphasis on Tobacco Prevention & Cessation
- Physical Activity and Nutrition with emphasis on Nutrition
- Physical Activity and Nutrition with emphasis on Physical Activity
- Chronic Disease with emphasis on Chronic Disease Management
- Maternal and Infant Health with emphasis on Breastfeeding Initiative
- Social Determinants of Health with emphasis on Translating Social Determinants Messages for Lay Audiences

## **2011 Forsyth County Community Health Report**

The full report can be accessed online at <http://www.forsyth.cc/PublicHealth/publications.aspx>; <http://forsythfutures.org/> and <http://www.healthycommunity.ws/>. This report serves as a reference for many agencies and organizations developing grant proposals and programming. A brochure summarizing findings and recommendations will be developed and mailed to community funders, elected officials; and will be easy to download and print at the websites listed above.

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o NC Youth Behavioral Risk Survey High School Questionnaire	

## Overview

### What is the Community Health Assessment?

Community assessment is the foundation for improving and promoting the health of community members. The role of the community assessment is to identify factors that affect the health of a population and determine the availability of resources within the community to adequately address these factors. Through collaborative efforts forged among community leaders, public health agencies, businesses, schools, recreation centers, and hospitals, the community can begin to answer key questions such as: “What are the strengths in our community?”, “What health concerns do community members have?”, and “What resources are available and what do we need in the community to address these concerns?”.

Healthy Carolinians is “a network of public-private partnerships across North Carolina that shares the common goal of helping all North Carolinians to be healthy.” In communities where there is an active Healthy Carolinians partnership, the coalition of partners with support from the local health department take the lead role in forming partnership, gathering health related data, determining priority health issues, identifying resources, and planning community health programs. The assessment process starts with the people who live in the community and gives the community primary responsibility for determining the focus of assessment activities at every level, including collection and interpretation of data, evaluation of health resources, identification of health problems, and development of strategies for addressing these problems. This way, community assessment is done by the community rather than for the community.

Local health departments in North Carolina are required to conduct a comprehensive Community Health Assessment once every four years for local health department accreditation through the NC Local Health Department Accreditation Board. During this cycle, we have collaborated with both hospitals: Forsyth Medical Center and Wake Forest Baptist Health to meet the Affordable Care Act/IRS 990 Schedule H Requirements for Not for Profit Hospitals.

This community health assessment is intended to study the current health status of the community, what has changed since the past assessment, and what still needs to change to improve the health of the community. The process involves the collection and analysis of a large range of data, including demographic, socioeconomic and health statistics, environmental data, and public and professional opinion. The document is a summary of all the available evidence, and serves as a resource until the next assessment.

Forsyth County Department of Public Health (FCDPH) along with community partners conducted a comprehensive community- wide assessment between November 2010 and May 2012. In November 2010, a team of FCDPH staff was assembled to develop and lead the community assessment process. In addition, the Forsyth County Healthy Community Coalition ( an Healthy Carolinians partnership), helped guide and respond to the work of the Community Assessment Team. *Forsyth County Healthy Community Coalition is a community coalition whose mission is to create, build, and sustain efforts that improve the quality of life of the residents of Forsyth County.*

The Community Health Assessment team was made up of community residents and representatives from several organizations which reflect all facets of the community. The various teams and working groups met frequently to review the various primary and secondary data already collected and collated. The findings from the 2011 Forsyth County Community Health Assessment (CHA) were used to develop seven (7) community action plans addressing the identified priority issues. This document is a summary of all the available evidence and serves as a resource until the next assessment.

## Changes in Health Status Since CHA 2007

The Community Health Assessment (CHA) is completed every four years. Community health data is analyzed to identify community health changes and establish priority issues. Since 2007 CHA, some areas have shown improvement, some worsened and some have remained the same.

CHA Comparison Legend	Symbol	Meaning
	←	Worsening
	↔	Similar
	→	Improvement

	Selected Health Indicators	Forsyth County Community Health Assessment Year			National Healthy People 2020 Benchmark
		2005	2009	CHA Comparison	Benchmark
<b>Maternal and Child Health</b>	<i>Selected Health Indicators</i>	<i>2005</i>	<i>2009</i>	<i>CHA Comparison</i>	<i>Benchmark</i>
	Infant Mortality (Rate per 1,000 Live Births)	8.9	9.9	←	6
	Teen Pregnancy (Rate per 1,000 Females ages 15-17)	38.1	38.6	↔	36.2
<b>Leading Causes of Death</b> (Age-Adjusted Rate per 100,000 Population)	<i>Selected Health Indicators</i>	<i>2001-5</i>	<i>2005-9</i>	<i>CHA Comparison</i>	<i>Benchmark</i>
	All Cancers	199.3	183.5	↔	160.6
	Heart Disease	193.0	150.5	→	100.8
	Chronic Lower Respiratory Disease	65.0	49.6	→	98.5
	Stroke	47.3	49.5	↔	33.8
	Alzheimer's	36.7	27.9	→	**
<b>Injury</b> (Age-Adjusted Rate per 100,000 Population)	<i>Selected Health Indicators</i>	<i>2001-5</i>	<i>2005-9</i>	<i>CHA Comparison</i>	<i>Benchmark</i>
	Unintentional	23.3	25.6	↔	36
	Motor Vehicle	12.4	12.0	↔	12.4
	Suicide	10.4	10.8	↔	10.2
	Homicide	7.1	6.6	↔	5.5
<b>Communicable Disease</b> (Rate per 100,000 Population)	<i>Selected Health Indicators</i>	<i>2001-5</i>	<i>2005-9</i>	<i>CHA Comparison</i>	<i>Benchmark</i>
	Primary/Secondary Syphilis	1.8	10.5	←	Females-1.4; Males-6.8
	Gonorrhea	237.7	230.4	↔	Females-257; Males-198
	Tuberculosis	4.0	2.3	→	1.0
<b>Behavioral/ Environmental Health Risks</b> (% of Adults Over 18 Years of Age)	<i>Selected Health Indicators</i>	<i>2005</i>	<i>2009</i>	<i>CHA Comparison</i>	<i>Benchmark</i>
	Smoking	18.5	21.2	↔	12
	Obesity	21.5	27.6	←	30.6
	No Physical Activity	17.3	12.8	→	32.6

## **Priority Setting Exercise**



**List of Attendees**  
**Priority Ranking Results**  
**Recommendations**



## Overview

The Priority Setting exercise took place on March 26, 2012 in the Chapter Hall, Conference Room at Forsyth Medical Center. Invitations went out to different sectors within Forsyth County: business, education, faith, community agencies, health care, human service agencies and coalitions. A total of 45 people participated in the exercise, they are listed below.

The process started with a brief presentation of the seven (7) health focus areas selected by the CHA working group, followed by table discussion and finally each individual scored the topic based on various criteria. This process was repeated for each of the seven health topics. Scoring sheets were collected throughout the exercise and scores were entered into an Excel database. At the end of the exercise participants were presented with the prioritized list of the seven (7) health topics based on their combined scores.

Four action planning teams were formed based on the top four health issues: Physical Activity & Nutrition, Chronic Disease Prevention, Maternal & Infant Health and Social Determinants of Health. Each team generated a list of recommended actions which are to be used in the action planning process. Each participant filled out a demographic form and evaluation form.

### List of Attendees

Name	Agency
Andrea McDonald	Forsyth Medical Center
Ann Potter	UNC School of the Arts
April Broadway	Smart Start
Ashley Thomas	Forsyth County Department of Public Health Intern
Ayo Ademoyero	Forsyth County Department of Public Health
Brad Daniel	Nouvista Health Strategy
Carolyn Marcus	Community
Carrie Worsley	Forsyth County Department of Public Health
Catherine Sanguenza	TSI
Cynthia W. Jeffries	Forsyth County Department of Public Health
Curt Hazelbaker	YMCA
Dan Kornelis	Forsyth County Housing
Debbie Mason	Forsyth County Department of Public Health
Deborah Dickerson	Community
Dewanna Hamlin	Family Services
Donna Joyner	WFUBMC/ Safe Kids
Doris Paez	Forsyth Futures
Glenda Dancy	Forsyth County Department of Public Health
Jane Mosko	Member, Board of Health
Jeffery Eads	Center Point Human Services

**List of Attendees, cont.**

Name	Agency
Jennie Anthony	YMCA
Jennifer Houlihan	WFUBMC
Jeremy Moseley	WFUBMC
Jerri McLemore	WFUBMC
Kathy Lowe	WFUBMC
Katisha Blackwell	My Aunt's House
Kismet Loftin-Bell	The Shalom Project
Linda Darden	Hospice & Palliative Care
Linda Petrou	Wake Forest University
Lynne Mitchell	Forsyth County Department of Public Health
Marlon Hunter	Forsyth County Department of Public Health
Mary Ann Squire	Healthcare Access
Mary Lynn Wigodsky	Change/ TSI
Mayte Grundseth	Forsyth County Department of Public Health-WIC
Melissa Smith	Senior Services
Nancy Sutton	WSFC Schools
Peggy Carter	Forsyth Medical Center Foundation
Quintana Stewart	Forsyth County Department of Public Health
Rachel Bates	Forsyth County Housing
Rebecca Thompson	Forsyth County Department of Public Health
Robert Jones	Downtown Health Plaza
Rolanda Coleman	Forsyth County Department of Public Health
Sandra Clodfelter	Forsyth County Department of Public Health
Sheila Bogan	Forsyth County Department of Public Health
Suzana McCalley	The Shalom Project
Tamara Smith	Forsyth Medical Center
Willard Bass	Faith Community Leader

## Priority Ranking Results

### Demographic Profile of Attendees

A total of 45 residents attended the March 26 Priority Setting Exercise. Of those attendees, 23 completed the demographic and evaluation forms. The following data describes the demographic profile of the participants:

- The majority of the participants were female (92%)
- 36% were between the ages of 25-44years; 52% were 45-64 years. Those less than 24 years and older than 65 years accounted for 12% of the participants.
- 52% were White, 44% were Black and 4% were Other.
- The majority of the participants reported living in Forsyth County for more than 10 years (68%); while 8% reported living in the county less than 2 years.
- Participants were from various backgrounds, including health care, mental health, public health, community members/leaders, education and faith community leader.

### Priority Ranking Process

Participants of the March 26th Priority Setting meeting were randomly assigned into 8 groups to prioritize the seven (7) focus areas. Random assignments allowed members to share their diverse knowledge, experience and challenges in addressing each priority area. Prior to the start of the ranking process, the Epidemiology Division Director provided a PowerPoint presentation to briefly summarize data from each focus area. Participants were also provided with copies of the 2010 State of the County Health Report as well as other pertinent data materials for each priority area to facilitate group discussion. After discussion, each group member ranked priority areas with a score of one to ten for the following five criteria:

1. **Magnitude:** Proportion of the population affected or vulnerable.
2. **Severity:** Impact on mortality, morbidity, disability and quality of life
3. **Intervention Effectiveness:** Proven interventions exist that are feasible from a practical, economic and political viewpoint
4. **Public Concern:** Degree of public concern and/or awareness
5. **Urgency:** Need for action based on degree and rate of growth (decline); Potential for affecting and amplifying other health or socioeconomic issues; Timing for public awareness, collaboration, and funding is present.

# SAMPLE SCORING SHEET

## Topic Area 7: Substance Abuse

Please rank the above health topic by scoring the following criteria from 1 to 10

**CRITERIA FOR RANKING**

**SCORE**

**Magnitude:** Proportion of the population affected or vulnerable?

*1=Affects very few, 10 Affects very many*

---

**Severity:** Impact on mortality, morbidity, disability, and quality of life?

*1=Not very severe, 10=Extremely severe*

---

**Public concern:** Degree of public concern and awareness?

*1=Public is not concerned/aware; 10=Public is very concerned/aware*

---

**Intervention Effectiveness:** Proven interventions exist that are feasible from a practical, economic, and political viewpoint?

*1=No effective intervention; 10=Several effective interventions*

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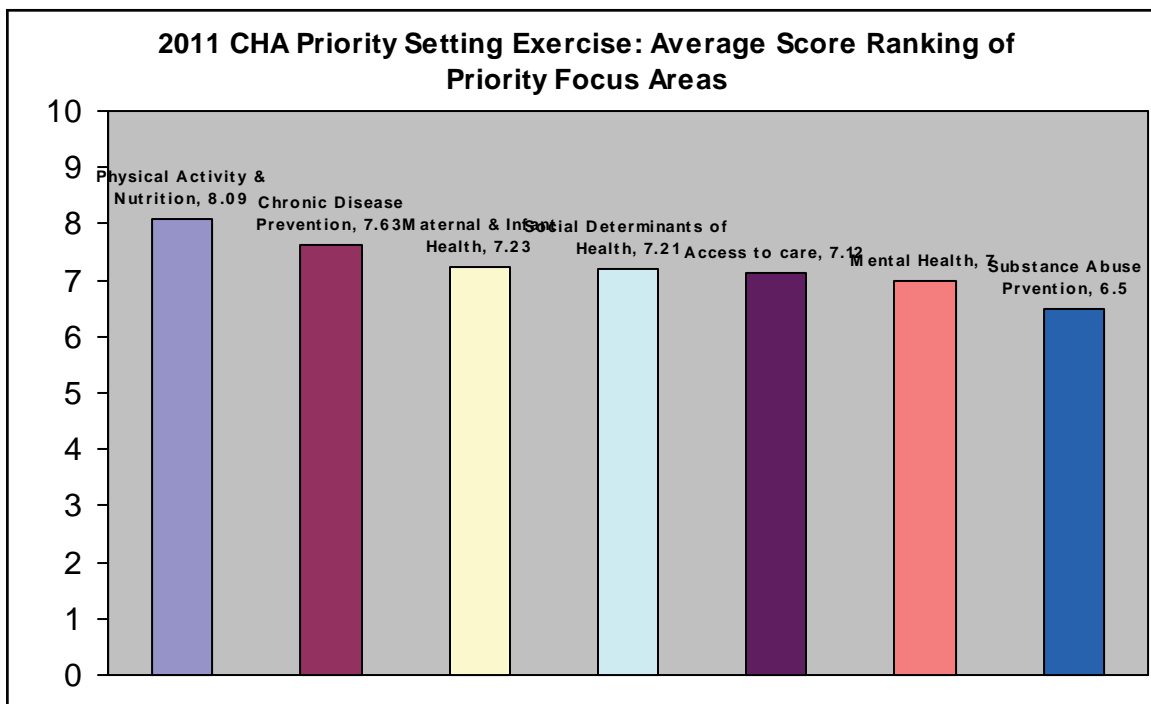
**Urgency:** Need for action based on degree and rate of growth ( or decline), potential for affecting and amplifying other health Or socioeconomic issues, or timing for public awareness, collaboration, And funding is present?

*1=While issue is important there is no need to address it immediately, 10=Issue requires immediate attention*

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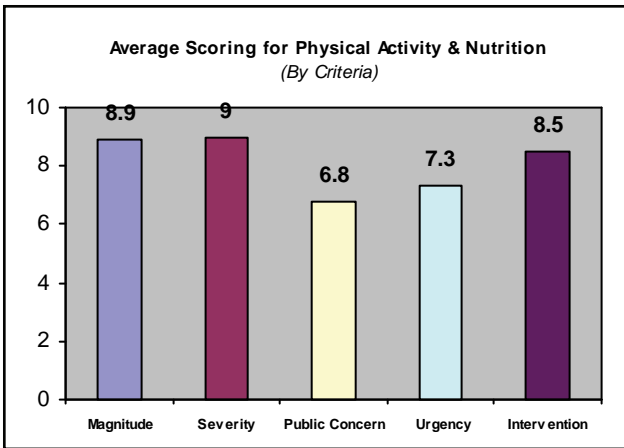
Ranking results from participants were entered into an Excel database by Forsyth County Department of Public Health staff during the priority setting exercise and final scorings were presented to attendees at the close of the prioritization exercise. The rankings for the seven (7) focus areas, based upon the priority setting exercise were:

1. Access to Care
2. Chronic Disease Prevention
3. Maternal & Infant Health
4. Mental Health
5. Physical Activity & Nutrition
6. Social Determinants of Health
7. Substance Abuse Prevention



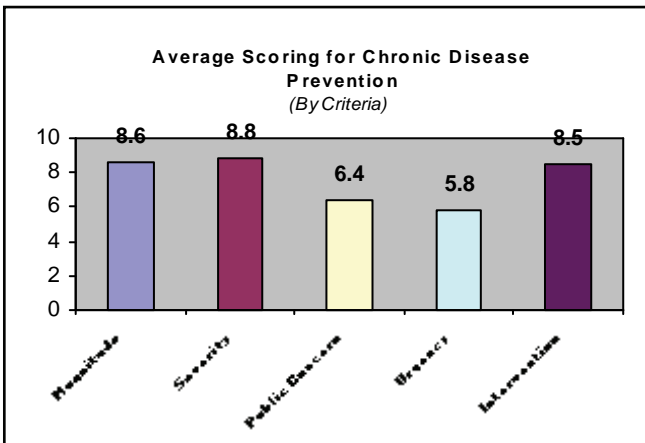
# RECOMMENDATIONS

## 1. PHYSICAL ACTIVITY & NUTRITION



- Focus on chronic disease prevention by targeting children/healthy families and efforts to reduce hospital readmissions and tailor intervention to seniors
- Research evidence-based interventions such as healthy family model
- Create and encourage partnership among community agencies/organizations to strengthen their commitment and initiatives related to nutrition and physical activity.
- Mobilize and support specific partners such as YMCA and include Transformation Nation; FC Health Department with Step up Forsyth
- Expand resources, financial support and promoting efforts.

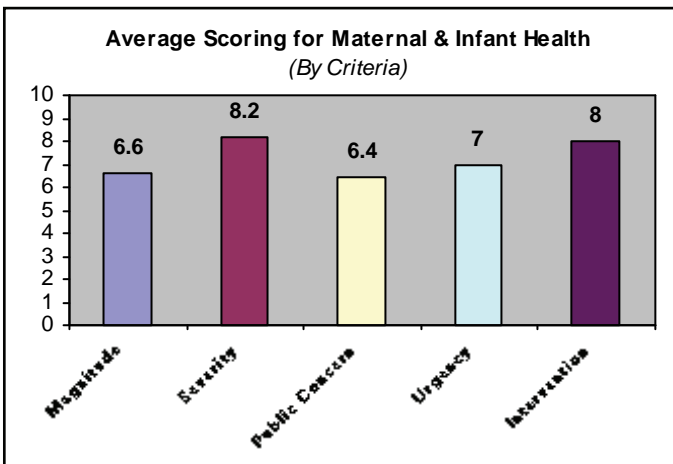
## 2. CHRONIC DISEASE PREVENTION



- Review evidence-based intervention such as the Pregnancy Care Model for Chronic disease management
- Identify which chronic disease to address: diabetes, asthma, cardiovascular, substance abuse or mental health
- Review claims data and research best practices for intervention
- Mobilize and support different partners
- Expand resources
- Focus intervention with high mental health conditions or complications with those with chronic

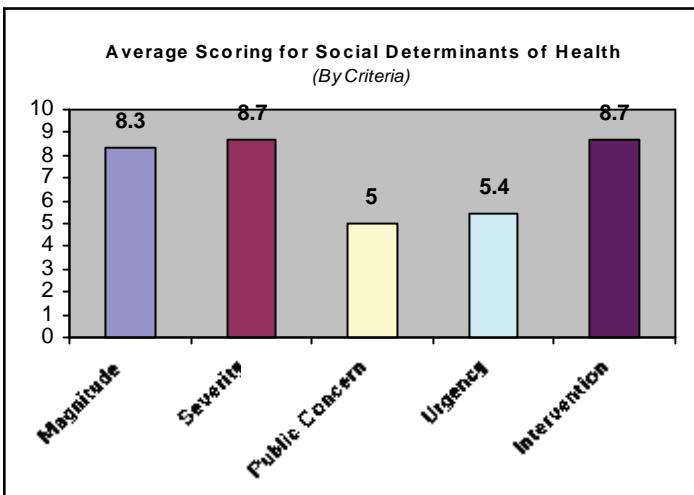
disease management complications

### 3. MATERNAL & INFANT HEALTH



- Promote a breast feeding policy through media campaign and presentation to businesses, hospital clinicians, and private practice physicians. According to emerging research, breastfeeding reduces infant mortality by 29%. Breastfeeding needs to be promoted as the norm for infant feeding in Forsyth County.
- Focus on pre-conception health for women of child bearing age through FC Infant Mortality Reduction Coalition (FCIMRC ) an interconception project to improve the quality of preconception counseling provided at the postpartum visit.

### 4. SOCIAL DETERMINANTS OF HEALTH



- Convene different community and business leaders to increase awareness of this issue
- Mobilize and support specific partners such as businesses, Forsyth Future, CHANGE
- Research evidence-based interventions and models
- Strengthen the social structure in the community, social isolation was identified as a barrier
- Due to lack of access to resources, assure resources are equitable; advocate for discussion around limited resources
- Review Purpose Built Community in Guilford County for ideas
- Support the Public Health leadership during this process

# Community Profile

## Winston-Salem, Forsyth County





## Forsyth County History

Forsyth County was initially a Moravian settlement begun by Bishop August Gottlieb Spangenberg, a noted German theologian and minister who organized many international missions for the Moravian church. In 1753 Bishop Spangenberg acquired one hundred thousand acres of land from Lord Granville, a lord proprietor of North Carolina. After the two settlements of Bethabara and Bethania were established, the town of Salem was founded in 1766 as the central town of Wachovia. Salem grew rapidly both as a religious center and as a center for crafts and trades.



In 1849, The North Carolina legislature formed Forsyth County from portions of Stokes County. The county was named for Colonel Benjamin Forsyth, a respected landowner from Stokes County, who was killed in the War of 1812. Salem’s town hall served as the courthouse until 1851 when justices passed an act naming Winston as the county seat. Winston and Salem were authorized by the legislature to be combined, but it was not until 1913 that they became one town and Winston-Salem officially became the county seat.

Forsyth County has progressed from its rustic past to a modern community, although its past remains memorialized in historic preservation areas in the county, including Old Salem.

## County Overview

Forsyth County consists of 15 townships, within which are 8 primary towns and cities. Winston-Salem, the county seat, is the largest city in the county.

### Cities, Towns, & Villages

- Bethania
- Clemmons
- Kernersville
- Lewisville
- Rural Hall
- Tobaccoville
- Walkertown
- Winston-Salem

### Townships

- Abbotts Creek
- Belews Creek
- Bethania
- Broadbay
- Clemmonsville
- Kernersville
- Lewisville
- Middle Fork I
- Middle Fork II
- Old Richmond
- Old Town
- Salem Chapel
- South Fork
- Vienna
- Winston

As of 2010, the county had 351,798 residents, ranging from a population of 149 residents in the Old Town township to 229,617 in the Winston township. Forsyth County’s population grew 14.6% since the 2000 US Census when there were 306,067 county residents. By 2010 US Census estimates, Forsyth County is the fourth most populous county in North Carolina after Mecklenburg (923,944 residents), Wake (907,314 residents), and Guilford (490,371 residents) counties.

## Geography and Climate

Forsyth County is approximately 408 square miles in size. It is located in central North Carolina, also known as the Piedmont Region, approximately 30 miles west of Greensboro, NC, 80 miles north of Charlotte, NC, and 107 miles northwest of Raleigh, NC. Surrounding Forsyth are Stokes, Guilford, Davidson, Davie, and Yadkin counties. A small portion of Surry County borders the northwest corner of Forsyth County.

Climate in Forsyth County is relatively mild. In January, typically the coldest month, the average high is 51 degrees Fahrenheit and the average low is 28 degrees Fahrenheit. In July, typically the hottest month in Forsyth County, the average high of 89 degrees Fahrenheit and the average low is 67 degrees Fahrenheit. Precipitation averages 3-4 inches per month. June is usually the wettest month with 4.14 inches of precipitation.

## Transportation and Commuting

### Highways

Almost 100% of county residents live within 10 miles of a four-lane roadway. Primary roadways passing through and around the Forsyth County include Interstate 40, Highway 311, Highway 8, Highway 66, and Highway 421.

The North Carolina Department of Transportation (NCDOT) has two projects currently under way in Forsyth County. The first project will replace the north and south bridges of US 52 that pass over Liberty Street and the Norfolk Southern Railroad Switching Yard in Winston-Salem. This project will also widen Liberty Street, improve the ramps at the US 52 interchanges with 25<sup>th</sup> Street and 28<sup>th</sup> Street. The second project also affects travel in US 52 with plans to streamline and repave the roadway from US 421/Business 40 to Akron Drive and improve a portion of Martin Luther King, Jr. Drive in Winston-Salem.

In 2014, NCDOT will begin construction of the Winston-Salem Northern Beltway to alleviate congestion along US 52 and Business 40, two heavily traveled roadways.

### Airports

Greensboro's Piedmont Triad International Airport (PTI) is located 20 miles east of Winston-Salem, NC and is the nearest airport offering commercial passenger service. Other airports open for commercial passenger service are Raleigh-Durham International Airport, located approximately 90 miles east in Morrisville, NC and Charlotte-Douglas International Airport, located approximately 85 miles southwest in Charlotte, NC. Although located in Forsyth County, Smith-Reynolds Airport is primarily used for general aviation and flight training.

### Public Transportation

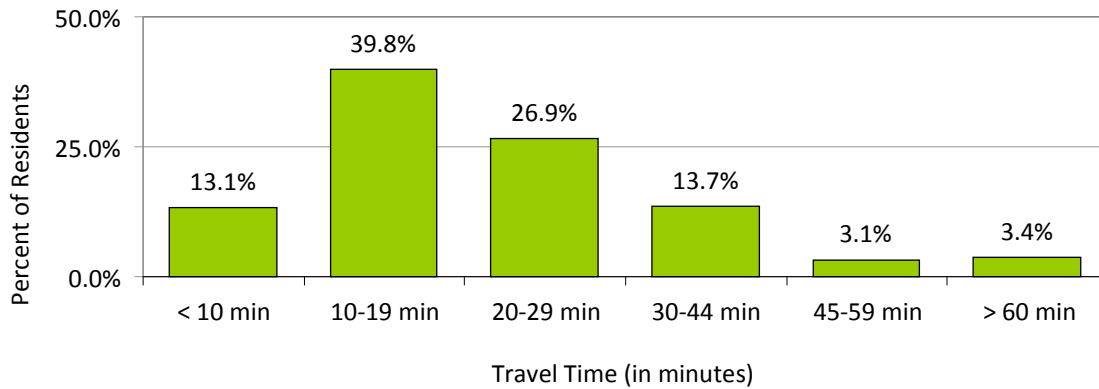
The Winston-Salem Transit Authority (WSTA) offers bus service in and around the Winston-Salem area. Rates are \$1.00 per ride and \$0.50 per ride for disabled and elderly persons. WSTA offers transportation for elderly and disabled persons who are unable to ride fixed route buses.

The Piedmont Authority for Regional Transportation (PART) offers bus service in Forsyth County and nine other member counties: Alamance, Davidson, Davie, Guilford, Randolph, Rockingham, Stokes, Surry, and Yadkin. PART has 14 express routes and multiple shuttle routes for travel in the region. Cost varies by route and discounts are offered to elderly, disabled, and student riders.

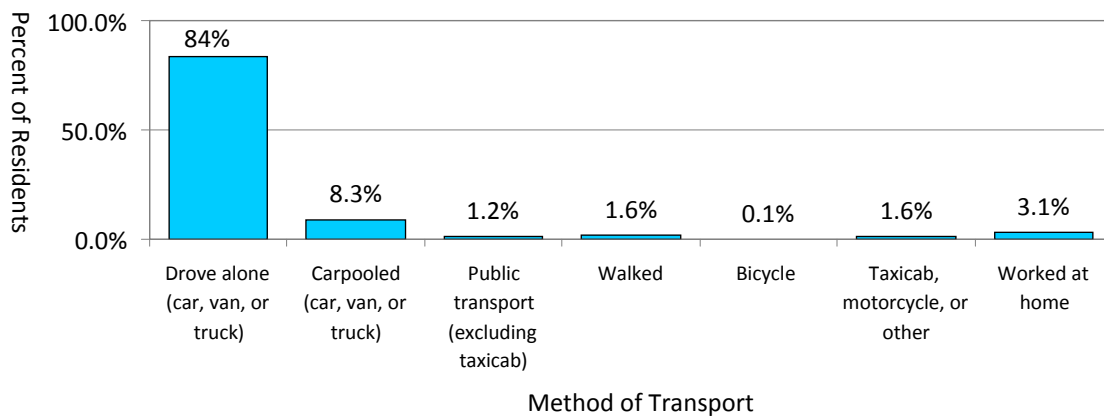
## Commuting

The majority of county residents (79.3%) work within Forsyth County. Residents travel an average of 20.3 minutes to work and typically drive alone to work. About 84% of county residents drive alone to work.

**2006-2010 Forsyth County Commuting Time to Work**



**2006-2010 Methods of Transportation to Work**



Data sources: 2010 American Community Survey 5-Year Estimates for Forsyth County from US Census Bureau.

## Community Profiles

The following section describes selected demographics of Forsyth County. This section examines the county first by cities, towns, and villages and then by townships as indicated by the 2010 US Census.

### **Village**

A type of incorporated place in 20 states and American Samoa. The Census Bureau treats all villages in New Jersey, South Dakota, and Wisconsin and some villages in Ohio as county subdivisions

### **Town**

A type of minor civil division in the New England states, New York, and Wisconsin and a type of incorporated place in 30 states and the Virgin Islands of the United States

### **City**

A type of incorporated place in 49 states and the District of Columbia. In 23 states and the District of Columbia, some or all cities are not part of any Minor Civil Division (MCD), and the Census Bureau also treats these as county subdivisions, statistically equivalent to MCDs

### **Minor civil division (MCD)**

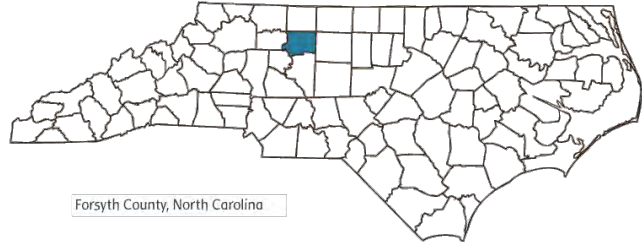
A primary governmental and/or administrative subdivision of a county, such as a township, precinct, or magisterial district. MCDs exist in 28 states and the District of Columbia

The 2010 US Census and the 2005-2009 American Community Survey five-year estimates served as data sources. Percentages reflect the proportion out of the total population for the specified locale.

Except for Hispanic category, data reflects single race, non-Hispanic ethnicity. Hispanic category reflects persons who selected Hispanic ethnicity regardless of their race selections. Multiracial reflects persons who selected more than one race category. Other reflects persons who selected a race/ethnicity other than those listed.

For income, family household is defined as a householder and one or more other people related to the householder by birth, marriage, or adoption living together in the same household. Non-family household is defined as a householder living alone or with non-relatives only.

# About Forsyth County



### Population and Geography†

2010 Total population	350,670
Population change since 2000	+ 12.7%
Land area	408.1 square miles
Population density	859.5 persons per square mile

### 2010 Population by Race/Ethnicity†

White	58.7%
Black/African-American	25.5%
Hispanic	11.9%
Asian	1.8%
American Indian/ Alaska Native	0.3%
Native Hawaiian/ Pacific Islander	0.04%
Multiracial	1.5%
Other	0.2%

### Population by Age Distribution†

Under 5 years old	6.8%
Under 18 years old	24.4%
≥ 65 years old	13.0%
Median age	37.5 years

### Population by Sex†

Male	47.5%
Female	52.5%

### Population by Educational Attainment\*

*Percent of persons ≥ 25 years old who have:*

< High school diploma or GED	13.8%
A high school diploma or GED	28.2%
A bachelor's degree	20.7%
≥ Graduate degree	10.0%

### Percentage of Families Living Below Poverty Level\*

All Families	11.0%
--------------	-------

#### *Families with a householder who is:*

White	4.6%
Black/African American	21.6%
Hispanic	31.4%
Asian	6.6%
American Indian/ Alaska Native	17.2%
Other Race	34.7%

### Percentage of Population Living Below Poverty Level\*

Children (0-17yr old)	22.8%
Adults (18-64yr old)	12.9%
Seniors (≥ 65yr old)	7.1%

### County Schools

K-12 Enrollment	53,627
Graduation Rate	72.7%

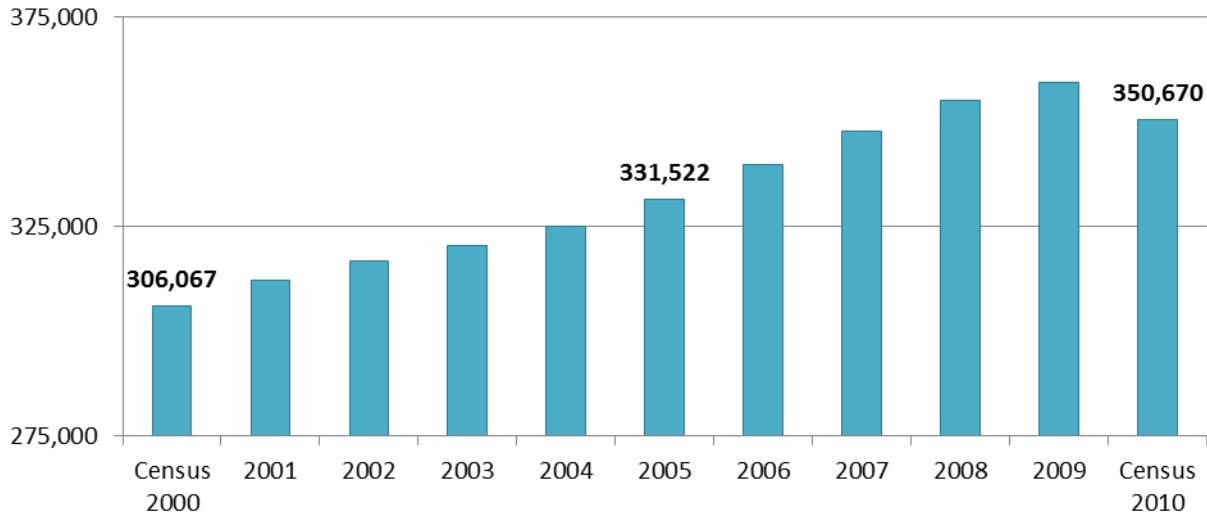
### Unemployment

Unemployment rate	9.9%
Lost jobs & layoffs	1,900

### Income\*

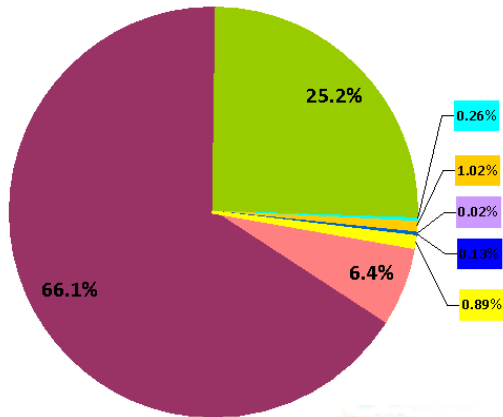
Median family household	\$55,075
Median non-family household	\$28,023

### Forsyth County Population, 2000 - 2010

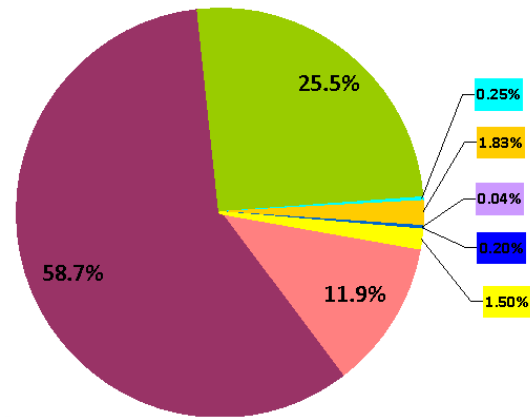


Data sources: 2010 US Census data, 2000 US Census data, and 2009 Population Estimates for Forsyth County from US Census

2000 Forsyth County Population by Race/Ethnicity



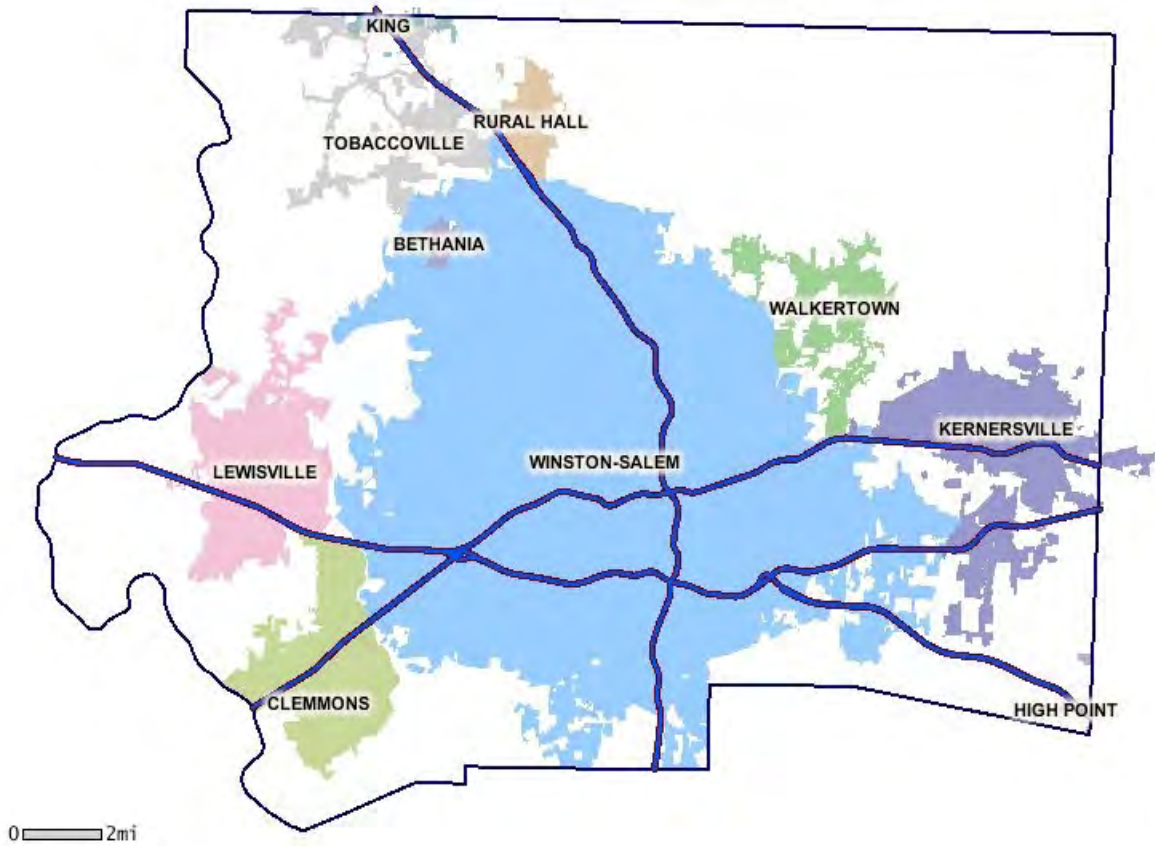
2010 Forsyth County Population by Race/Ethnicity



- Hispanic
- Non-Hispanic White
- Non-Hispanic Black
- Non-Hispanic American Indian/Alaska Native
- Non-Hispanic Asian
- Non-Hispanic Native Hawaiian/Pacific Islander
- Non-Hispanic Other
- Non-Hispanic Multiracial

Data sources: 2010 US Census data and 2000 US Census data for Forsyth County from US Census Bureau.

# Forsyth County's Primary Villages, Towns, and Cities



# About the Town of Bethania

## Population and Geography†

Total population	328
Population change since 2000	- 7.9%
Land area	0.7 square miles
Population density	468.6 persons per square mile

## Population by Race/Ethnicity†

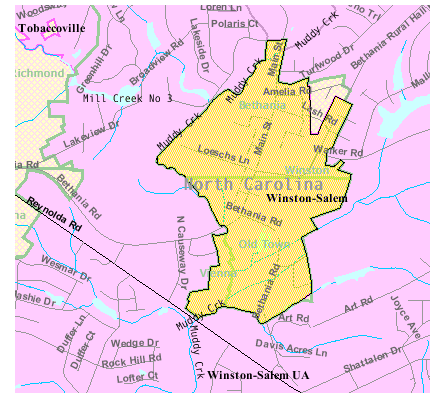
White	86.0%
Black/African-American	8.2%
Hispanic	3.4%
Asian	0.0%
American Indian/Alaska Native	0.0%
Native Hawaiian/Pacific Islander	0.0%
Multiracial	2.4%
Other	0.0%

## Population by Age Distribution†

Under 5 years old	3.0%
Under 18 years old	12.2%
≥ 65 years old	21.0%
Median age	51.3 years

## Population by Sex†

Male	48.5%
Female	51.5%



## Population by Educational Attainment\*

Percent of persons ≥ 25 years old who have:

< High school diploma or GED	7.9%
High school diploma or GED	28.2%
Bachelor's degree	13.9%
≥ Graduate degree	3.9%

## Percentage of Population Living Below Poverty Level\*

Children (0-17yr old)	32.8%
Adults (18-64yr old)	4.2%
Seniors (≥ 65yr old)	2.9%

## Income\*

Median family household	\$84,583
Median non-family household	\$30,833

**Bethania** is the oldest municipality in [Forsyth County, North Carolina, United States](#), and was most recently incorporated in 1995, upon the reactivation of the original 1838/1839 town charter. In 2009, Bethania celebrated the 250th anniversary of its establishment in 1759 as a self-sufficient farming community which allowed both Moravian and non-



[www.townofbethania.org](http://www.townofbethania.org)



# About the Village of Clemmons

## Population and Geography†

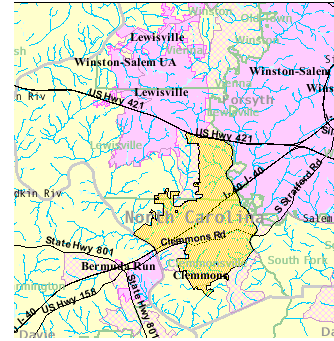
Total population	18,627
Population change since 2000	+ 25.8%
Land area	10.7 square miles
Population density	1,740.8 persons per square mile

## Population by Race/Ethnicity†

White	79.8%
Black/African-American	6.6%
Hispanic	8.4%
Asian	3.7%
American Indian/ Alaska Native	0.1%
Native Hawaiian/ Pacific Islander	0.0%
Multiracial	1.2%
Other	0.2%

## Population by Age Distribution†

Under 5 years old	6.5%
Under 18 years old	26.5%
≥ 65 years old	14.6%
Median age	40.6 years



## Population by Sex†

Male	47.7%
Female	52.3%

## Population by Educational Attainment\*

*Percent of persons ≥ 25 years old who have:*

< High school diploma or GED	7.1%
High school diploma or GED	20.9%
Bachelor's degree	29.9%
≥ Graduate degree	16.0%

## Percentage of Population Living Below Poverty Level\*

Children (0-17yr old)	6.9%
Adults (18-64yr old)	4.0%
Seniors (≥ 65yr old)	3.1%

## Income\*

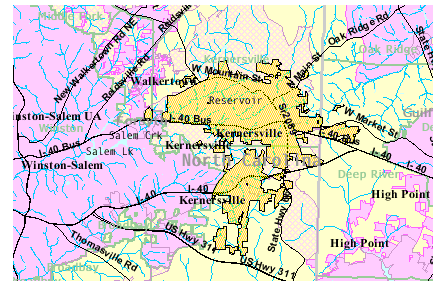
Median family household	\$75,659
Median non-family household	\$37,923

## Stagecoach Historical Marker

The Village of Clemmons was founded in 1802. Clemmons marked its 200<sup>th</sup> anniversary in 2002 with a year-long celebration planned by the Clemmons Historical Society. The Clemmons Historical Society presented the Stagecoach Historical Marker to the Mayor, the Village Council, and the Citizens of Clemmons on Sunday, December 29th, 2002 at the Village Hall. The sign is located on Clemmons Road in front of the Village Hall where the Hattie Butner Stagecoach is on display.



# About the Town of Kernersville



### Population and Geography†

Total population	23,123
Population change since 2000	+ 25.9%
Land area	12.1 square miles
Population density	1,911.0 persons per square mile

### Population by Race/Ethnicity†

White	74.0%
Black/African-American	12.4%
Hispanic	9.7%
Asian	1.9%
American Indian/Alaska Native	0.3%
Native Hawaiian/Pacific Islander	0.0%
Multiracial	1.6%
Other	0.1%

### Population by Age Distribution†

Under 5 years old	6.6%
Under 18 years old	23.7%
≥ 65 years old	13.1%
Median age	38.5 years

### Population by Sex†

Male	46.9%
Female	53.1%

### Population by Educational Attainment\*

Percent of persons ≥ 25 years old who have:

< High school diploma or GED	13.1%
High school diploma or GED	26.8%
Bachelor's degree	21.0%
≥ Graduate degree	8.1%

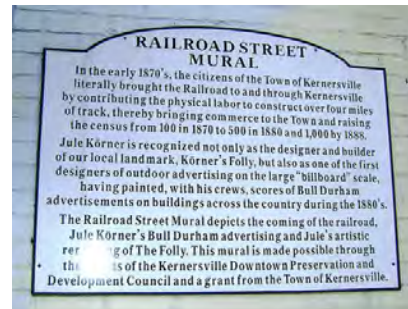
### Percentage of Population Living Below Poverty Level\*

Children (0-17yr old)	12.1%
Adults (18-64yr old)	8.0%
Seniors (≥ 65yr old)	9.9%

### Income\*

Median family household	\$64,328
Median non-family household	\$30,759

The site was first settled by an [Irishman](#) named Jacob Story in [1756](#). Around 1770 the site was purchased by William Dobson and was called Dobson's Crossroads. [George Washington](#) was served breakfast at Dobson's tavern on June 2, 1791. Joseph Kerner bought the property in 1817, continuing to operate the inn; the town became known as Kerners Crossroads. Kerner left his property to two sons and a daughter. Not long after the arrival of the railroad, the town was incorporated as Kernersville in 1873



[www.toknc.com](http://www.toknc.com)

# About the Town of Lewisville

## Population and Geography†

Total population	12,639
Population change since 2000	+ 30.2%
Land area	10.7 square miles
Population density	1,181.2 persons per square mile

## Population by Race/Ethnicity†

White	88.3%
Black/African-American	5.0%
Hispanic	3.4%
Asian	1.7%
American Indian/Alaska Native	0.2%
Native Hawaiian/Pacific Islander	0.0%
Multiracial	1.3%
Other	0.1%

## Population by Age Distribution†

Under 5 years old	5.0%
Under 18 years old	25.0%
≥ 65 years old	12.7%
Median age	43.4 years

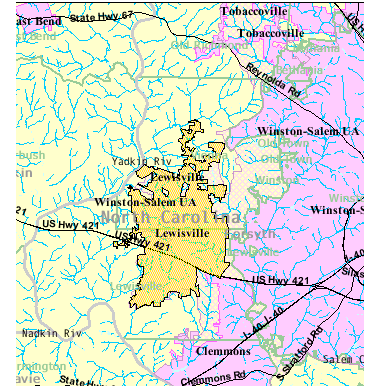
## Population by Sex†

Male	48.5%
Female	51.5%

In the mid1770s, settlers moving westward following the Great Wagon Road from Pennsylvania down into Virginia and then North Carolina frequently stopped over night on the banks of the Yadkin River before crossing the Shallow Ford. A town was born in the 19th century when Moravian settlers blazed a wagon trail across the pastures and established a community here.

Lewisville was named after one of those settlers, Lewis Laugenour, a benefactor who donated lands for development in the central area of town. His home, constructed in the late 1850's, still stands.

[www.lewisvillenc.net](http://www.lewisvillenc.net)



## Population by Educational Attainment\*

Percent of persons ≥ 25 years old who have:

< High school diploma or GED	5.3%
High school diploma or GED	20.1%
Bachelor's degree	29.9%
≥ Graduate degree	15.9%

## Percentage of Population Living Below Poverty Level\*

Children (0-17yr old)	2.8%
Adults (18-64yr old)	3.8%
Seniors (≥ 65yr old)	1.2%

## Income\*

Median family household	\$84,626
Median non-family household	\$41,620



# About the Town of Rural Hall

## Population and Geography†

Total population	2,937
Population change since 2000	+ 16.1%
Land area	2.8 square miles
Population density	1,048.9 persons per square mile

## Population by Race/Ethnicity†

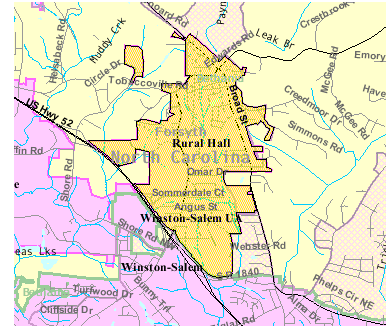
White	68.6%
Black/African-American	15.5%
Hispanic	13.5%
Asian	0.4%
American Indian/Alaska Native	0.1%
Native Hawaiian/Pacific Islander	0.0%
Multiracial	1.5%
Other	0.3%

## Population by Age Distribution†

Under 5 years old	7.2%
Under 18 years old	24.3%
≥ 65 years old	14.9%
Median age	38.2 years

## Population by Sex†

Male	47.7%
Female	52.3%



## Population by Educational Attainment\*

Percent of persons ≥ 25 years old who have:

< High school diploma or GED	11.7%
High school diploma or GED	37.8%
Bachelor's degree	21.3%
≥ Graduate degree	4.0%

## Percentage of Population Living Below Poverty Level\*

Children (0-17yr old)	0.0%
Adults (18-64yr old)	5.5%
Seniors (≥ 65yr old)	5.8%

## Income\*

Median family household	\$61,821
Median non-family household	\$22,132

In 1750 Rural Hall was made up of mostly forest and meadow land. This land had been inhabited by the Indians for over 8,000 years. When the early American settlers came to the area they found Tutelo and Saponi Indians, who were tribes of the Sioux nation. The Indians remained in the area until the white settlers took over in the 1760's. The earliest settler apparently was Ludwig Bitting, former [Hessian soldier](#) in British General Cornwallis's army, who liked the area when passing through and returned after the [American Revolution](#) to settle. Rural Hall first got its name in 1875 when the post office was established in the Bitting home.

[www.ruralhall.gov/office.com](http://www.ruralhall.gov/office.com)

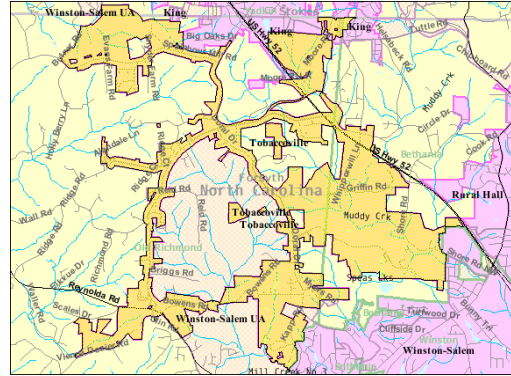




# About the Village of Tobaccoville

## Population and Geography†

Total population	2,441
Population change since 2000	+ 9.5%
Land area	7.1 square miles
Population density	343.7 persons per square mile



## Population by Race/Ethnicity†

White	90.7%
Black/African-American	6.2%
Hispanic	2.0%
Asian	0.3%
American Indian/Alaska Native	0.3%
Native Hawaiian/Pacific Islander	0.0%
Multiracial	0.0%
Other	0.5%

## Population by Age Distribution†

Under 5 years old	4.8%
Under 18 years old	19.5%
≥ 65 years old	17.0%
Median age	45.9 years

## Population by Sex†

Male	50.4%
Female	49.8%

## Population by Educational Attainment\*

Percent of persons ≥ 25 years old who have:

< High school diploma or GED	4.8%
High school diploma or GED	19.5%
Bachelor's degree	16.7%
≥ Graduate degree	2.5%

## Percentage of Population Living Below Poverty Level\*

Children (0-17yr old)	0.0%
Adults (18-64yr old)	5.9%
Seniors (≥ 65yr old)	14.9%

## Income\*

Median family household	\$63,167
Median non-family household	\$38,224

Tobaccoville was named for a plug chewing tobacco factory owned and operated in the 1870's by Charles Orrender. The factory was located on what is now Doral Drive, one mile south of the present day post office at the Tobaccoville crossroads. This area was the mail route of a 4-horse stagecoach from Mt. Airy to Winston-Salem, which changed horses at Donnaha and forded the Little Yadkin River. When the river water was high, the horses were forced to swim, and the mail was frequently lost. People regularly gathered in the area to watch the stagecoach come and go. R.J. Reynolds Tobacco Company built a large cigarette plant here and dedicated it in 1986. The town of Tobaccoville was incorporated in 1991

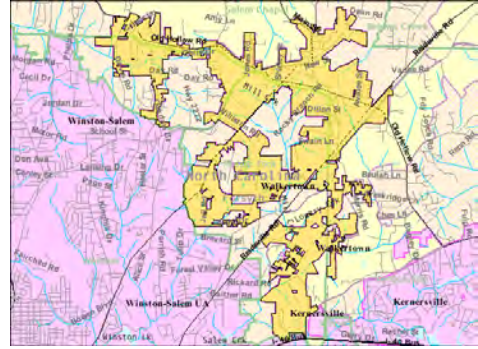


Doral Drive, Tobaccoville



[www.tobaccovillenc.org](http://www.tobaccovillenc.org)

# About the Town of Walkertown



### Population and Geography†

Total population	4,675
Population change since 2000	+ 14.2%
Land area	5.9 square miles
Population density	792.4 persons per square mile

### Population by Race/Ethnicity†

White	74.8%
Black/African-American	17.3%
Hispanic	5.6%
Asian	0.6%
American Indian/Alaska Native	0.2%
Native Hawaiian/Pacific Islander	0.1%
Multiracial	1.3%
Other	0.1%

### Population by Age Distribution†

Under 5 years old	5.7%
Under 18 years old	22.4%
≥ 65 years old	16.3%
Median age	41.8 years

### Population by Sex†

Male	47.8%
Female	52.2%

### Population by Educational Attainment\*

*Percent of persons ≥ 25 years old who have:*

< High school diploma or GED	21.0%
High school diploma or GED	43.0%
Bachelor's degree	10.9%
≥ Graduate degree	4.8%

### Percentage of Population Living Below Poverty Level\*

Children (0-17yr old)	9.0%
Adults (18-64yr old)	7.4%
Seniors (≥ 65yr old)	3.2%

### Income\*

Median family household	\$58,600
Median non-family household	\$29,667

Walkertown was named for Dr. Robert Walker who was living at the site by 1771. It was predominately a hub-bub of Methodist's activity.



# About the City of Winston-Salem

## Population and Geography†

Total population	229,617
Population change since 2000	+ 19.1%
Land area	129.6 square miles
Population density	1,771.7 persons per square mile



## Population by Race/Ethnicity†

White	47.1%
Black/African-American	34.0%
Hispanic	14.7%
Asian	2.0%
American Indian/Alaska Native	0.2%
Native Hawaiian/Pacific Islander	0.1%
Multiracial	1.7%
Other	0.2%

## Population by Age Distribution†

Under 5 years old	7.3%
Under 18 years old	24.6%
≥ 65 years old	12.5%
Median age	34.6 years

## Population by Sex†

Male	47.0%
Female	53.0%

## Population by Educational Attainment\*

Percent of persons ≥ 25 years old who have:

< High school diploma or GED	15.5%
High school diploma or GED	27.2%
Bachelor's degree	20.4%
≥ Graduate degree	10.9%

## Percentage of Population Living Below Poverty Level\*

Children (0-17yr old)	29.9%
Adults (18-64yr old)	16.9%
Seniors (≥ 65yr old)	8.0%

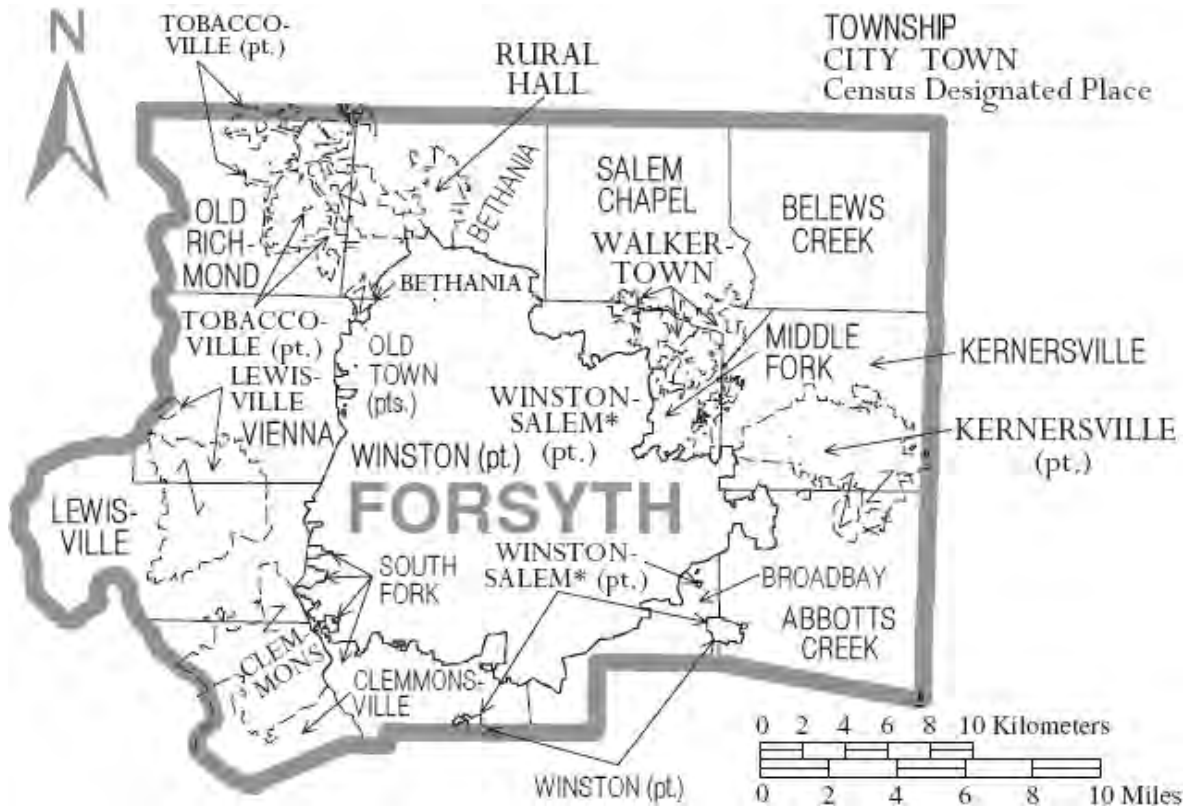
## Income\*

Median family household	\$53,635
Median non-family household	\$28,264



[www.cityofws.org](http://www.cityofws.org)

# Forsyth County's 2010 Census Townships





# About Abbotts Creek Township

## Population and Geography†

Total population	11,310
Population change since 2000	- 13.8%
Land area	26.8 square miles
Population density	422.0 persons per square mile



## Population by Race/Ethnicity†

White	84.5%
Black/African-American	7.4%
Hispanic	5.1%
Asian	1.6%
American Indian/Alaska Native	0.4%
Native Hawaiian/Pacific Islander	0.0%
Multiracial	1.0%
Other	0.1%

## Population by Educational Attainment\*

Percent of persons ≥ 25 years old who have:

< High school diploma or GED	8.9%
High school diploma or GED	32.9%
Bachelor's degree	18.3%
≥ Graduate degree	7.5%

## Population by Age Distribution†

Under 5 years old	5.4%
Under 18 years old	21.7%
≥ 65 years old	14.5%
Median age	41.7 years

## Percentage of Population Living Below Poverty Level\*

Children (0-17yr old)	12.6%
Adults (18-64yr old)	4.9%
Seniors (≥ 65yr old)	5.5%

## Population by Sex†

Male	48.9%
Female	51.1%

## Income\*

Median family household	\$73,775
Median non-family household	\$35,191

Abbotts Creek Township contains portions of the town of [Kernersville](#) and the city of [High Point](#) as well as the unincorporated community of [Union Cross](#).



## About Belews Creek Township

### Population and Geography†

Total population	6,160
Population change since 2000	+ 8.6%
Land area	26.8 square miles
Population density	229.9 persons per square mile



### Population by Race/Ethnicity†

White	89.1%
Black/African-American	6.6%
Hispanic	3.1%
Asian	0.3%
American Indian/Alaska Native	0.3%
Native Hawaiian/Pacific Islander	0.0%
Multiracial	0.6%
Other	0.1%

### Population by Educational Attainment\*

Percent of persons ≥ 25 years old who have:

< High school diploma or GED	11.1%
High school diploma or GED	40.5%
Bachelor's degree	3.1%
≥ Graduate degree	15.5%

### Population by Age Distribution†

Under 5 years old	5.5%
Under 18 years old	23.6%
≥ 65 years old	11.8%
Median age	41.5 years

### Percentage of Population Living Below Poverty Level\*

Children (0-17yr old)	3.8%
Adults (18-64yr old)	4.5%
Seniors (≥ 65yr old)	8.8%

### Population by Sex†

Male	50.2%
Female	49.8%

### Income\*

Median family household	\$69,766
Median non-family household	\$28,083

There are no incorporated municipalities in Belews Creek Township, however the small unincorporated community of [Belews Creek](#) is located here.



# About Bethania Township

## Population and Geography†

Total population	9,200
Population change since 2000	- 3.7%
Land area	23.1 square miles
Population density	398.3 persons per square mile



## Population by Race/Ethnicity†

White	71.8%
Black/African-American	18.6%
Hispanic	7.7%
Asian	0.5%
American Indian/Alaska Native	0.2%
Native Hawaiian/Pacific Islander	0.0%
Multiracial	1.1%
Other	0.3%

## Population by Educational Attainment\*

Percent of persons ≥ 25 years old who have:

< High school diploma or GED	16.4%
High school diploma or GED	32.8%
Bachelor's degree	17.7%
≥ Graduate degree	3.6%

## Population by Age Distribution†

Under 5 years old	6.2%
Under 18 years old	23.6%
≥ 65 years old	14.5%
Median age	40.8 years

## Percentage of Population Living Below Poverty Level\*

Children (0-17yr old)	17.5%
Adults (18-64yr old)	11.9%
Seniors (≥ 65yr old)	5.9%

## Income\*

Median family household	\$59,016
Median non-family household	\$27,577

## Population by Sex†

Male	48.3%
Female	51.7%

Bethania Township is comprised of one city-King, two towns-Rural Hall & Bethania, one village-Tobacco Ville, and three unincorporated places-Bannertown, Chestnut Trails and Temora Lake Estates.



## About Broadbay Township

### Population and Geography†

Total population	2,002
Population change since 2000	- 45.1%
Land area	6.2 square miles
Population density	322.9 persons per square mile



### Population by Race/Ethnicity†

White	74.9%
Black/African-American	15.7%
Hispanic	6.1%
Asian	1.2%
American Indian/Alaska Native	0.3%
Native Hawaiian/Pacific Islander	0.0%
Multiracial	1.6%
Other	0.0%

### Population by Age Distribution†

Under 5 years old	7.7%
Under 18 years old	22.1%
≥ 65 years old	15.0%
Median age	39.1 years

### Population by Sex†

Male	48.8%
Female	51.2%

### Population by Educational Attainment\*

Percent of persons ≥ 25 years old who have:

< High school diploma or GED	9.8%
High school diploma or GED	33.5%
Bachelor's degree	20.1%
≥ Graduate degree	4.8%

### Percentage of Population Living Below Poverty Level\*

Children (0-17yr old)	0%
Adults (18-64yr old)	5.7%
Seniors (≥ 65yr old)	0%

### Income\*

Median family household	\$69,898
Median non-family household	\$38,026

The name "Broadbay" is an interesting one 300 miles (480 km) from the coast. Settlers who came in 1770 to join the [Moravian Church](#) and found the settlement of Friedland originated from [Waldoboro, Maine](#), a town known at the time as "Broad Bay". The settlers named the new area in [Wachovia](#) after their former town on the coast of Maine.



## About Clemmonsville Township

### Population and Geography†

Total population	14,927
Population change since 2000	+ 12.1%
Land area	18.3 square miles
Population density	824.7 persons per square mile



### Population by Race/Ethnicity†

White	85.7%
Black/African-American	5.5%
Hispanic	4.3%
Asian	3.3%
American Indian/Alaska Native	0.1%
Native Hawaiian/Pacific Islander	0.0%
Multiracial	1.0%
Other	0.1%

### Population by Educational Attainment\*

*Percent of persons ≥ 25 years old who have:*

< High school diploma or GED	5.4%
High school diploma or GED	19.2%
Bachelor’s degree	30.8%
≥ Graduate degree	17.6%

### Population by Age Distribution†

Under 5 years old	5.2%
Under 18 years old	23.7%
≥ 65 years old	16.1%
Median age	44.0 years

### Percentage of Population Living Below Poverty Level\*

Children (0-17yr old)	8.0%
Adults (18-64yr old)	3.2%
Seniors (≥ 65yr old)	3.0%

### Income\*

Median family household	\$87,018
Median non-family household	\$38,591

### Population by Sex†

Male	48.4%
Female	51.6%

The only incorporated municipality in Clemmonsville Township is the village of [Clemmons](#). The township fronts the [Yadkin River](#) on its western boundary.

Clemmonsville Township is comprised of Clemmons village and ten(10) unincorporated places– Clemmons Station, Clemmons West, Forest Hills Estates, Meadowbrook Estates, Middlebrook, Muddy Creek, Nestleway Acres, Park-



## About Kernersville Township

### Population and Geography†

Total population	30,386
Population change since 2000	+ 13.2%
Land area	31.13 square miles
Population density	980.2 persons per square mile



### Population by Race/Ethnicity†

White	76.5%
Black/African-American	10.4%
Hispanic	9.8%
Asian	1.4%
American Indian/Alaska Native	0.3%
Native Hawaiian/Pacific Islander	0.0%
Multiracial	1.5%
Other	0.1%

### Population by Age Distribution†

Under 5 years old	6.2%
Under 18 years old	24.1%
≥ 65 years old	13.1%
Median age	39.6 years

### Population by Sex†

Male	47.5%
Female	52.5%

### Population by Educational Attainment\*

Percent of persons ≥ 25 years old who have:

< High school diploma or GED	13.2%
High school diploma or GED	28.2%
Bachelor's degree	21.2%
≥ Graduate degree	6.4%

### Percentage of Population Living Below Poverty Level\*

Children (0-17yr old)	9.8%
Adults (18-64yr old)	6.9%
Seniors (≥ 65yr old)	7.9%

### Income\*

Median family household	\$66,487
Median non-family household	\$30,857

Much of Kernersville Township consists of the town of [Kernersville](#) and a small portion of the town of [Walkertown](#).





## About Lewisville Township

### Population and Geography†

Total population	17,707
Population change since 2000	+ 12.9%
Land area	31.8 square miles
Population density	556.8 persons per square mile



### Population by Race/Ethnicity†

White	81.5%
Black/African-American	6.3%
Hispanic	7.8%
Asian	2.8%
American Indian/Alaska Native	0.2%
Native Hawaiian/Pacific Islander	0.0%
Multiracial	1.3%
Other	0.1%

### Population by Educational Attainment\*

Percent of persons ≥ 25 years old who have:

< High school diploma or GED	6.4%
High school diploma or GED	24.3%
Bachelor's degree	27.4%
≥ Graduate degree	15.0%

### Population by Age Distribution†

Under 5 years old	6.4%
Under 18 years old	27.2%
≥ 65 years old	11.8%
Median age	36.9 years

### Percentage of Population Living Below Poverty Level\*

Children (0-17yr old)	3.9%
Adults (18-64yr old)	3.3%
Seniors (≥ 65yr old)	1.3%

### Income\*

Median family household	\$77,215
Median non-family household	\$38,214

### Population by Sex†

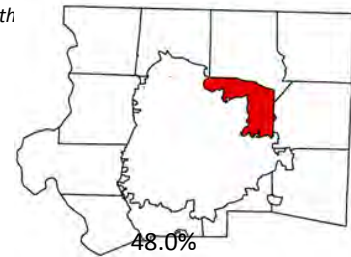
Male	48.2%
Female	51.8%

Lewisville Township contains the town of [Lewisville](#) and parts of the village of [Clemmons](#). The township fronts the [Yadkin River](#) on its western boundary.



# About Middle Fork I Township

2011 Forsyth



## Population and Geography†

Total population	1,710
Population change since 2000	N/A
Land area	12.8 square miles
Population density	133.6 persons per square mile

## Population by Race/Ethnicity†

White	60.1%
Black/African-American	20.1%
Hispanic	16.8%
Asian	0.2%
American Indian/Alaska Native	0.3%
Native Hawaiian/Pacific Islander	0.1%
Multiracial	1.9%
Other	0.5%

## Population by Age Distribution†

Under 5 years old	7.1%
Under 18 years old	27.1%
≥ 65 years old	11.1%
Median age	36.3 years

## Population by Sex†

Male	48.0%
Female	52.0%

## Population by Educational Attainment\*

Percent of persons ≥ 25 years old who have:

< High school diploma or GED	21.3%
High school diploma or GED	54.2%
Bachelor's degree	6.9%
≥ Graduate degree	0%

## Percentage of Population Living Below Poverty Level\*

Children (0-17yr old)	0%
Adults (18-64yr old)	8.1%
Seniors (≥ 65yr old)	0%

## Income\*

Median family household	\$56,979
Median non-family household	\$36,582

Middle Fork I Township was formed in April 2003, when [Middle Fork Township](#) was split into Middle Fork I Township and [Middle Fork II Township](#)

# About Middle Fork II Township



## Population and Geography†

Total population	2,639
Population change since 2000	N/A
Land area	6.3 square miles
Population density	466.5 persons per square mile

## Population by Race/Ethnicity†

White	72.5%
Black/African-American	20.9%
Hispanic	4.6%
Asian	0.8%
American Indian/Alaska Native	0.2%
Native Hawaiian/Pacific Islander	0.0%
Multiracial	0.8%
Other	0.1%

## Population by Age Distribution†

Under 5 years old	5.7%
Under 18 years old	21.1%
≥ 65 years old	11.1%
Median age	43.5 years

## Population by Sex†

Male	48.4%
Female	51.6%

## Population by Educational Attainment\*

Percent of persons ≥ 25 years old who have:

< High school diploma or GED	12.8%
High school diploma or GED	42.2%
Bachelor's degree	13.0%
≥ Graduate degree	3.9%

## Percentage of Population Living Below Poverty Level\*

Children (0-17yr old)	33.1%
Adults (18-64yr old)	13.0%
Seniors (≥ 65yr old)	7.6%

## Income\*

Median family household	\$56,146
Median non-family household	\$36,458



# About Old Richmond Township



### Population and Geography†

Total population	5,236
Population change since 2000	+ 1.4%
Land area	29.4 square miles
Population density	178.1 persons per square mile

### Population by Sex†

Male	49.6%
Female	50.4%

### Population by Race/Ethnicity†

White	88.2%
Black/African-American	7.4%
Hispanic	2.7%
Asian	0.4%
American Indian/Alaska Native	0.4%
Native Hawaiian/Pacific Islander	0.0%
Multiracial	0.7%
Other	0.0%

### Population by Educational Attainment\*

*Percent of persons ≥ 25 years old who have:*

< High school diploma or GED	14.9 %
High school diploma or GED	36.3%
Bachelor’s degree	17.9%
≥ Graduate degree	3.1%

### Population by Age Distribution†

Under 5 years old	5.2%
Under 18 years old	20.7%
≥ 65 years old	15.5%
Median age	44.6 years

### Percentage of Population Living Below Poverty Level\*

Children (0-17yr old)	13.6%
Adults (18-64yr old)	7.9%
Seniors (≥ 65yr old)	6.7%

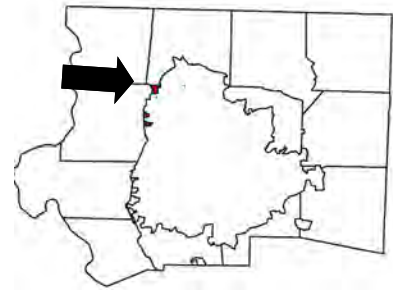
### Income\*

Median family household	\$64,063
Median non-family household	\$25,192

The village of [Tobaccoville, North Carolina](#) is located here as well as the unincorporated community of [Donnaha](#). The township fronts the [Yadkin River](#) on its western boundary.



## About Old Town Township



### Population and Geography†

Total population	149
Population change since 2000	- 1.4%
Land area	0.52 square miles
Population density	286.5 persons per square mile

### Population by Race/Ethnicity†

White	83.2%
Black/African-American	5.4%
Hispanic	8.7%
Asian	0.0%
American Indian/Alaska Native	1.3%
Native Hawaiian/Pacific Islander	0.0%
Multiracial	1.3%
Other	0.0%

### Population by Age Distribution†

Under 5 years old	2.7%
Under 18 years old	11.4%
≥ 65 years old	26.2%
Median age	55.1 years

### Population by Sex†

Male	46.3%
Female	53.7%

### Population by Educational Attainment\*

*Percent of persons ≥ 25 years old who have:*

< High school diploma or GED	15.8%
High school diploma or GED	19.7%
Bachelor's degree	22.4%
≥ Graduate degree	5.3%

### Percentage of Population Living Below Poverty Level\*

Children (0-17yr old)	N/A
Adults (18-64yr old)	N/A
Seniors (≥ 65yr old)	N/A

### Income\*

Median family household	\$61,667
Median non-family household	N/A

Geographically, Old Town Township occupies 0.53 square miles (1.4 km<sup>2</sup>) in central Forsyth County.<sup>[2]</sup> Parts of the town of [Bethania](#) are located here but nearly all of the original township has been annexed by the [City of Winston-Salem](#) and made part of [Winston Township](#), including the original community of [Old Town](#)



## About Salem Chapel Township

### Population and Geography†

Total population	6,808
Population change since 2000	- 3.8%
Land area	32.5 square miles
Population density	209.5 persons per square mile

### Population by Race/Ethnicity†

White	80.1%
Black/African-American	12.4%
Hispanic	5.1%
Asian	0.2%
American Indian/Alaska Native	0.7%
Native Hawaiian/Pacific Islander	0.0%
Multiracial	1.3%
Other	0.1%

### Population by Age Distribution†

Under 5 years old	5.2%
Under 18 years old	22.9%
≥ 65 years old	15.5%
Median age	43.3 years



### Population by Sex†

Male	49.5%
Female	50.5%

### Population by Educational Attainment\*

Percent of persons ≥ 25 years old who have:

< High school diploma or GED	18.0%
High school diploma or GED	42.3%
Bachelor's degree	9.9%
≥ Graduate degree	4.0%

### Percentage of Population Living Below Poverty Level\*

Children (0-17yr old)	24.0%
Adults (18-64yr old)	10.8%
Seniors (≥ 65yr old)	6.9%

### Income\*

Median family household	\$53,185
Median non-family household	\$26,505

Geographically, Salem Chapel Township occupies 32.5 square miles (85 km<sup>2</sup>) in northern Forsyth County. Portions of the town of [Walkertown](#) are in Salem Chapel Township.



## About South Fork Township

### Population and Geography†

Total population	2,576
Population change since 2000	- 24.7%
Land area	10.4 square miles
Population density	247.7 persons per square mile



### Population by Race/Ethnicity†

White	77.3%
Black/African-American	13.0%
Hispanic	6.9%
Asian	1.1%
American Indian/Alaska Native	0.2%
Native Hawaiian/Pacific Islander	0.0%
Multiracial	1.4%
Other	0.2%

### Population by Age Distribution†

Under 5 years old	7.5%
Under 18 years old	22.2%
≥ 65 years old	12.5%
Median age	38.9 years

### Population by Sex†

Male	46.5%
Female	53.5%

### Population by Educational Attainment\*

Percent of persons ≥ 25 years old who have:

< High school diploma or GED	7.9%
High school diploma or GED	33.1%
Bachelor's degree	18.6%
≥ Graduate degree	8.5%

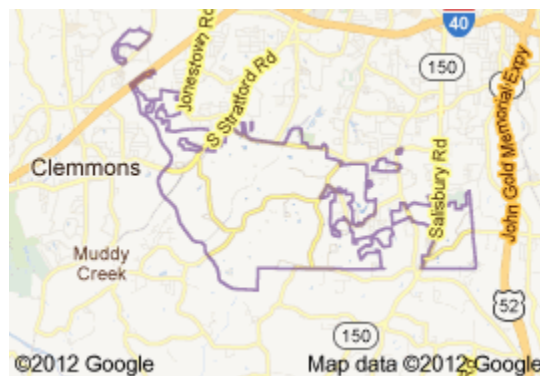
### Percentage of Population Living Below Poverty Level\*

Children (0-17yr old)	0.0%
Adults (18-64yr old)	4.0%
Seniors (≥ 65yr old)	3.9%

### Income\*

Median family household	\$61,553
Median non-family household	\$37,768

There are no incorporated municipalities in South Fork and much of the original township has been annexed by the [City of Winston-Salem](#) and made part of [Winston](#) Township



## About Vienna Township



### Population and Geography†

Total population	10,243
Population change since 2000	- 17.3%
Land area	25.7 square miles
Population density	398.6 persons per square mile

### Population by Race/Ethnicity†

White	87.5%
Black/African-American	6.4%
Hispanic	3.3%
Asian	1.4%
American Indian/Alaska Native	0.3%
Native Hawaiian/Pacific Islander	0.0%
Multiracial	1.1%
Other	0.1%

### Population by Age Distribution†

Under 5 years old	4.9%
Under 18 years old	24.4%
≥ 65 years old	14.4%
Median age	44.3 years

### Population by Sex†

Male	48.5%
Female	51.5%

### Population by Educational Attainment\*

Percent of persons ≥ 25 years old who have:

< High school diploma or GED	6.0%
High school diploma or GED	22.9%
Bachelor's degree	27.1%
≥ Graduate degree	13.7%

### Percentage of Population Living Below Poverty Level\*

Children (0-17yr old)	2.7%
Adults (18-64yr old)	4.1%
Seniors (≥ 65yr old)	6.7%

### Income\*

Median family household	\$83,145
Median non-family household	\$29,476

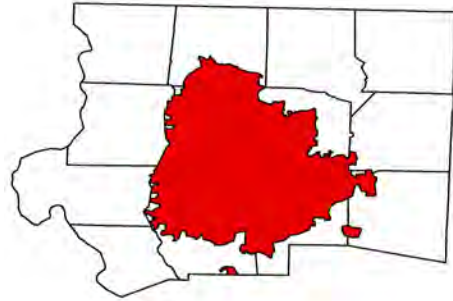
Vienna Township contains parts of the town of [Lewisville](#) as well as the unincorporated communities of [Pfafftown](#) and [Vienna](#). The township fronts the [Yadkin River](#) on its western boundary.



## About Winston Township

### Population and Geography†

Total population	229,617
Population change since 2000	+ 19.1%
Land area	132.5 square miles
Population density	1,733.0 persons per square mile



### Population by Race/Ethnicity†

White	47.1%
Black/African-American	34.0%
Hispanic	14.7%
Asian	2.0%
American Indian/Alaska Native	0.2%
Native Hawaiian/Pacific Islander	0.1%
Multiracial	1.7%
Other	0.2%

### Population by Educational Attainment\*

*Percent of persons ≥ 25 years old who have:*

< High school diploma or GED	15.5%
High school diploma or GED	27.2%
Bachelor's degree	20.4%
≥ Graduate degree	10.9%

### Population by Age Distribution†

Under 5 years old	7.3%
Under 18 years old	24.6%
≥ 65 years old	12.5%
Median age	34.6 years

### Percentage of Population Living Below Poverty Level\*

Children (0-17yr old)	29.9%
Adults (18-64yr old)	16.9%
Seniors (≥ 65yr old)	8.0%

### Income\*

Median family household	\$53,635
Median non-family household	\$28,264

### Population by Sex†

Male	47.0%
Female	53.0%

Winston Township is coextensive with the city of [Winston-Salem](#) and subsequently, township boundaries expand with every annexation by the city. Consequently, much of the townships of [Old Town](#), [Broadbay](#), [South Fork](#), [Middle Fork](#) and smaller portions of others have been consumed by Winston in recent years



**Sources:**

1. 2005-2009 American Community Survey 5-year Estimates, United States Census Bureau
2. 2010 American Fact Finder, United States Census Bureau
3. City of Winston-Salem: [www.cityofws.org](http://www.cityofws.org)
4. Forsyth County, North Carolina Geo-Data Explorer: <http://maps2.co.forsyth.nc.us/geodata>
5. North Carolina Economic development Information: [www.thrivenc.com](http://www.thrivenc.com)
6. North Carolina Office of State Budget management: [www.osbm.state.nc.us](http://www.osbm.state.nc.us)
7. Town of Bethania: [www.townofbethania.org](http://www.townofbethania.org)
8. Town of Kernersville: [www.toknc.com](http://www.toknc.com)
9. Town of Lewisville: [www.lewisvillenc.net](http://www.lewisvillenc.net)
10. Town of Rural Hall: [www.ruralhall.govoffice.com](http://www.ruralhall.govoffice.com)
11. Town of Walkertown: [www.townofwalkertown.com](http://www.townofwalkertown.com)
12. Village of Clemmons: [www.clemmons.org](http://www.clemmons.org)
13. Village of Tobaccoville: [www.tobaccovillenc.org](http://www.tobaccovillenc.org)



# Zip Codes

## Forsyth County, North Carolina



Forsyth County  
Department of Public Health

Promoting Health, Improving Lives

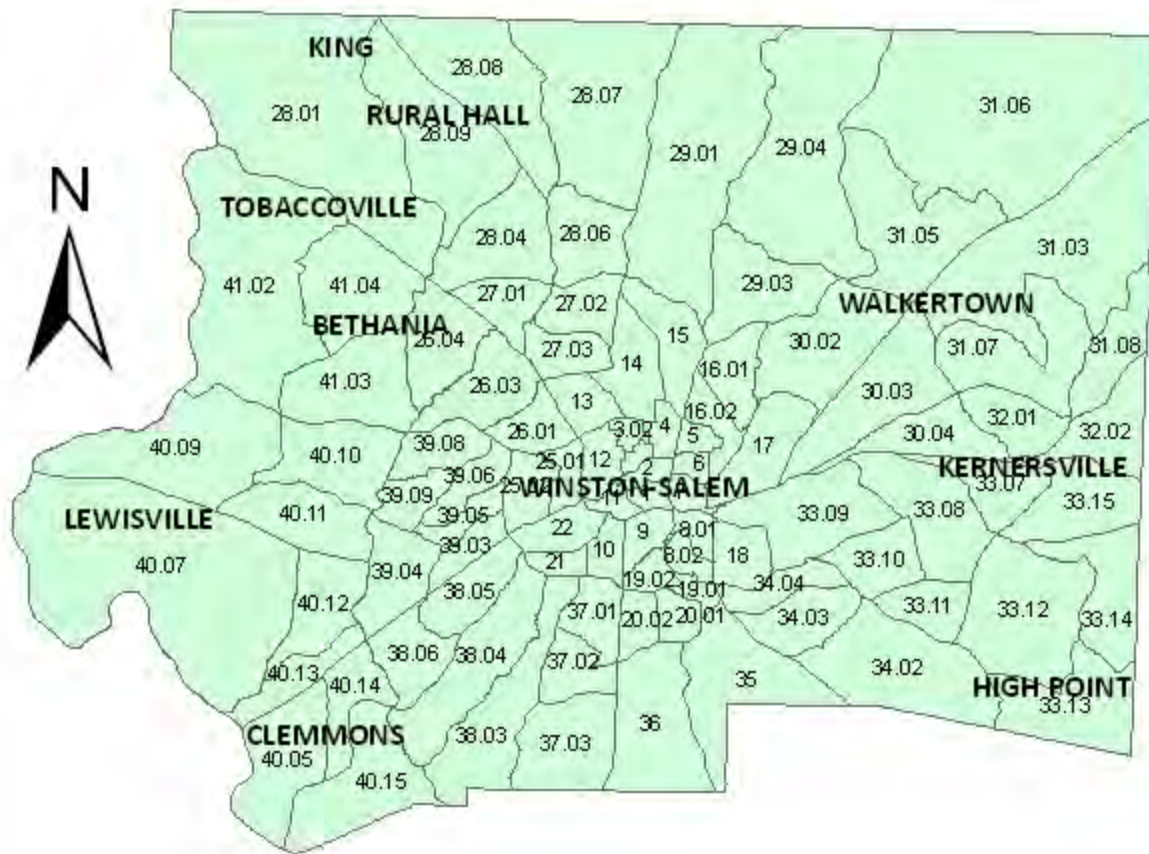
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# Census Tracts

## Forsyth County, North Carolina



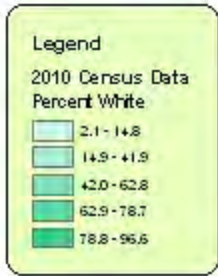
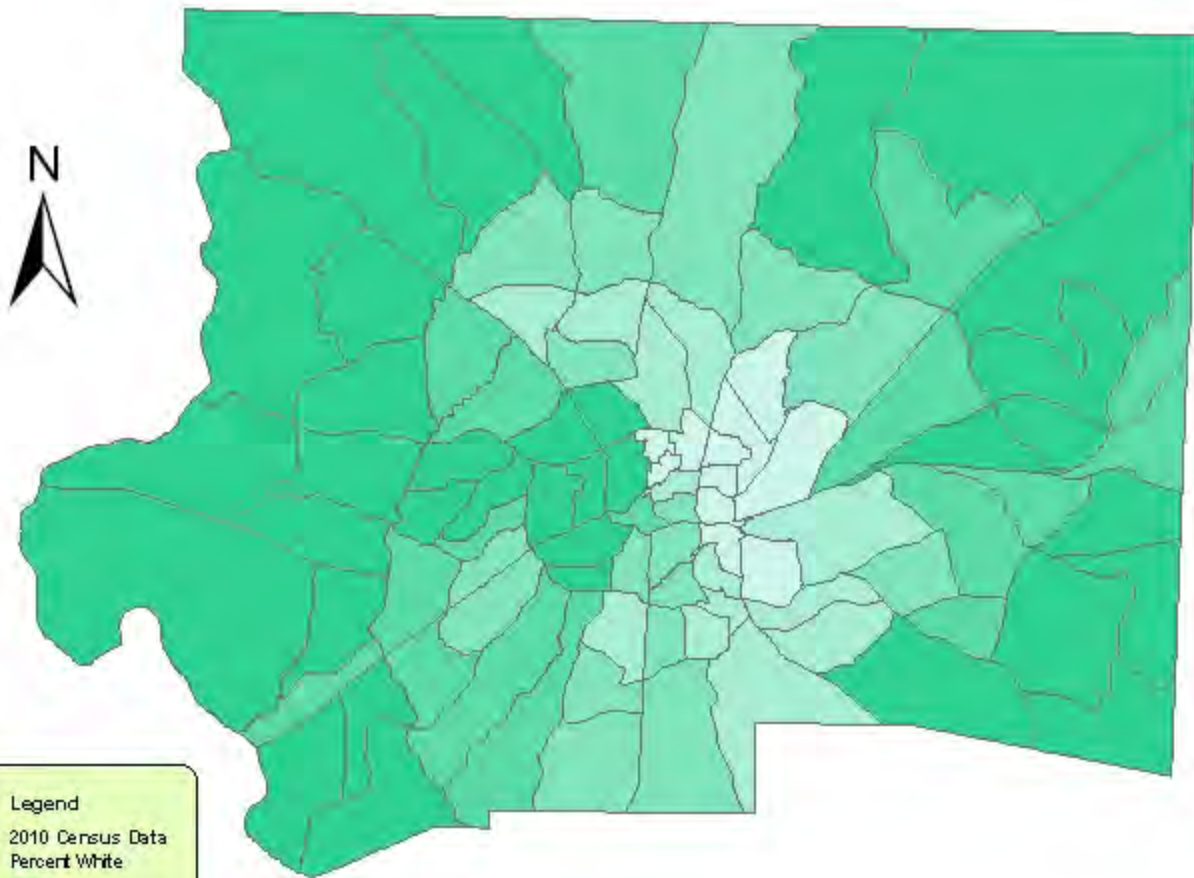
Forsyth County  
Department of Public Health

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# Percent Population: White 2010 Census By Census Tracts, Forsyth County



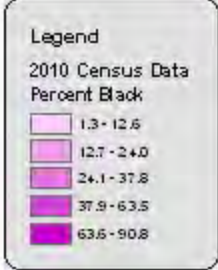
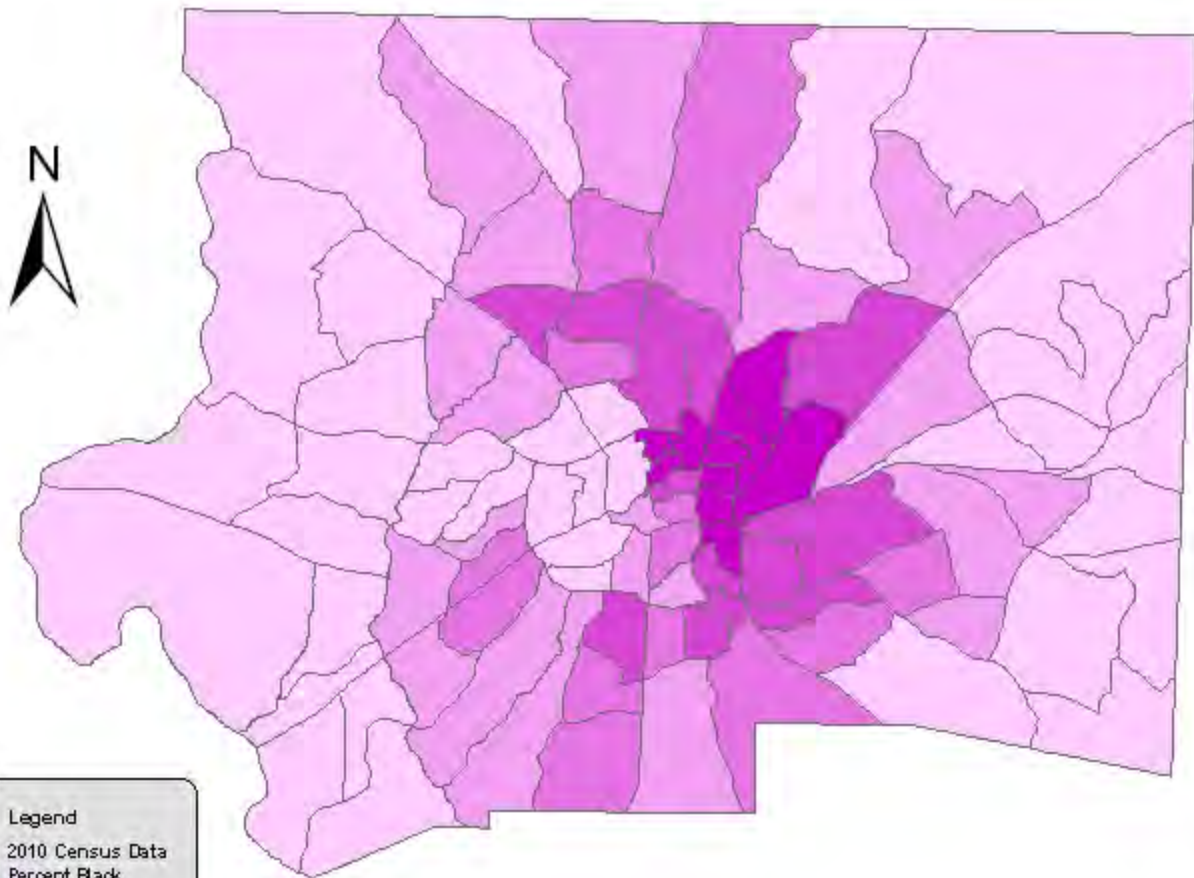
**Forsyth County**  
*Department of Public Health*

**Promoting Health, Improving Lives**

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# Percent Population: Black 2010 Census By Census Tracts, Forsyth County



Forsyth County  
Department of Public Health

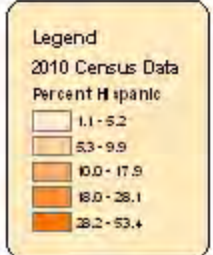
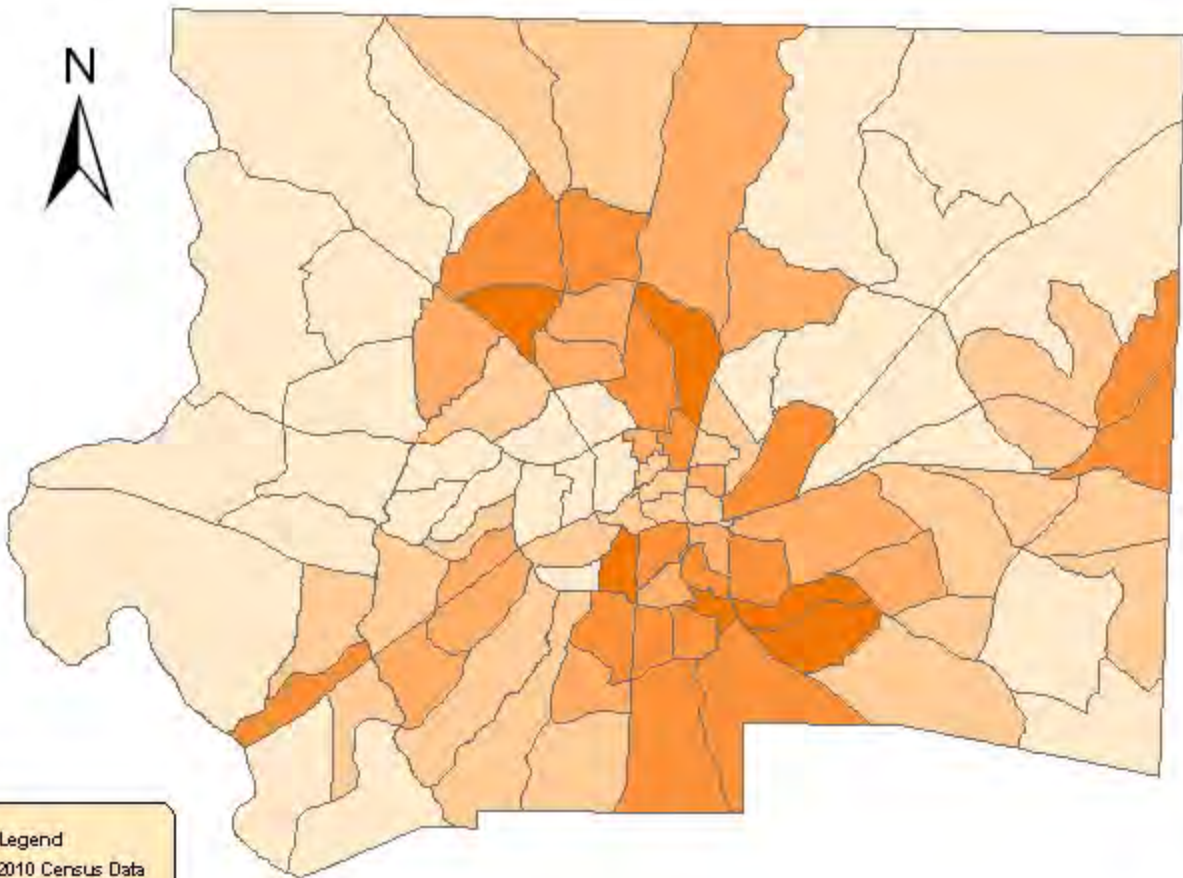
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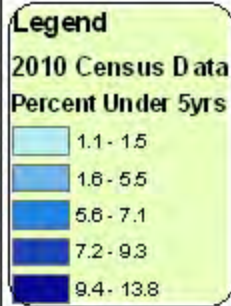
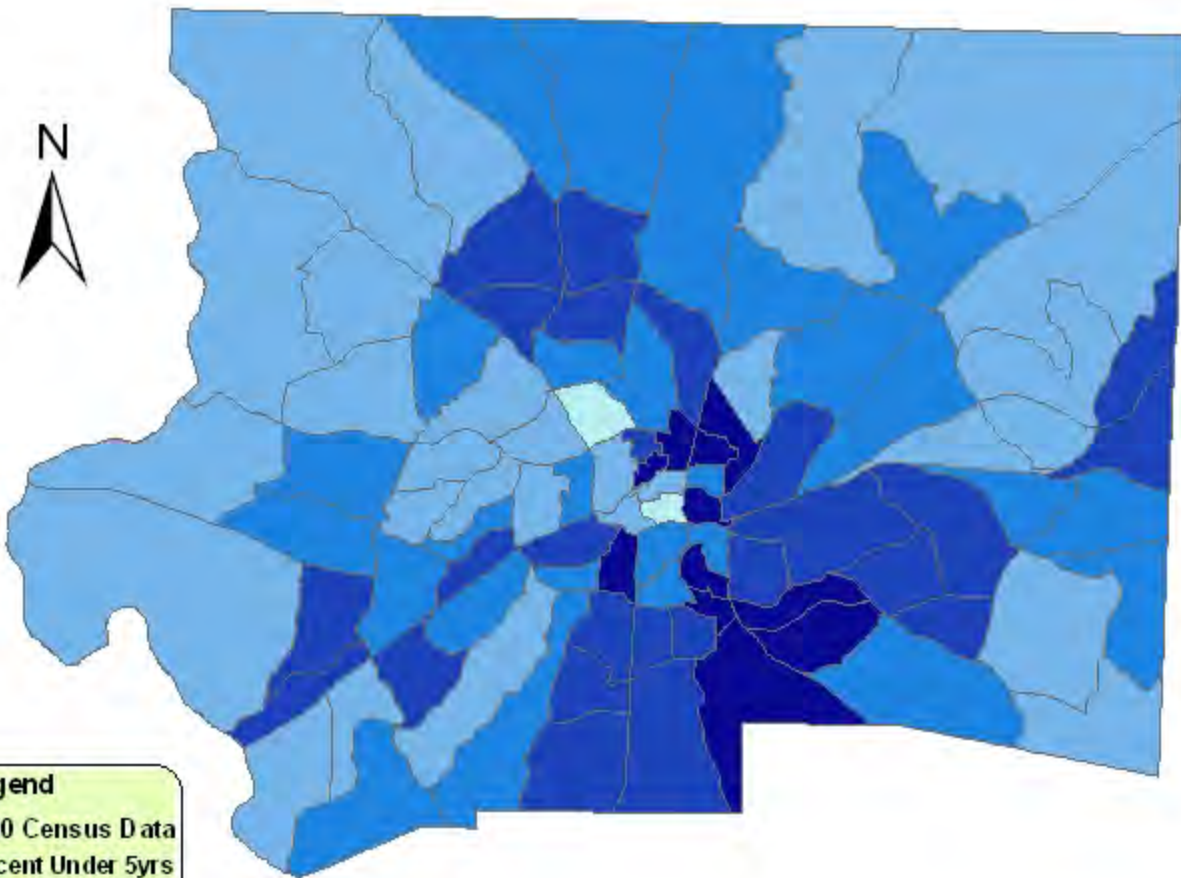


# Percent Population: Hispanic 2010 Census By Census Tracts, Forsyth County



Prepared by Epidemiology Division, FCDPH July 2012

# Percent Population Under 5 Years Old by Census Tracts, Forsyth County



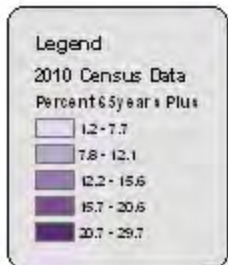
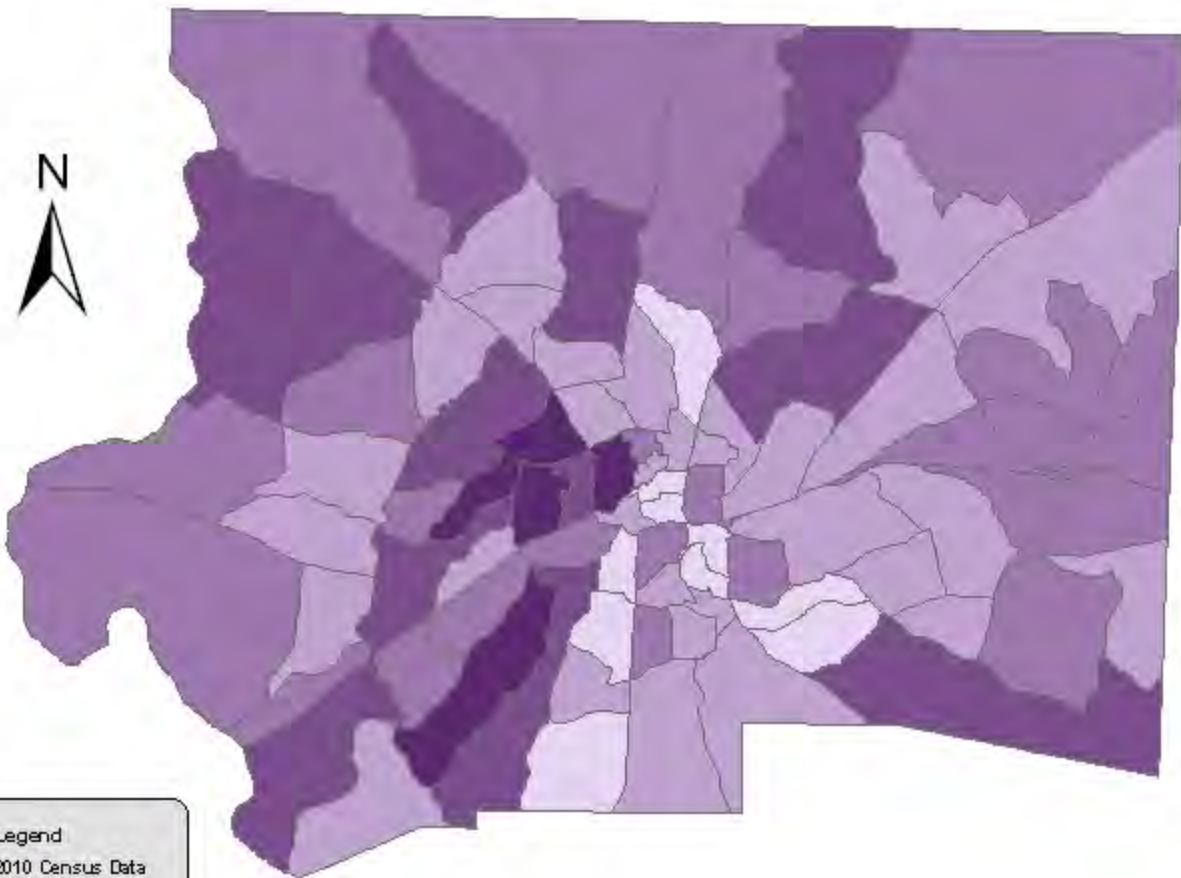
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# Percent Population Over 65 Years Old by Census Tracts, Forsyth County



**Forsyth County**  
*Department of Public Health*

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# **Health Data Collection Process**

# Primary Data

## Community Health Opinion Survey

### Methodology

Forsyth County community health opinion survey is a means of gauging the overall community health in the county. This survey was conducted between March 31<sup>st</sup> and April 2<sup>nd</sup>, 2011. With the help of volunteers, which included Forsyth County Healthy Community Coalition (FCHCC) members and Forsyth County Department of Public Health (FCDPH) staff, health opinions were gathered using handheld computers that are equipped with an electronic survey questionnaire. Prior to the survey, UNC Center for Public Health Preparedness (UNC CPHP) Spatial Health Assessment and Research Program (SHARP) staff trained 21 FCDPH staff and 18 public health students and other volunteers in survey methodology using handheld geographic positioning systems (GPS) units and mobile GIS technology.

Participants were selected based on GPS coordinates for parcels and structures, utilizing a local tax information system. They were randomly selected according to Centers for Disease Control and Prevention (CDC)'s 40-7 Rapid Needs Assessment method. In this selection process, forty census blocks were chosen throughout the county, with seven selected household points within each block group. A total of **231** of the target 280 surveys were collected (for a response rate of 60%) over 3 days.

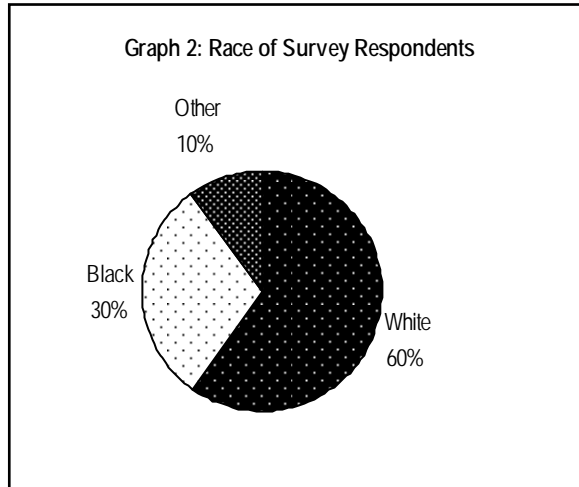
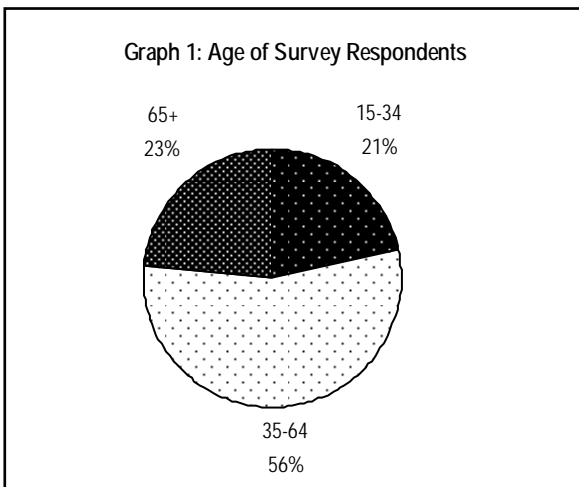
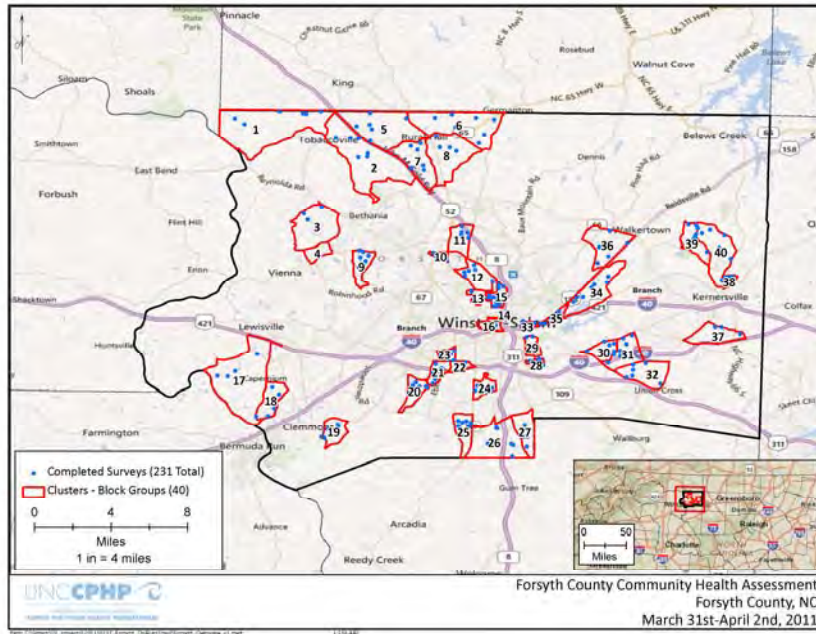
Participants were asked to supply their demographic information, as well as their opinions on an array of quality-of-life statements, community issues, lists of services and health behaviors. Additionally, participants were asked about their personal health, access to care and emergency preparedness. During and after the survey, participants were informed that the information collected from this survey was confidential, and their names nor their identity or any personal identifiers would not be linked and/or associated to their responses. Responses collected from this survey were analyzed for frequency distribution using EpiInfo software package. It is worth noting that during the analysis not every respondent answered every question. Frequency distribution analysis results are presented below.

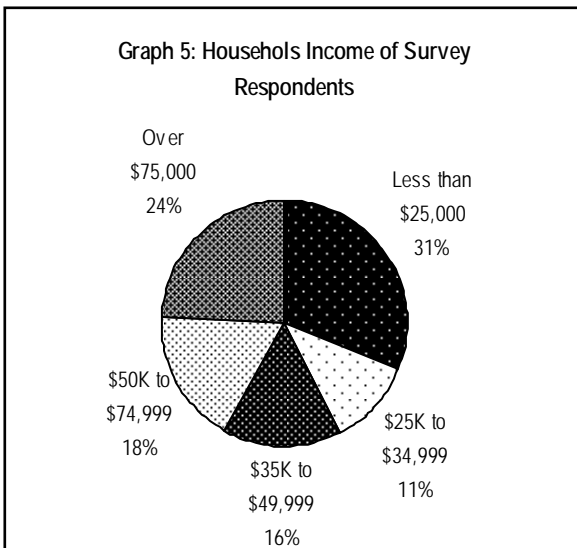
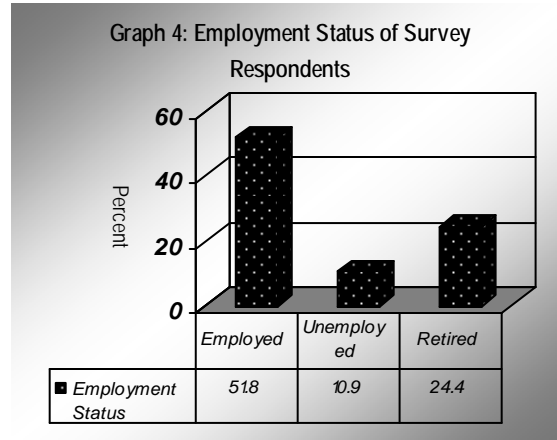
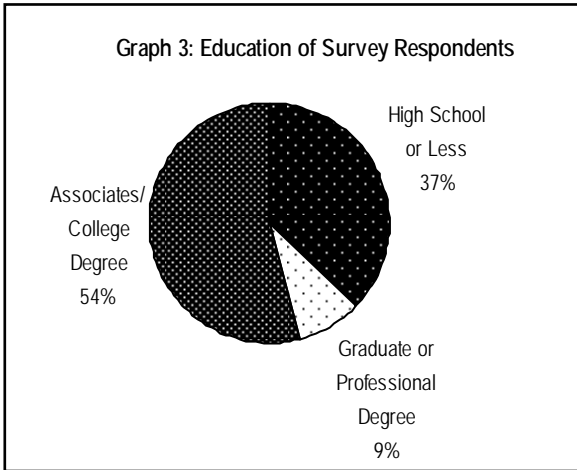
Data collected indicated that just over 20% of respondents felt that low income and poverty was the priority issue that most affected the quality the life in Forsyth County. Similarly, 20% reported that the availability of employment was the service that needed to be improved the most in their community. When asked which one behavior their community needed more information about, answers varied significantly. Just over 10% felt their community could use more information about how to prepare for an emergency or disaster; 7% cited weight management and less than 1% cited substance abuse prevention.

Stratification by age, income, and race analysis were run on some and/or all responses pertaining to quality of life, community issues, lists of services and health behaviors and personal health questions. Attributed to the stratification process's usage of multiple categories, totals for stratified data may vary slightly as some respondents did not answer all questions in every category. As participants were permitted to choose more than one response to a question, the



percent is a reflection of how often each option was chosen; on the other hand, it does not signify how often each response was picked in combination with any other response. Therefore, the total per cent column is greater than 100. See Appendix for the Community Health Opinion Survey Report.



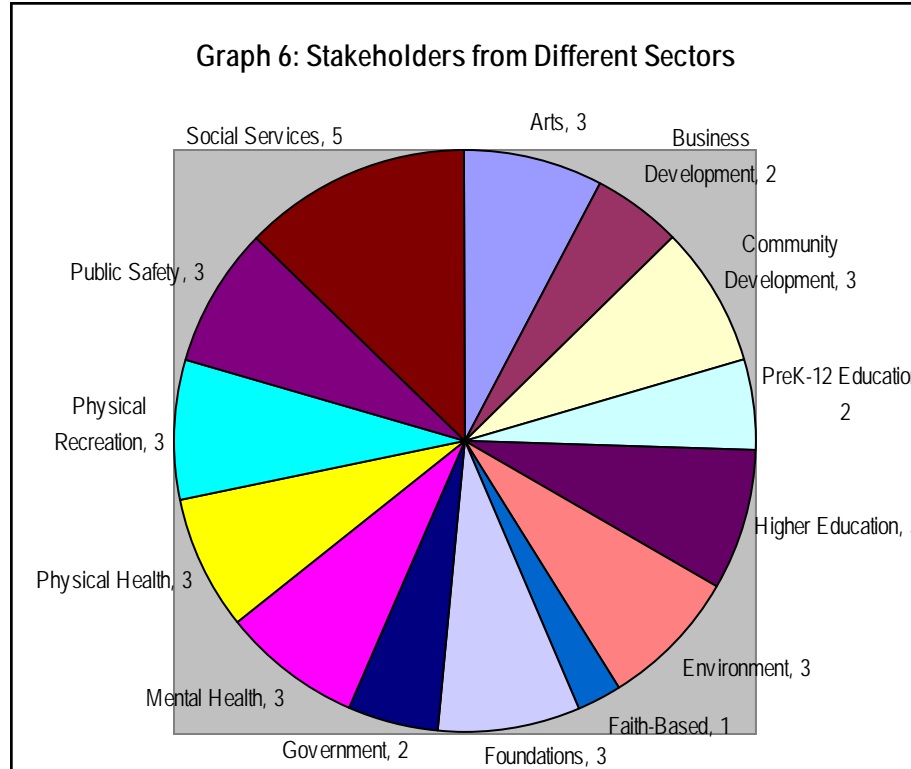


## Community Stakeholders Interview

From March to June of 2011, Forsyth County Department of Public Health staff, Forsyth Futures staff and Forsyth County Healthy Community Coalition members conducted telephone interviews with 41 stakeholders representing multiple organizations in Forsyth County. The interviewees worked in key sectors of the community, including cultural, recreation, healthcare, education, business, law enforcement and social services.

Participating stakeholders were assured that their personal identities would be protected and would not be connected to the report during the interview consent. Stakeholders shared information about the services they provide, their perceptions on current and emerging community issues, the strengths of the community, and areas that need improvement.

Data was recorded in the written form and analyzed by counting the number of participants comments made about a topic or issue. Only the most often mentioned topics or issues are presented in this report, and illustrative quotes that reflect the themes have been included. In instances in which identifying information is included, statements were paraphrased. *See Appendix for Community Stakeholders Interview report.*



## Focus Group Summary

During March to August 2011, nine focus groups were conducted by the Community Health Assessment (CHA) team as part of the state-mandated community health assessment process to collect primary data via focus groups in the Forsyth County community. The purpose of the focus groups was to better understand community concerns about food access, healthcare access, neighborhood activism and to identify barriers that affect Forsyth County residents’ overall health.

Focus groups are informal structured meetings in which community members discuss their thoughts on various community topics through predetermined questions. The focus groups were conducted among neighborhood associations within Winston-Salem’s wards, senior communities and churches to include the diversity of the county’s population, including Hispanic, African American, and White ethnic and racial groups.

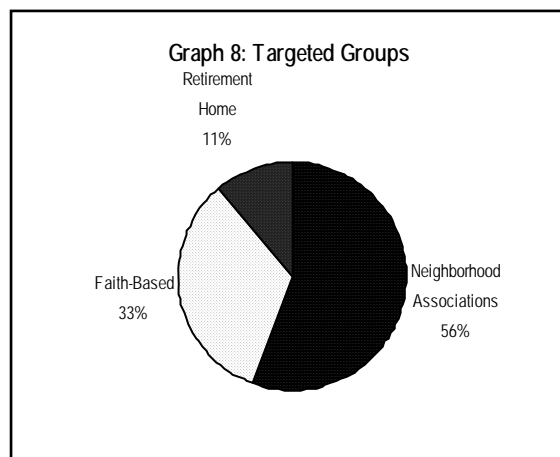
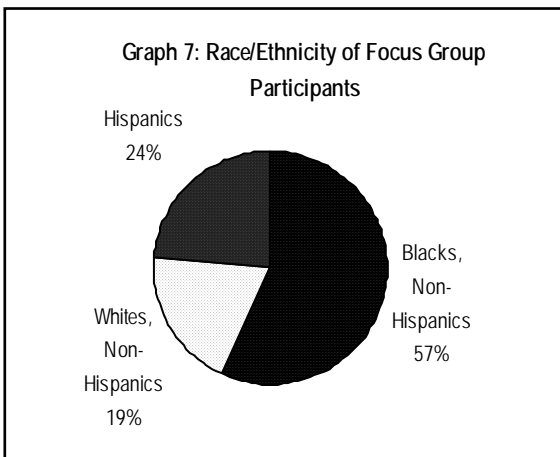
After the target populations were identified, the CHA team recruited focus group participants from the target group. Focus group agendas were the same across all targeted groups and were conducted by the CHA team who had undergone uniform training to assure consistency of results. The group size for the focus

group target populations, locations, dates, size and racial composition is attached as Appendix A. The research is qualitative and exploratory in nature, therefore, samples were not chosen for statistical validity, but to ensure a diverse cross-section of participants.

Prior to the focus group session, the participants were presented with a written notice of consent form (see Appendix C). The notice of consent informed potential participants that the session would be audio taped and of the need to sign the consent agreement before participating in the session. The form was explained to and read by each participant. All signed consent agreements were submitted and stored in the Forsyth County Department of Public Health.

Focus group discussions were conducted in English and Spanish. Participants were referred to by first name only to ensure confidentiality. Each session was between 60 minutes to 90 minutes in duration. The focus group guides (English & Spanish) developed by the CHA team, were used to guide each session (see Appendix B). Each group session began with brief introductions from each participant.

This report is a fair and accurate report of what was observed and discussed in each session. Actual respondent verbatim responses accompany most, if not all, points made in the report. Highlights of individual sessions are presented below. Respondent quotations are italicized. The text heading for individual focus group is a summary of group comments and is not the opinion of the author. The discussion questions and topic were used as the organizing format for the analysis. An assessment was made of group responses to all the questions addressed in the meeting. *See Appendix for Focus Group Summary Report.*



## Youth Risk Behavior Survey

### Methodology

The Youth Risk Behavior Survey (YRBS) was administered by the Forsyth County Department of Public Health. All together, 2,184 Winston-Salem/Forsyth County Schools (WSFCS) middle school students and 1,532 WSFCS high school students participated in the surveys. The data was collected in the spring of 2011 with a report prepared by Gramercy Research Group, LLC.

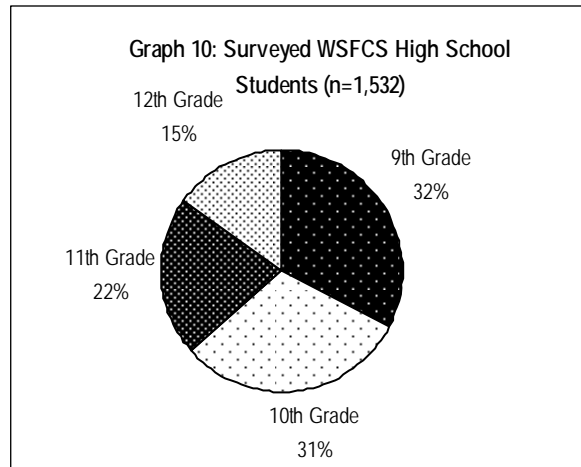
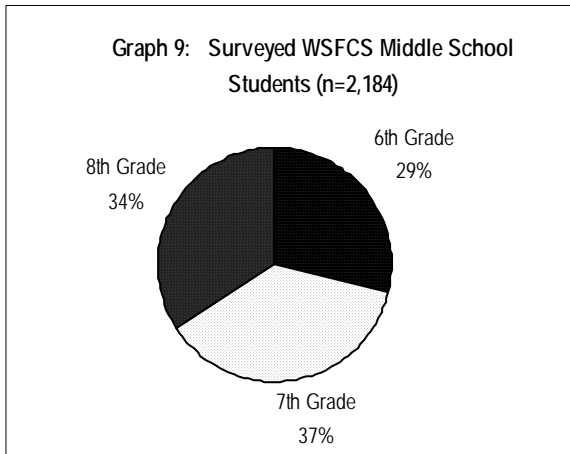
Classes were randomly selected to participate in the survey. The survey was administered in each classroom by trained facilitators. Facilitators were staff members of the Forsyth County Department of Public Health and adult volunteers from the local community. Each facilitator received an appropriate number of student survey booklets. With a total of 77 middle school survey questions and 97 high school survey questions, the booklets were short enough to allow the survey to be easily completed in one class period.

Students were asked to complete the survey but were also told that participation is voluntary. Furthermore, students were told that they could skip any question that they were not comfortable answering. Both the facilitator and the written instructions on the front of the booklet assured students that the survey was anonymous and confidential. Student names were not recorded as part of the survey process. Appropriate procedures were implemented for obtaining permission from parents for student participation.

Centers for Disease Control and Prevention's (CDC) guidelines for ensuring the quality of YRBS data were implemented during the processing of this report. WSFCS middle and high school students were cooperative. Each survey record was examined for logically inconsistent responses. For example, if a student reported in one question that she never tried smoking, but in a later question reported smoking within the past 30 days, the responses to both questions would be recoded as missing values. Survey records were marked as invalid if the student answered 20 questions or less.

The results of the WSFCS Middle & High School YRBS were presented for individual grade levels and the overall sample. The overall results must be interpreted in light of the sampling composition, especially which grades were included in the sample. This is important because the behaviors and attitudes measured by the YRBS are strongly associated with a respondent's age.

Participation in the YRBS included WSFCS middle schools students in grades 6-8 and WSFCS high school students in grades 9-12. Since this includes the full range of grade levels in each school level, the overall survey results can be interpreted as representing the attitudes and behaviors of the student population as a whole rather than just individual grade levels. *See Appendix for YRBS WSFCS Middle & High School Survey Highlights.*



## Secondary Data

Secondary data is information that has already been collected by someone other than you. The data may be a compilation of records or surveys that are conducted by other agencies. The data collected is generally of fairly high quality, especially when that agency involved collects similar data on a regular basis. This Community Assessment includes secondary data from the following sources:

- 2000 US Census Bureau
- 2010 United Way Annual Report
- 2010 Crime in North Carolina
- 2009 Forsyth County Infant Mortality Report
- 2009 Forsyth County Trends & Development Patterns
- 2010 Forsyth County Health Rankings
- Piedmont Triad Regional Council
- 2009 WS by Numbers & NW Piedmont COG Reports (Piedmont Triad Council of Governments)
- 2010 NC Coalition to End Homelessness Report
- North Carolina Department of Health and Human Services
- The North Carolina Center for Health Statistics
- 2009 Winston-Salem: By The Numbers
- Novant Health’s Forsyth Medical Center
- Baptist Hospital
- 2010 Winston-Salem Police Annual Statistical Report
- 2009 Forsyth County HIV/STD Surveillance Report
- Environmental Protection Agency
- NC Department of the Environment and Natural Resources
- Winston-Salem Forsyth County Utilities Division
- City of Winston-Salem
- US Department of Agriculture
- Forsyth Futures

US Census Bureau is a part of the United States Department of Commerce. One of the major duties of the Census Bureau is the United States Census, a decennial poll mandated by the United States Constitution. The Census is a source of quality data about the nation's people and economy to be used to determine the distribution of Congressional seats to states, make decisions about what community services to provide, distribute more than \$400 billion in federal funds to local, state, and tribal governments each year, and to provide age search information.

United Way of Forsyth County is a nationally-recognized leader in delivering positive, measurable impact in the community it serves. Their strategic focus is on improving Education, Income and Health, and the Building Blocks for a Good Life. By addressing needs in these three areas, they eliminate or reduce many problems that could occur in the future. Through its 32 partner agencies and other partnerships, United Way of Forsyth County was able to create real impact in 2010 in local conditions.

The North Carolina Uniform Crime Reporting (UCR) Program is part of a nationwide, cooperative statistical effort administered by the Federal Bureau of Investigation. While the program's primary objective is to generate a reliable set of criminal statistics for use in law enforcement administration, operation, and management, its data has, over the years, become one of the country's leading social indicators.

The Forsyth County Infant Mortality Reduction Coalition is a group of concerned citizens, organizations, and institutions working together to prevent infant deaths. It recognizes that promoting women's health before women become pregnant is the best long-term way to work for healthy mothers and babies in the community.

The 2009 Forsyth County Trends and Development Patterns report describes trends in development approvals and building permits between 2004 and 2009, with additional sources included for population and employment trends comparisons and analysis. Development information for 2009 from the Clemmons and Kernersville Planning Departments has been included to give a more complete picture of development trends.

The *County Health Rankings* rank the health of nearly every county in the nation and show that much of what affects health occurs outside of the doctor's office. The *County Health Rankings* confirm the critical role that factors such as education, jobs, income, and environment play in how healthy people are and how long they live. Published by the University of Wisconsin Population Health Institute and the Robert Wood Johnson Foundation, the *Rankings* help counties understand what influences how healthy residents are and how long they will live. The *Rankings* look at a variety of measures that affect health such as the rate of people dying before age 75, high school graduation rates, access to healthier foods, air pollution levels, income, and rates of smoking, obesity and teen births. The *Rankings* is based on the latest data publically available for each county, are unique in their ability to measure the overall health of each county in all 50 states on the multiple factors that influence health.

The Piedmont Triad Regional Council (PTRC) was formed on July 1st, 2011 when the Northwest Piedmont Council of Governments (NWPCOG) and the Piedmont Triad Council of Governments (PTCOG) merged. The PTRC is a voluntary association of municipal and county governments, enabled by state law to promote regional issues and cooperation among members. The PTRC serves 72 member governments in and around the Greensboro/Winston-Salem/High Point metro including the following twelve counties: Alamance, Caswell, Davidson, Davie, Forsyth, Guilford, Montgomery, Randolph, Rockingham, Stokes, Surry, and Yadkin Counties.

The North Carolina Coalition to End Homelessness (NCCEH) is a statewide [membership](#) nonprofit created to secure resources, encourage public dialogue, and advocate for public policy change to end homelessness. NCCEH seeks to create alliances dedicated to changing the current system to end homelessness by addressing root causes and challenging North Carolina's acceptance of today's pervasive homelessness. NCCEH's policy agenda is focused on bringing about an end to homelessness through prevention, increased access to and flexible funding for services, affordable housing production, increased funding for housing and homelessness programs, and targeting policies that exacerbate poverty.

The North Carolina Department of Health and Human Services (DHHS) is the largest agency in state government. It is responsible for ensuring the health; safety and well being of all North Carolinians, providing the human service needs for fragile populations like the mentally ill, deaf, blind and developmentally disabled, and helping poor North Carolinians achieve economic independence. Overall, the mission of DHHS is to provide efficient services that enhance the quality of life of North Carolina individuals and families so that they have opportunities for healthier and safer lives resulting ultimately in the achievement of economic and personal independence.

The North Carolina Center for Health Statistics is responsible for data collection, health-related research, production of reports, and maintenance of a comprehensive collection of health statistics. They provide high quality health information for better informed decisions and effective health policies. The goal is to improve the health of all North Carolinians and their communities.

Winston-Salem: By The Numbers provides an overview of Winston-Salem/Forsyth County and its demographic and economic characteristics. This document uses public data sources to supply reliable and trustworthy information to the community about Winston-Salem.

Forsyth Medical Center, one of four hospitals with the not-for-profit Novant Health, is a tertiary care hospital, offering a full continuum of emergency medical, surgical, rehabilitative and behavioral health services. Centers of excellence include Forsyth Rehabilitation Center, Sara Lee Center for Women's Health, Forsyth Cardiac & Vascular Center affiliated with the Cleveland Clinic, Derrick L. Davis Forsyth Regional Cancer Center, Forsyth Stroke & Neurosciences Center, Forsyth Regional Orthopedic Center and Forsyth Medical Center Behavioral Health. Under a confidentiality and non-disclosure agreement, the hospital provided information on pertinent emergency department and other community health indicators.

Wake Forest Baptist Medical Center is an 885-bed teaching hospital that serves as the region's principal tertiary referral center. As the largest employer in Forsyth County, it was ranked as one of America's Best Hospital by the US News & World Reports sine 1993. The clinical enterprise, Wake Forest Baptist Health, serves a 24 county region in northwestern North Carolina and southwestern Virginia with 21 subsidiary or affiliate hospitals that operate more than 120 outreach activities. The hospital served as a secondary data source under a confidentiality and non-disclosure agreement, the hospital provided information on pertinent emergency department and other community health indicators

The 2010 Winston-Salem Police Annual Statistical Report was produced by the Crime Prevention Unit of the Winston-Salem Police Department. The Crime Prevention Unit conducts various crime prevention and community relations activities for the Police Department. Specific duties include public education for crime prevention, organization of neighborhood watch groups, residential and



public education for crime prevention, organization of neighborhood watch groups, residential and business security inspections, organizing various youth programs to educate youth in crime prevention, and various other activities to promote citizen cooperation in reducing and preventing crime in the city.

The Forsyth County 2009 HIV/STD Surveillance Report includes summary tables of surveillance reports and other information for HIV disease, AIDS, Chlamydia, gonorrhea, and syphilis for Forsyth County cases that were reported from January 1, 2009 through December 31, 2009. This report is intended to be used as a reference document for program managers, health planners, researchers, and others who are concerned with the public health implications of these diseases. The information presented is meant to be brief and provided limited data. This report and other annual publications are available at <http://www.forsyth.cc/PublicHealth/publications.asp>.

The Environmental Protection Agency (EPA) is a federal agency with the mission to protect human health and the environment. To accomplish its mission, the EPA can develop and enforce regulations by setting national standards enforced by state and tribal regulation. Additionally the EPA provides grants to state environmental program, nonprofits, educational institutions, and other.

NC Department of the Environment and Natural Resources (DENR) administers regulatory programs designed to protect air quality, water quality, and the public's health. DENR also offers technical assistance to businesses, farmers, local governments, and the public and encourages responsible behavior with respect to the environment through education programs provided at DENR facilities and through the state's school system. Through its natural resource divisions, DENR works to protect fish, wildlife and wilderness areas. The agency's activities range from helping to make sure drinking water is safe to managing state parks and forests for safe and enjoyable outdoor recreation experiences.

The Winston-Salem/Forsyth County Utilities Division's primary responsibility is to collect, treat, and distribute water, waste water, and solid waste. The City/County Utility Commission oversees the Winston-Salem/Forsyth County water treatment plants and distribution system, its wastewater treatment plants and sewage collection system, the landfills for solid waste, construction and demolition debris, and yard waste. The Commission maintains a staff that operates and maintains three water treatment plants, two wastewater treatment plants, three landfills, and a collection and distribution system that includes 14 water tanks, seven pumping stations for fresh water, 52 pumping stations for wastewater, and 3,296 miles of water and sewer lines.

The City of Winston-Salem provides quality, affordable services that ensure the health, safety and well-being of citizens, while collaborating throughout the community to ensure its economic, social and environmental vitality. They update information regarding parks, greenways, recreation centers, and bike routes through the Departments of Transportation and Recreation and Parks.

US Department of Agriculture (USDA) provides leadership on food, agriculture, natural resources, and related issues based on sound public policy, the best available science, and efficient management. The USDA works to support the American agricultural economy to strengthen rural communities; to protect and conserve our natural resources; and to provide a safe, sufficient, and nutritious food supply for the American people. The Department's wide range of programs and responsibilities touches the lives of every American every day.

Forsyth Futures is a non-profit collaborative of residents, organizations and institutions working together to address critical community issues. The Forsyth Futures serves Forsyth County as a location for accessing and utilizing community knowledge. Local data on a range of community indicators in six sectors (Economic Self Sufficiency, Educational Success, Civic Engagement, Physical and Mental Health, Safety, and Sustainable Environment) which are identified to determine community conditions, trends and needs.

# **Community Opinions, Perceptions and Needs**

## Overview

To gauge residents beliefs and opinions regarding health, the Forsyth County Healthy Community Coalition conducted a community health opinion survey in 2011. This survey provides an overview of resident's beliefs and opinions regarding health status, health concerns, health resources, socioeconomic and educational factors, health problems and disabilities, and barriers and access to health care.

## Method

The community health opinion survey was conducted between March 31 and April 2, 2011 with the help of volunteers from the Forsyth County Healthy Community Coalition and Forsyth County Department of Public Health. Residents were asked a series of questions and their opinions were gathered via handheld computers that held the electronic survey questionnaire. Using the Centers for Disease Control and Prevention's 40-7 rapid needs assessment method, participants were randomly selected from 40 census blocks throughout the county, with seven household points within each census block. Volunteers were able to collect 231 of the targeted 280 surveys for a response rate of 60% over 3 days. In addition to opinions on an array of quality-of-life statements, community issues, community services, health behaviors, personal health, access to care, and emergency preparedness participants, were also asked to supply demographic information.

### Demographic Comparison

Population Category	Survey Participants		County Population
	Number	Percent	Percent
<b>Age (n=231)</b>			
15-24	20	8.7%	14.1%
25-34	29	12.6%	12.8%
35-44	46	19.9%	13.4%
45-54	48	20.8%	14.6%
55-64	33	14.3%	11.8%
65+	54	23.4%	12.9%
Unk.	1	0.45	
<b>Gender (n-231)</b>			
Female	140	60.6%	52.5%
Male	87	37.7%	47.5%
Unk.	4	1.7%	
<b>Race (n-231)</b>			
White/Caucasian	138	59.7%	62.3%
African American/ Black	70	30.3%	26.0%
American Indian	5	2.2%	0.4%
Asian	5	2.2%	1.9%
Other	10	4.3%	9.4%
<b>Ethnicity (n-231)</b>			
Hispanic	20	8.7%	11.9%
Non-Hispanic	209	90.5%	88.1%
Unk.	2	0.9%	
<b>Other (n-varies)</b>			
Unemployed	25	10.8%	10.1%*
Less than HS Di- ploma	31	13.5%	13.3%**
Household Income <\$25,000	58	31.1%	27.2%**
<b>Note:</b> Unknown: Unk.; * = 2009 American Community Survey; ** = NC Employment Security Commission June 2011			

## Survey Results

### Quality-of-Life in Forsyth County

- 74.4% Agreed or Strongly Agreed that there is good healthcare in Forsyth County, while 13.9% were Neutral and 11.7% Disagreed or Strongly Disagreed
- 85.7% Agreed or Strongly Agreed that Forsyth County is a good place to raise children, while 11.3% were Neutral and 3.05% Disagreed or Strongly Disagreed
- 80.6% Agreed or Strongly Agreed that Forsyth County is a good place to grow old, while 14.7% were Neutral and 4.8% Disagreed or Strongly Disagreed
- When stratified by race, White respondents agreed at a higher percentage than Black and the Other races with this statement.

GROW OLD BY RACE	%Disagree or Strongly Disagree	% Neutral	%Agree or Strongly Agree
African American/Black	7.1%	20.0%	72.8%
White/Caucasian	4.3%	10.9%	84.7%
Other	0.0%	21.7%	78.2%

- Only 39.4% Agreed or Strongly Agreed that there is plenty of Economic Opportunity in Forsyth County, while 28.6% were Neutral and 39.4% Disagreed or Strongly Disagreed.

ECONOMIC OPPORTUNITY BY RACE	%Disagree or Strongly Disagree	% Neutral	%Agree or Strongly Agree
African American/Black	50.0%	25.7%	24.3%
White/Caucasian	35.5%	28.3%	36.2%
Other	30.4%	39.1%	30.4%

- When stratified by race, 50% of the Black respondents disagreed with statement about economic opportunity and about one-third among Whites or Other Races disagreed.

ECONOMIC OPPORTUNITY BY AGE	%Disagree or Strongly Disagree	% Neutral	%Agree or Strongly Agree
15-24	40.0%	25.0%	35.0%
25-34	41.4%	34.5%	24.1%
35-44	45.7%	21.7%	22.6%
45-54	39.6%	27.1%	33.4%
55-64	36.4%	33.3%	30.3%
65+	35.2%	31.5%	33.4%

- When stratified by age, more than 35% of the respondents in all age groups tended to disagree with the statement about Economic Opportunity

SAFE ENVIRONMENT BY RACE	%Disagree or Strongly Disagree	% Neutral	%Agree or Strongly Agree
African American/Black	8.6%	28.6%	62.8%
White/Caucasian	7.2%	16.7%	76.1%
Other	8.75	17.4%	73.9%

- 71.9% Agreed or Strongly Agreed that Forsyth County is a safe place to live, while 20.4% were Neutral and 7.8% Disagreed or Strongly Disagreed
- Whites and Other agreed with the safety statement in significantly higher proportion than Blacks.

## Community Improvements

The following Community Issues were selected as the top that most affects the quality of life in Forsyth County and important to community members. The responses are arranged in descending order of frequency with which a named issue was chosen.

Community Issues	Number of Responses	Percent of Responses
1. Low income/poverty	48	20.8%
2. Dropping out of school	39	16.9%
3. Lack/inadequate health insurance	29	12.6%
4. Homelessness	19	8.2%
5. Other	15	6.5%
6. Violent crime (murder, assault, etc.)	12	5.2%
7. Lack of community support	10	4.3%
8. Pollution (air, water, land)	9	3.9%
9. Discrimination/racism	9	3.9%
10. Theft	9	3.9%
11. Hopelessness	7	3.0%
12. Domestic violence	6	2.6%
13. Child abuse	4	1.7%
14. Elder Abuse	3	1.3%
15. Rape/sexual assault	2	0.9%

"Other" write –in responses included: Jobs(6); Taxes(2); Income disparity(1); Inappropriate behavior between Teacher & Student(1); Lack of communication among County Agencies(1); Crime (1); Children's education(1); Don't Know (2).

- All income groups, except the income group over \$75,000, selected low income/poverty most frequently; the income group over \$75,000 selected dropping out of school most frequently.
- Lack inadequate health insurance and low income/poverty were selected most frequently by respondents at income levels less than \$20,000.
- Low income/poverty and homelessness were selected most by the \$25,000-\$34,999 group.
- Violent crime was selected at the highest frequency by the \$50,000-\$74,999 group.
- Among income group over \$75,000, dropping out of school was selected the most and lack of community support at the highest frequency.

## Services

The following services were indicated as needing the most improvement in the neighborhood or community of survey respondents. The list is arranged in descending order of frequency with which a name issue was chosen.

List of Services	Number of Responses	Percent of Responses
1. Availability of employment	51	22.1%
2. Positive teen activities	31	13.4%
3. More affordable health services	27	11.7%
4. Higher paying employment	17	7.4%
5. Elder care options	13	5.6%
6. More affordable/better housing	11	4.8%
7. Road maintenance	11	4.8%
8. Services for disabled people	8	3.5%
9. Healthy family activities	8	3.5%
10. Transportation options	8	3.5%
11. Better/more recreational facilities	7	3.0%
12. Other*	7	3.0%
13. Animal control	6	2.6%
14. Better/more healthy food choices	6	2.6%
15. Child care options	5	2.2%
16. Number of health care providers**	3	1.3%
17. Road safety	3	1.3%
18. Culturally appropriate health services	1	0.4%
19. Counseling/mental health/support groups	1	0.4%

\* Other write-in responses for list of services included: law enforcement (3); friendly neighborhood (1); Garbage (1); Fire department (1); translation for disabled (1).

\*\*Of the 3 person who selected "number of healthcare providers (HCP); they indicated the kind of HCP as General health (2); Mental health (1)

- Income groups under \$74,999 selected availability of employment most frequently, while the over \$75,000 income group selected positive teen activities most frequently.



## Health Behavior

When asked what health behavior people in their community needed more information about, the survey responded:

Health Behavior	Number of Responses	Percent of Responses
1. Preparing for an emergency/disaster	23	10.0%
2. Eating well/nutrition	18	7.8%
3. Substance abuse prevention	17	7.4%
4. Going to a doctor for yearly check-ups and screenings	16	6.9%
5. Other*	16	6.9%
6. Managing weight	15	6.5%
7. Preventing pregnancy and sexually transmitted disease (safe sex)	12	5.2%
8. Crime prevention	11	4.8%
9. Elder care	11	4.8%
10. Caring for family members with special needs/disabilities	10	4.3%
11. Exercising/fitness	10	4.3%
12. Child care/parenting	9	3.9%
13. Driving safely	9	3.9%
14. Quitting smoking/Tobacco use prevention	9	3.9%
15. Stress management	8	3.5%
16. Going to a dentist for check-ups / preventive care	6	2.6%
17. Domestic violence prevention	5	2.2%
18. Getting flu shots and other vaccines	4	1.7%
19. Anger management	3	1.3%
20. Getting prenatal care during pregnancy	3	1.3%
21. Using child safety seats	2	0.9%
22. Rape/sexual abuse prevention	1	0.4%
23. Suicide prevention	1	0.4%
24. Using seat belts	1	0.4%

- Income group less than \$25,000 selected substance abuse prevention most frequently, while all income groups over \$25,000 selected preparing for an emergency/disaster most frequently.
- White/Caucasians selected preparing for an emergency/disaster most frequently; Black/African Americans selected going to a doctor for yearly check-ups and screenings and the Other group selected both eating well/nutrition and substance abuse prevention most frequently.

## Personal Health

When asked to described their general health:

- 71.8% of respondents rated their health as Good or Very Good, 9.1% as Excellent, while 19.0% rated their health as Fair or Poor

	Number	Percent
Excellent	21	9.1%
Very Good	86	37.2%
Good	80	34.6%
Fair	28	12.1%
Poor	16	6.9%

- When asked about health conditions diagnosed by a doctor, nurse, or other health professional, the following response frequencies occurred:

Health Conditions	Number of Responses
High blood pressure	81
High cholesterol	68
Overweight/obesity	63
Depression or anxiety	40
Asthma	32
Diabetes(not during pregnancy)	27
Cancer	18
Angina/diseases disease	15
Osteoporosis	14

- About 22.1% respondents stated that they felt sad or worried and had kept them from going about their normal business in the past 30 days.
- 65.2% engaged in physical activity or exercise outside their regular job
- 12.7% had the recommended 14 cups of fruit in an average week while 18.8% indicated they ate the recommended 14 cups of vegetables in an average week.
- More than 57% of respondents had been exposed to secondhand smoke in the past year.
- Only 24.2% of respondents were current smokers.

## Access to Health Care

- 67.1% of respondent go to a doctor's office most often when sick

	Number	Percent
Doctor's Office	155	67.1
Health department	6	2.6
Hospital	20	8.7
Medical Clinic	19	8.2
Urgent care center	11	4.8
Other	20	8.7

- 50.2% of respondents had Blue Cross and Blue Shield of North Carolina or Other Private Health Insurance Plan Purchased from Employer or Workplace; 21.8% reported No Health Plan of Any Kind.

	Number	Percent
The State Employee Health Plan	9	4.0
Blue Cross and Blue Shield of North Carolina	58	25.8
Other private health insurance plan purchased from employer or workplace	55	24.4
Other private health insurance plan purchased directly from an insurance company	7	3.1
Medicare	33	14.7
Medicaid or Carolina ACCESS or Health Choice 55	7	3.1
The military, Tricare, CHAMPUS, or the VA	3	1.3
The Indian Health Service	0	0.0
Other (government plan)	4	1.8
No health plan of any kind	49	21.8

- 12.6% reported having a problem getting the healthcare needed for them personally or for a family members. Of those they had most trouble getting health care from a Dentist (20%) or a General Practitioner (20%).

	Number	Percent
Dentist	9	20.0
General practitioner	9	20.0
Eye care/ optometrist/ ophthalmologist	4	8.9
Pharmacy/ prescriptions	2	4.4
Pediatrician	1	2.2
OB/GYN	2	4.4
Health department	3	6.7
Hospital	2	4.4
Urgent Care Center	3	6.7
Medical Clinic	4	8.9
Specialist	6	13.3

- 34.7% attributed no health insurance as a problem that prevented them or a family member from getting necessary health care.

	<b>Number</b>	<b>Percent</b>
No health insurance.	17	34.7
Insurance didn't cover what I/we needed.	4	8.2
My/our share of the cost (deductible/co-pay) was too high.	8	16.3
Doctor would not take my/our insurance or Medicaid.	1	2.0
Hospital would not take my/our insurance.	0	0.0
Pharmacy would not take my/our insurance or Medicaid.	1	2.0
Dentist would not take my/our insurance or Medicaid.	1	2.0
No way to get there.	0	0.0
Didn't know where to go.	2	4.1
Couldn't get an appointment.	0	0.0
The wait was too long.	5	10.2
Other	10	20.4

- If a friend or family member needed counseling for a mental health or a drug/alcohol abuse problem, 35.1% would refer them to a doctor, 20.3% would refer them to a minister/religious official, and 16.9% would refer them to a private counselor or therapist.

#### **Emergency Preparedness**

- 42.9% of homes had both smoke detectors and carbon monoxide detectors that were working, 45.9% only had smoke detectors, while 5.2% had neither and 1.3% were unsure.
- 42% of homes had a basic emergency supply kits with 81.3% having enough supplies for 1-7 days.
- To learn information from authorities in a large-scale disaster or emergency 47.4% would use televisions, 26.1% would use the radio and 13.0% would use the internet.

#### **Food Security**

- In response to the statement "The food that (I/we) bought just didn't last, and (I/we) didn't have enough money to get more," was Sometimes True for 21.4% of respondents and Often True for 4.4% of respondents
- 14.5% of respondents said it is Sometimes True that they couldn't afford to eat balanced meals, while 5.7% of respondents said it is Often True.

*See Appendix for more information Community Health Opinion Survey Report*

## Focus Groups

The Community Health Assessment Primary Data Working group conducted focus groups to synthesize Forsyth County residents' viewpoint on important health and community issues. For the 2011 CHA process, focus group questions were specific to food access, healthcare access, neighborhood activism and other issues important to them into primary themes. These themes are often supported by quotes from the participants which will help the Forsyth County to identify its strengths, challenges, and future directions. *See Appendix for more information on Focus Group Report*

***Community concerns and opinions on food access*** included developing a habit of eating healthy; not having the time to cook; cost of healthier food; and eating out a lot. Habits varied from style of cooking, cultural differences to selection of food. They mostly shopped at Walmart, Food Lion, Sam's Club, Costco and Aldi's because of the price, location, convenience and ability to buy in bulk. They stated that they went out to eat at different restaurants such as Chinese, K&W, Golden Corral, and fast food restaurants. Majority stated that they drove their cars, rode with someone else, took the bus or walked to the store or restaurants. Most of them stated that they had the skills to prepare healthy meals. Their concern regarding food preparation and storage were cross contamination, preparing food at the right temperature, labeling food properly and food spoilage.

***Community concerns and opinions on healthcare access*** included medical care, mental care and going to work while sick. Most of the participants go to their primary care provider (PCP) for medical care because of the established relationship and trust; and those without health insurance go to a Hospital Emergency Department, Church clinic or health fair. They would go to their PCP referral, Behavioral Health Plaza or Daymark for mental health concern or a Hospital Emergency Department. Their form of payment ranges from health insurance, state assistance or church assistance or payment plans. They either drive or take the bus to get to their appointments. For after hours crisis, they would call 911, their PCP on-call number or use a Hospital Emergency Department. More than half stated that they went to work sick for lack of sick paid leave.

***Overall concerns and opinions on neighborhood activism included*** neighborhood concerns, bringing change to their neighborhood and success already achieved. Their major concerns were increased crime, gang activity, drug activity and public safety. They mentioned ways to activate their neighborhoods were through meetings, involving their City of Winston-Salem Neighborhood Liaisons and law enforcement. As neighborhoods, they believed that they could bring about the change they desired. Majority stated that they had an active neighborhood association and communicated through printed media, phone calls and going door to door. The success achieved included neighborhood signage, crime watch, and cleaning up their neighborhood.

***Hispanic community concerns and opinions on food access*** included the difficulty of avoiding starchy food; obesity of their children and the difficulty to motivate them to eat vegetables; cost of organic food; and unhealthy food choices in schools. They mostly shopped at Walmart, Compare, Aldi's, Food Lion, and Mexican stores because of their prices, store specials and finding everything at one place. They stated that they went out to eat at different restaurants such as Chinese, K&W, Golden Corral, CC Pizza and fast food restaurants because of affordability. Majority stated that they drove their cars, took the bus or walked to the store or restaurants. Most of them stated that they had the skills to prepare healthy meals. However they thought that it was too expensive to cook healthy meals at home they cook healthy meals 2 -3 times during the week. Their concern regarding food preparation and storage was labeling food properly.

*"..They develop bad habits and only want hamburgers etc."*

*"... to label food properly, you can only keep food for three days..."*

**Hispanic community concerns and opinions on healthcare access** included medical care, mental care and going to work while sick. Their responses regarding where they go for medical care varied from Free Clinic, Church Clinics, Health Fairs, Prime Care, high bills from the Emergency Department, affordable payment plan at Downtown Health Plaza, too many requirements from Community Care Center to not going anywhere because of lack of health insurance. They stated they had no concerns with mental health. Their form of payment ranged from Carolina Access, state assistance or church assistance or payment plans. They rode the bus, took a taxi or drove their cars to get to their appointments. For after hours crisis, some stated that they would call 911 while others stated that they do not to call anyone because of language barriers. Majority stated that they went to work sick for lack of sick paid leave, they were temporary workers and they can't afford to miss any days of work due to the economy; so they take some medicine and go on to work.

*"...I don't call anybody because of the English barrier..."*

*"I don't call 911 because they do not have interpreters and it takes a long time..."*

*"If you don't show for work there is someone right behind you to take your place"*

*"Who's going to pay the bills if you don't work?"*

*"..There's not enough money, so we won't waste a day of work..."*

**Hispanic community concerns and opinions on neighborhood activism included** neighborhood concerns, bringing change to their neighborhood and success already achieved. Their major concerns were the need for more safe parks for children; affordable daycares; citizens' rights regarding debt collectors; lack of interest/support from the police department; robbery; gang activity; loud music; accessible dental clinics; public safety for children and mistreatment from DSS staff. They also mentioned the need for more programs for teen education about sex and pregnancy, access to eye care and health-care; more resource information; YMCA programs are unaffordable; after school care at churches to help with homework and English. They wanted to see changes in their community but do not know how to start. They also wanted the WS Police Department to take more interest in their community; and have more support from the local businesses and the City. They communicated through the radio and pass news to everyone in the community or church. The success achieved included crime watch, and cleaning up their neighborhood and have security checks at Lakeside. They were unaware of First Line, 211 neighborhood liaisons with the city.

*" the police aren't interested in getting to Latino neighborhoods"*

*"They are good at giving tickets to Latinos."*

*".. we need more information to help us plan.."*

*"It's one thing not to be able to see well, but if you have a horrible tooth pain, you can't eat"*

## Stakeholders' Interview Report

The Community Health Assessment Primary Data Working group conducted telephone interviews with 41 stakeholders representing multiple organizations in Forsyth County. The interviewees worked in the key sectors of the community, including cultural, recreation, healthcare, education, business, law enforcement and social services.

Participating stakeholders were assured that their personal identities would be protected and would not be connected to the report during the interview consent. Stakeholders shared information about the services they provide, their perceptions on current and emerging community issues, the strengths of the community, and areas that need improvement. *See Appendix for more information on the Stakeholders' Interview Report.*

### Current and emerging community issues

Stakeholders indicated that the major challenges or needs for residents that are not being addressed are as follows:

- Employment opportunities/Retraining & Job Skills (7)
- Financial constraint (5)
- Mental health issues (5)
- Wealth disparity (4)
- Access to healthcare (3)

*"Rising rates of co-morbidities in older adults with cardiovascular disease, diabetes, and cancer; Obesity epidemic in kids – a generation of kids getting early diabetes and Type 2 diabetes"*

*"Gaps in service - mental health - not addressing mental health in terms of types of services"*

*"....increasing gap between low and high SES not being addressed in our current conversations;"*

*"Underemployment; Employment - We need more appropriate level compensation and skills for jobs."*

The most often mentioned major health-related problems they perceived in their county are listed below:

- Overweight and obesity (18)
- Mental health issues; lack of mental illnesses services (8)
- Chronic illnesses such as diabetes, high blood pressure, heart disease (8)
- Access to healthcare; no health insurance (7)
- Infant mortality (5)
- Substance abuse /addiction (4)

*"....youth-unhealthy/inactive lifestyles; obesity, child diabetes, high blood pressure, stress.."*

*"Extreme use of emergency room for non-emergency issues due to lack of insurance."*

*"Smoking – RJR has been a great community partner, but tobacco is still a bad product and shows up in our infant mortality rates. "*

*"Mental Health (due to restructuring at the state level); Obesity*



### **Community Strengths**

Stakeholders indicated that Forsyth County has much strength. The most often mentioned strengths are listed below:

- Caring and philanthropic nature of the community (13)
- Good health care system and two well managed hospitals (12)
- Quality schools and post-secondary educational institutions (12)
- Variety of services and resources available, including non-profits, foundations, and community agencies/organizations (10)

*"We have a positively engaged community with much philanthropy and volunteerism..."*

*"Two major medical centers; active EMS; on the whole our community is well"*

*"Quality of life; local health care; local colleges and universities; strong public schools and private schools"*

*"...very livable place, easy to get around, people are personable.."*

### **Areas that Need Improvements**

Participating stakeholders stated that the main barriers for residents seeking to access their agencies' services were as follows:

- Lack of accessibility and awareness of services (17)
- Economic Stress/ Affordability (11)
- Transportation (8)
- Language Barriers (5)

*"...stigma associated with mental illness; Lack of awareness of the Mental Health Association and its related services"*

*"The perception of a language barrier; Lack of awareness regarding specialty and newer services"*

*"...worry about transportation in centralized location particularly homebound/elderly"*

*"Social/economic stress factors prevent parents from seeking access & lack of awareness of mental health services"*

The most identified health services that are needed for children and adolescents were:

- Access to mental health (8)
- Lack of education and awareness (5)
- Basic dental health (5)
- Recreation facilities and activities (4)

*"....mental health long term services - few for preschool/ early childhood services."*

*"Outpatient mental health services are needed for adolescents. Alternatives are needed to institutions and prisons."*

*"We have Brenner Children's Hospital (excellent), but we need more public awareness about the available services offered."*

*"Recreational activities and facilities are needed – more outside activities to get kids away from screens – we need bigger capacity."*

*".....dental care for certain populations, regular primary care"*

## 2011 Youth Risk Behavior Survey

The Youth Risk Behavior Survey (YRBS) is produced by the Centers for Disease Control and Prevention (CDC) and modified to meet the needs of North Carolina. Statewide, North Carolina Healthy Schools administers the YRBS to a select sample of North Carolina middle and high school students. It is conducted every two years to assess health risk behaviors that contribute to some of the leading causes of morbidity and mortality in youth.

In 2011, the YRBS was administered in **15 public middle schools** in Winston-Salem/Forsyth County (WSFC); among **2,184 middle school students** and in 13 public high schools among 1,532 high school students.

### Highlights from the WSFCS Middle School Survey Results

#### Positive Results

- 78% of students either strongly agree or agreed that they feel good about themselves
- Over the past week (at the time of the survey), students reported an average of 4.6 days in which they were physically active for at least 60 minutes.

#### Areas for Improvement

- A third of students reported having had a drink of alcohol, other than a few sips
- One in two students reported ever being in a physical fight
- One out of every five students reported seriously considering attempting suicide
- 13% of students reported developing a suicide plan

### Highlights from the WSFCS High School Survey Results

#### Positive Results

- The percentage of students who reported drinking a can, bottle, or glass of soda or pop at least once per day during past 7 days decreased from 36% in 2009 to 23% in 2011.
- Slight declines were reported in students ever having sexual intercourse.

#### Areas for Improvement

- Reports of being bullied on school property increased from 14% in 2009 to 17% in 2011.
- One in every three student reported sending a text or email while driving.
- 10% of female students and 6% of male students reported having been physically forced to have sexual intercourse.
- Over one third of students reported gang activity is a problem in their school.
- 14% reported seriously considering attempting suicide; and 12% had attempted suicide one or more times in the past year.
- Compared to male students, females reported substantially higher rates of suicide-related attitudes and behavior.

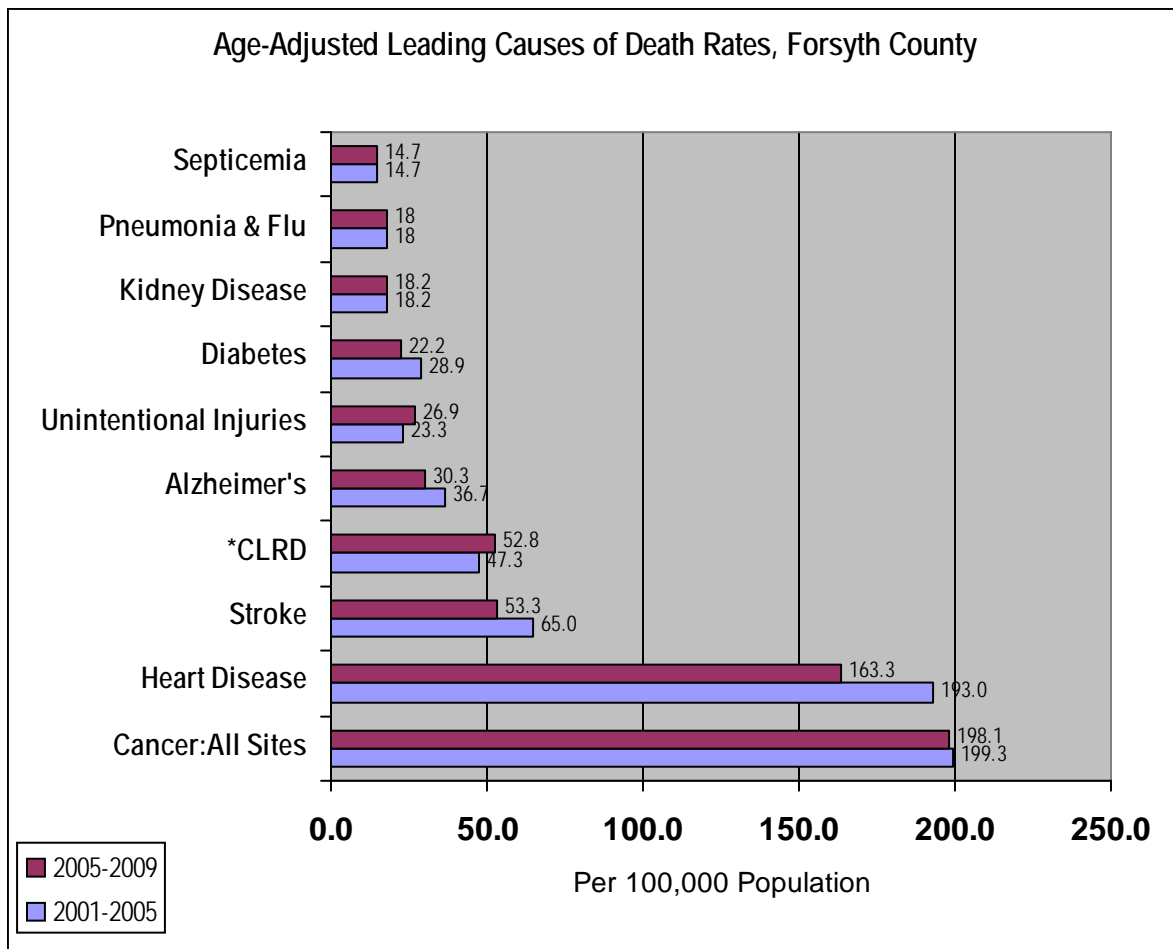
***See Appendix for more information on the YRBS Middle & High Survey Reports***

# **Mortality**

## Leading Causes of Deaths

In comparison to the ten leading causes of death in the 2007 Community Health Assessment, the causes remain the same: cancer, heart disease, cerebrovascular disease, chronic lower respiratory disease, Alzheimer's, unintentional injuries, diabetes, kidney disease, pneumonia and influenza, and septicemia.

The chart below compares the age adjusted leading causes of death data from the 2007 assessment (2001-2005 data) with the current (2005-2009) data. The rates of most causes of death decreased or remained constant, with the exception of chronic lower respiratory disease and unintentional injuries, which increased.



\*CLRD-Chronic Lower Respiratory Disease

## Leading Causes of Death by Age, Gender & Race

2005-09 Leading Causes of Death by Age, Forsyth County			
Age	Cause of Death	Number of Deaths	Death Rate
0-19	Conditions originating in the perinatal period	137	27.7
20-39	Other Unintentional injuries	84	18
40-64	Cancer - All Sites	971	174.9
65-84	Cancer - All Sites	1818	976.2
85+	Diseases of the heart	867	3045.4

North Carolina County Health Data Book - 2011

NC Department of Health and Human Services

In 2005-2009, among ages 0-19 years, the leading cause of death was Conditions originating in the perinatal period. The leading cause of death among ages 20-39 was Other unintentional injuries which includes falls, exposure to smoke, fires or flame, accidental drowning, and accidental poisoning. Cancer was the leading cause of deaths among residents ages 40-84 and Heart disease for those over the age of 84.

Leading Causes of Death in Forsyth County by Age Group, 2009		
Infants (<1year)	Ages 1-14 Years	Ages 15-24 Years
1. Congenital Defects	1. Cancer	1. Motor Vehicle Injuries
2. Prematurity & Low Birth Weight	2. Other Unintentional Injuries	2. Suicide
3. Maternal Complication or SIDS	3. Influenza & Pneumonia	3. Other Unintentional Injuries
Ages 25-44 Years	Ages 45-64 Years	Ages 65+ Years
1. Heart Disease	1. Cancer	1. Cancer
2. Cancer	2. Heart Disease	2. Heart Disease
3. Other Unintentional Injuries	3. Other Unintentional Injuries	3. Chronic Lower Respiratory Disease

In 2009, the leading causes of death for infants was Congenital defects; Cancer for residents 1-14 years; Motor Vehicle injuries for residents 15-24; Heart Disease for residents 25-44 and Cancer for ages 44 and older.

## Leading Causes of Death by Age, Gender & Race

2005 - 2009 Forsyth County Resident Race and Sex-Specific Age-Adjusted Death Rates  
Standard = Year 2000 U.S. Population ; \*Rates Per 100,000 Population

Cause of Death:	White				African American				Other			
	Male		Female		Male		Female		Male		Female	
	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate
All Causes	4,977	858	5,676	627	1,718	1,251.40	1,786	823	46	524	26	275
Diseases of Heart	1,048	182	990	104	368	275.3	345	160	14	N/A	5	N/A
Cerebrovascular Disease	248	44.9	410	42	88	73.8	151	70.9	4	N/A	3	N/A
Cancer	1,288	214	1,255	149	408	308.2	391	175	8	N/A	10	N/A
Diabetes Mellitus	98	16.4	111	12.7	83	55.8	82	38.9	1	N/A	2	N/A
Pneumonia and Influenza	113	21	139	14.7	20	16.1	31	14.7	2	N/A	0	N/A
Chronic Lower Respiratory Diseases	341	59.7	439	49.8	60	51.6	56	26.6	0	N/A	0	N/A
Chronic Liver Disease and Cirrhosis	66	10	51	6.3	22	13.8	15	N/A	0	N/A	0	N/A
Septicemia	84	14.5	87	9.9	35	24.9	42	19.5	0	N/A	1	N/A
Nephritis, Nephrotic Syndrome, and Nephrosis	107	19.5	93	10.1	46	36.8	62	29.9	1	N/A	0	N/A
Unintentional Motor Vehicle Injuries	114	18.8	52	7.4	32	15.9	11	N/A	2	N/A	0	N/A
All Other Unintentional Injuries	215	36.9	161	19.7	43	26.6	34	15.6	3	N/A	0	N/A
Suicide	124	19.4	44	6.8	22	11.1	3	N/A	1	N/A	0	N/A
Homicide	39	6.6	12	N/A	54	25.5	7	N/A	0	N/A	1	N/A
Alzheimer's disease	100	19.7	333	32.1	15	N/A	66	32.6	0	N/A	0	N/A
Acquired Immune Deficiency Syndrome	7	N/A	4	N/A	45	23	34	14	0	N/A	0	N/A

- Both White and African American women continue to experience higher death rates for Alzheimer's disease compared to men.
- African American continue to experience higher death rates for Diabetes, Heart disease, Stroke and Kidney Disease compared to Whites
- Whites experience higher death rates for Chronic Lower Respiratory Disease and Suicide compared to African Americans.
- Homicide deaths are 3.1 times higher among African American than Whites and 5.0 times higher among males compared to females ..

## Mortality: Leading Causes of Death by Gender & Race

Leading Causes of Death by Race in Forsyth County, 2009			
Rank	Whites	Non-Whites	Hispanics
1	Cancer	Cancer	Homicide
2	Heart Disease	Heart Disease	Heart Disease
3	Chronic Lower Respiratory Disease	Cerebrovascular Disease	Cancer
4	Cerebrovascular Disease	Diabetes Mellitus	Congenital Anomalies
5	Other Unintentional Injuries	Chronic Lower Respiratory Disease	Motor Vehicle Injuries
6	Alzheimer's Disease	Kidney Disease	Perinatal Conditions
7	Pneumonia & Influenza	Other Unintentional Injuries	Other Unintentional Injuries
8	Septicemia	Alzheimer's Disease	Suicide
9	Suicide	Perinatal Conditions	Septicemia
10	Kidney Disease	HIV Disease	Cerebrovascular Disease

- In 2009, Cancer, Heart Disease, Chronic Lower Respiratory Diseases and Stroke are the leading causes of death in Forsyth County, North Carolina and the United States.
- Homicide is leading cause of death among Hispanics.
- Whites continue to experience higher death rates due to Alzheimer's Disease, Pneumonia & Influenza, Suicide and Septicemia compared to Non-Whites
- Non-whites continue to experience higher death rates due to Diabetes, Perinatal Conditions, HIV Disease compared to Whites.
- Males continue to experience higher death rates due to Suicide and Other Unintentional injuries compared to females
- Females continue to experience higher death rates due to Alzheimer's Disease compared to males.

Leading Causes of Death in Forsyth County by Gender, 2009		
Rank	Males	Females
1	Cancer	Cancer
2	Heart Disease	Heart Disease
3	Chronic Lower Respiratory Disease	Cerebrovascular Disease
4	Other Unintentional Injuries	Chronic Lower Respiratory Disease
5	Cerebrovascular Disease	Alzheimer's Disease
6	Suicide	Other Unintentional Injuries
7	Kidney Disease	Pneumonia & Influenza
8	Diabetes Mellitus	Diabetes Mellitus
9	Pneumonia & Influenza	Septicemia
10	Septicemia	Kidney Disease

Top Ten Leading Causes of Death for Forsyth County, North Carolina, and the United States, 2009			
	Forsyth	NC	US
Cancer	1	1	2
Heart Disease	2	2	1
Cerebrovascular Disease	3	3	4
Chronic Lower Respiratory Disease	4	4	3
Alzheimer's Disease	5	6	6
Other Unintentional Injuries	6	5	5
Diabetes Mellitus	7	7	7
Kidney Disease	8	8	9
Pneumonia & Influenza	9	9	8
Septicemia	10		
Motor Vehicle Injuries		10	
Suicide			10



## Mortality: Health Disparities

Health Disparities in Forsyth County, 2005-2009 Adjusted Death Rates				
	White	Black	Black Ratio to White	White Ratio
<b>Prostate Cancer</b>	7.6	17.4	2.3	1
<b>Diabetes</b>	14.1	45.9	3.3	1
<b>Heart Disease</b>	136.2	203.0	1.5	1
<b>Stroke</b>	43.7	72.2	1.7	1
<b>Chronic Lower Respiratory Disease</b>	53	35	1	1.5
<b>Kidney Disease</b>	13.5	32.3	2.4	1
<b>Suicide</b>	12.9	5.4	1	2.4
<b>Homicide</b>	4.3	13.1	3.1	1
<p><b>Ratio:</b> A ratio is calculated by dividing the group with the higher death rate by the group with the lower death rate. Example the prostate cancer ration would read: 2.3 black people die from prostate cancer for every 1 white person that dies from the same disease.</p> <p><b>Rate</b> per 100,000 Population</p>				

Healthy People 2020 defines health disparities as “a particular type of health difference that is closely linked with social, economic, and/or environmental disadvantage. Health disparities adversely affect groups of people who have systematically experienced greater obstacles to health based on their racial or ethnic group; religion; socioeconomic status; gender; age; mental health; cognitive, sensory, or physical disability; sexual orientation or gender identity; geographic location; or other characteristics historically linked to discrimination or exclusion.”

Persistent health disparities in the United States, North Carolina and Forsyth County are unacceptable and correctable. The problem must be addressed with dual strategies— both universal interventions available to everyone and targeted interventions for populations with special needs.

Health Disparities can lead to concerns about:

- Cultural beliefs and attitudes/ trust
- Culturally competent providers
- Effective messages
- Navigating the health care system

### Health Outcomes– Mortality & Morbidity

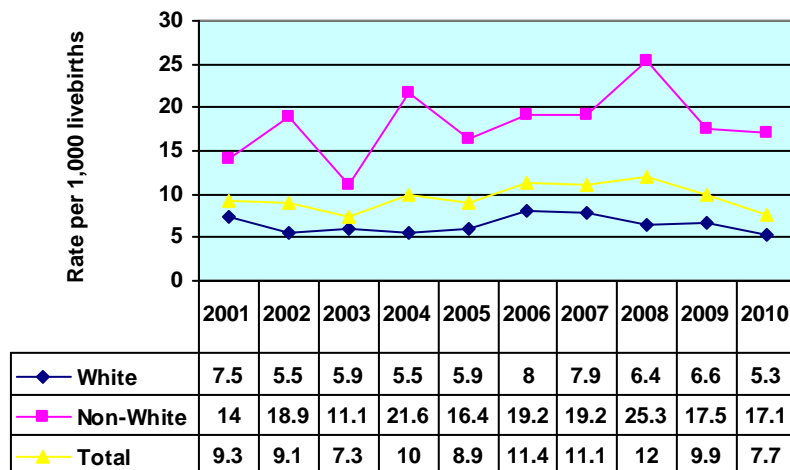
- *Infant deaths*– Since 2005 to 2009, the non-Hispanic black babies die at a rate of almost 3 times that of white babies.
- *Prostate Cancer deaths* among African Americans are about 2.3 times that of White men.
- African American experience higher death rates for *Diabetes, Heart Disease, Stroke and Kidney Disease* compared to Whites.
- *Homicide deaths* are 3.1 times higher among African American than White and 5.0 times higher among males compared to females.
- Whites experience higher death rates for *Chronic Lower Respiratory Disease and Suicide* compared to African Americans.
- Prevalence of *Obesity* is twice higher among non-Whites compared to Whites.

## Infant Mortality Rates

Forsyth County’s infant mortality rate (IMR) declined significantly in 2010, reaching its lowest level in seven years. The rate, 7.7 infant deaths for every 1,000 live births, represents a 22.2 percent drop from 2009 rate of 9.9 deaths.

According to information from the North Carolina State Center for Health Statistics, there were 36 infant deaths and 4,693 live births in Forsyth County in 2010; compared to 48 infant deaths and 4,834 live births in 2009. There has been a decrease in live births in Forsyth County, North Carolina and the nation over the past four years. **Forsyth County has the second highest overall infant mortality rate of the five (5) urban North Carolina counties.** The State's overall infant mortality rate was 7.0 deaths per 1,000 live births; a decline of 11.4 percent from its 2009 rate of 7.9.

2001-2010 Forsyth County Infant Mortality Rates by Race



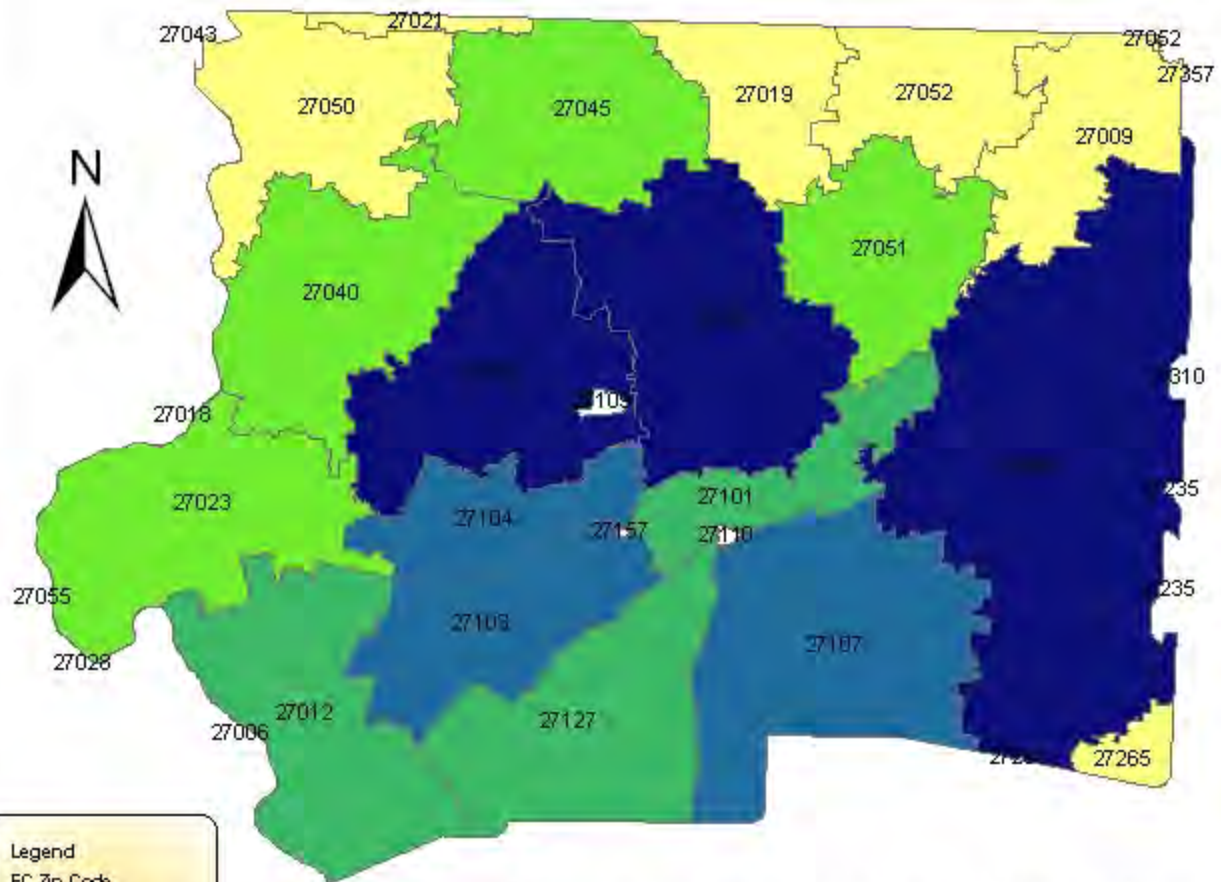
### Forsyth County Infant Mortality Facts:

- Forsyth County has the second highest overall infant mortality rate of the five most populated NC counties in 2010.
- Forsyth County continues to have a persistent inequity in birth outcomes. In 2010, African American infants in Forsyth County died at a rate of over three (3.2) times that of white infants.
- For North Carolina as a whole, total infant mortality rates dropped 11.4% between 2009 and 2010.
- North Carolina ranks 44th in the nation for infant death.
- The U.S. ranks 29th in the world in infant mortality, tied with Poland and Slovakia.

### Sources:

1. North Carolina State Center for Health Statistics: 2011 County Health Data Book
2. North Carolina State Center for Health Statistics: 2009 Leading Causes of Death
3. North Carolina State Center for Health Statistics: 2001-2010 Infant Mortality Statistics
4. Centers for Disease Control and Prevention: National Center for Health Statistics-FastStats

# 2006-2010 Cancer Deaths, by Census Zip Codes, Forsyth County



Note: Some areas cross the county boundary and only a portion of those areas are displayed



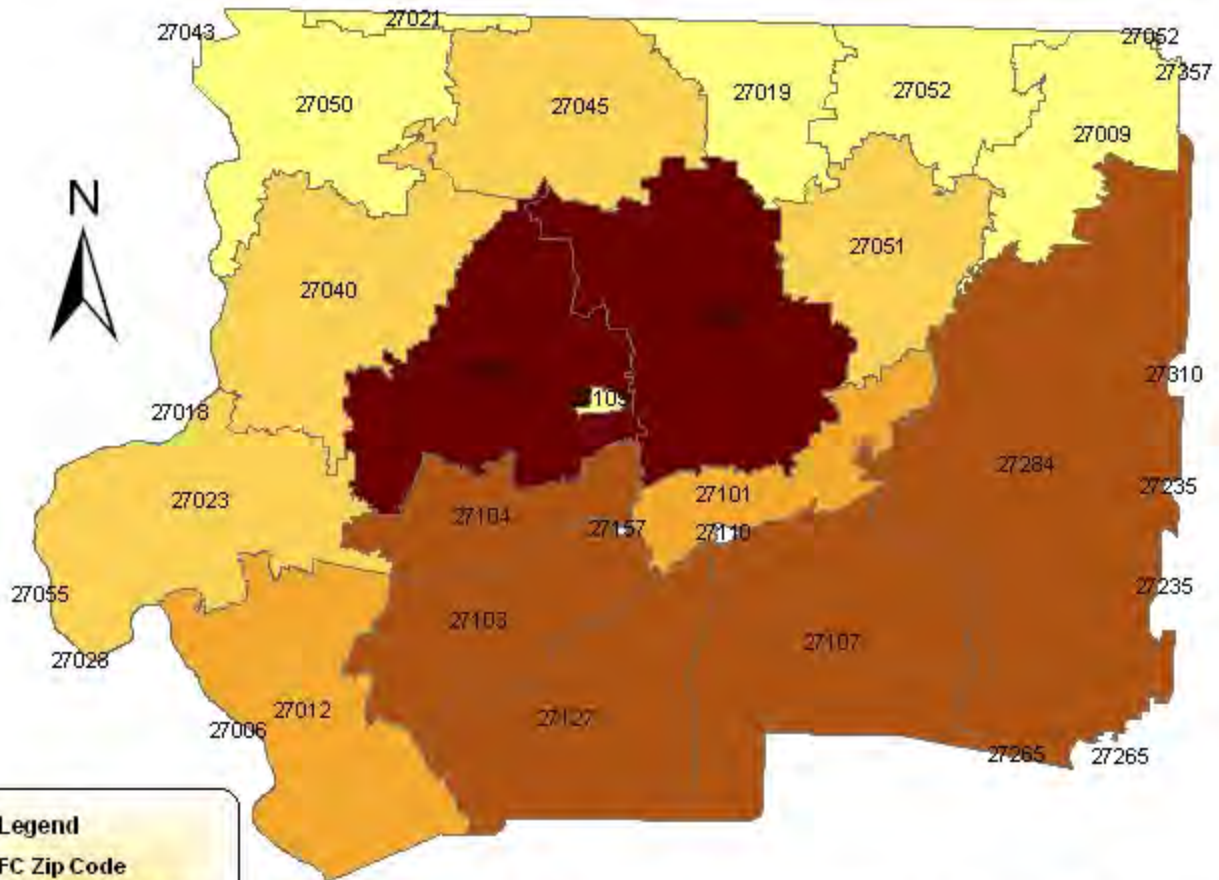
**Forsyth County**  
 Department of Public Health

Promoting Health, Improving Lives

Prepared by Epidemiology Division, FCDPH July 2012



# 2006-2010 Heart Disease Deaths, by Census Zip Codes, Forsyth County



**Legend**

**FC Zip Code**

2006-10 Heart Disease

- 1 - 30
- 31 - 62
- 63 - 155
- 156 - 314
- 315 - 436

Note: Some areas cross the county boundary and only a portion of those areas are displayed



Forsyth County  
Department of Public Health

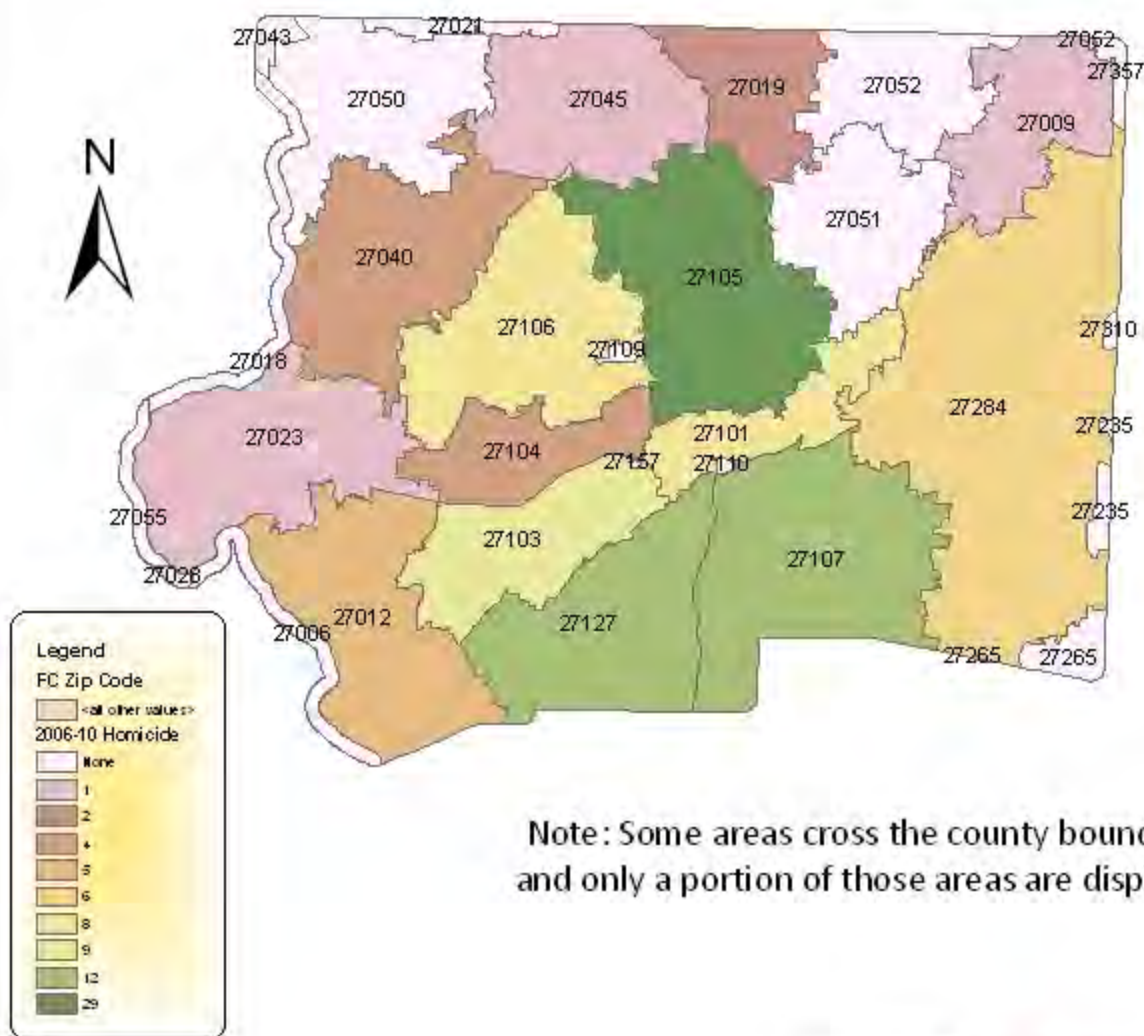
Promoting Health, Improving Lives

Prepared by Epidemiology Division, FCDPH July 2012





# 2006-2010 Homicide Deaths, by Census Zip Codes, Forsyth County



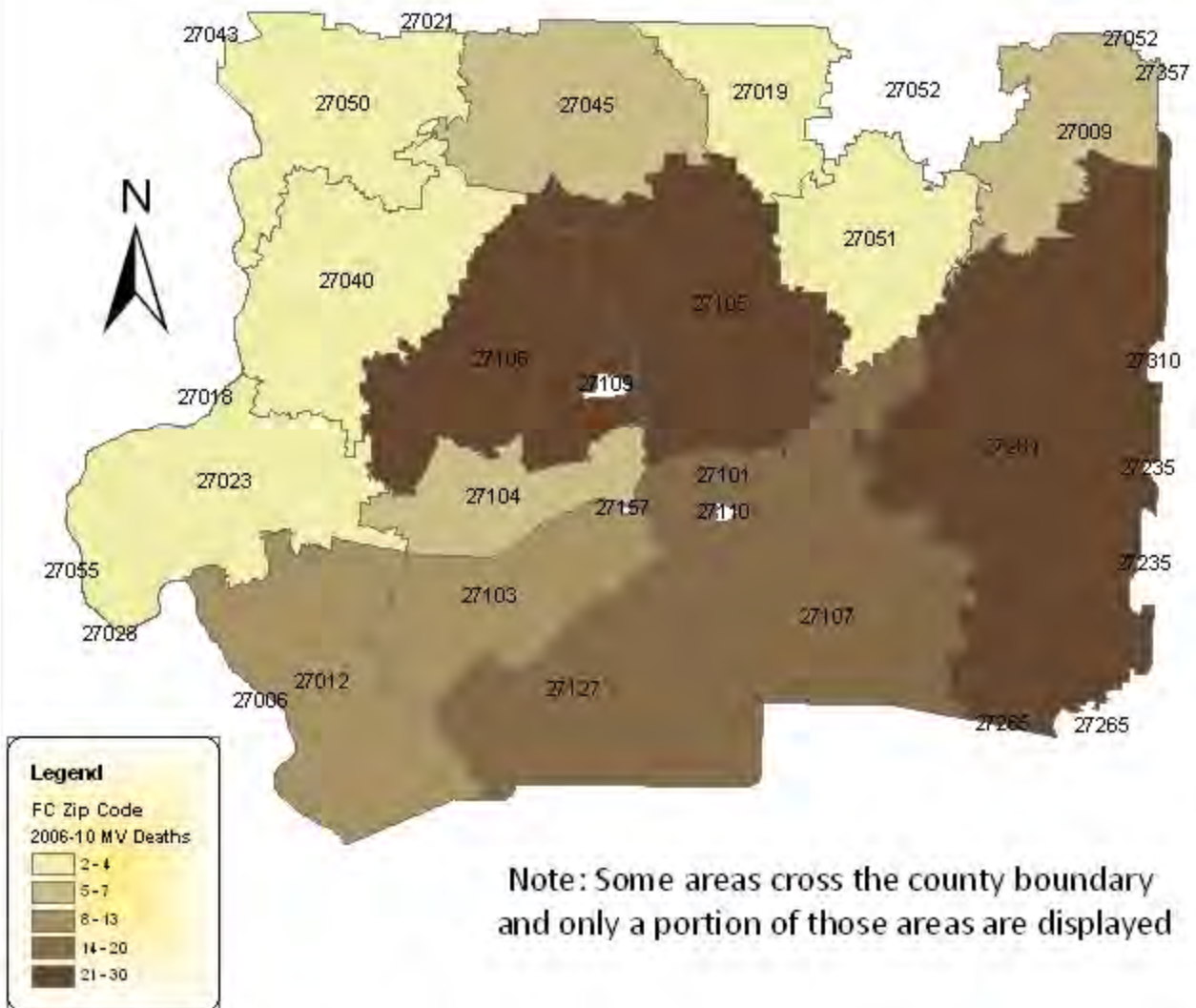
Note: Some areas cross the county boundary and only a portion of those areas are displayed



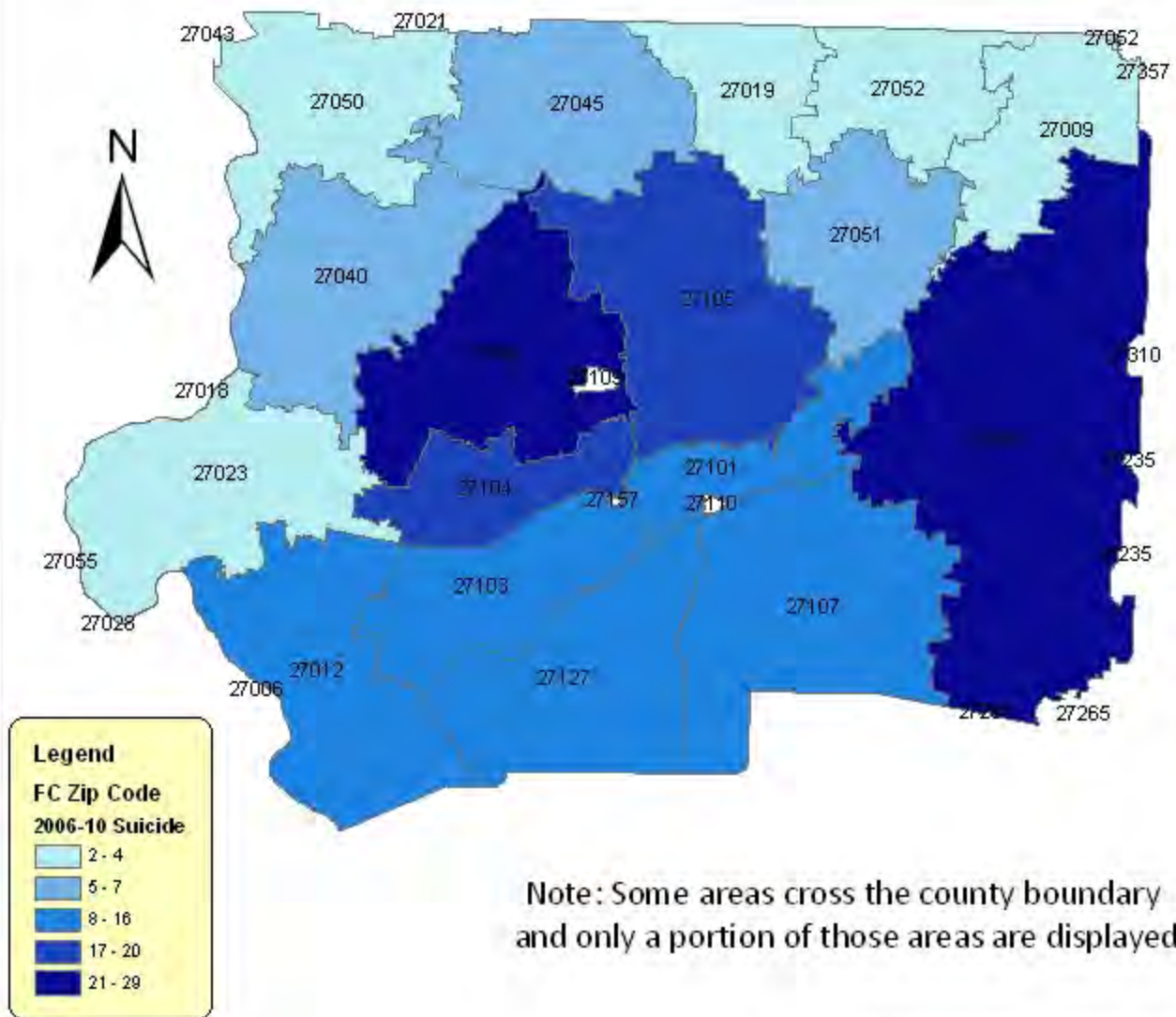
Promoting Health, Improving Lives  
 Prepared by Epidemiology Division, FCDPH July 2012



# 2006-2010 Motor Vehicles Injuries Deaths, by Census Zip Codes, Forsyth County



# 2006-2010 Suicide by Census Zip Codes, Forsyth County



**Forsyth County**  
Department of Public Health

**Promoting Health, Improving Lives**

Prepared by Epidemiology Division, FCDPH July 2012



**Morbidity:  
Incidence or Prevalence of Diseases**



## CHRONIC DISEASE

Chronic diseases such as cancer, heart disease and stroke, and diabetes account for the leading causes of death in Forsyth County. There are the most common, costly, and preventable of all health problems. The four health risk behaviors responsible for the development of chronic diseases are:

- Lack of physical activity
- Poor nutrition
- Tobacco use
- Excessive alcohol consumption

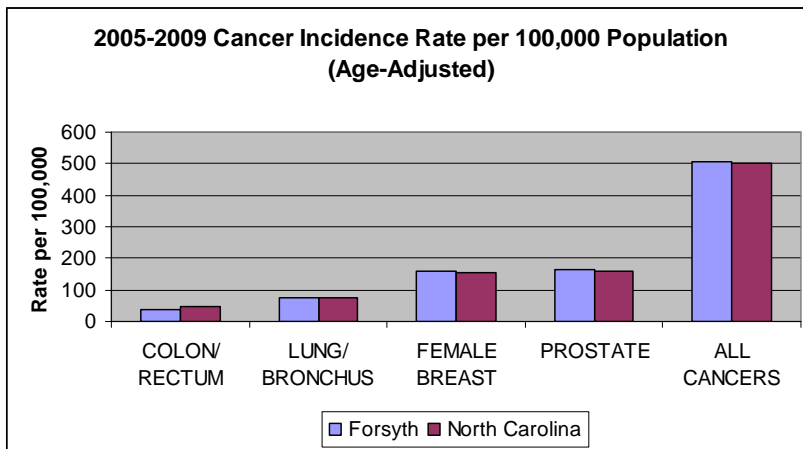
### Cancer

According to the National Cancer Institute, Cancer is a term used for diseases in which abnormal cells divide without control and at times invade other tissues. Cancer cells can spread to other parts of the body. There are more than 100 types of cancers. Nationally the age-adjusted incidence rate from 2005-2009 was 465.2 per 100,000 men and women annually. The highest cancer incidence rates from 2005-2009 in Forsyth County were breast cancer, at a rate of 160.3 females per 100,000 population, and prostate cancer at a rate of 165.6 per 100,000 population. This is higher than the state’s rate of 154.5 per 100,000 population for female breast cancer and 158.3 per 100,000 population for prostate cancer although these two cancers had the highest cancer incidence rates in North Carolina. Forsyth County’s rate for all cancers was 505.6 per 100,000 persons, while the state’s was 500.1 per 100,000 persons. Colon/rectal, lung/bronchus, female breast, and prostate cancer accounted for 1,182 cases of inpatient hospitalization accounting for \$42,179,968 in total charges in 2009.

Table 1: 2005-2009 Cancer Incidence Rate per 100,000 Population (Age-Adjusted)

	COLON/ RECTUM		LUNG/ BRONCHUS		FEMALE BREAST		PROSTATE		ALL CANCERS	
	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate
<b>Forsyth County</b>	707	38.4	1,355	74.0	1,626	160.3	1,357	165.6	9,295	505.6
<b>North Carolina</b>	21,383	45.5	35,748	75.9	39,779	154.5	34,120	158.3	236,301	500.1

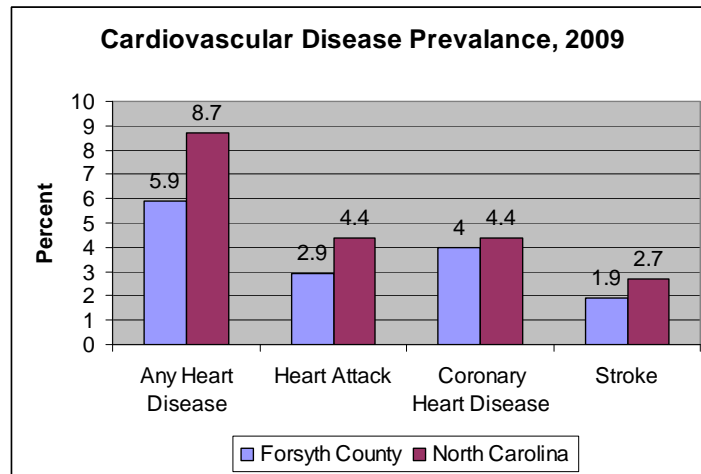
Source: NC State Center for Health Statistics.



Source: NC State Center for Health Statistics.

### Cardiovascular Disease

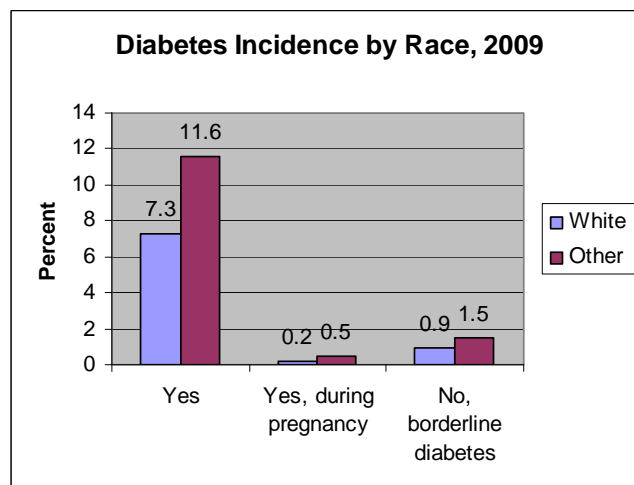
Cardiovascular disease, commonly called heart disease, refers to a group of heart conditions. The most common is coronary artery disease. It also includes heart attacks, anginas, heart failure, stroke and arrhythmias. Heart disease is the leading cause of death in the United States. In the 2009 Behavior Risk Factor Surveillance System (BRFSS) revealed that 5.9% of survey participants had a history of cardiovascular disease. This percent was less than the state percent of 8.7% with a history of any cardiovascular disease. In 2005, 10.8% of the survey participants reported having a history of cardiovascular disease. In 2009, Cardiovascular disease in Forsyth County accounted for 5,585 hospital inpatient visits with an accumulating cost of \$155,595,217 in total charges.



Source: NC State Center for Health Statistics.

### Diabetes

Diabetes is a group of diseases in which blood glucose levels are high as a result of defected insulin production, insulin action or both. Serious complications and premature death can arise from diabetes, but it can be controlled and the risk of complications can be lowered. Overall in 2009, 8.7% of BRFSS participants in Forsyth County reported being told they had diabetes by a doctor. This was lower than the state’s 9.6%. The rate was 0.3% for women diagnosed during pregnancy which is less than half of the state rate of 0.7%. 11.6% of minorities had been diagnosed with diabetes compared to 7.3% of whites. There were 669 hospitalizations due to diabetes resulting in \$13,236,733 total charges.



Source: NC State Center for Health Statistics.

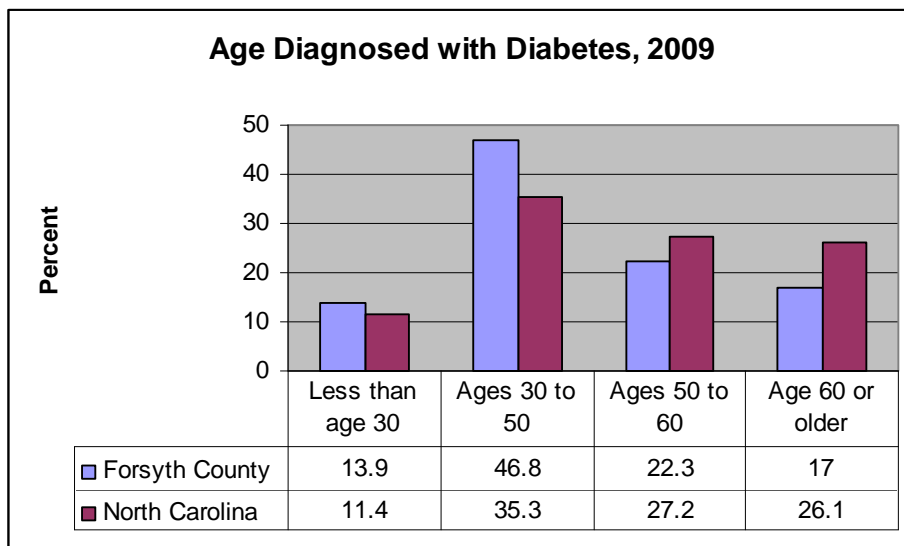
According to the 2009 BRFSS results, 4.7% of participants had been diagnosed with pre-diabetes which was lower than the state’s rate of 7.1%.

Table 2: Health Professional Diagnosed Pre-Diabetes

	Yes		White		Male		Female	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Forsyth County	19	4.7	11	3.2	7	4.5	12	4.8
North Carolina	1004.0	7.1	818.0	7.5	320.0	5.5	684.0	8.7

Source: NC State Center for Health Statistics.

About 60% of those diagnosed with diabetes, were diagnosed before the age of 50 years of age in comparison to 47% for North Carolina



Source: NC State Center for Health Statistics

**INFECTIOUS DISEASE**

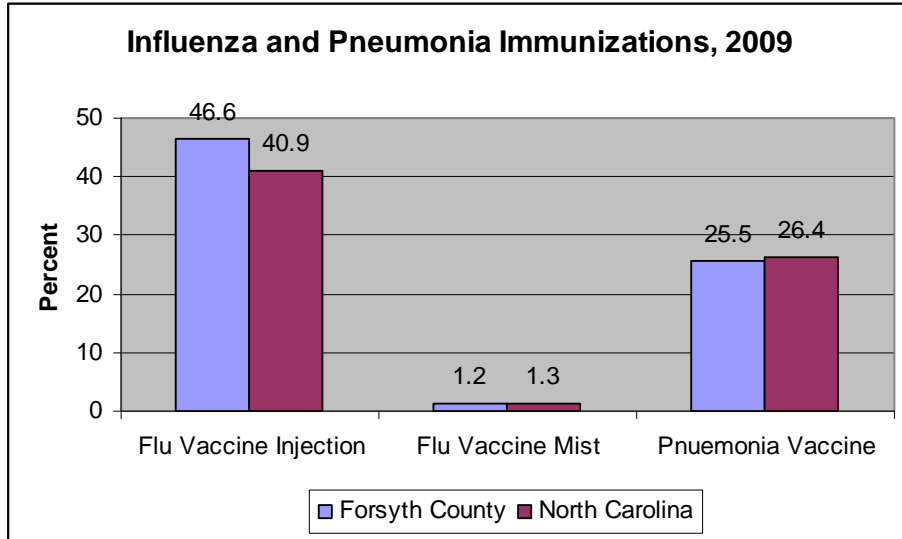
Collectively, influenza and pneumonia, were responsible for 1,160 inpatient hospitalizations resulting in \$27,101,138 in total charges in 2009

**Influenza**

Influenza (flu) is a contagious respiratory illness caused by the influenza virus. The diseases range from mild to severe illness, and can cause death. Older people, young children, and people with certain health conditions have a higher risk for serious complications due to influenza. Influenza can be prevented with flu vaccines According to the Community Health Opinion Survey, 49.4% of Forsyth County residents had received a seasonal flu vaccine, by injection or mist.

**Pneumonia**

Pneumonia is an infection of the lungs that is usually caused by bacteria or viruses. It is preventable with vaccines and treatable with antibiotics or antiviral drugs. Pneumonia can cause mild to severe illnesses, with adults age 65 and older and children younger than 5 years of age having a greater risk factor. Cigarette smoking and asthma increases risk for pneumonia



Source: NC State Center for Health Statistics

## INJURIES

Injuries are a collection of several fatal and non-fatal occurrences which include:

- Drowning and submersion
- Falls
- Fire and burns
- Firearms
- Motor vehicle crash
- Sports and recreational injury
- Occupational injury
- Bicycle pedestrian safety
- Pedestrian safety
- Poisoning
- Suffocation
- Homicide
- Suicide
- Assault
- Sexual violence
- Child maltreatment
- Violence against North Carolina women and men
- Childhood injury
- Intimate partner violence
- Traumatic Brain Injury
- Disaster related injury and preparedness

Forsyth County Leading Causes of Injury Hospitalization All Ages: 2007 to 2009			Forsyth County Leading Causes of Injury ED Visits All Ages: 2007-2009		
Rank	Cause	Number	Rank	Cause	Number
1	Fall, Unintentional	3,283	1	Fall, Unintentional	22,680
2	MVT, Unintentional	845	2	MVT, Unintentional	9,746
3	Poisoning, Self-Inflicted	719	3	Struck, Unintentional	9,249
4	Unspecified, Unintentional	619	4	Overexertion, Unintentional	7,565
5	Poisoning, Unintentional	368	5	Unspecified, Unintentional	7,513
	Other	2,054		Other	22,484
	<b>Total</b>	<b>7,888</b>		<b>Total</b>	<b>79,237</b>

Source: NC DPH, Injury and Violence Prevention Branch. Injury and Violence Data, Injury Statistics, Surveillance.

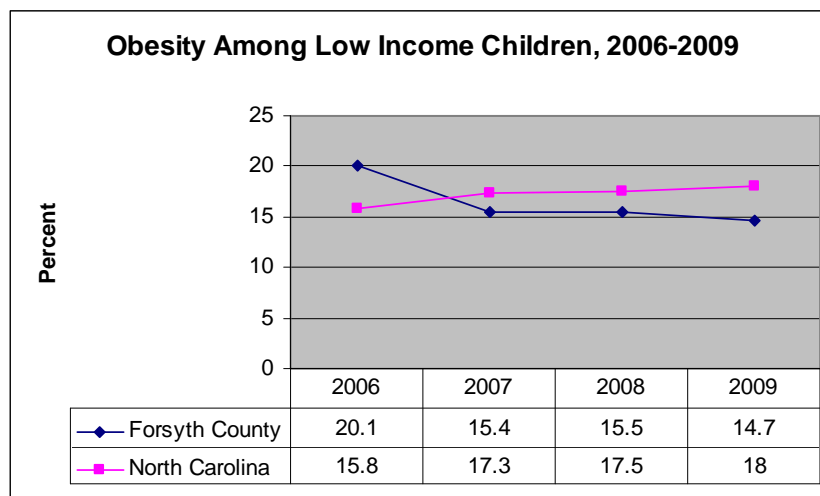
### OBESITY

Overweight is defined as having excess body weight for a particular height from either fat, muscle, bone, water, or a combination thereof. Obesity is defined as having excess body fat. Both result from a caloric imbalance in which too few calories are expended for the amount of calories consumed. This is affected by genetic, behavioral, and environmental factors

#### Child Obesity

According to the CDC, childhood obesity has more than tripled in that past 20 years with 20% of children 6-11 years old and 18% of 12-19 year olds considered obese. Obese children have higher risks for risk factors for development of chronic diseases and other health effects.

Since 2006, the percent of obese low income children decreased approximately 27% from 20.1% to 14.7%. This is below the North Carolina average of 18% of low income obese children in 2009, which was an increase of about 14% from 15.8% in 2006. (Low income children are ages 2-18 that were seen in public health clinics who are considered obese. Obese is defined here as a body mass index equal to or greater than the 95<sup>th</sup> percentile using federal guidelines. Prior to 2008 this was considered overweight.)

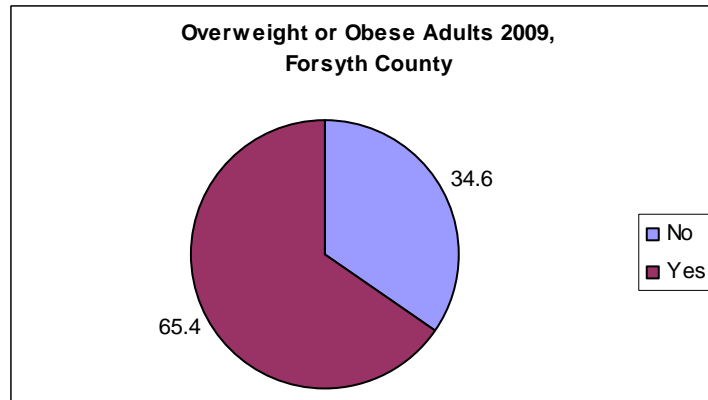


**Adult Obesity** Source: Annie E. Casey Foundation. Kids County Data Center.

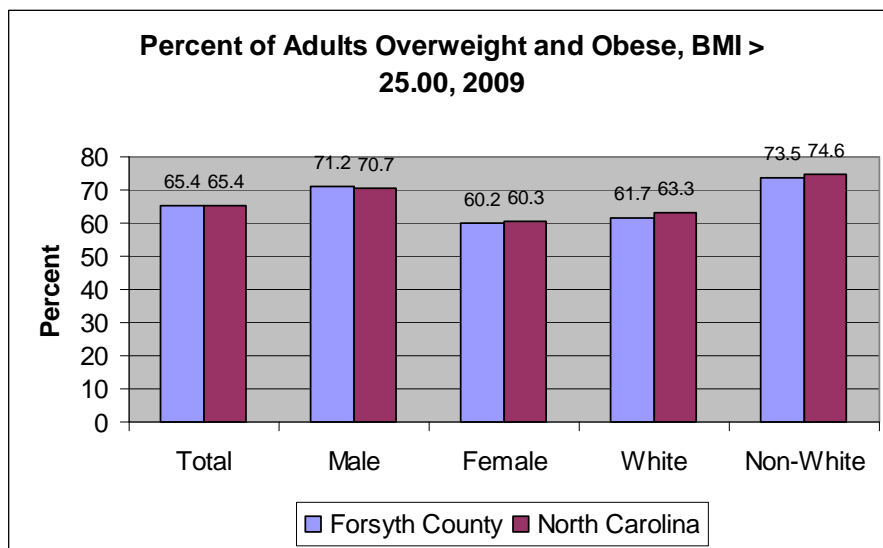
According to the 2009 BRFSS 65.4% of Forsyth County adults surveyed reported being overweight or obese which was the same rate as the state. The BRFSS used the body mass index as an intermediate variable used in defining weight status. It is computed as weight in kilograms divided by height in meters squared:(kg/ m2).

BMI	Weight Classification
Less Than 18.5	Underweight
18.5 to 24.9	Recommended Range
25.0 to 29.9	Overweight
Greater than 30	Obese

Forsyth County had a slightly higher percentage of males who were overweight or obese in comparison to the state, while females, whites and other minorities had slightly lower percentages than that of the state.



Source: NC State Center for Health Statistics



Source: NC State Center for Health Statistics

## ORAL HEALTH

### Child Oral Health

The Oral Health Section of the NC Division of Public Health provides dental health prevention and education services to children throughout the state. They also perform dental health surveillance activities to collect information on the state’s children dental health status.

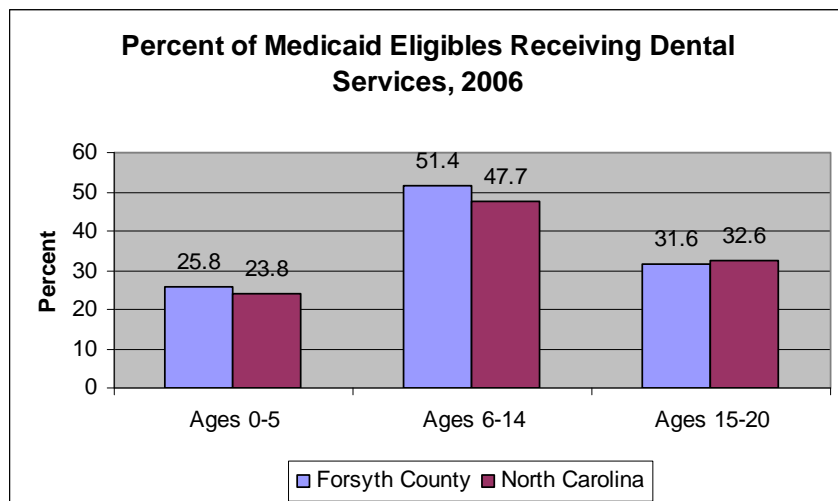
In 2008-2009, 93% of kindergarteners and 92% of 5<sup>th</sup> grade students were screened, both higher than the state’s average percent; which was similar to the 2005-2006 results of 93% for kindergarten students and 91% of 5<sup>th</sup> grade students. The percent of kindergarten children with untreated tooth decay increased from 21% to 24% from 2005-2006 to 2008-2009. The percent of 5<sup>th</sup> grade students who had untreated tooth decay was 5% in 2005-2006 compared to 9.0% in 2008-2009.

Table 3: 2008-2009 NC Oral Health Data

	Percent Children Screened		Percent of Children with Untreated Tooth Decay		Children With Sealants	Average DFMT/Child		Average DT/Child	
	Kindergarten	5th Grade	Kindergarten	5th Grade	5th Grade	Kindergarten	5th Grade	Kindergarten	5th Grade
Forsyth County	93%	92%	24%	9%	56%	1.82%	0.71%	0.66%	0.14%
North Carolina	83%	77%	17%	4%	44%	1.50%	0.56%	0.47%	0.05%

DFMT: Decayed, Missing, or Filled Teeth; DT: Decayed Teeth.  
 Source: NC DHHS. NC Oral Health. Measuring Oral Health

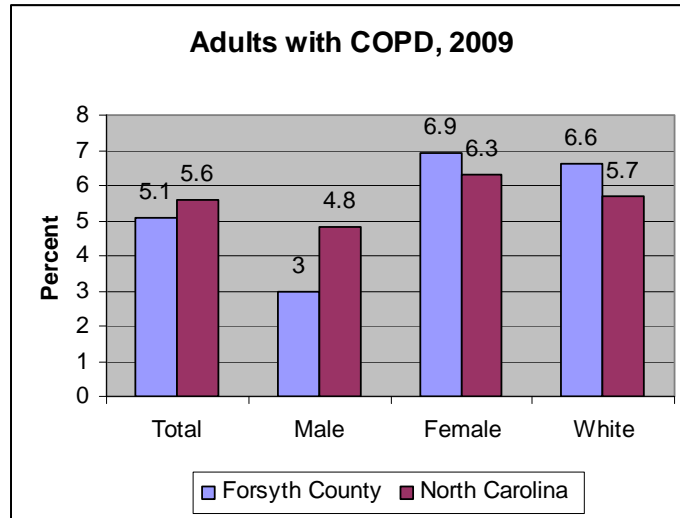
In 2006, approximately one-fourth of Medicaid eligibles received dental services, this amount increased to more than one-half for ages 6-14. Less than one third of Medicaid eligible ages 15-20 received dental services.



Source: Annie E. Casey Foundation.-Kids County Data Center.

### Chronic Lower Respiratory Disease (CLRD)

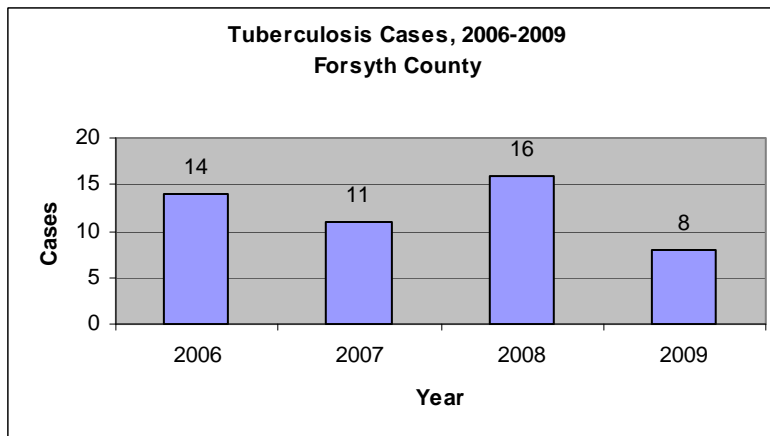
Chronic obstructive pulmonary disease (COPD) is a group of lung diseases in which airflow is limited, the airway is inflamed and lung tissue is destroyed. Forsyth County reported lower percentages of the population having COPD than the state overall although the female and white populations were higher than the state's rate.



Source: NC State Center for Health Statistics

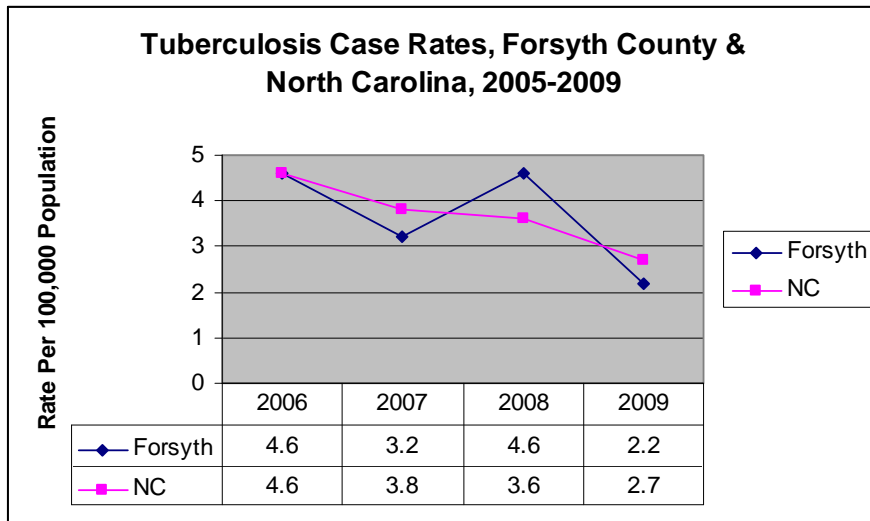
### Tuberculosis

Tuberculosis cases in Forsyth County have fluctuated between 2006 and 2011. Overall the trend is steady in the number cases. Forsyth County saw a rise in case rates from 2007 to 2008 then a sharp decline from 2008 to 2009. Forsyth County declined in tuberculosis case rates from 4.6 in 2006 to 2.2 per 100,000 in 2009.



Source: NC DHHS Tuberculosis Control Program.

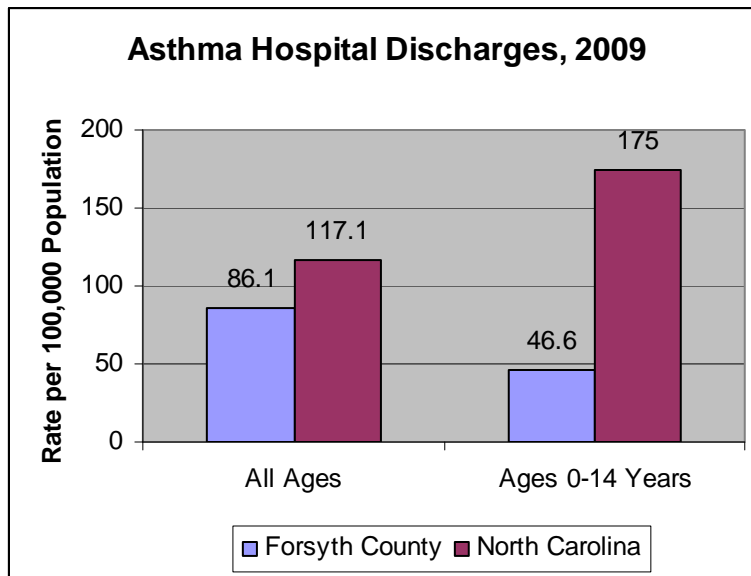




Source: NC DHHS Tuberculosis Control Program.

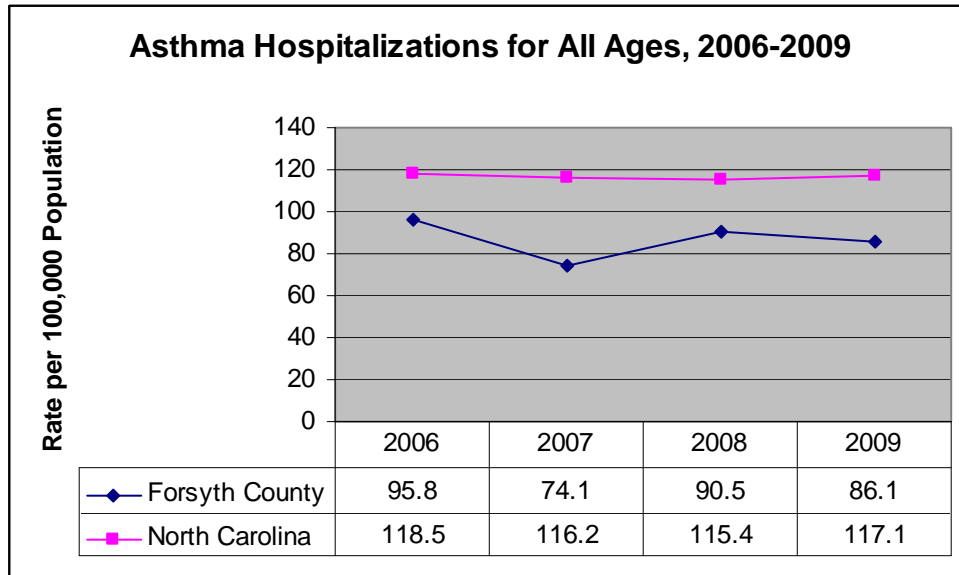
### Asthma

Asthma is a disease that affects the lungs causing repeated wheezing, breathlessness, chest tightness, and nighttime or early morning coughing. Asthma is controllable with medication and avoiding triggers that cause an attack. Forsyth County had 70% lower rates of asthma hospitalization for all ages than the state rate for children who were between 0 and 14 years old.



Source: NC State Center for Health Statistics

Since 2006, the asthma rate in Forsyth County has fluctuated, but overall there was a decrease of approximately 10% from 2006 to 2009. The state asthma's rate has remained relatively unchanged within that time frame.



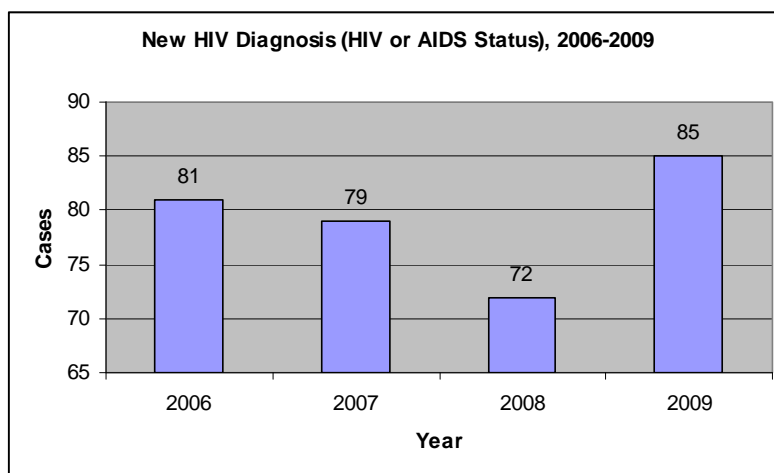
Source: NC State Center for Health Statistics

### SEXUALLY TRANSMITTED DISEASES (STDs) AND HIV/AIDS

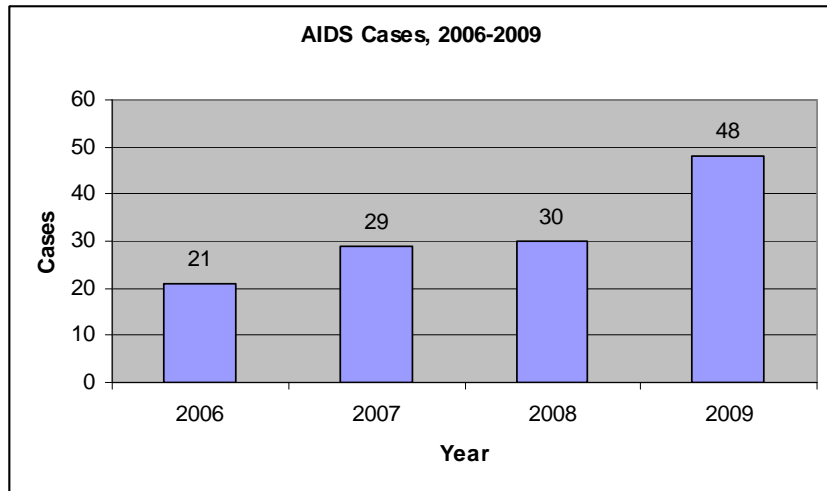
North Carolina requires certain sexually transmitted diseases (STDs), as communicable diseases, to be reported to local health departments who then report to the state. These STDs are human immunodeficiency virus (HIV), acquired immunodeficiency syndrome (AIDS), Chlamydia, Gonorrhea, and Syphilis. HIV case reports include all new diagnoses with HIV regardless of stage.

#### HIV & AIDS

Cases are counted as date of first diagnosis for HIV. AIDS case reports only count those with HIV infection who have progressed to a later, more life-threatening stage of HIV. AIDS case report represents persons previously diagnosed with HIV. From 2006-2009, new HIV diagnosis remained consistent in Forsyth County, first declining from 2006 to 2008 and increasing in 2009. The number of AIDS cases has increased continuously, more than doubling from 21 in 2006 to 48 in 2009.



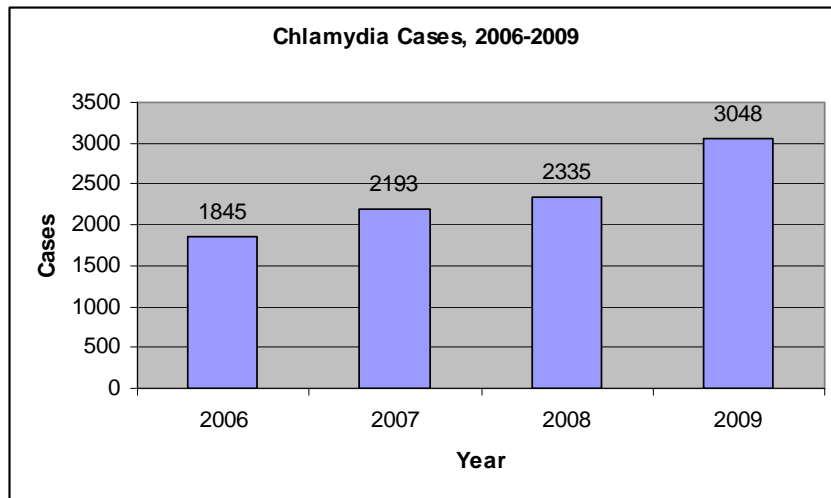
Source: NC DHHS NC 2009 HIV/STD



Source: NC DHHS NC 2009 HIV/STD

### Chlamydia

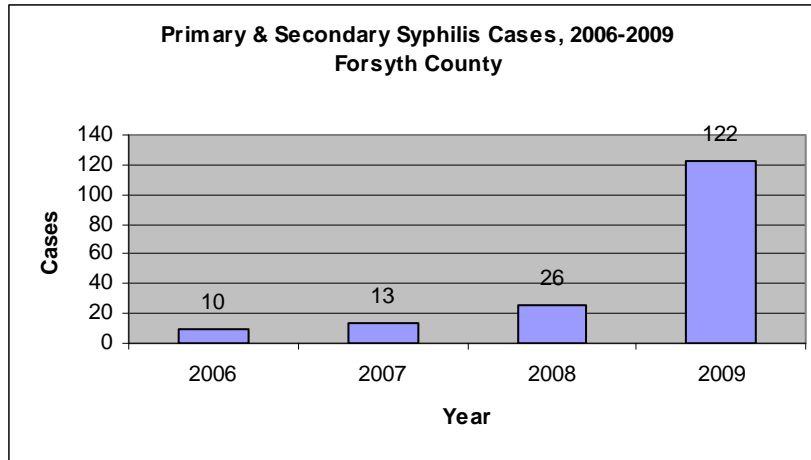
Chlamydia increased more than 1.65 times from 1845 cases in 2006 to 3048 cases in 2009. Chlamydia has seen an upward trend since 2006.



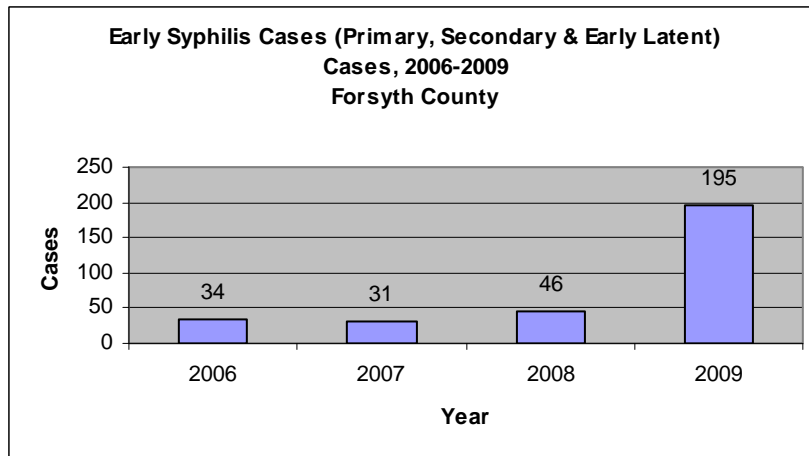
Source: NC DHHS NC 2009 HIV/STD

## Syphilis

Primary and Secondary Syphilis increased more than 12 times from a total of 10 cases in 2006 to 122 cases by 2009. When measuring cases of early syphilis, which includes primary, secondary, and latent stages, total cases increased more than 5 times from 34 in 2006 to 195 in 2009. In comparison to the last health assessment the number of syphilis cases was 29 for the county in 2007, with a rate of 1.8. Minorities made up 65.5% of the cases of Primary and Secondary Syphilis with a rate of 4.2.



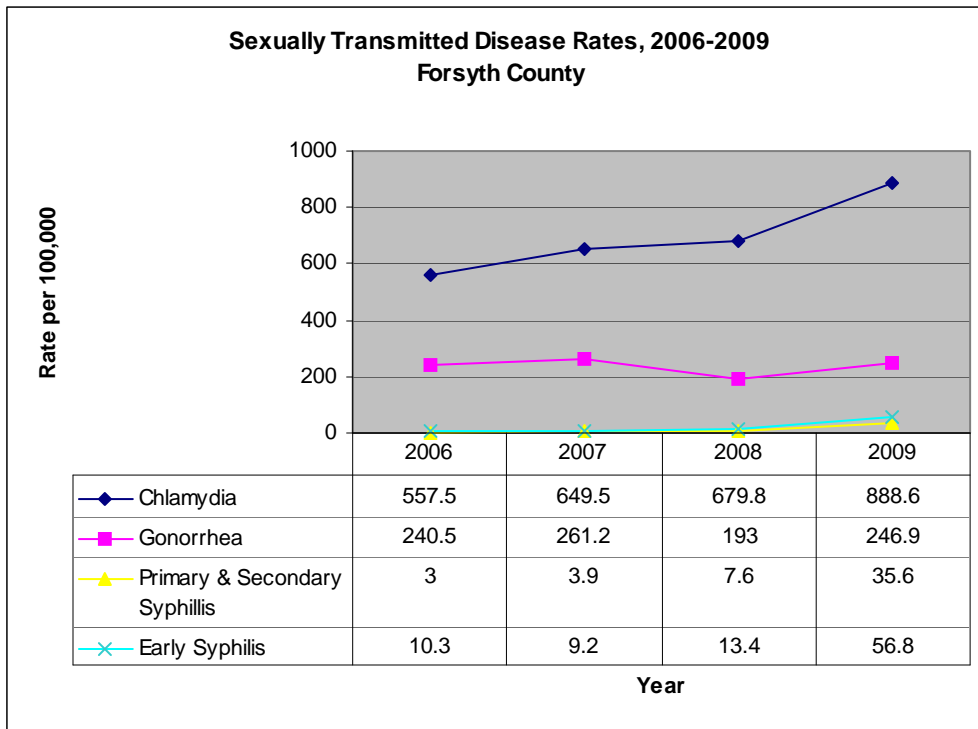
Source: NC DHHS NC 2009 HIV/STD



Source: NC DHHS NC 2009 HIV/STD

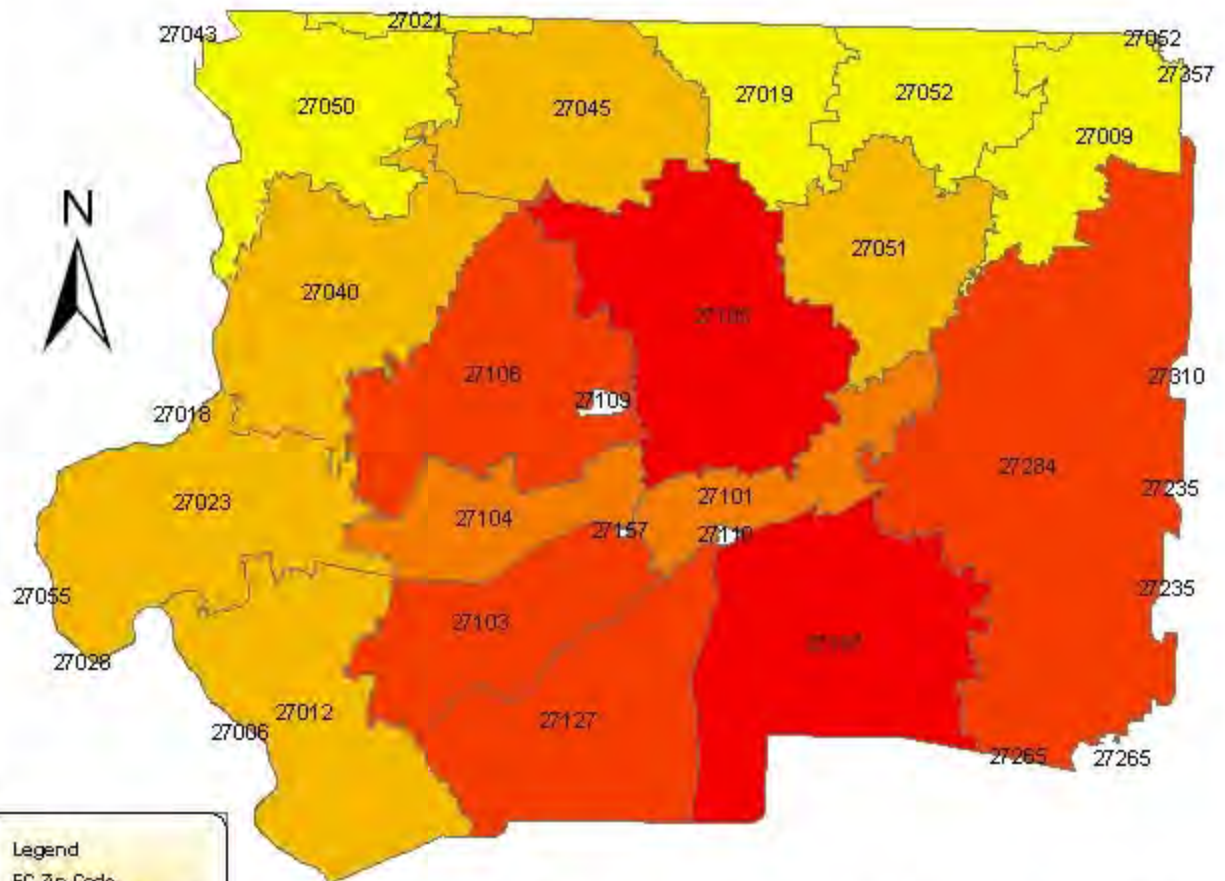
### STD Rates

When looking at rates of sexually transmitted diseases, Chlamydia saw the greatest rate change, increasing by more than 200 persons per 100,000 population from 2008 to 2009. Overall there the rate increased from were 557.5 per 100,000 population in 2006 to 888.6 per 100,000 population in 2009. Gonorrhea rates saw little change. Syphilis rates increased more than 11 times for Primary and Secondary Syphilis from 3 per 100,000 population in 2006 to 35.6 per 100,000 population in 2009. Early Syphilis also increased more than 5 times from 10.3 per 100,000 population in 2006 to 56.8 per 100,000 population in 2009.



Source: NC DHHS NC 2009 HIV/STD

# 2006-2010 Low Birthweights by Census Zip Codes, Forsyth County



**Legend**  
 FC Zip Code  
 2006-10 Low Birthweight

- 1 - 10
- 11 - 75
- 77 - 179
- 180 - 275
- 276 - 499

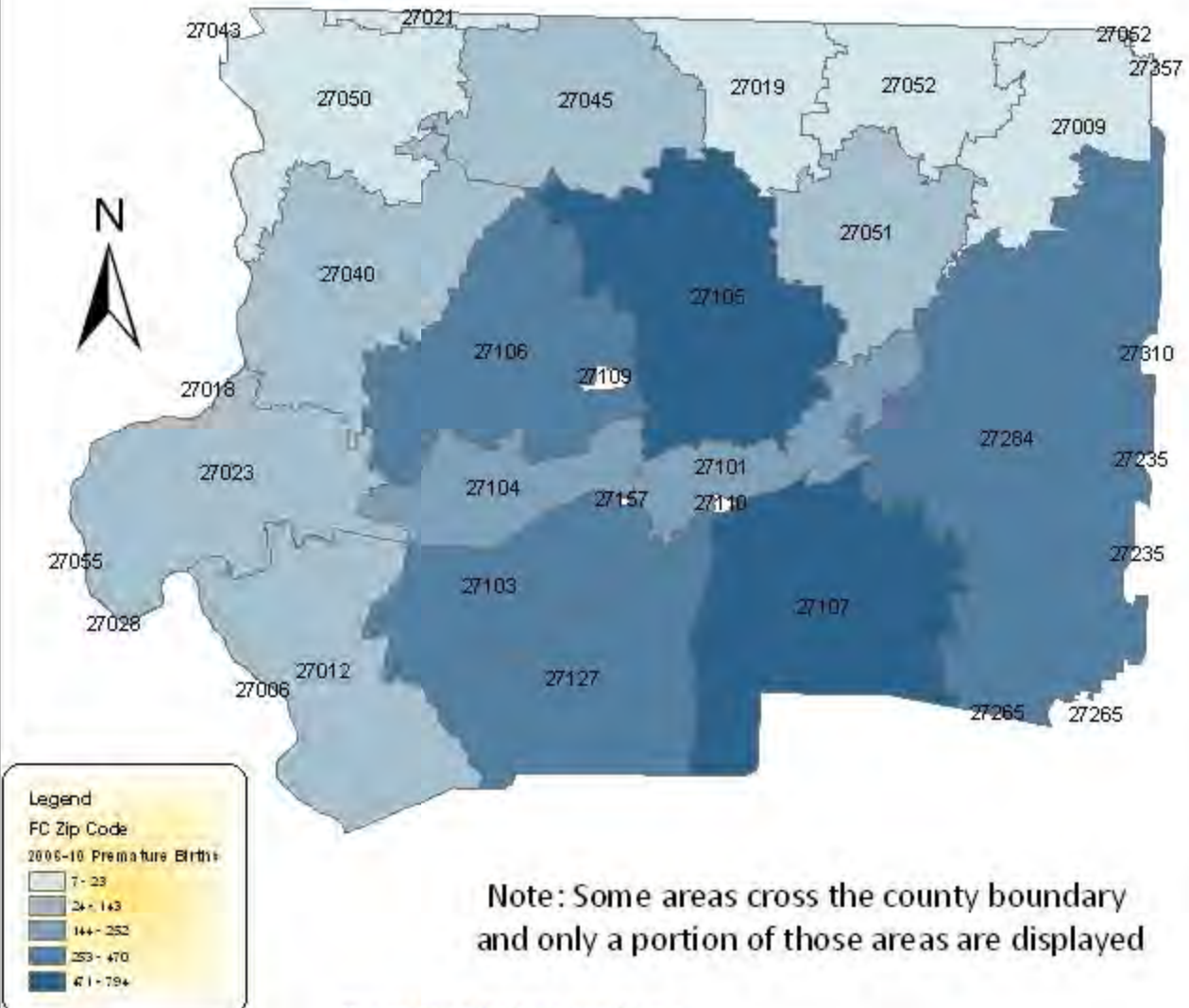
Note: Some areas cross the county boundary and only a portion of those areas are displayed



Promoting Health, Improving Lives  
 Prepared by Epidemiology Division, FCDPH July 2012



# 2006-2010 Premature Births, by Census Zip Codes, Forsyth County



Premature babies are born before 37 weeks of pregnancy.

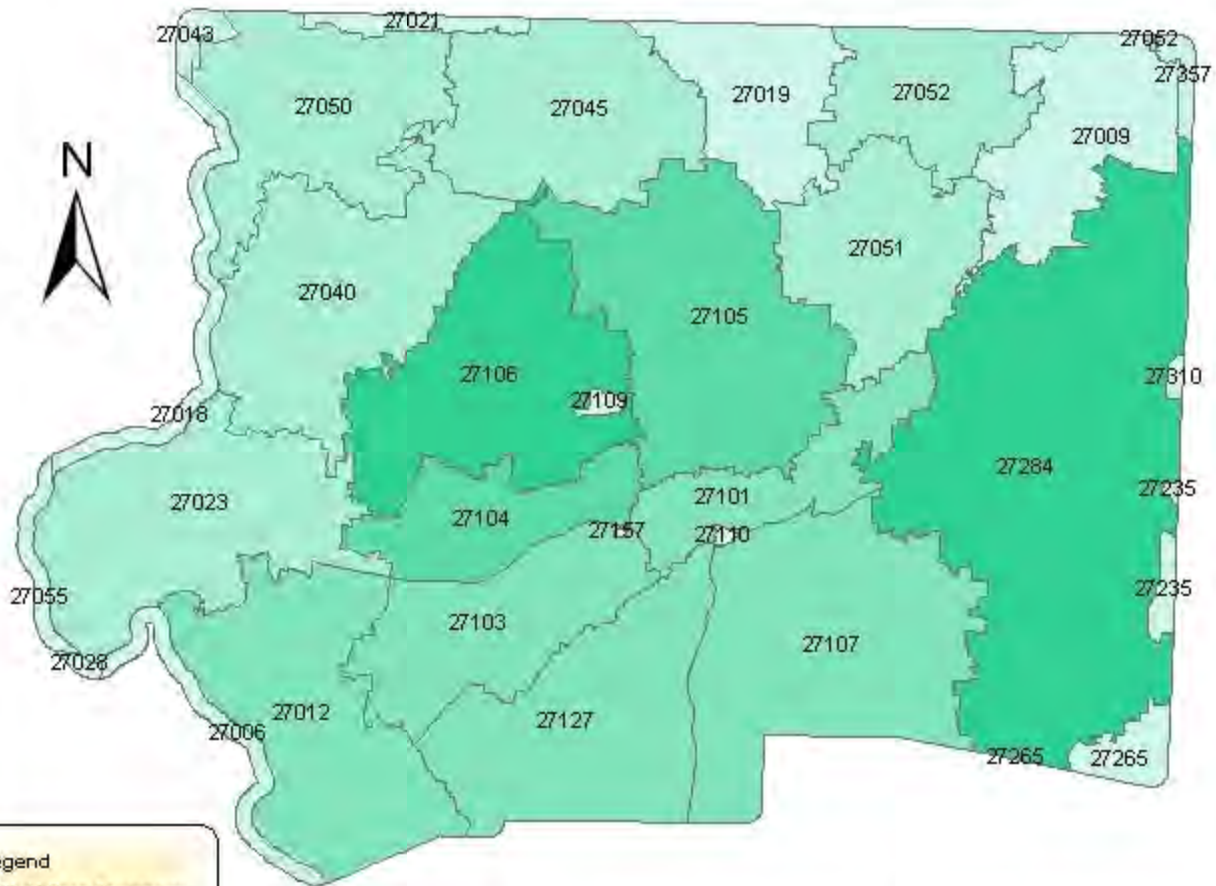


Prepared by Epidemiology Division, FCDPH July 2012





# 2006-2010 Teen Pregnancy by Census Zip Codes, Forsyth County



**Legend**

2006-10 Teen Pregnancy

0-2
3-7
8-16
17-20
21-29

Note: Some areas cross the county boundary and only a portion of those areas are displayed



**Forsyth County**  
Department of Public Health

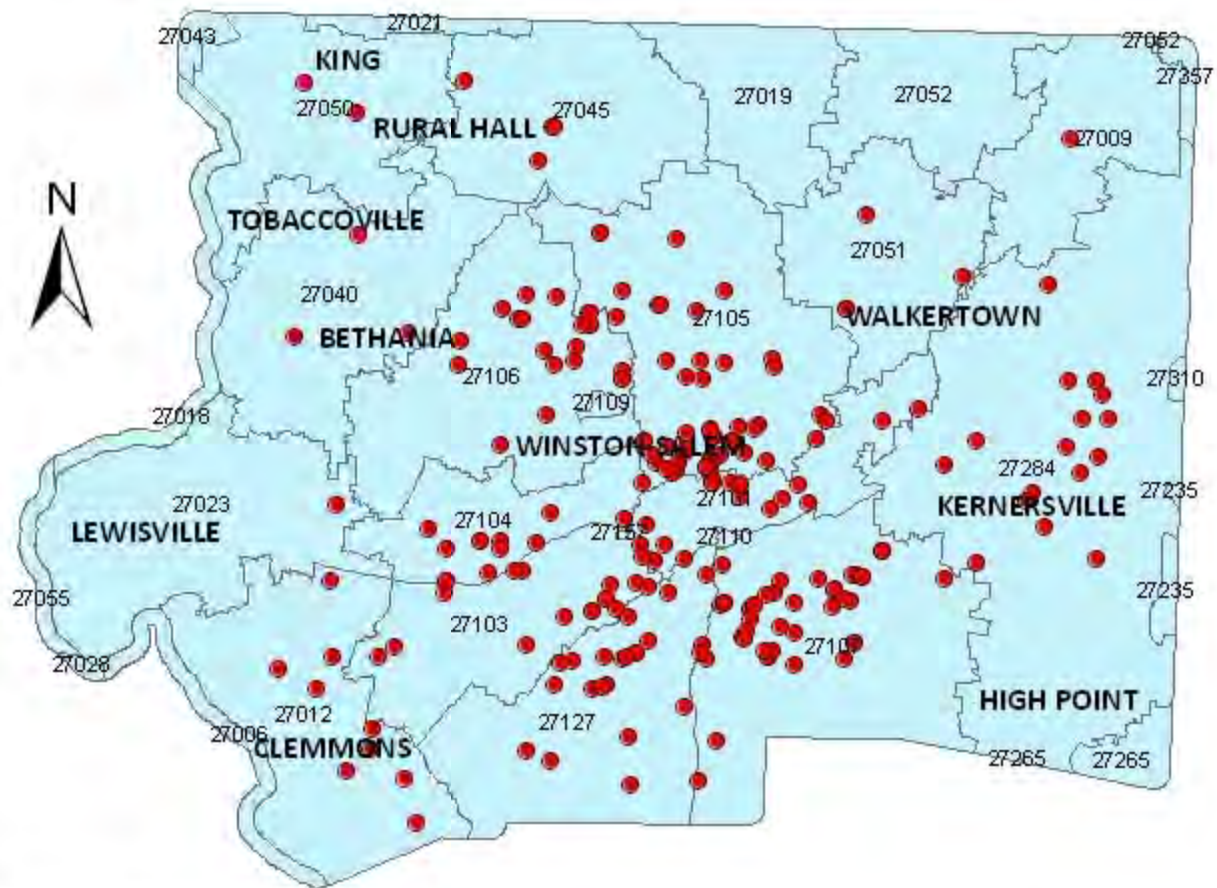
**Promoting Health, Improving Lives**

Prepared by Epidemiology Division, FCDPH July 2012





# 2006-2010 Infant Deaths by Zip Codes Forsyth County, North Carolina



## Legend

- 2006-10 Infant Deaths
- FC Zip Codes



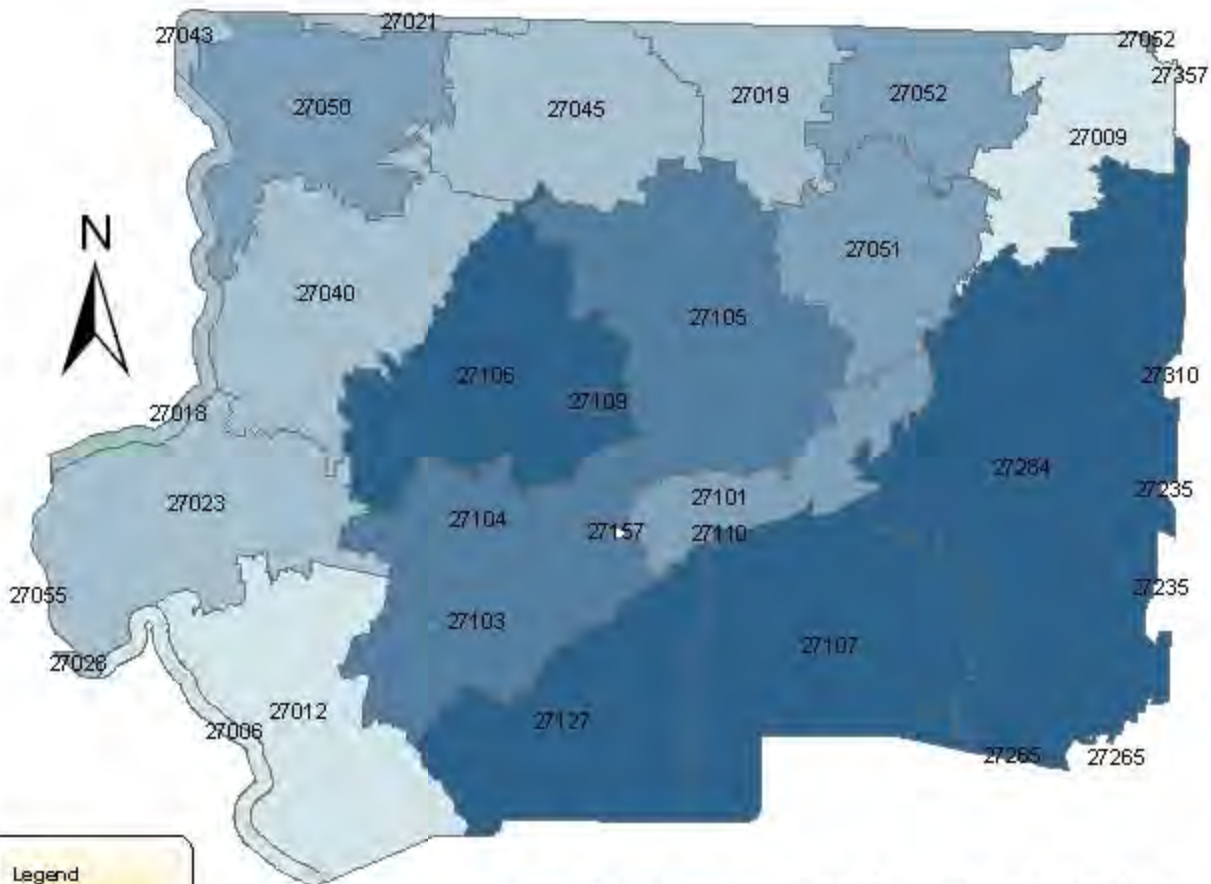
Forsyth County  
Department of Public Health

Promoting Health, Improving Lives

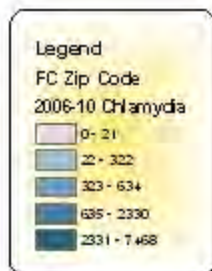
Prepared by Epidemiology Division, FCDPH July 2012



# 2006-2010 Chlamydia Incidence by Census Zip Code, Forsyth County



Note: Some areas cross the county boundary and only a portion of those areas are displayed



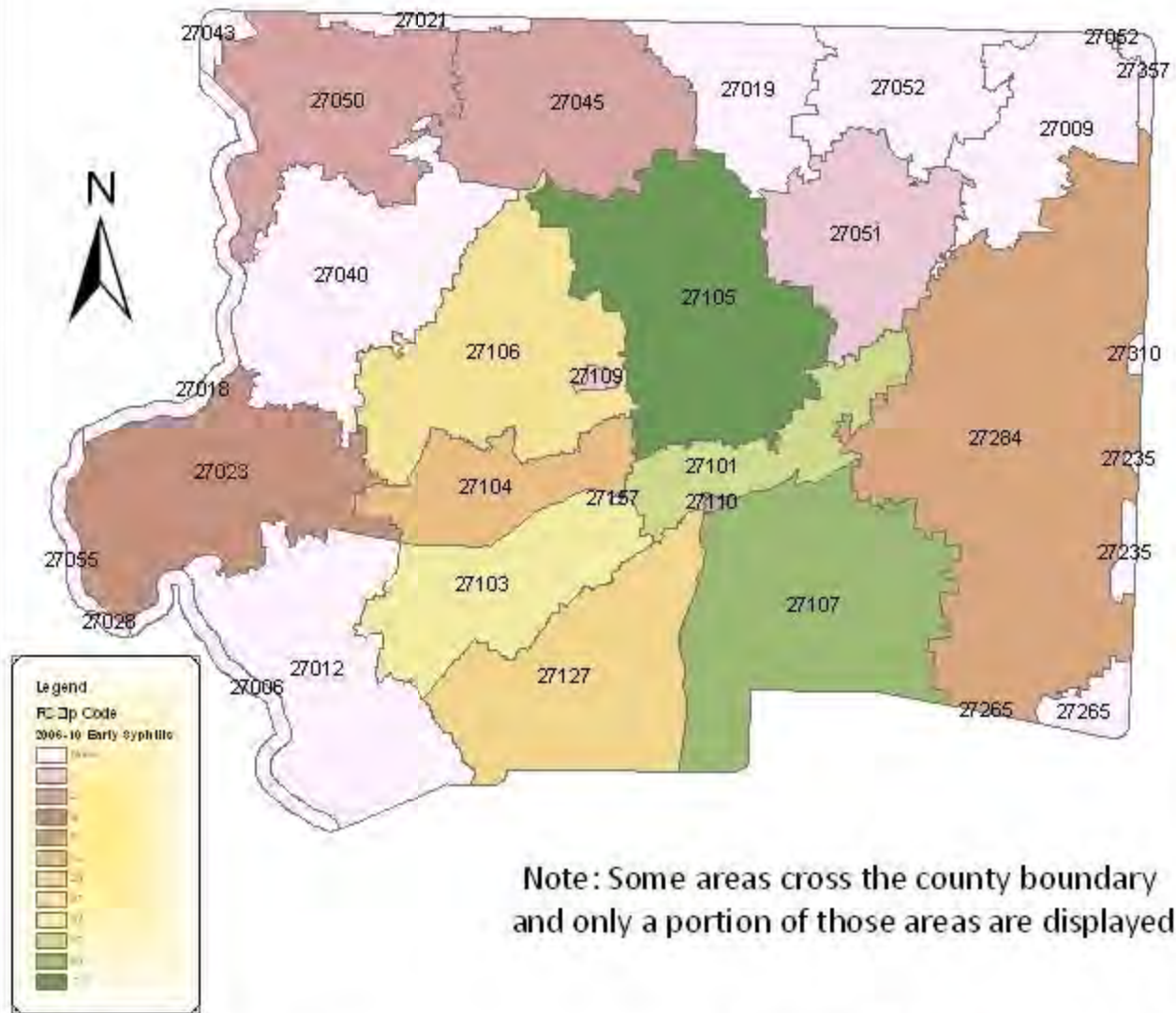
**Forsyth County**  
Department of Public Health

Promoting Health, Improving Lives

Prepared by Epidemiology Division, FCDPH July 2012

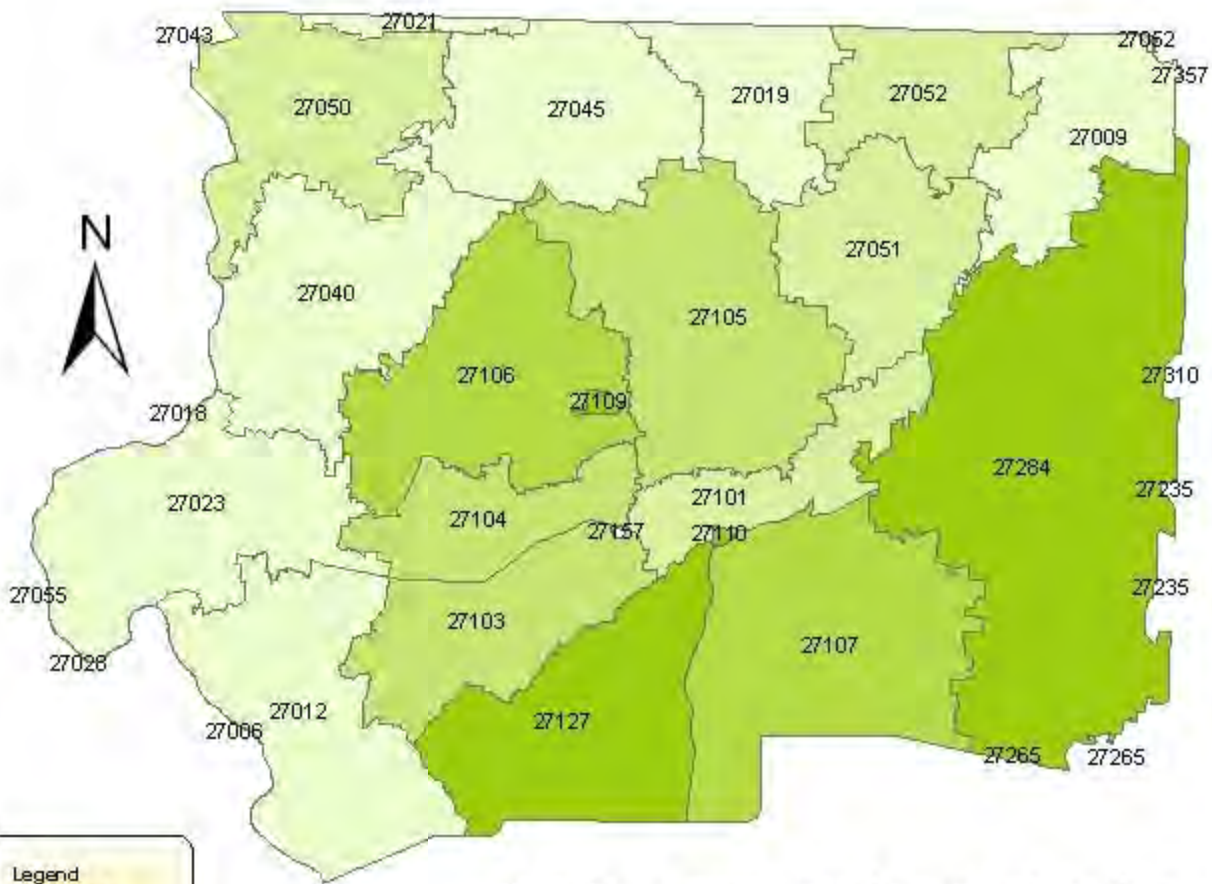


# 2006-2010 Early Syphilis Incidence by Census Zip Code, Forsyth County

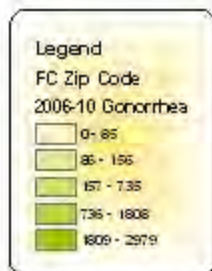




# 2006-2010 Gonorrhea Incidence by Census Zip Code, Forsyth County



Note: Some areas cross the county boundary and only a portion of those areas are displayed



**Forsyth County**  
 Department of Public Health

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# Maternal and Child Health

2011 Forsyth County Community Health Assessment

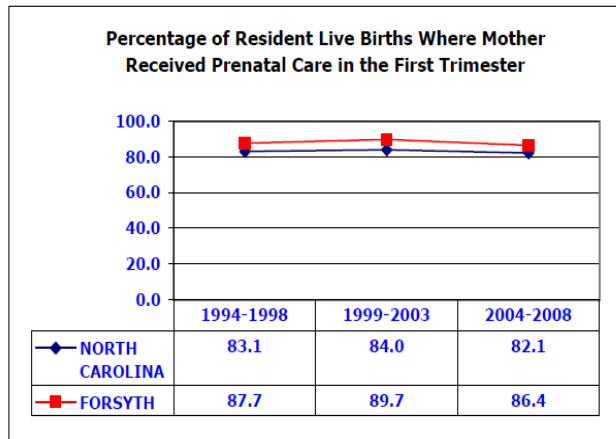


## Prenatal Care

### Prenatal Care during First Trimester:

Similar to the state average, the percentage of live births in Forsyth County where the mother received prenatal care during the first trimester remains about the same from 1994-2008.

The percentage is slightly greater for women in Forsyth County to receive prenatal care during the first trimester than the North Carolina average.

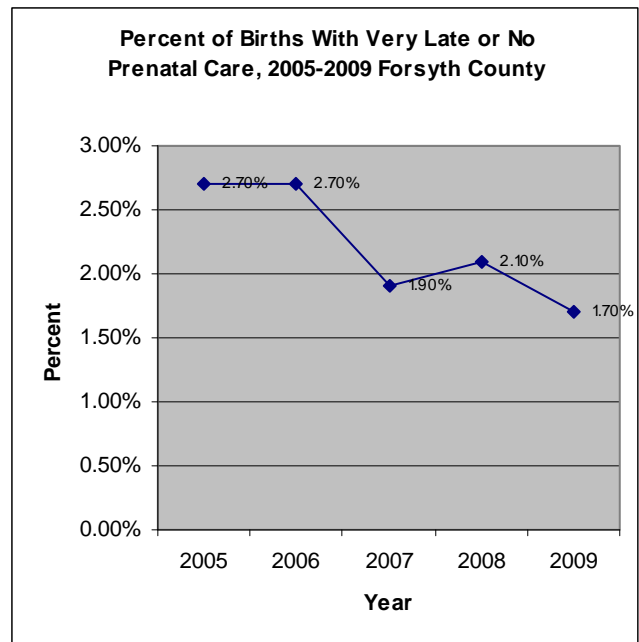


North Carolina County Trends Report  
NC State Center for Health Statistics

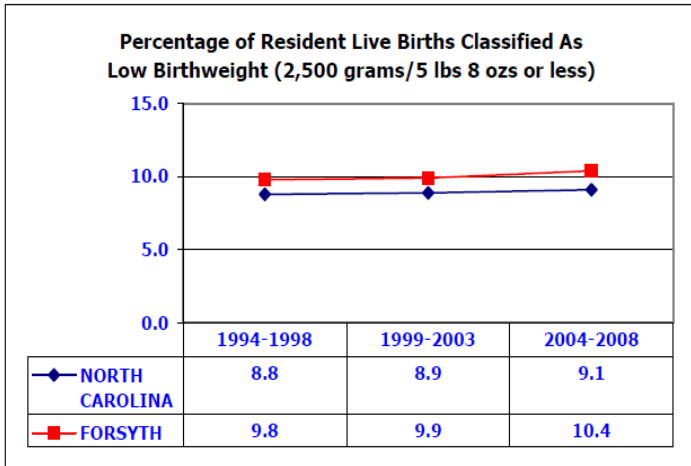
### Little or No Prenatal Care:

Although the percent of mothers who receive prenatal care in the first trimester remains similar, the percent of women with very late or no prenatal care is decreasing.

The chart to the right shows the percent of births with very late or no prenatal care, and is calculated as the number of women with no prenatal care until the third trimester or none at all, divided by the total number of births.



## Low Birth Weight Babies



North Carolina County Trends Report  
NC State Center for Health Statistics

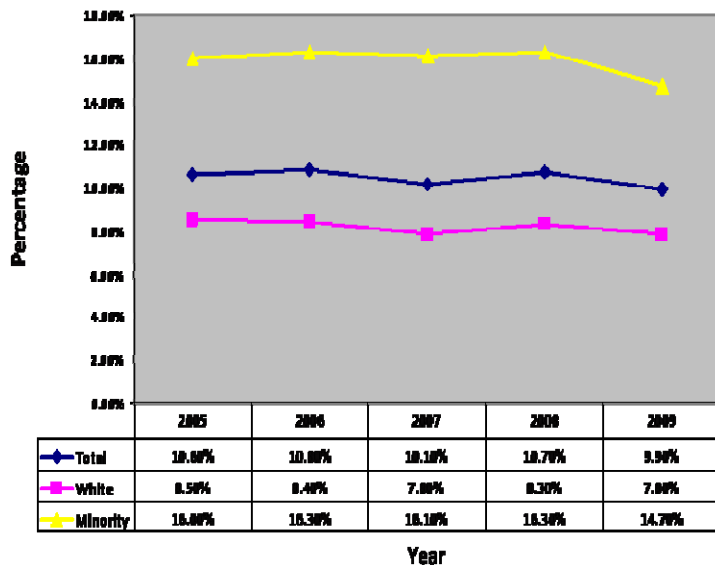
### Low Birth Weight Babies:

In Forsyth County, the percent of live birth classified as low birth weight is higher than the state average. The chart below compares live birth data in Forsyth County to that of the state. Since 1994, Forsyth County has had a higher percentage of low birth weight babies; and similar to the state, that percentage is increasing.

### Low Birth weight Infants in Forsyth County:

The chart to the right shows the percent of infants born weighing less than 2,500 grams (5 lbs, 8 oz) at birth. It is important to note that minority residents have a much higher percent of low birth weight infants than white residents in Forsyth County.

### Percent of Low Birthweight Infants in Forsyth County

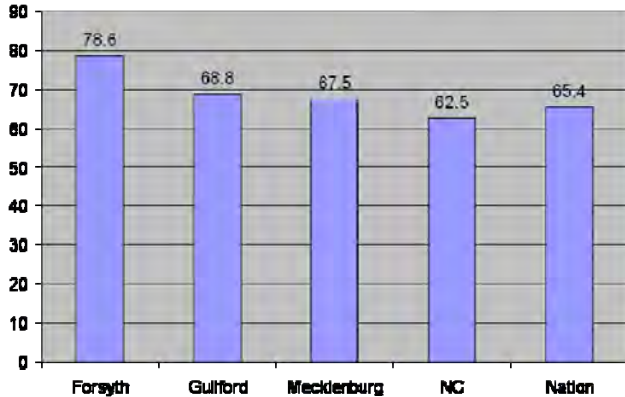


NC Department of Health and Human Services, State Center for Health Statistics.  
"North Carolina Live Birth Data."



## Breastfeeding

2009 Percent of Infants Ever Breastfed



Data from 2009 CDC Pregnancy Nutrition Surveillance Report on Infant Health Indicators

Breastfeeding is the best source of infant nutrition and immunologic protection, and it provides remarkable health benefits to mothers as well. According to the US Surgeon General, “babies who are breastfed are less likely to become overweight and obese. Many mothers in the United States want to breastfeed, and most try. And yet within only three months after giving birth, more than two-thirds of breastfeeding mothers have already begun using formula. By six months postpartum, more than half of mothers have given up on breastfeeding, and mothers who breastfeed one-year olds or toddlers are a rarity in our society.” The chart to the left shows the percent of infants ever breastfed in Forsyth County, peer counties, the state and the nation. Forsyth County ranks 12th in the state for infants ever breastfed, and the rate is higher than peer counties, the state, and the

### Health Risks Associated with Not Breastfeeding:

The table to the right comes from the U.S. Surgeon Generals 2011 Call to Action to Support Breastfeeding report.

As shown in this table, compared with mothers who breastfeed, those who do not breastfeed experience increased risks for certain poor health outcomes. These poor health outcomes for infants include: ear infections, eczema, asthma, and childhood obesity.

In general, exclusive breastfeeding and longer durations of breastfeeding are associated with better maternal health outcomes.

Table 1. Excess Health Risks Associated with Not Breastfeeding

Outcome	Excess Risk* (%)
<b>Among full-term infants</b>	
Acute ear infection (otitis media) <sup>2</sup>	100
Eczema (atopic dermatitis) <sup>11</sup>	47
Diarrhea and vomiting (gastrointestinal infection) <sup>4</sup>	178
Hospitalization for lower respiratory tract diseases in the first year <sup>4</sup>	257
Asthma, with family history <sup>2</sup>	67
Asthma, no family history <sup>2</sup>	35
Childhood obesity <sup>7</sup>	32
Type 2 diabetes mellitus <sup>6</sup>	64
Acute lymphocytic leukemia <sup>2</sup>	23
Acute myelogenous leukemia <sup>5</sup>	18
Sudden infant death syndrome <sup>2</sup>	56
<b>Among preterm infants</b>	
Necrotizing enterocolitis <sup>2</sup>	138
<b>Among mothers</b>	
Breast cancer <sup>8</sup>	4
Ovarian cancer <sup>2</sup>	27

Chart from the 2011 Surgeon Generals Call to Action to Support Breastfeeding Report



The Centers for Disease Control and Prevention (CDC) began releasing national and state breastfeeding report cards in 2007. In the figure below, the Healthy People 2020 goals related to breastfeeding are listed along with breastfeeding trends in North Carolina from 2009-11.

North Carolina was very close to meeting the Healthy People 2010 goal of increasing the proportion of infants ever breastfed. Unfortunately, the other goals related to breastfeeding were not met. There is work to be done to meet the Healthy People 2020 goals for breastfeeding.

### North Carolina Trends: CDC Report Card Results\*

Objective	Healthy People 2010 Goal	North Carolina 2009 (%)	North Carolina 2010 (%)	Healthy People 2020 Goal	North Carolina 2011 (%)
<b>Increase the proportion of infants ever breastfed</b>	<b>75%</b>	<b>66.9</b>	<b>73.5</b>	<b>81.90%</b>	<b>67.3</b>
Increase the proportion of infants breastfed at 6 months	50%	36.7	35.9	60.60%	37
<b>Increase the proportion of infants breastfed at 1 year</b>	<b>25%</b>	<b>18.9</b>	<b>19.4</b>	<b>34.10%</b>	<b>19.6</b>
Increase the proportion of infants who are breastfed exclusively through 3 months	40%	30.2	28.2	46.20%	28.1
<b>Increase the proportion of infants who are breastfed exclusively through 6 months</b>	<b>25%</b>	<b>13.1</b>	<b>8.7</b>	<b>25.50%</b>	<b>8.2</b>

\*The CDC Report Card is based on data collected from the National Immunization Survey. This table is representative of provisional and final data collected from 2006-08. Chart from the NC DHHS Breastfeeding Blueprint.

In addition to the previously listed Healthy People 2020 objectives for initiation, duration and exclusivity, three new breastfeeding objectives have been added.

### New Healthy People 2020 Breastfeeding Goals:

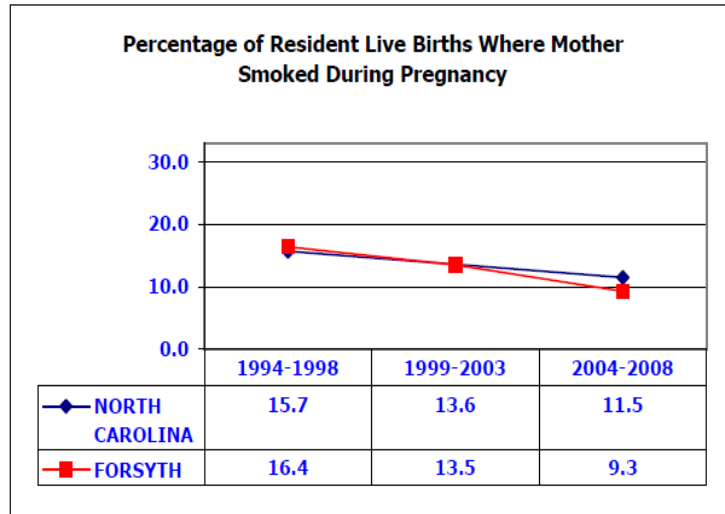
Objective	Goal
<b>Reduce the proportion of breastfed newborns who receive formula supplementation within the first 2 days of life</b>	<b>14.20%</b>
<b>Increase the proportion of live births that occur in facilities that provide recommended care for lactating mothers and their babies.</b>	<b>8.10%</b>
<b>Increase the proportion of employers that have worksite lactation programs.</b>	<b>38%</b>

\*Chart from the NC DHHS Breastfeeding Blueprint

## Tobacco Use

### Smoking During Pregnancy:

Smoking during pregnancy is one cause of low birth weight, and many other infant health issues. In 1994, Forsyth County had a higher percentage of women who smoked during pregnancy than the state average. In more recent data (2008), fewer Forsyth County women smoke during pregnancy than the state average. This decrease in smoking during pregnancy is a wonderful step towards health birth outcomes.



North Carolina County Trends Report  
NC State Center for Health Statistics

### Children Exposed to Secondhand Smoke

Over half of all children in the United States breathe secondhand smoke at home, in cars, or in public places. According to the 2010 US Surgeon General’s report, more than 300,000 children suffer each year from infections caused by secondhand tobacco smoke, including bronchitis, pneumonia and ear infections. Secondhand smoke (and maternal smoking while pregnant) also contributes to preterm birth, low birth weight and Sudden Infant Death Syndrome (SIDS).

The NC Youth Tobacco Survey is a public school based survey of students in grades 6-12. The following information about secondhand smoke is from the 2009 survey of schools in Central NC:

#### Middle School:

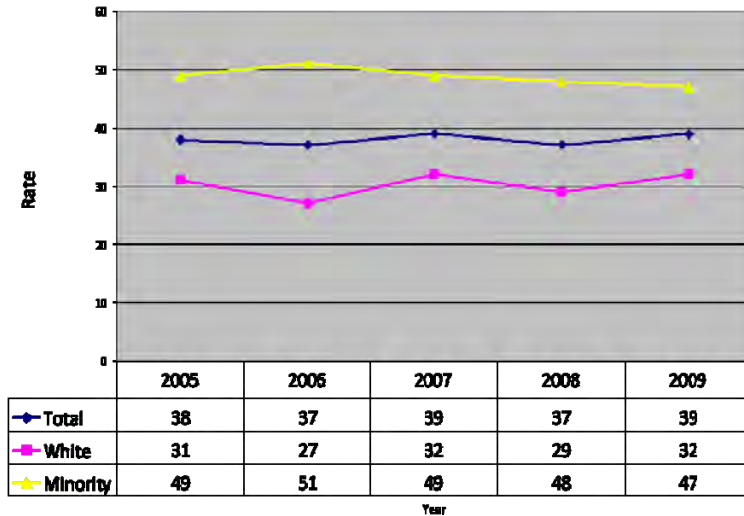
- 39.5% live in homes where others smoke
- 45.5% are in the same room as others who smoke during the week
- 86.5% think smoke from others is harmful to them

#### High School:

- 37.7% live in homes where others smoke
- 51.7% are in the same room as others who smoke during the week
- 90% think smoke from others is harmful to them

## Teen Pregnancy & Sexual Activity

**Teen Pregnancy Rates**



NC Department of Health and Human Services, State Center for Health Statistics. "North Carolina Reported Pregnancies."

### Teen Pregnancies:

In 2010\*, teen pregnancy rates across the state dropped 11% to the lowest level in North Carolina's history. As a state average, fewer than 5% of girls age 15-19 got pregnant last year.

Historically, teen pregnancy has disproportionately affected minorities. State data shows that these disparities are shrinking; however they still exist. The chart to the left shows the teen pregnancy rates per 1,000 girls in NC from 2005-2009 for white and minority girls age 15-17.

\*2010 information from the Adolescent Pregnancy Prevention Campaign of NC

In relation to teen pregnancies, highlights from the 2009 Youth Risk Behavior Survey of WSFCS System students show that:

- 72% of middle school students reported they have been taught about abstaining from sexual activity
- 10% of high school students had sexual intercourse for the first time before age 13
- 16% of high school students had sexual intercourse with 4 or more people during their lifetime
- 54% of male students and 47% of female students have had sexual intercourse; among the sexually active students, 63% reported using a condom
- 12% of female students and 5% of male students reported having been physically forced to have sexual intercourse

## 2009 Youth Risk Behavior Survey Data

In March 2009, schools in the WSFCS System participated in the Youth Risk Behavior Survey (YRBS). This survey identifies the prevalence of specific health risk behaviors and compares local youth behavior patterns to county and state data.

<b>Alcohol, Tobacco &amp; Other Drugs YRBS High School Data</b>	<b>2009 WSFCS</b>	<b>2008 Guilford</b>	<b>2009 Mecklenburg</b>	<b>2009 NC</b>
Smoked cigarettes on one or more days in the past 30 days.	19%	21%	13%	20%
Had at least one drink of alcohol on one or more days in the past 30 days	37%	38%	33%	35%
Had 5 or more drinks of alcohol in a row, on at least 1 day during the past 30 days (binge drinking)	20%	26%	14%	19%
Used marijuana one or more times in the past 30 days	22%	23%	21%	20%
Been offered, sold or given illegal drugs on school property	30%	31%	38%	5%
Drove a car or other vehicle when they had been drinking alcohol in the past 30 days	8%	12%	6%	8%
Rode with a driver in a car or other vehicle who had been drinking alcohol in the past 30 days	21%	28%	23%	21%

### Middle School Highlights

- 55% of students reported being physically active for a total of 60 minutes or more per day for the past 7 days
- 20% of students reported seriously considered attempting suicide, and 15.4% reported developing a suicide plan
- 41% reported watching 3 or more hours of TV on an average school night
- 47% were trying to lose weight

### High School Highlights

- 46% of students reported being physically active for a total of 60 minutes on five or more days of the past seven days
- 29% of student have been in a physical fight, 10% on school property
- 14% considered attempting suicide and 12% had attempted suicide within the past year
- 43% were trying to lose weight

<b>Violence-Related Behavior YRBS Middle School Data</b>	<b>2009 WSFCS</b>	<b>2008 Guilford</b>	<b>2009 Mecklenburg</b>	<b>2009 NC</b>
Ever carried a weapon such as a gun, knife, or club	32%	32%	31%	39%
Ever in a physical fight	53%	60%	60%	53%
Bullied on school property in past 12 months	34%	n/a	39%	n/a
Electronically bullied in past 12 months	19%	n/a	18%	21%
Someone stole or damaged student's property while at school	28%	29%	32%	28%

## 2009 Youth Tobacco Survey Data

In 2009 school sin the WSFCS System participated in the Youth Tobacco Survey as part of the Central Region. This survey identifies the prevalence of the use of cigarette and other tobacco products, as well as information on secondhand smoke, school tobacco prevention education, and access to tobacco products.

### Middle School Highlights:

- Almost 3 in 10 students have tried tobacco; 10% currently use some form of tobacco
- Secondhand smoke exposure is high—nearly 5 in 10 students are exposed to secondhand smoke on a daily basis
- 6 in 10 current smokers want to quit smoking
- 6 in 10 students were not taught the dangers of tobacco at school in the past year
- An overwhelming majority (9 of every 10) say they have not smoked on school property

### High School Highlights:

- 5 in 10 students have tried tobacco; 25% reported currently use some form of tobacco
- Secondhand smoke exposure is high—more than 5 in 10 students are exposed to secondhand smoke on a daily basis
- 40% of current smokers want to quit smoking
- Nearly three-quarters were not taught the dangers of tobacco at school in the past year
- An overwhelming majority (9 of every 10) say they have not smoked on school property

### Access and Availability—Current Smokers Under Age 18

Middle School:

- 3.3% buy cigarettes in stores
- 46.8% get cigarettes via social sources (friends, family, and others)

High School:

- 17.5% buy cigarettes in stores
- 61.6% get cigarettes via social sources (friends, family, and others)

### Schools & Tobacco

Middle School:

- 41.8% were taught the dangers of tobacco use
- 1.6% smoked on school property within the past month
- 4.2% said their school has a program to help students quit smoking

High School:

- 26.3% were taught the dangers of tobacco use
- 6.6% smoked on school property within the past month
- 7.1% said their school has a program to help students quit smoking

*These results are from a combination of school districts within the central part of North Carolina. Counties included in this survey include Alamance, Anson, Cabarrus, Caswell, Chat-ham, Cumberland, Davidson, Davie, Durham, Forsyth, Franklin, Gaston, Granville, Guilford, Harnett, Hoke, Iredell, Lee, Lincoln, Mecklenburg, Montgomery, Moore, Orange, Person,*

## Children’s Issues

Child Abuse and Neglect Reports Investigated (Rate per 1,000)				
2005	2006	2007	2008	2009
43	43.4	48.9	50.7	47.3

Duncan, D.F., Kum, H.C., Flair, K.A., and Stewart, C.J. (2010). Management Assistance for Child Welfare, Work First, and Food & Nutrition Services in North Carolina.

### Child Abuse and Neglect Reports Investigated in Forsyth County:

The chart to the left shows the rate per 1,000 reports of child abuse and neglect investigated. In 2009, the rate of investigation was 47.3, this was down 3.4 from 2008.

### Children in Foster Care:

Since 2006, Forsyth County has seen a decrease in the number of children ages 0-17 placed in foster care. In 2006, 480 children were placed into foster care, and in 2010 only 259 children were placed.

Children in Foster Care (Number)				
2006	2007	2008	2009	2010
480	432	398	337	259

Duncan, D.F., Kum, H.C., Flair, K.A., and Stewart, C.J. (2010). Management Assistance for Child Welfare, Work First, and Food & Nutrition Services in North Carolina.

Children without Health Insurance (Percent)		
2007	2008	2009
11.50%	14.30%	12.70%

The North Carolina Institute of Medicine and the Cecil G. Sheps Center for Health Services Research

### Children without Health Insurance:

According to the NC Institute of Medicine, In 2008 Forsyth County saw an increase in the percent of children (0-17) without health insurance from 11.5% to 14.30%. In 2009, this percent went back down to 12.7%.

### Obesity in low-income Children:

The chart to the right shows the percentage of children (aged 2-18) seen in public health clinics who are considered obese. Obese is defined as a body mass index equal to or greater than the 95th percentile using federal guidelines, prior to 2008 this was considered to be overweight.

Obese: % low-income children who are obese				
2005	2006	2007	2008	2009
13.90%	20.10%	15.40%	15.50%	14.70%

North Carolina Nutrition and Physical Activity Surveillance System

\*Please note the following terminology change for 2008 childhood data: 2008 - Obesity (>= 95th Percentile) & Overweight (>= 85th and < 95th Percentile) 2007 (and earlier) - Overweight: (>= 95th Percentile) & At Risk For

**Sources:**

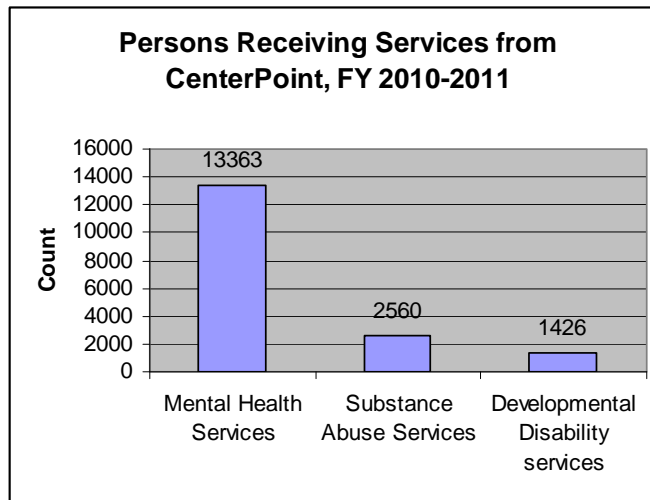
1. 2011 County Health Data Book, NC SCHS:
2. Behavioral Risk Factor Surveillance System, NC SCHS:
3. North Carolina Injury and Violence Prevention Branch
4. Annie E. Casey Foundation. Kids County Data Center.
5. NC DHHS, NC Oral Health. Measuring Oral Health
6. NC DHHS Tuberculosis Control Program.
7. NC DHHS NC 2009 HIV/STD
8. North Carolina County Trends Report, NC SCHS
9. 2009 CDC Pregnancy Nutrition Surveillance Report on Infant Health Indicators
10. 2011 Surgeon Generals Call to Action to Support Breastfeeding Report
11. National Immunization Survey, CDC Report Card
12. NC DHHS Breastfeeding Blueprint
13. North Carolina Reported Pregnancies."
14. Management Assistance for Child Welfare, Work First, and Food & Nutrition Services in North Carolina.
15. North Carolina Institute of Medicine
16. North Carolina Nutrition and Physical Activity Surveillance System



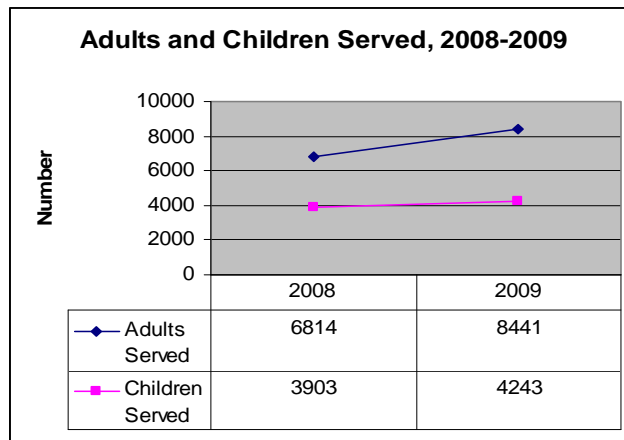
# **Mental Health**

**Mental Health, Developmental Disabilities, and Substance Abuse**

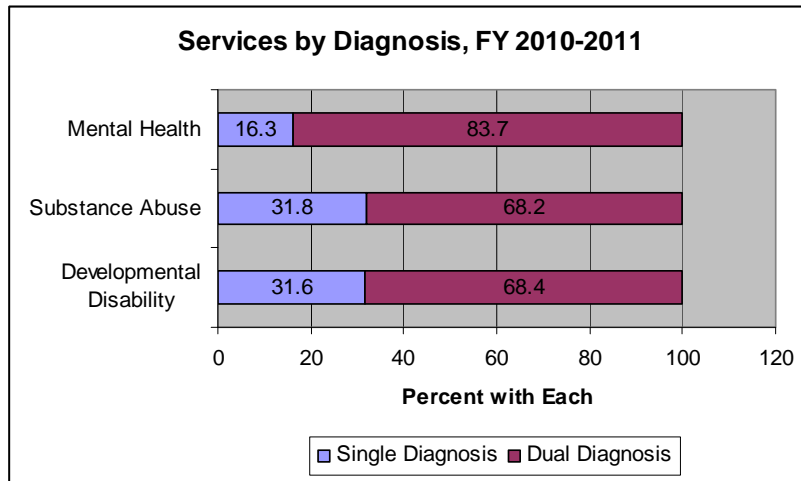
Mental health services are managed by the Division of Mental Health, Developmental Disabilities, and Substance Abuse Services (MH/DD/SA) which is part of the NC Department of Health and Human Services. The Local Management Entity responsible for delivery of publicly-funded MH/DD/SA services is CenterPoint Human Services. CenterPoint Human Services provided Mental Health Services to 13,363 persons, Substance Abuse Services to 2,560 persons and Developmental Disability to 1,436 persons during the Fiscal Year 2010-2011. Mental Health Services are received by the highest number in individuals. The majority of those served by CenterPoint Human Services in Fiscal Year 2010-2011 had a dual diagnosis and received multiple services (1).



From 2008-2009, CenterPoint Human Services saw an increase in both the number of adults and children served in Forsyth County. By the Fiscal Year 2010-2011, CenterPoint Human Services served nearly 11,000 adults and 4,200 children who received Medicaid and/or state funds for MH/DD/SA needs (1).

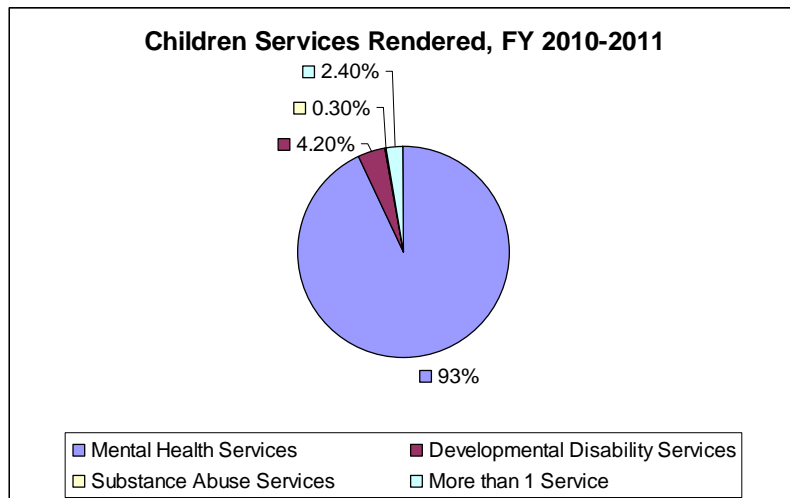


Source: CenterPoint Human Services. Annual Reports.



Source: Forsyth Futures. Making Progress Report: Physical and Mental Health, 2012.

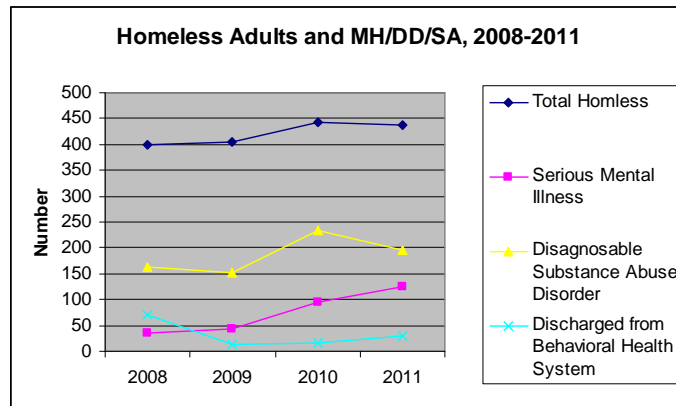
Ninety-three percent of children served received mental health services while 4.2% received developmental disability services, 2.4% received more than 1 service, and 0.30% received substance abuse



Source: Forsyth Futures. Making Progress Report: Physical and Mental Health, 2012.

**Homelessness and Mental Health and Substance Abuse**

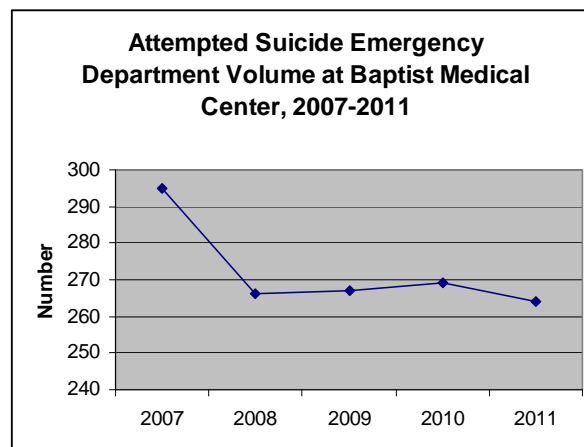
The NC Coalition to End Homelessness completes annual Point-In-Time Counts to assess the number of homeless living in NC in January. From 2008 to 2011 the number of homeless adults increased slightly from 400 to 438. Homeless is defined as those individuals in an emergency shelter (including domestic violence shelters); those in transitional housing for homeless persons who originally came from the streets or emergency shelters; and those living in places not meant for human habitation, such as cars, parks, sidewalks, abandoned buildings, or on the streets. Of those homeless adults, an increasing number were seriously mentally ill. In 2011 there were 3.6 times more homeless with a serious mental illness than in 2008, increasing from 35 to 126 in 2011. Those who had diagnosable substance abuse disorders fluctuated, with the highest count of 233 in 2010. The count of homeless adults with diagnosable substance abuse disorders decreased slightly to 195 in 2011. The number of homeless who were discharged from a behavioral health system in the preceding 30 days before becoming homeless decreased from 70 in 2008 to 29 in 2011 (2).



Source: NC Coalition to End Homelessness. Point -n-Time Count Data.

**Suicide**

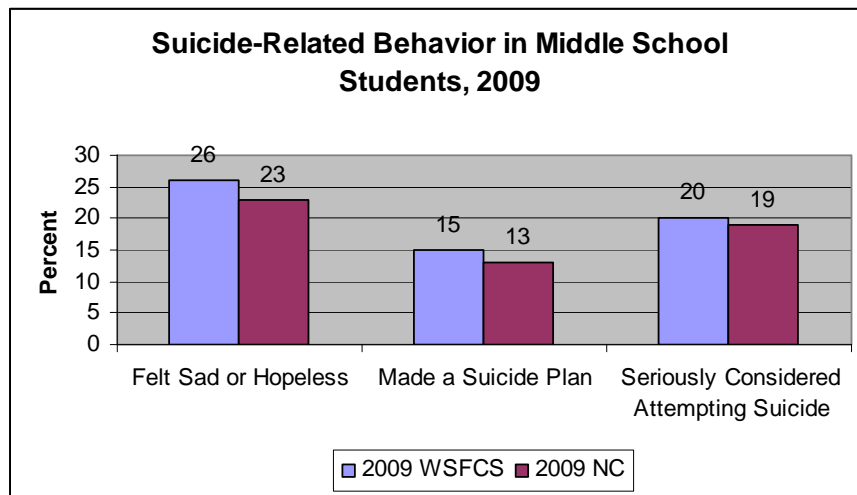
Emergency department volume from attempted suicide has decreased from 2007 to 2011. It decreased 10.5% from a high of 295 in 2007 to a low of 264 in 2011. From 2008 to 2011, the number of suicide attempts remained steady.



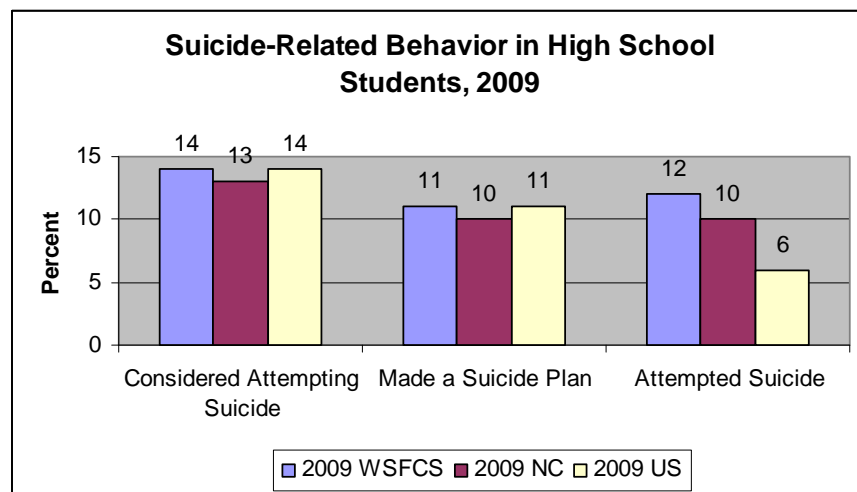
Source: Wake Forest University Baptist Medical Center Data Repository

**Teens and Suicide**

Between 2006 and 2010, 8 teens committed suicide in Forsyth County. The 2009 Youth Risk Behavior Survey, given to middle and high school students in Forsyth County measures behaviors related to health. In suicide-related behaviors, Winston-Salem/Forsyth County middle school students reported higher percentages engaging in Suicide-Related Behaviors. These higher percentages were accounted for in feelings of sad or hopelessness, making a suicide plan, and seriously considered attempting suicide. For Winston-Salem/Forsyth County high school students, the percent of students who had attempted suicide was double that of the nation, and higher than the state. Questions that address consideration of suicide and development of a suicide plan, Forsyth County was one percentage point higher than the state, but the same as the United States.



Source: 2009 WSFCS Youth Risk Behavior Survey.



Source: 2009 WSFCS Youth Risk Behavior Survey.

## Community Views on Mental Health

The 2011 Community Stakeholders Interview (CSI), conducted between March to June 2011; revealed stakeholders in multiple organizations in the county that identify mental health issues as a major challenge for residents. Stakeholders stated there were gaps in service for mental health issues. When asked what was perceived to be the major health related problem in Forsyth County, the category of “Mental Health Issues; Lack of Mental Illnesses Services” ranked second highest along with “Chronic Illnesses.” Mental health was ranked second, as survey participants noted that restructuring at the state level created problems for those needed services.

Stakeholders also identified access to mental health services as the top health service needed for children and adolescents. Stakeholders felt that: mental health long-term services are few, especially for preschool or early childhood services; and outpatient mental health services are needed for adolescents as alternatives to institutions and prisons. Counseling/Mental Health/Support Groups were the third identified services that stakeholders felt need improvement in the county from a list of 20 options. Stakeholders identified mental health as a health problem that has affected their personal life via family and friends. Overall stakeholders believed mental health should be fully embraced as a public health issue, with a request to see more integrated services for mental and physical health, as they now practice as separate entities.

### Sources:

1. 2011 County Health Data Book, NC SCHS: <http://www.schs.state.nc.us/schs/data/databook/>.
2. Behavioral Risk Factor Surveillance System, NC SCHS: <http://www.schs.state.nc.us/schs/brfss/results.html>
3. 2010/2011 Center Point Human Services Annual Report
4. 2012 Forsyth Futures Making Progress report: Physical & Mental Health
5. NC Coalition to End Homelessness. Point -n-Time Count Data
6. Wake Forest University Baptist Medical Center Data Repository
7. 2009 WSFCS Youth Risk Behavior Survey
8. 2011 Community Stakeholders Report

# **Health Care Resources**



### Health Care Resources

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

#### Practitioners

In 2009, the number of physicians per 10,000 population was 40.7. The number of primary care physicians per 10,000 population was 14.1. The number of federal physicians per 10,000 population was 26. In North Carolina there were 24.7 physicians per 10,000 population in 2007.

<i><b>Practitioner</b></i>	<b>Number</b>
<i>Physicians</i>	
Non-Federal Physicians	1,449
Primary Care Physicians	500
Family Practice	136
General Practice	4
Internal Medicine	196
Obstetrics/Gynecology	52
Pediatrics	112
Other Specialties	949
<i>Dental</i>	
Dentists	186
Dental Hygienists	200
<i>Nurses</i>	
Registered Nurses	6,170
Nurse Practitioners	231
Certified Nurse Midwives	6
Licensed Practical Nurses	1,004
<i>Other Health Professionals</i>	
Chiropractors	44
Occupational Therapists	115
Occupational Therapy Assistants	25
Pharmacists	497
Physical Therapists	262
Physical Therapy Assistants	64
Physician Assistants	267
Podiatrists	17
Practicing Psychologists	88
Psychological Associates	32
Respiratory Therapists	308
Source: Cecil G. Sheps Center for Health Services Research. NC Health Professions Data System. 2009 Active Health Professionals.	

In Forsyth County 18 dentists were Significant Health Choice Providers, who provide dental care to Health Choice recipients. There were 64 dentists who were Significant Medicaid Providers who treat Medicaid recipients.

## Hospitals Discharges and Beds

The number of general hospital discharges have decreased from 2006 to 2009 for both Forsyth County and North Carolina. General Hospital Discharges decreased approximately 6% from 2008 to 2009. In North Carolina, the number of general hospital discharges decreased less than 1%

General Hospital Discharges, 2006-2009				
	2006	2007	2008	2009
<b>Forsyth County</b>	38,599	37,859	38,902	36,549
<b>North Carolina</b>	961,904	980,775	968,197	967,560

Source: Log Into North Carolina (LINC). [Http://linc.state.nc.us](http://linc.state.nc.us)

Beds General Hospital, 2006-2009				
	2006	2007	2008	2009
<b>Forsyth County</b>	1,511	1,562	1,562	1,608
<b>North Carolina</b>	20,329	20,322	20,443	20,647

Source: Log Into North Carolina (LINC). [Http://linc.state.nc.us](http://linc.state.nc.us)

## Hospitals

### North Carolina Baptist Hospital

North Carolina Baptist Hospital, located in Winston-Salem, NC is a 840-bed teaching hospital that is the region's principal tertiary referral center. It is home to nearly 13,000 employees and is the largest employer in Forsyth County. Brenner Children's Hospital, opened in 2002. This 400,000-square-foot, 160-bed tower is a "hospital within a hospital" and has cared for thousands of young patients and their families. It houses North Carolina's only Level I Pediatric Trauma Center, a pediatric Emergency Department, pediatric and neonatal intensive-care units, infant, child and adolescent inpatient units, and outpatient clinics .

### Forsyth Medical Center & Medical Park Hospital

Forsyth Medical Center is a 921-bed, not-for-profit regional medical center. It offers a full continuum of emergency, medical, surgical, rehabilitative and behavioral health services. Coupled with the nearby 22 -bed Medical Park Hospital, both give Winston-Salem one of the largest, best-equipped hospital facilities in the state. Both are accredited by the Joint Commission on Accreditation of Healthcare Organizations and are a member of the American Hospital Association.

Forsyth Medical Center and Medical Park Hospital perform close to 40,000 surgical procedures each year, including more than 6,500 general surgery procedures, 7,000 orthopedic and neurological procedures and 700 open-heart surgeries. They are also active in a number of different clinical areas, including cancer diagnoses, stroke treatments and the delivery of babies .

**Kernersville Medical Center**, Novant Health's newest hospital, is a 50-bed community hospital. This \$100 million state-of-the-art facility includes a 24/7 emergency department, surgical services, intensive care unit, radiology services, laboratory and pharmacy services, general orthopedics and sports medicine and diagnostic cardiac, neurological and GI care. In the hospital's first year of being open, they performed nearly 2,000 surgeries and saw more than 21,000 patients in the emergency department. The hospital serves residents and businesses located in eastern Forsyth, western Guilford, Rockingham and Stokes Counties.

## Community Clinics

### Community Care Center of Forsyth County

The Community Care Center is a free medical and dental clinic staffed primarily by volunteers. While 91% of their patients have a working member of the household, they earn too much to be eligible for Medicaid or Medicare, but not enough to afford private insurance or medical care. The Community Care Center is now the largest and most comprehensive free clinic in North Carolina providing basic healthcare services and the following, specialty clinical services :

<ul style="list-style-type: none"> <li>● Cardiology</li> <li>● Dental</li> <li>● Dermatology</li> <li>● Endocrinology</li> <li>● Gastroenterology</li> <li>● Gynecology</li> <li>● Neurology</li> <li>● Ophthalmology</li> </ul>	<ul style="list-style-type: none"> <li>● Optometry</li> <li>● Otolaryngology</li> <li>● Pediatrics</li> <li>● Podiatry</li> <li>● Psychiatry (limited)</li> <li>● Psychology (limited)</li> <li>● Radiology</li> <li>● Urology</li> </ul>
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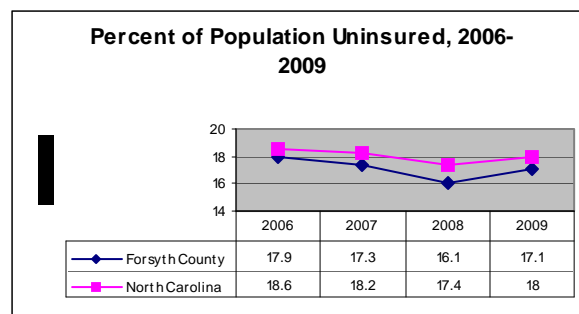
### Forsyth County Department of Public Health

The Forsyth County Department of Public Health is located at 799 N. Highland Avenue in Winston-Salem. Comprehensive clinical services include Women’s Preventive Health, Teen and Adult Health, Communicable Disease Control, Immunizations, School and Community Health Education, Dental Health Services, Medicaid Chronic Disease Case Management, Child Health, WIC, Environmental Health, TB Control, Family Planning, STD Clinic, HIV Testing and Counseling, and Lead Poisoning and Prevention.

Neighborhood clinics are held each month in our community in order to serve persons who have difficulty obtaining very basic preventive and acute care services. They are intended for adults and children who do not have private doctors .

### Health Insurance

Citizens’ access to and utilization of health care services is related to the ability to pay for those services, either directly or through private or government health insurance plans/programs. From 2006 to 2008, Forsyth County saw decreases in the percent of the population that was uninsured, only to see an increase by 1 percent point in 2009. Forsyth County followed the same pattern as North Carolina, although the increase from 2008 to 2009 was only 0.6 percent. Overall Forsyth County’s uninsured population remained below North Carolina’s average.



Source: US Census Bureau. Small Area Health Insurance Estimates.

## Children and Health Insurance

NC Health Choice for Children, a free or reduced price comprehensive health care program for children, is also available for families not eligible for Medicaid, but whose income is not sufficient to afford health insurance premiums. It has the same benefits as the State Health Plan, plus vision, hearing and dental benefits (following the same guidelines as Medicaid).

Between 2006 and 2009, the number of children enrolled in NC Health Choice in Forsyth County increased approximately 23%. North Carolina saw an increase of approximately 19% in the number of children enrolled in NC Health Choice. The number of children enrolled in Medicaid also increased between 2006 and 2009 for both Forsyth County and North Carolina. North Carolina saw an increase of approximately 19%, while North Carolina had an increase of approximately 18%. The number of children without health insurance saw peaks in 2008 for both Forsyth County and North Carolina, although the number of children without health insurance decreased in 2009.

<b>Children and Health Insurance, 2006-2009</b>				
<i>Number of Children Enrolled in NC Health Choice</i>				
	2006	2007	2008	2009
Forsyth County	3,982	4,372	4,675	4,900
North Carolina	118,145	126,190	134,518	140,683
<i>Number of Children Enrolled in Medicaid</i>				
	2006	2007	2008	2009
Forsyth County	28,855	30,013	32,160	34,368
North Carolina	746,534	770,672	818,372	879,646
<i>Children Without Health Insurance (Number)</i>				
	2006	2007	2008	2009
Forsyth County	n/a	10,279	13,288	11,996
North Carolina	n/a	292,454	308,567	279,547

Source: Annie E. Casey Foundation. Kids County Data Center.

## Long-Term Care

The number of nursing facility beds has remained stable in Forsyth County and North Carolina between 2006 and 2009. From 2006 to 2008, Forsyth County had the same number of nursing facility beds at 1,661, which decreased by 5 beds in 2009 to 1656. North Carolina saw some fluctuations but has ultimately increased beds by 67 to 44,315 in 2009.

<b>Nursing Facility Beds, 2006-2009</b>				
	2006	2007	2008	2009
<b>Forsyth County</b>	1661	1661	1661	1656
<b>North Carolina</b>	44248	44210	44234	44315

Source: Log Into North Carolina. [linc.state.nc.us](http://linc.state.nc.us).

## Compilation of Forsyth County Health Resources

Below is a list of some health resources by category in Forsyth County. Detailed information on each resource is found under Community Health Resources in the Appendix.

Category	Number of Resources
AIDS/HIV Services	14
Ancillary	1
Chiropractic	8 **
Dental Health Providers	7
Domestic Violence/Sexual Assault	5
Foundations and Nonprofits	11
Free Clinic and Community Centers	13
Home Health Care	6
Homeless Services	7
Hospice	3
Hospitals and Urgent Care	9
Immunizations	2
Insurance Providers and Employee Health Benefits	9 **
Jail Health Services	1
Maternal and Child Care	8
Medical School Services	3
Medical/Health Transportation	7
Medication Assistance	4
Mental Health	25
Nursing Home and Intermediate and Skilled Care Facilities	12
Nursing School Services	2
Nutrition Services	4
Renal Dialysis Centers	5
School Health Services	4
Screening, Testing & Diagnosis	9
Substance and Alcohol abuse Services	21
Suppliers of Medical Equipment	6
Uninsured Financial Assistance (Hospital)	2

**\*\* More in Phone Directory**

### Sources:

1. Cecil G. Sheps Center for Health Services Research. NC Health Professions Data System. 2009 Active Health Professionals.
2. Log Into North Carolina (LINC). [Http://linc.state.nc.us](http://linc.state.nc.us)
3. US Census Bureau. Small Area Health Insurance Estimates
4. Annie E. Casey Foundation. Kids County Data Center.

# **Determinants of Health**

# Determinants of Health

## SOCIAL ENVIRONMENT

### Education

Education is the Leading Health Indicator to address social determinants as a means to improve population health. Higher levels of education are associated with:

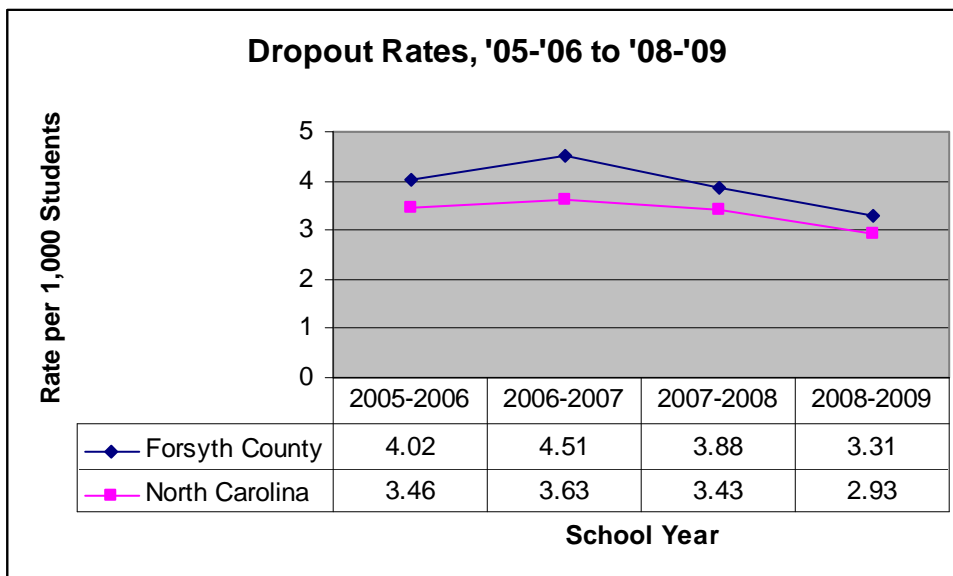
- Longer life expectancy
- Financial security
- Improved health and quality of life
- Health-promoting behaviors like getting regular physical activity, not smoking, and going for routine checkups and recommended screenings.

In 2009, the four year high school graduation rate was 72.7%.

Educational Attainment	
2010-11 Kindergarten - 12th Enrollment	53,627
2010 Average SAT score (1600 scale)	1,000
2010 Percent of Graduates taking SAT	60%
2008-09 Higher Education Total Enrollment	29,244

Source: Data from: Access NC <http://accessnc.commerce.state.nc.us/EDIS/page1.html>

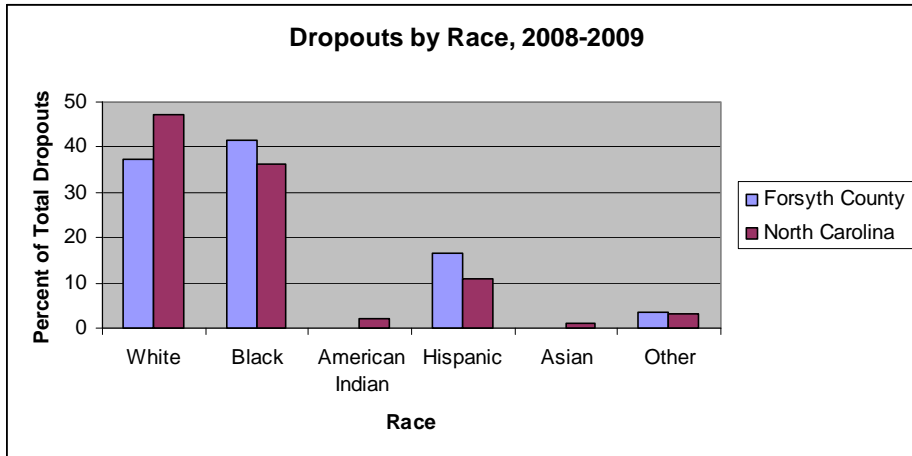
High school drop-outs are five times more likely to live below the poverty line, earn 32% less on average than graduates, live nine years less, and are more likely to serve time in jail. In the 2005-2006 school year, drop out rates for grades 7<sup>th</sup>-13<sup>th</sup> decreased, although Forsyth County continued to have a higher dropout rate than North Carolina. The county and the state both saw increases in dropout rates in the 2006-2007 school year, but the rate declined the following two school years.



Source: Public Schools of North Carolina. Annual Reports. Dropout Reports

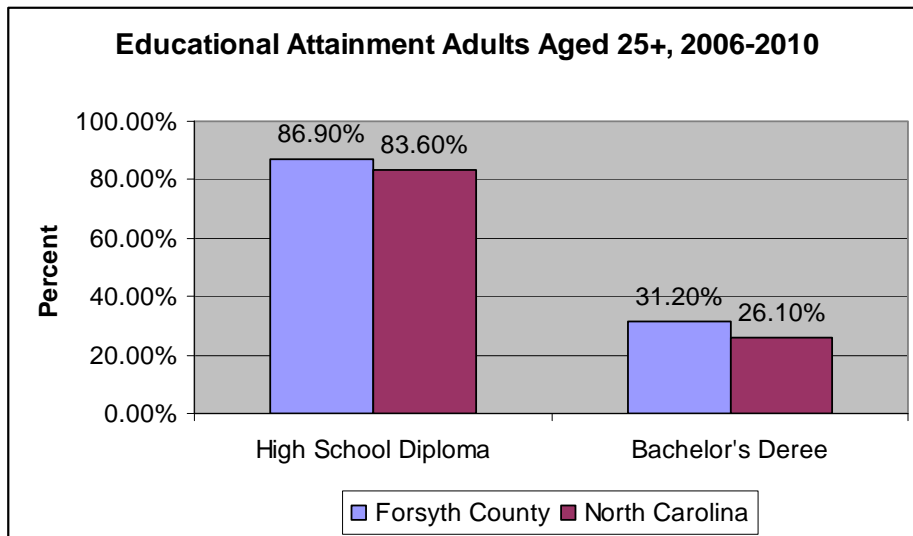


The percent of total dropouts (grades 7-13) who were white was lower in Forsyth County than in North Carolina, 37.5% versus 47.1%. American Indian and Asian students had lower dropout rates than the state as well; both were less than 1% for Forsyth County while it was 2% and 1% for the state respectively. Black, Hispanic and Other non-whites made up a higher percentage of dropouts in Forsyth County than the states. Black students made up 41.6% in Forsyth County and 36.3% in the state; Hispanic students made up 16.7% in the county and 10.8% in the state; and Other students made up 3.6% in the county and 3% in the state.



Source: Public Schools of North Carolina. Annual Reports. Dropout Reports.

For adults over 25 years of age, Forsyth County had higher educational attainment than the state. Forsyth County had 86.9% of adults with a high school diploma in comparison to North Carolina, which had 83.6% of adults with the same. Forsyth County also had 31.2% of adults who held a bachelor's degree in comparison to North Carolina's 26.1% who held a bachelor's degree.



Source: US Census Bureau. State and County Quick Facts

## Families

### **Family Composition**

In 2009 there were 142,191 households in the County. There were 90,648 families, with an average household size of 2.38 (1).

### **Family Violence**

In Forsyth County there were over 7,519 domestic violence relation reports in 2008, with more than 1,100 restraining orders served. In 2009 294 women and children were stayed at the Family Services Shelter throughout the year. This is an increase of 10% from the 262 women and children who stayed at the shelter in 2007. Approximately 1 in 5 high school females reported being physically or sexually abused by a dating partner (2).

### **Care for the Elderly**

Forsyth County is served by the Northwest Piedmont Area Agency on Aging which also serves Davie, Stokes, Surry, and Yadkin Counties. The mission is to assist older adults in achieving and maintaining quality of life by utilizing resources and services through advocacy, coordinating, planning and education (3).

## Neighborhoods

### **Crime/Intentional Injuries**

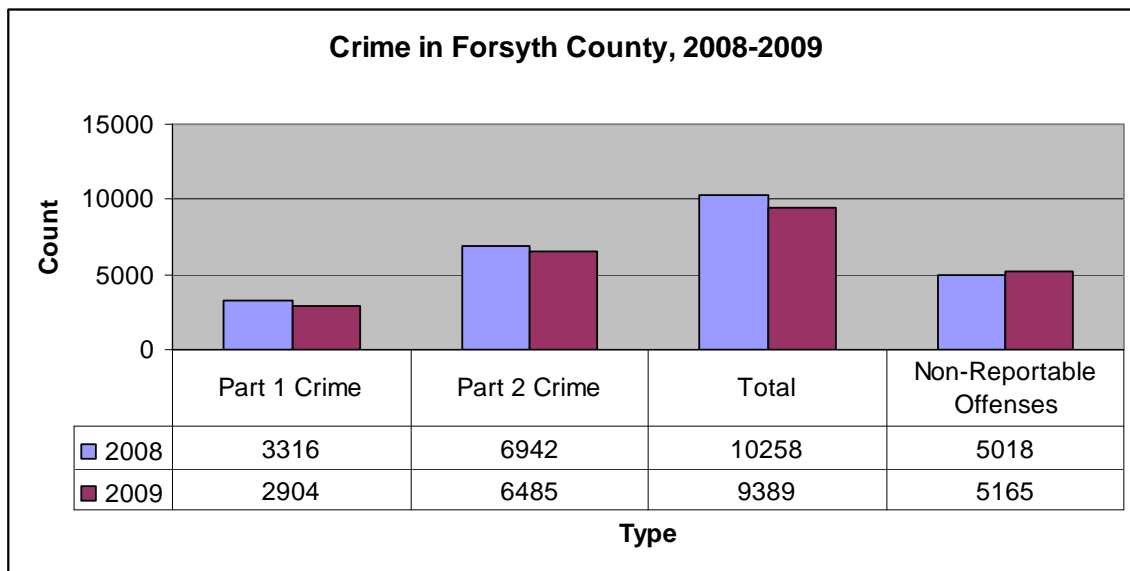
The Forsyth County Sheriff's Office 2009 Annual Report revealed an overall decrease in crime. There was a 8.47% decrease in Part 1 and Part 2 Crime and an overall total decrease of 4.73% when including non-reportable offenses. Part 1 and Part 2 Crime includes (4):

<b>Part 1:</b>	<b>Part 2</b>	<b>Part 2</b>
<i>Violent</i>	<i>Other Crimes Against Persons</i>	Liquor Law Violations
Murder	Simple Assault	<i>White Collar Crime</i>
Rape	Sex Offenses	Forgery/Counterfeiting
Robbery	Offenses Against Family/ Children	Fraud
Aggravated Assault	<i>Public Disorder Crimes</i>	Embezzlement
<i>Property</i>	Disorderly Conduct	<i>All Other Crimes</i>
Burglary	Vandalism	Stolen Property
Larceny (Not Including from Motor Vehicle)	Prostitution/Gambling/ Pornography	Weapons
Larceny from Motor Vehicle	<i>Drug/Alcohol Offenses</i>	Traffic
Motor Vehicle Theft	Drug/Drug Equipment Violations	Miscellaneous Offenses
Arson	DWI	All Other Offenses

### Crime by Part I and Part II Status

	2008	2009	Percent Change
Part 1 Crime	3,316	2,904	-12.42
Part 2 Crime	6,942	6,485	-6.58
Total	10,258	9,389	-8.47
Non-Reportable Offenses	5,018	5,165	2.93
Grand Total	15,276	14,554	-4.73

Source: Forsyth County Sheriff's Office. 2009Annual Report.



Source: Forsyth County Sheriff's Office. 2009Annual Report.

### Religion/Social Support/Civic Engagement

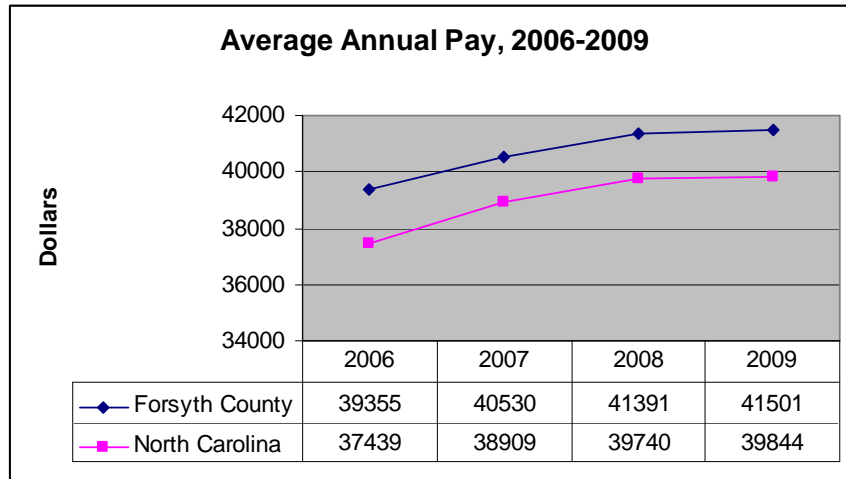
The National Center for Charitable Statistics revealed (5):

- 65 Private Foundations that had given \$69,289,965 in grants
- 240 Clubs, Sports, and Other Mutual Benefit or Social Bonding Organizations
- 302 Congregations and Other Religious Organization

## FINANCIAL/ECONOMIC FACTORS

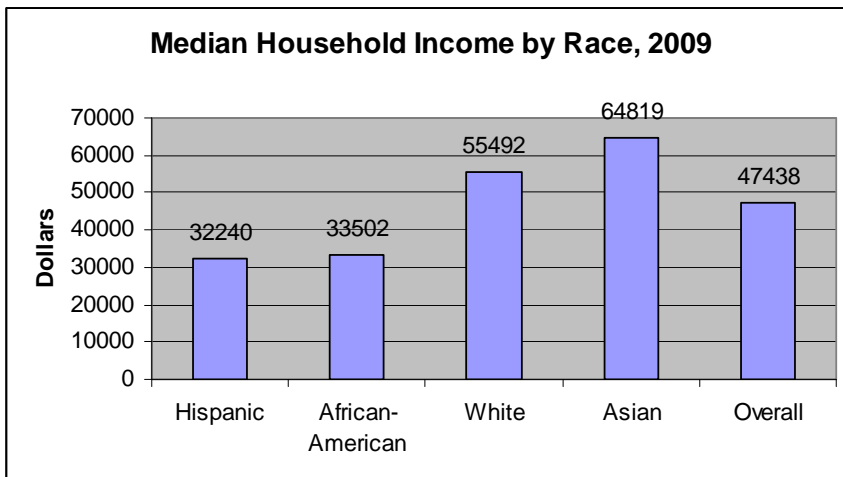
### Income/poverty Levels

The average annual pay in Forsyth County rose going from \$39,355 in 2006 to \$41,501 in 2009. Forsyth County annual average pay was \$1,711 higher on average than North Carolina from 2006-2010.



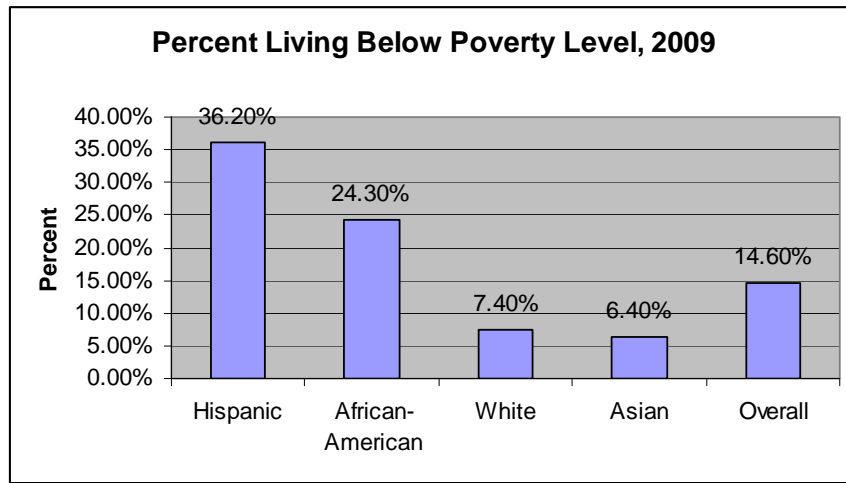
Source: Bureau of Labor Statistics. Databases, Tables, and Calculators.

Median Household income varied by race in 2009. Asians had the highest median household income at \$64,819 while Hispanic household income was the lowest at \$32,240. Hispanic and African-American median household income fell below the overall of \$47,438 by approximately \$14,000 while White and Asian households were at least \$8,000.



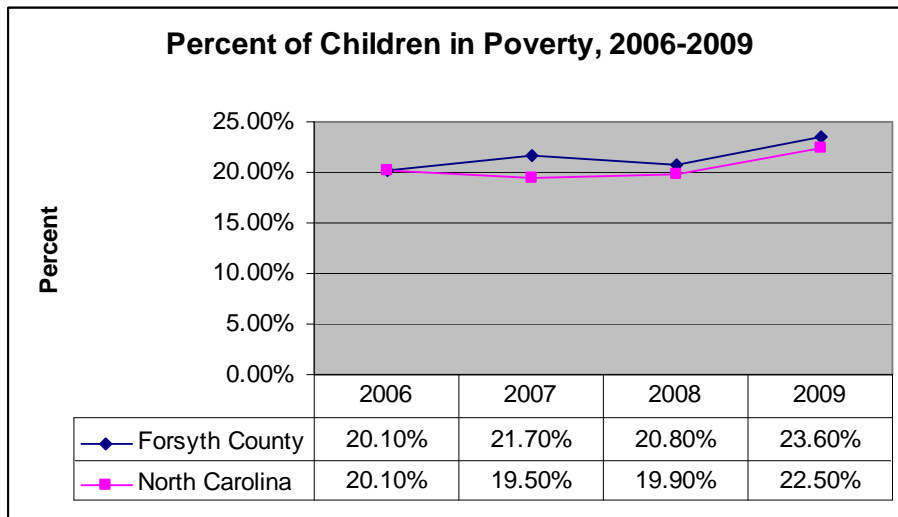
Source: Northwest Piedmont Council of Governments. Demographic and Income Profile.

The percent of the population living below poverty level in 2009 overall was 14.6%. Hispanic and African Americans had higher percentages of the population than the overall rate by approximately 10 percentage points while White and Asian populations were at least 7 percentage points lower.



Source: Northwest Piedmont Council of Governments. Demographic and Income Profile.

The percent of children in poverty increased slightly from 2006-2009. While Forsyth County started off the same, but in 2007 rose to a rate higher than the state's percentage of children in poverty.

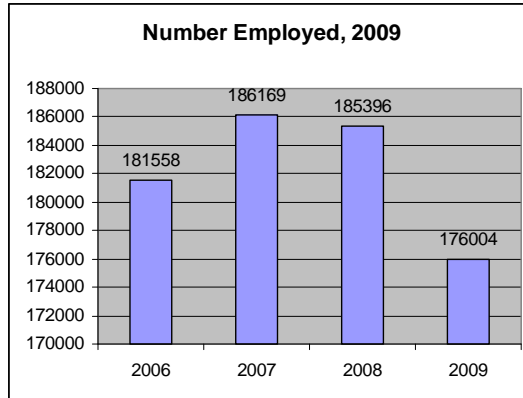


Source: Annie E. Casey Foundation Kids County Data Center. Percentage of XIX Eligible Receiving Dental Services.

The percent of the population living below poverty level in 2009 overall was 14.6%. Hispanic and African Americans had higher percentages of the population than the overall rate by approximately 10 percentage points while White and Asian populations were at least 7 percentage points lower.

### Employment Rates

The number of Forsyth County residents employed fluctuated between 2006 and 2009, indicative of the economic downturn. The number employed increased from 2006-2007, saw a small decline in 2008, and then declined by almost 5%.



Source: Bureau of Labor Statistics.

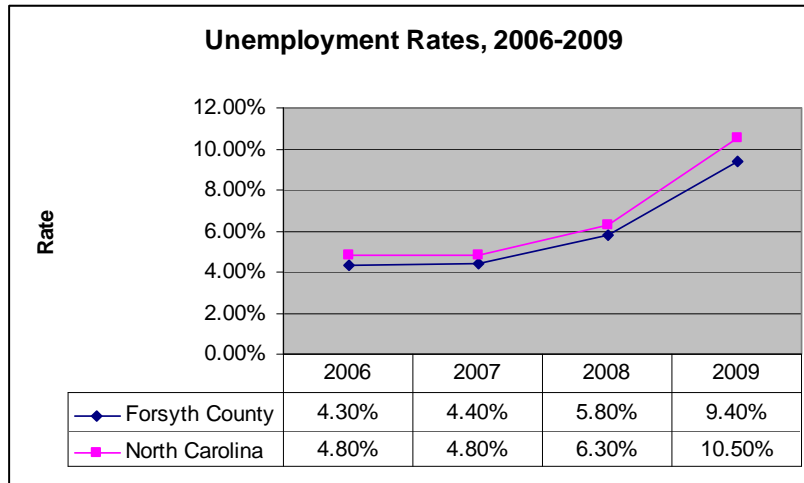
In 2009, the industries with the highest employment numbers were Health Care and Social Assistance, Manufacturing, Educational Services, Retail Trade, and Accommodation and Food Services according to the North American Industry Classification System

Industry	2009 Annual Employment
Health Care and Social Assistance	32,594
Manufacturing	20,614
Educational Services	19,509
Retail Trade	19,041
Accommodation and Food Services	14,612
Administrative and Waste Services	11,207
Finance and Insurance	9,540
Professional and Technical Services	7,466
Public Administration	7,180
Transportation and Warehousing	7,092
Construction	6,468
Wholesale Trade	5,489
Management of Companies and Enterprises	4,491
Other Services Ex. Public Admin	4,464
Arts Entertainment and Recreation	2,438
Real Estate and Rental and Leasing	1,963
Information	1,673
Unclassified establishments	250
Utilities	139
Agriculture Forestry Fishing & Hunting	79
Mining	31
<b>Total Private Industry</b>	<b>156,547</b>
<b>Total All Industries</b>	<b>176,260</b>

Source: NAICS. 2009 Employment and Wages.

## Unemployment

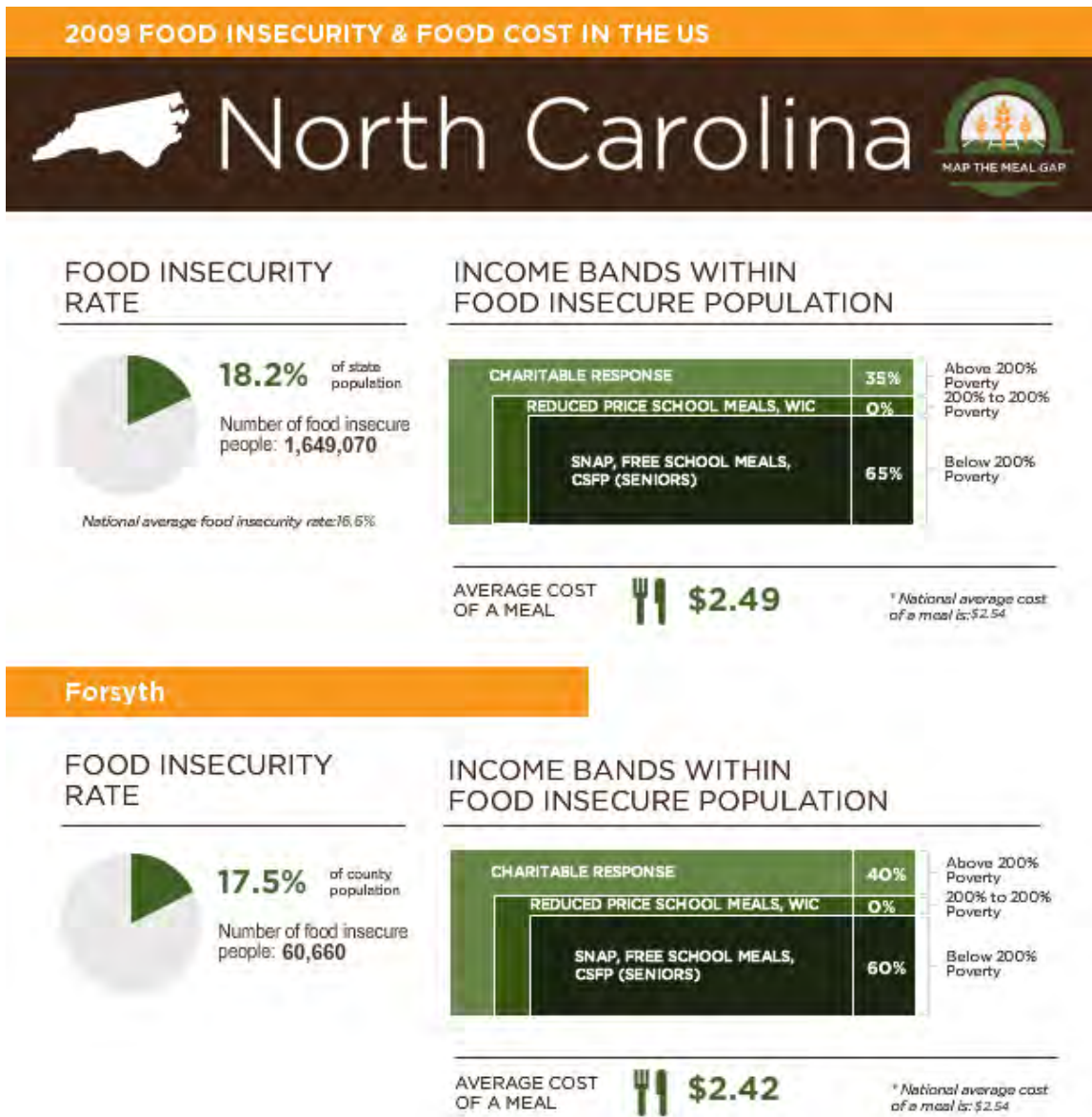
Unemployment rates increased from 2006-2009. Forsyth County unemployment rates were slightly lower than the state. The unemployment rate more than doubled from 2006-2009. Unemployment increased by approximately 62% from 2008 to 2009.



Source: Bureau of Labor Statistics.

### Food Insecurity/Access to Healthy Foods

According to the USDA “food insecurity refers to the lack of access, at times, to enough food for an active, healthy life for all household members and limited or uncertain availability of nutritionally adequate foods. Food insecure households are not necessarily food insecure at all times. Food insecurity may reflect a household’s need to make trade-offs between important basic needs, such as housing or medical bills, and purchasing adequate foods.(6)” The below image from Feeding America describes food insecurity and food cost in Forsyth County and North Carolina.



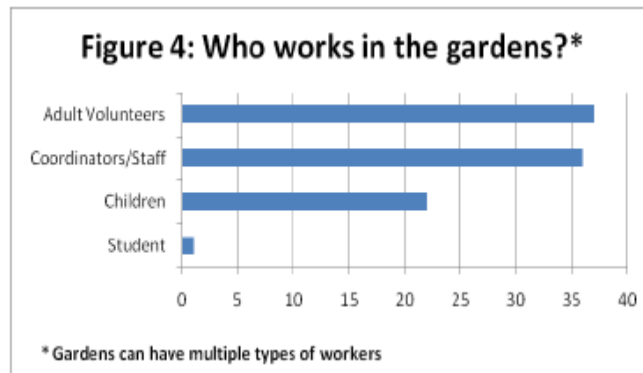
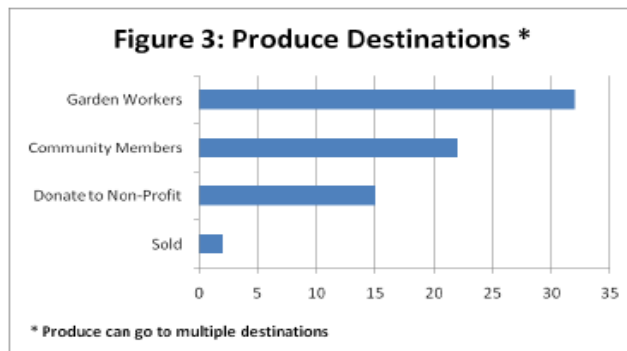
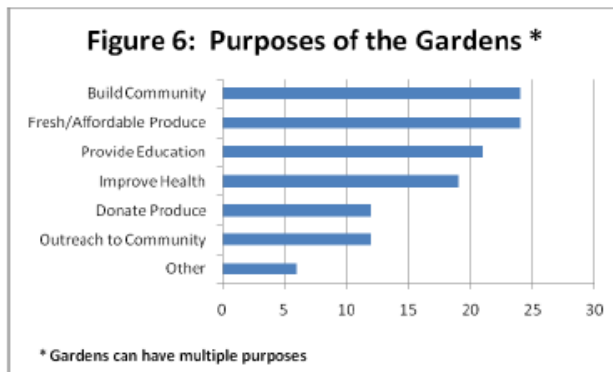
Source: Feeding America. Food Insecurity and Food Cost in the United States



**Community Gardening**

Forsyth County is home to the country’s first community garden beginning with the only known, well document colonial community garden in 1759. Both the 1759 Community Garden and the 1761 Medical Garden are located in Historic Bethabara Park. Currently, Forsyth County has at least 40 community gardens. At these community gardens, the public comes together to grow vegetables, fruits, herbs, healthy lifestyles and social capitals with gardens in neighborhoods, parks, urban centers, and churches (7).

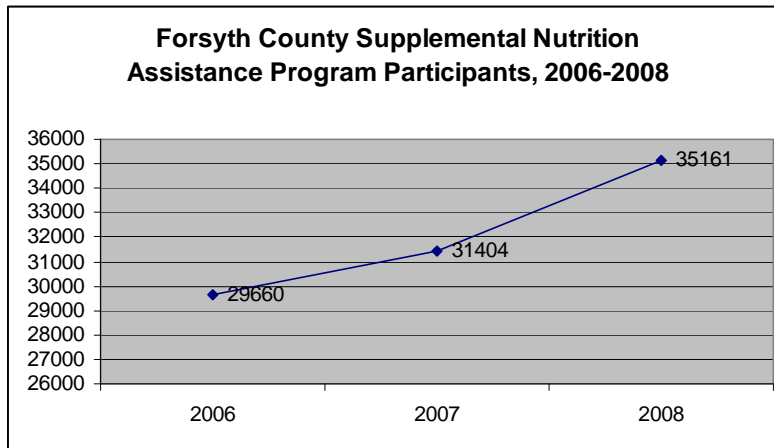
During the summer 2010 an assessment on community gardens revealed 44 community gardens in Forsyth County located at schools, churches, public housing developments, and on private land. Of the gardens, 82% were within the city limits of Winston-Salem. The remaining gardens are located throughout the county with 2 in western, 2 in eastern, and 3 in northwestern areas of Forsyth County (8).



Source: Wake Forest University Translational Science Institute. Program in Community Engagement and Implementation. Report on Community Gardens and Farmers Markets in Forsyth County

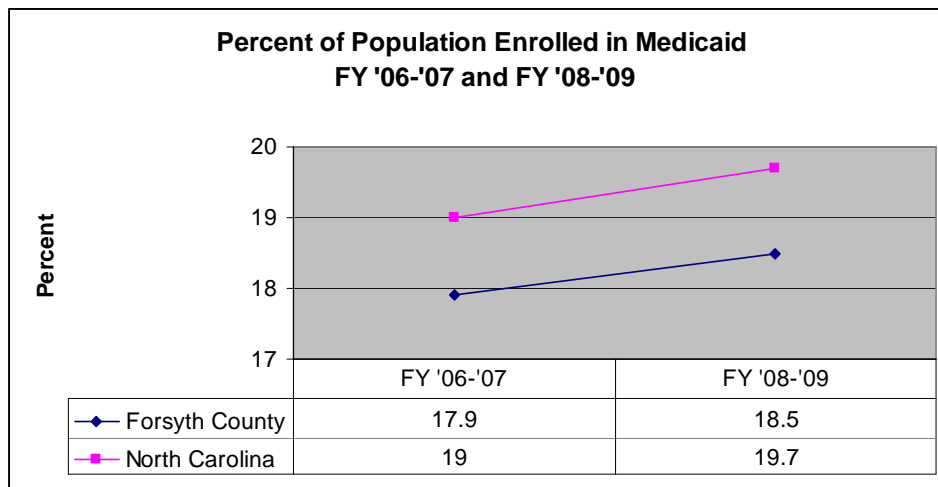
### Financial Assistance

The number of participants of Supplemental Nutrition Assistance Program (formerly known as food stamps) increased by 5,501 participants from 2006 to 2008.



Source: USDA. Economic Research Service. SNAP Data System

The percent of the population enrolled in Medicaid increased by 3.4% from Fiscal Year 2006-2007 to Fiscal Year 2008-2009. North Carolina percentage increased 3.7% during the same time. The percent of population enrolled in Medicaid in Forsyth County is lower than the state percentage.



Source: NC State Center for Health Statistics. NC Health Statistics Pocket Guide-2009.

## Transportation

### Commuting to Work:

In Forsyth County, 19% of employees work outside of their county of residence (still in NC), and 1% work outside their state of residence. 81% of Forsyth County residents work within the county.

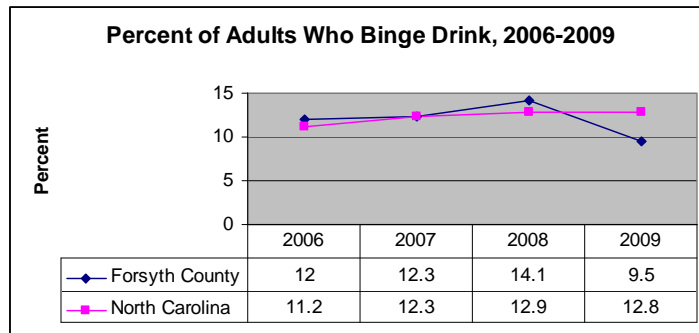
	Commuters	Percent by Residence
Worked in State/ County of Residence	119,233	81%
Worked in State/ Outside County of Residence	27,501	19%
Worked Outside State of Residence	1,104	1%

## INDIVIDUAL BEHAVIOR

Portions of this section use the Behavior Risk Factor Surveillance Survey estimates of certain individuals are gauged as a reflection of community members' behaviors.

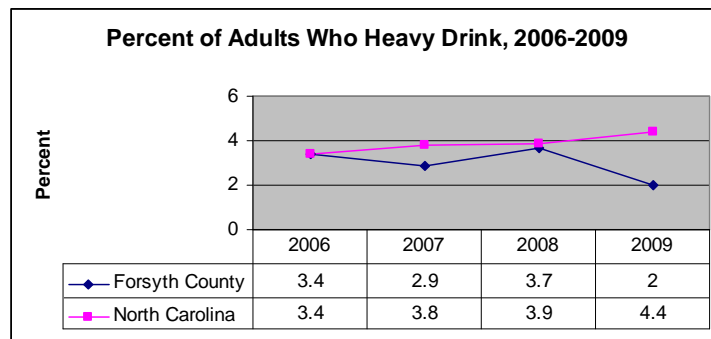
### Substance Use (Tobacco, Alcohol, Illicit Drugs)

According to community members, the percent of adults who binge drink increased from 2006 to 2008, then decreased in 2009 to the lowest rate of 9.5%. The state saw an increase in the amount of adults who binge drink with, although it remained within a two percentage point range of the lowest rate in 2006.



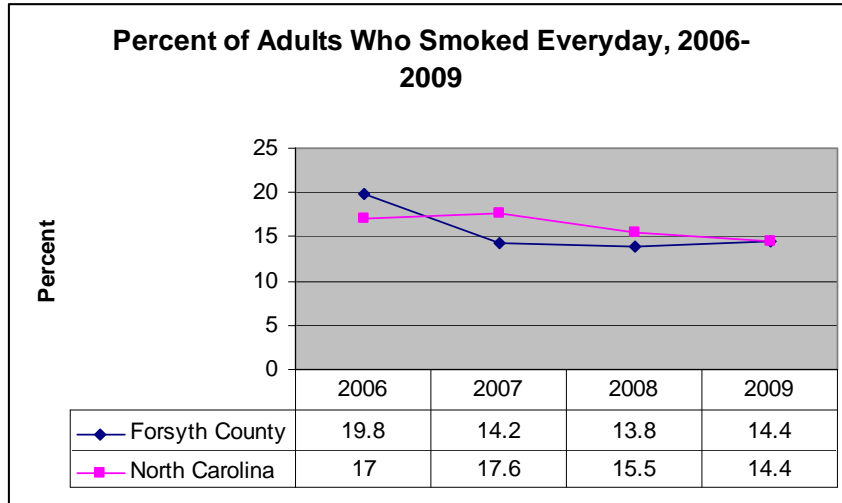
Source: NC State Center for Health Statistics.

Forsyth County saw similar trends for percent of adults who heavy drink. Although the county saw increases and decreases, the overall percent of adults who heavy drink decreased by 1.2 percentage points. North Carolina, in comparison, saw an increase of 1 percentage point by 2009, revealing an increasing trend.



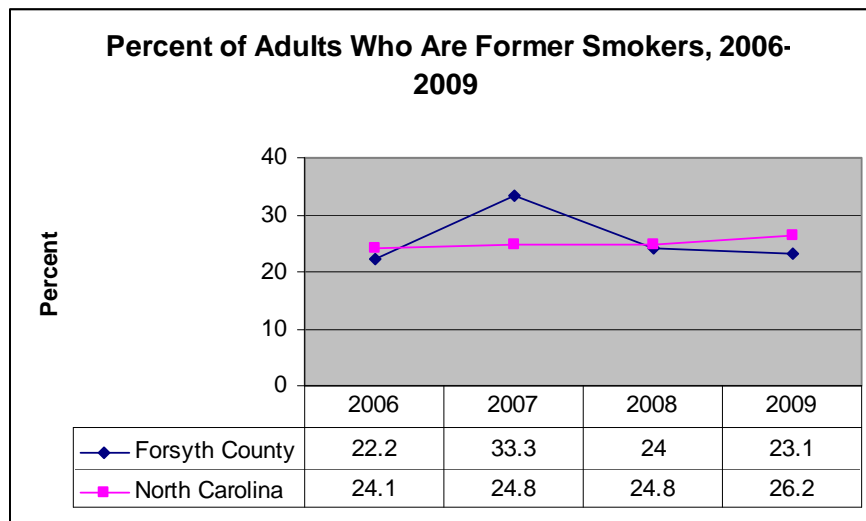
Source: NC State Center for Health Statistics.

Tobacco use by adults in the county saw changes between 2006 and 2009. The percent of adults who smoked everyday was above the state in 2006. Reductions in the percent of adults who smoked everyday, saw declines earlier than the state, although by 2009, both Forsyth County and North Carolina had 14.4% of its population smoking everyday.



Source: NC State Center for Health Statistics.

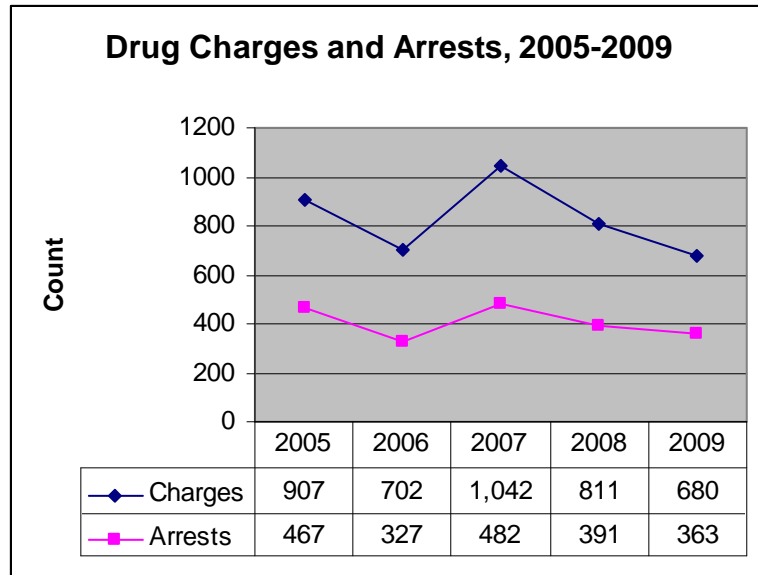
The percent of adults who are former smokers increased for both Forsyth County and North Carolina. While Forsyth County saw a spike in the percent of adults who were former smokers in 2007, this percentage decreased in 2008 and again in 2009. North Carolina saw small but steady increases in the percent of adults who were former smokers.



Source: NC State Center for Health Statistics.

*Illicit Drugs*

The number of drug charges and arrest can indicate drug use in the community. The overall number of drug charges in Forsyth County has fluctuated between 2005 and 2009. The peak number of both drug charges and arrests occurred in 2007, while 2008 and 2009 saw decreases in the number of charges and accounts, for the lowest during the period of time in 2009. The number of drug charges and drug arrests may be useful in estimating drug use in the county.



Source: Forsyth County Sheriff's Office. 2009Annual Report.

Drug Charges and Arrests from 2006 to 2009 varied based upon the type of drug. Between 2006 and 2009, the top drugs for drug charges were cocaine, marijuana, and other drug charges. Cocaine drug charges peaked in 2007 in the time period, and has seen declines in 2008 and 2009. Marijuana charges also peaked in 2007, with a decrease in 2008, and a slight increase in 2009. Other drug charges increased from 198 charges in 2006 to 416 in 2007, with decreases in both 2008 and 2009, for a total of 245 in 2009. In drug arrests by drugs, more individuals were arrested for marijuana than for cocaine or other drugs. Drug arrests, saw similar patterns in increases and decreases as drug charges, with peaks in 2007, with decreases for cocaine and other drugs, while marijuana saw a decrease in 2008 followed by an increase in 2009.

	Schedule I (Heroin)	Schedule II (Cocaine)	Schedule II (Vicodin)	Schedule IV (Valium)	Schedule V (Non-Prescription)	Schedule VI (Marijuana)	Other Drug Charges
2006	39	256	10	10	0	189	198
2007	44	281	6	14	0	281	416
2008	42	200	20	11	0	222	316
2009	36	137	10	27	1	224	245

Source: Forsyth County Sheriff's Office. 2009Annual Report. [http://www.co.forsyth.nc.us/sheriff/Documents/annual\\_report09.pdf](http://www.co.forsyth.nc.us/sheriff/Documents/annual_report09.pdf). (Accessed June 22, 2012).

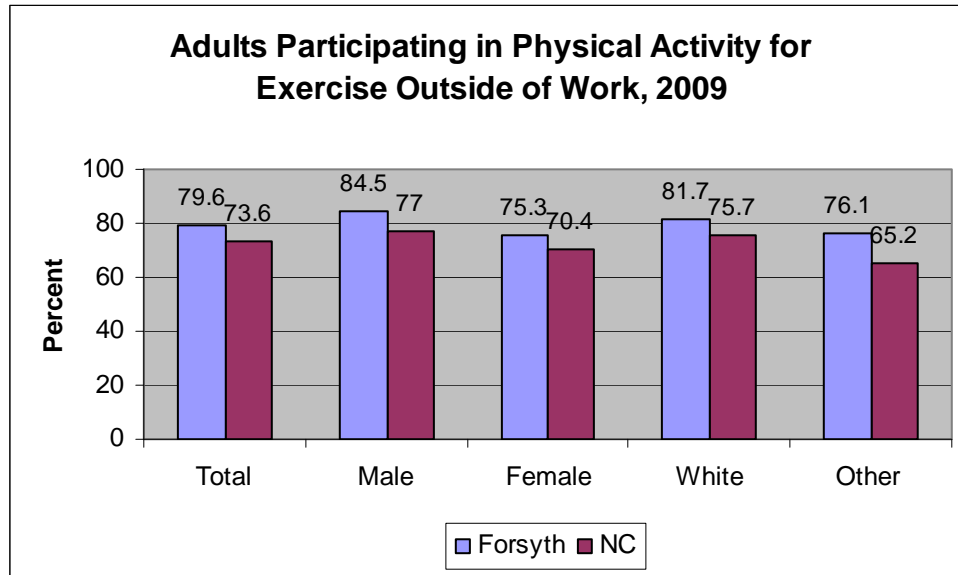
	Schedule I (Heroin)	Schedule II (Cocaine)	Schedule II (Vicodin)	Schedule IV (Valium)	Schedule V (Non-Prescription)	Schedule VI (Marijuana)	Other Drug Arrests
2006	12	91	3	8	0	142	71
2007	16	113	3	5	0	235	110
2008	17	80	8	6	0	152	128
2009	12	43	9	8	1	194	96

Source: Forsyth County Sheriff's Office. 2009Annual Report. [http://www.co.forsyth.nc.us/sheriff/Documents/annual\\_report09.pdf](http://www.co.forsyth.nc.us/sheriff/Documents/annual_report09.pdf).

## Overweight/Obesity Rates

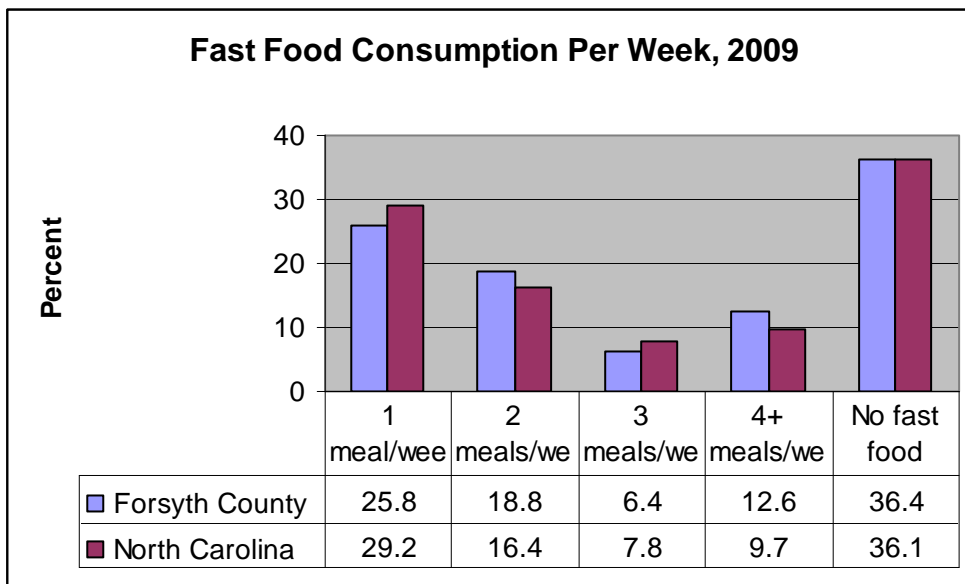
### Physical Activity and Nutrition

The percent of adults who participated in physical activity outside of work in 2009 in Forsyth County was higher than the state for all groups.



Source: NC State Center for Health Statistics.

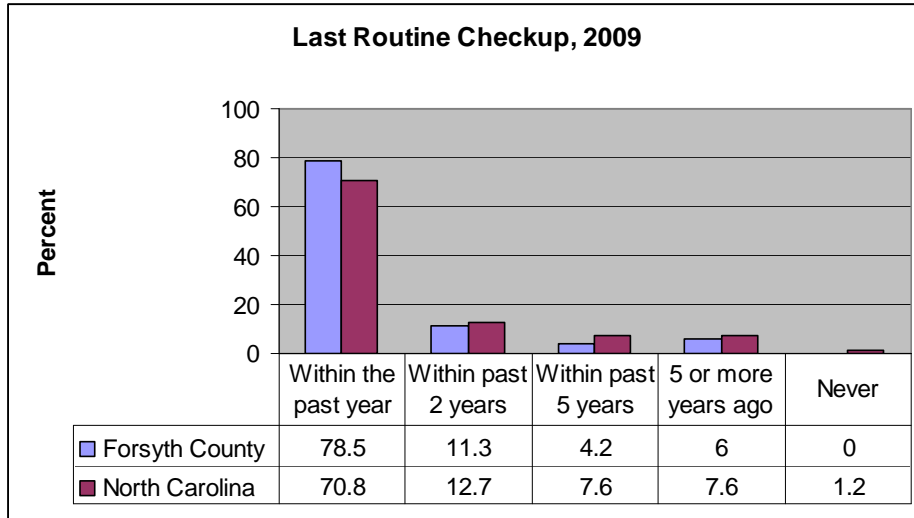
In Forsyth County 62.2% of residents consumed fast food one or none times in a week, this was lower than the state's percentage of 65.3%. Only 12.6% of residents ate fast food four or more times a week.



Source: NC State Center for Health Statistics.

### Health Screenings

Routine check-ups can be beneficial to health. A higher percentage of Forsyth County residents, 78.5%, stated they had a routine checkup in the past year than the state, 70.8%. Zero percent of Forsyth County residents reported that they never had a routine checkup, in comparison to 1.2% of North Carolina.

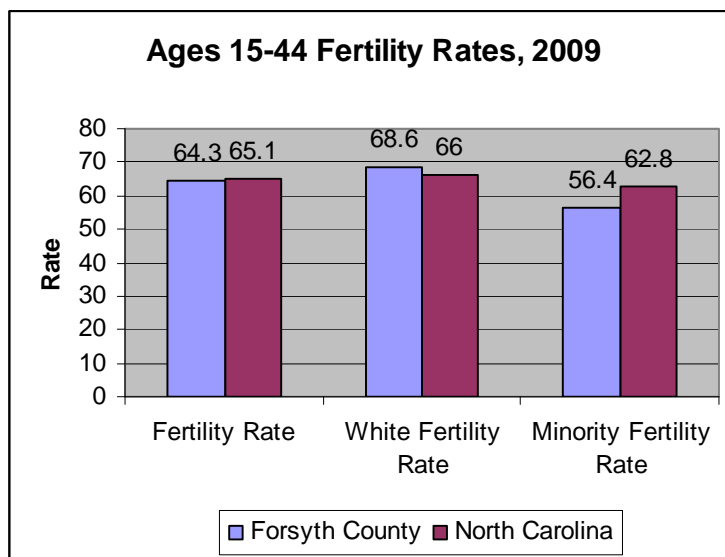


Source: NC State Center for Health Statistics.

### Family Planning-Contraception, Pregnancy/Abortion/Fertility Rates

#### Fertility

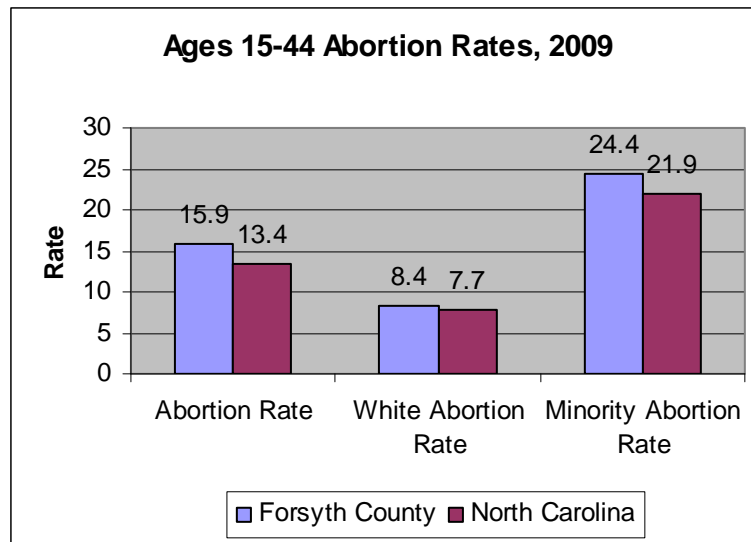
The overall fertility rate in Forsyth County was 64.3, similar to the state rate of 65.1. County fertility rates for whites and minority groups varies, with the white fertility rate at 68.6 in comparison to the minority fertility rate at 56.4. The white fertility rate was 2.6 more than the state’s white fertility rates, while in comparison the minority fertility rate was 6.4 below the state’s minority fertility rate.



Source: NC DHHS. Division of Public Health. NC Reported Pregnancies-2009.

**Abortion**

The abortion rate for Forsyth County was 15.9, 2.5 higher than the state abortion rate of 13.4. Both the white and minority abortion rates were higher than the state. The white abortion rate was 8.4. This was 0.7 higher than the states. The minority abortion rate was 24.4, 2.5 more than the state abortion rate for minorities.

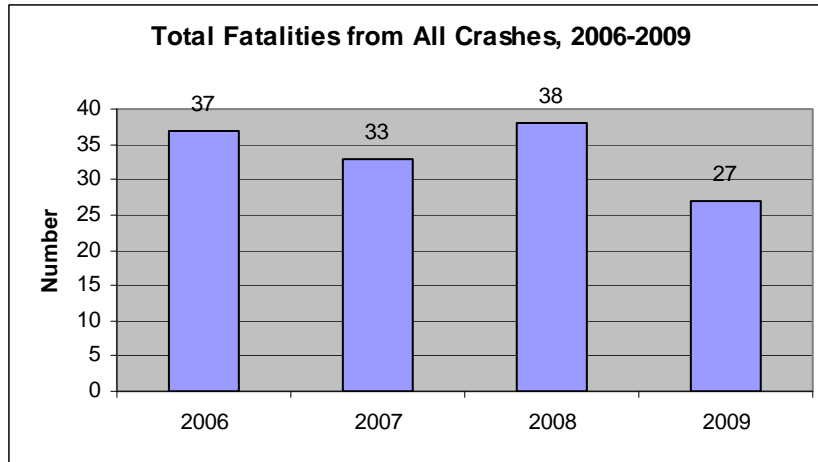


Source: NC DHHS. Division of Public Health. NC Reported Pregnancies-2009.

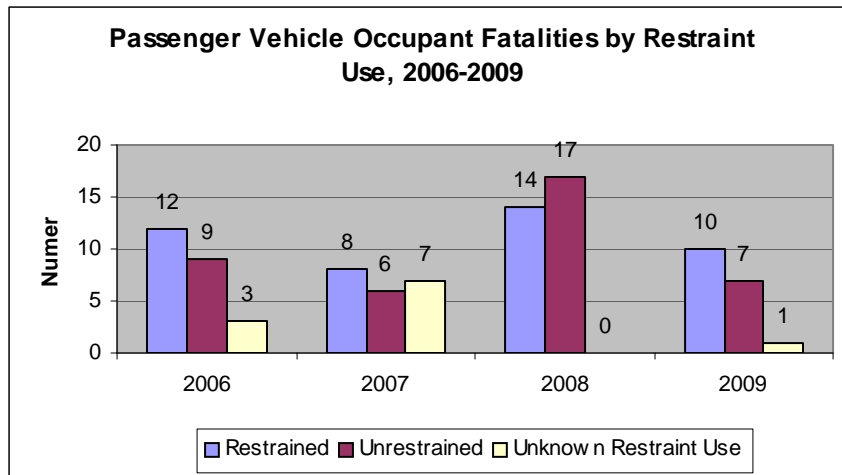


### Motor Vehicle Injuries (Seat Belt Usage, Drinking and Driving)

In between 2006 and 2009, motor vehicle fatalities have seen increases and decreases. The total fatality from all crashes, saw a peak of 38 in 2008, and then a low of 27 in 2009. In the majority of passenger vehicle occupant fatalities, most passengers were restrained in 2006, 2007, and 2009. In 2008, the majority of fatalities occurred in passengers who were unrestrained.

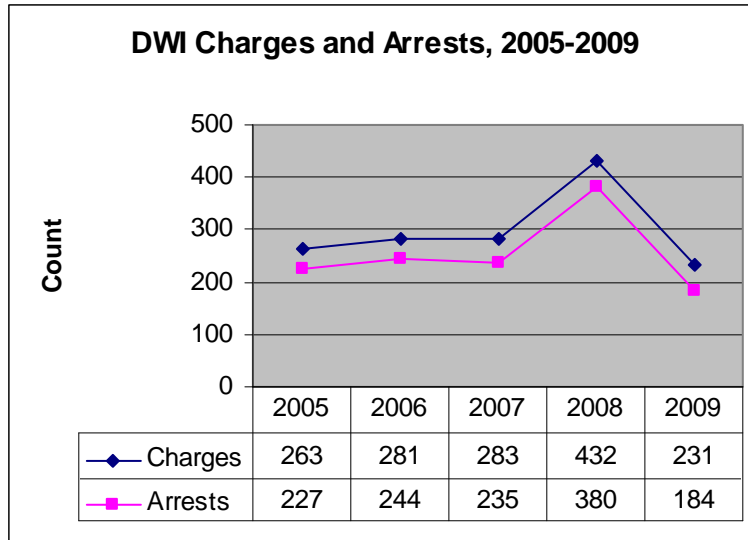


Source: US Department of Transportation. National Highway Traffic Safety Administration. Traffic Safety Facts. Forsyth County, NC 2006-2010.



Source: US Department of Transportation. National Highway Traffic Safety Administration. Traffic Safety Facts. Forsyth County, NC 2006-2010.

The number of Driving While Impaired (DWI) charges and arrests saw an increase in 2006 and remained constant through 2007. Both DWI charges and arrests peaked in 2008 at 432 charges and 380 arrests then decreased to lows in 2009 at 231 charges and 184 arrests.

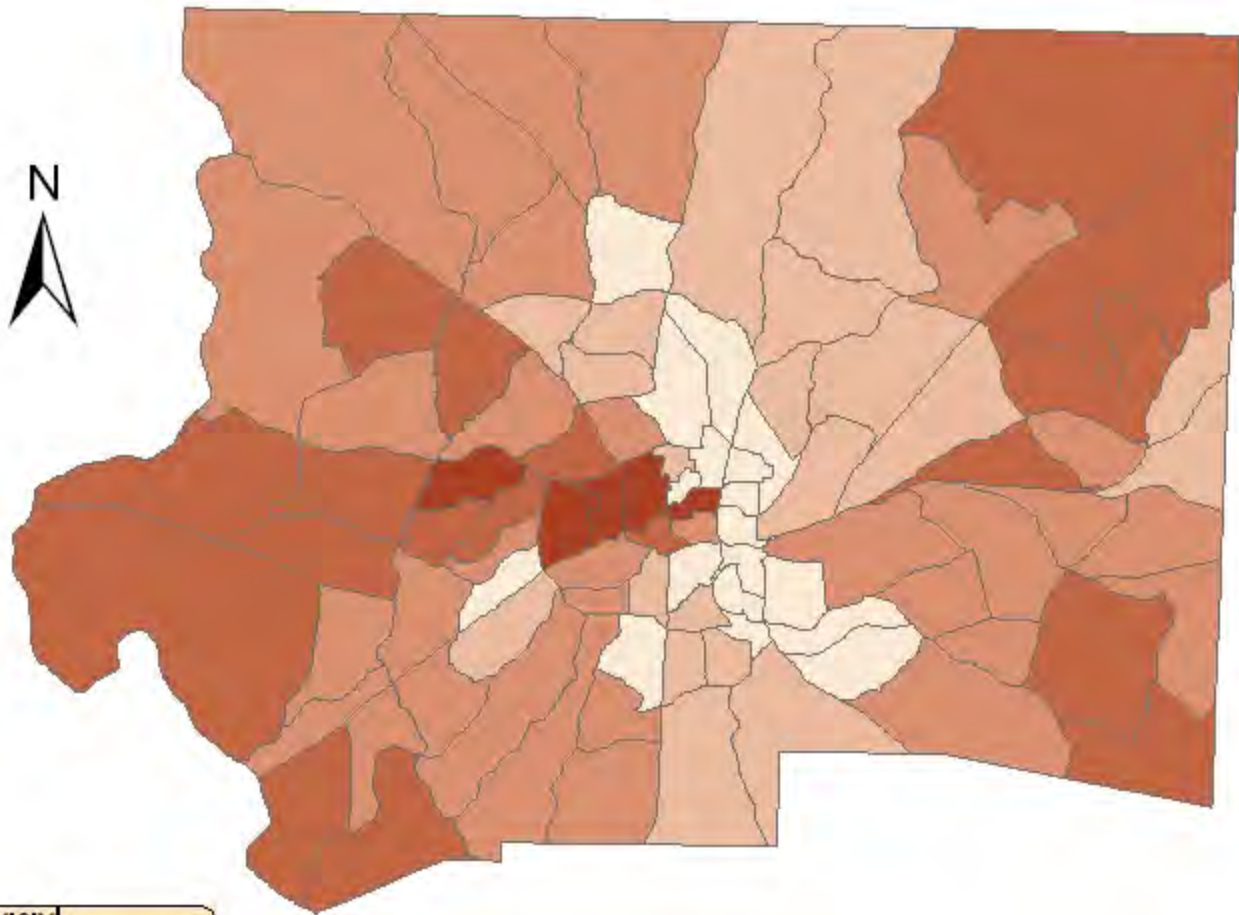


Source: Forsyth County Sheriff's Office. 2009 Annual Report.

**Sources:**

1. Northwest Piedmont Council of Governments. Demographic and Income Profile.
2. United Way Forsyth County. 2009 Annual Report.
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18. NC DHHS. Division of Public Health. NC Reported Pregnancies-2009
19. US Department of Transportation. National Highway Traffic Safety Administration. Traffic Safety Facts. Forsyth County, NC 2006-2010

# Family Median Income by Census Tracts, Forsyth County



**Legend**

**2010 Census Data**  
**Family Median Income**

9,146.0 - 34,940.0
34,940.1 - 54,777.0
54,777.1 - 75,721.0
75,721.1 - 112,500.0
112,500.1 - 171,382.0

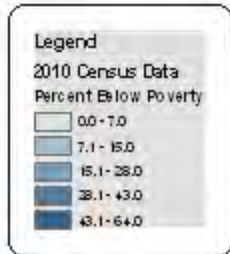
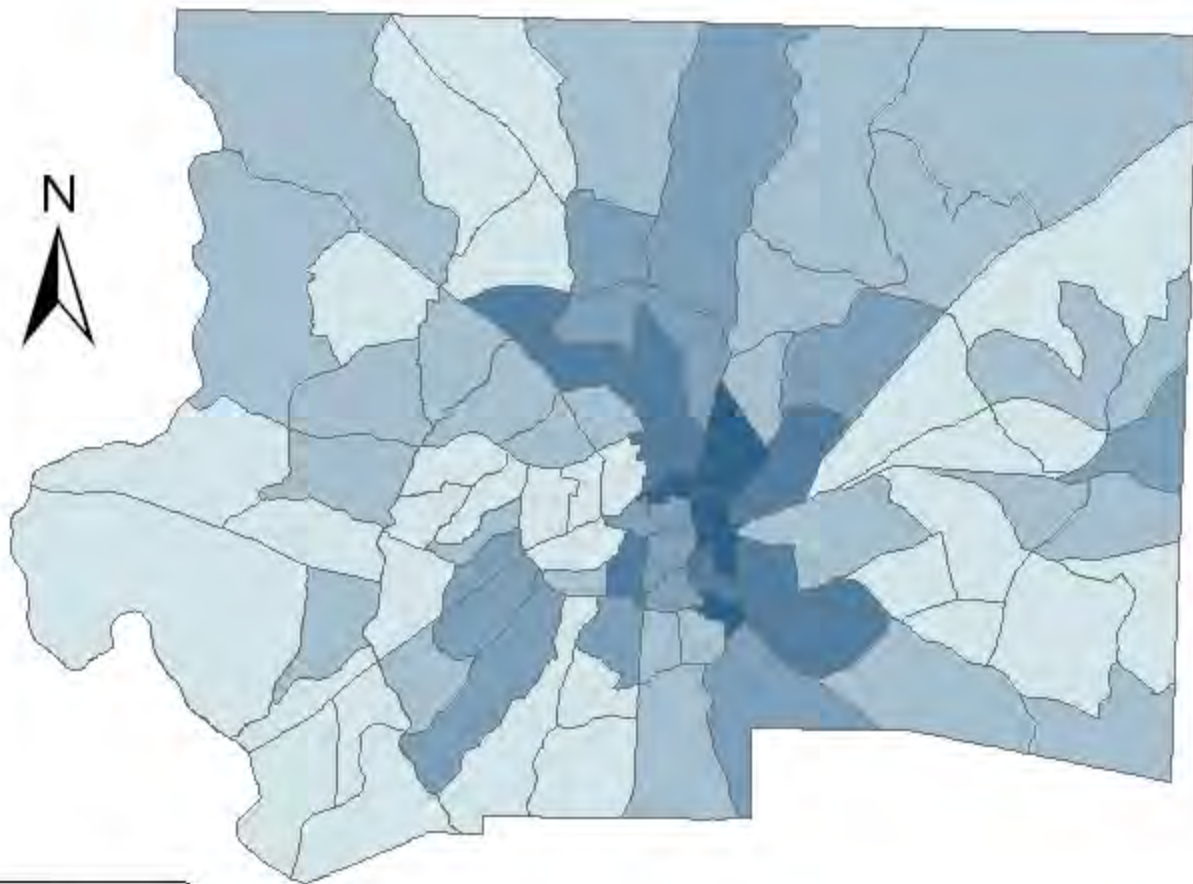


**Forsyth County**  
*Department of Public Health*  
**Promoting Health, Improving Lives**

Prepared by Epidemiology Division, FCDPH March 2012



# Percent Below Poverty Level: 2010 Census By Census Tracts, Forsyth County



Forsyth County  
Department of Public Health

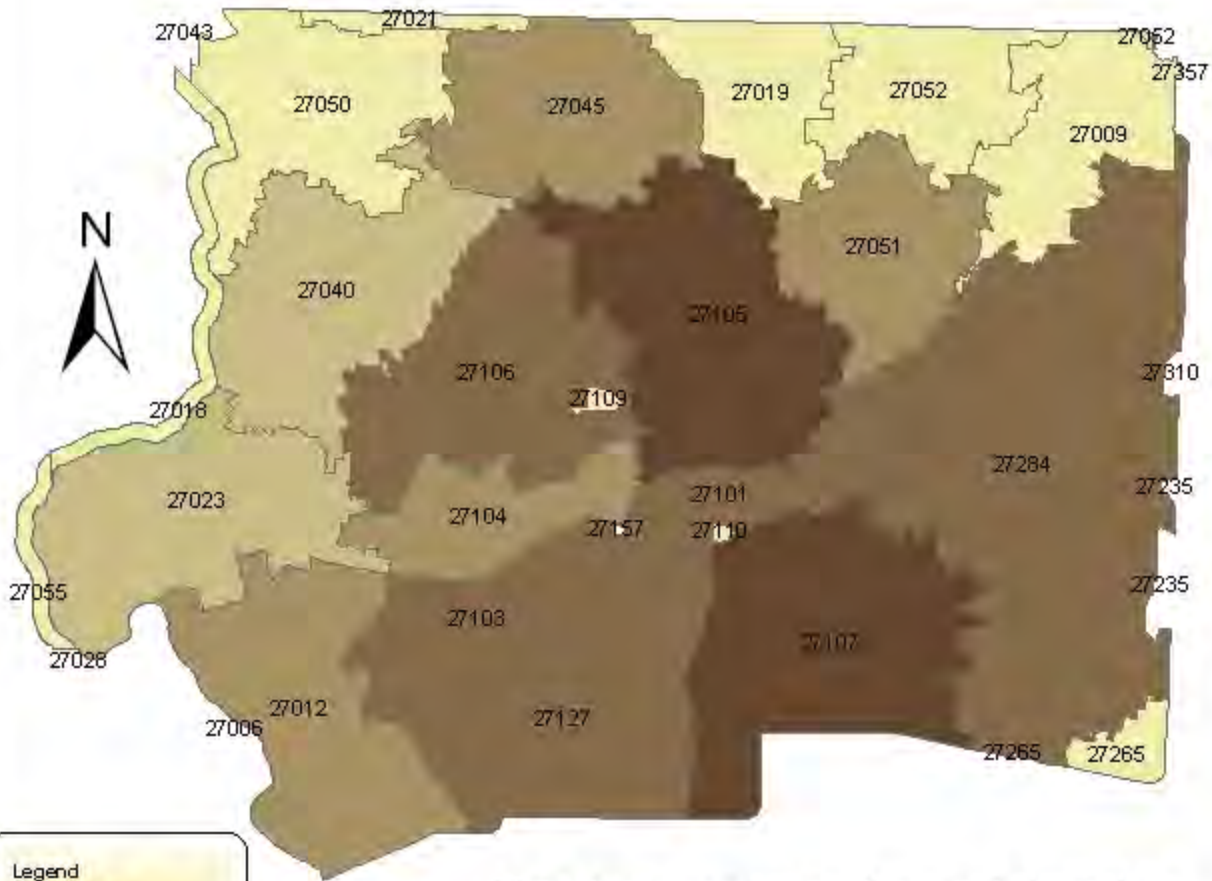
Promoting Health, Improving Lives

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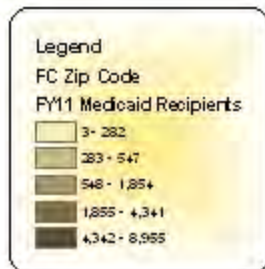




# FY11 Forsyth County Medicaid Recipients by Census Zip Code.



Note: Some areas cross the county boundary and only a portion of those areas are displayed



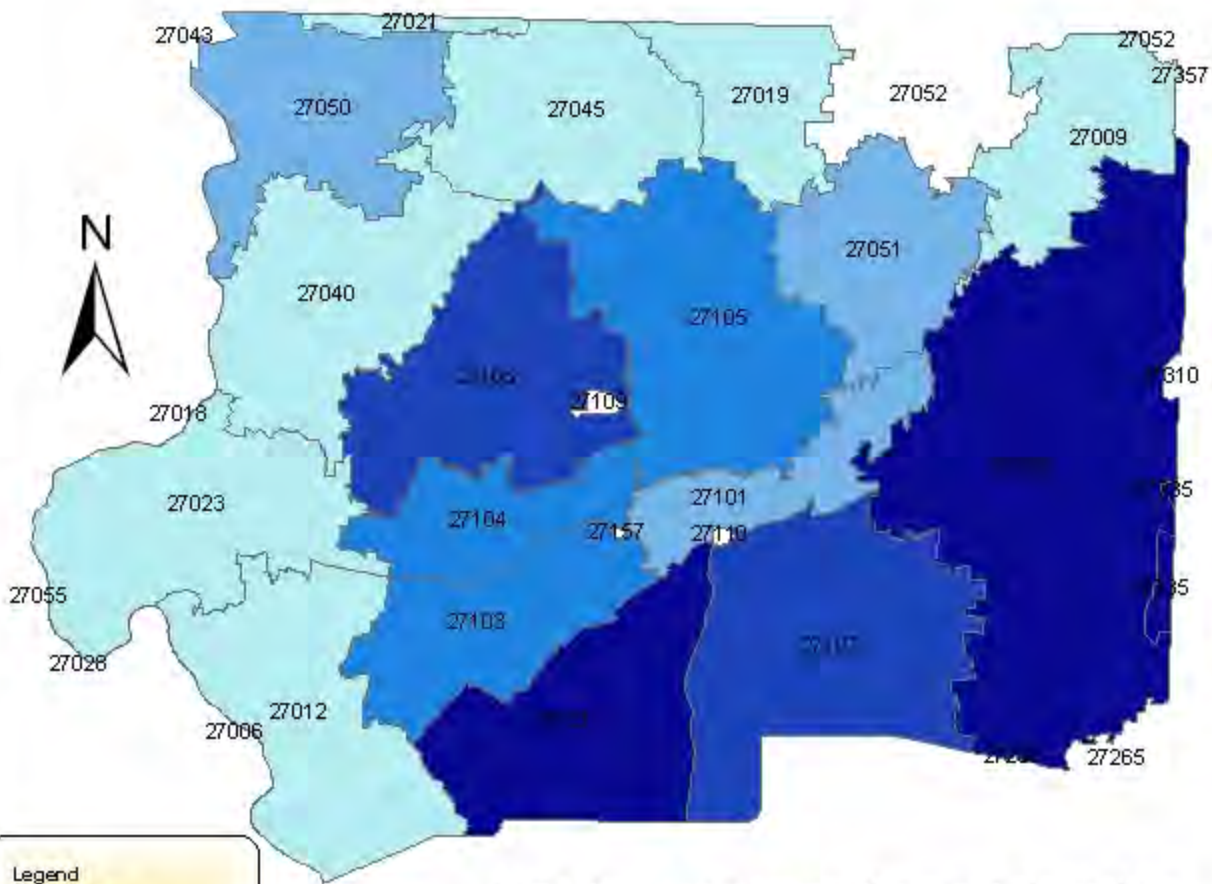
**Forsyth County**  
 Department of Public Health

**Promoting Health, Improving Lives**

Prepared by Epidemiology Division, FCDPH July 2012



# FY11 Forsyth County Work First Recipients by Census Zip Code



Note: Some areas cross the county boundary and only a portion of those areas are displayed



Forsyth County  
Department of Public Health

Promoting Health, Improving Lives

Prepared by Epidemiology Division, FCDPH July 2012



# Environmental Health



## Environmental Health

Human health and development is largely impacted by the environment. Exposures to certain environmental qualities and disease have been linked through research to solidify the environment's impact on human health. One example of the environment's direct impact on human health and development is the exposure to lead and correlated impaired cognitive development in children (1).

The built and natural environments both play a role in the community's health. The built environment includes man-made structures that influence healthy behaviors. A part of environmental public health's purpose is to maintain good air and water quality by ensuring low levels of pollutants while also monitoring the safety and sanitation of places that serve food, provide lodging, serve as pools, and provide child and elder care (2).

### AIR

Air is a constant environmental factor that varies in quality for indoor and outdoor air. Air pollution refers to the presence of substances that are either present in the environment where it does not belong or at levels higher than they should be. Pollutants may be natural, like those from forest fires, soil erosion, or volcanoes, while some are a result of human behavior, like environmental tobacco smoke or car emissions. Air pollution has been strongly linked to health effects such as decreased lung functioning and increased heart attacks (3).

### Outdoor/Ambient Air Quality

Air quality can be affected by pollutants from stationary sources (e.g., factories, power plant, dry cleaners, and degreasing operations), mobile sources (e.g., cars, buses, planes, trucks, and trains), or natural sources (e.g. windblown dust and volcanic eruptions). The Environmental Protection Agency (EPA) classifies pollutants into six principal, or criteria pollutants, which are monitored by the EPA, national, state, and local organizations (4). The six principal pollutants are:

- Carbon Monoxide
- Sulfur Dioxide
- Nitrogen Dioxide
- Ozone (smog)
- Lead
- Particulate Matter

When levels of these pollutants are higher than standards, the area is then considered a nonattainment area (4). Each pollutant has different effects on human health and the environment described below in Table 1.



**Table 1. Effects of Air Pollutants**

<b>Pollutant</b>	<b>Description</b>	<b>Sources</b>	<b>Health Effects</b>	<b>Welfare Effects</b>
<b>Carbon Monoxide (CO)</b>	Colorless, odorless gas	Motor vehicle exhaust, indoor sources include kerosene or wood burning stoves.	Headaches, reduced mental alertness, heart attack, cardiovascular diseases, impaired fetal development, death.	Contribute to the formation of smog.
<b>Sulfur Dioxide (SO<sub>2</sub>)</b>	Colorless gas that dissolves in water vapor to form acid, and interact with other gases and particles in the air.	Coal-fired power plants, petroleum refineries, manufacture of sulfuric acid and smelting of ores containing sulfur.	Eye irritation, wheezing, chest tightness, shortness of breath, lung damage.	Contribute to the formation of acid rain, visibility impairment, plant and water damage, aesthetic damage.
<b>Nitrogen Dioxide (NO<sub>2</sub>)</b>	Reddish brown, highly reactive gas.	Motor vehicles, electric utilities, and other industrial, commercial, and residential sources that burn fuels.	Susceptibility to respiratory infections, irritation of the lung and respiratory symptoms (e.g., cough, chest pain, difficulty breathing).	Contribute to the formation of smog, acid rain, water quality deterioration, global warming, and visibility impairment.
<b>Ozone (O<sub>3</sub>)</b>	Gaseous pollutant when it is formed in the troposphere.	Vehicle exhaust and certain other fumes. Formed from other air pollutants in the presence of sunlight.	Eye and throat irritation, coughing, respiratory tract problems, asthma, lung damage.	Plant and ecosystem damage.
<b>Lead (Pb)</b>	Metallic element	Metal refineries, lead smelters, battery manufacturers, iron and steel producers.	Anemia, high blood pressure, brain and kidney damage, neurological disorders, cancer, lowered IQ.	Affects animals and plants, affects aquatic ecosystems.
<b>Particulate Matter (PM)</b>	Very small particles of soot, dust, or other matter, including tiny droplets of liquids.	Diesel engines, power plants, industries, wind-blown dust, wood stoves.	Eye irritation, asthma, bronchitis, lung damage, cancer, heavy metal poisoning, cardiovascular effects.	Visibility impairment, atmospheric deposition, aesthetic damage.
<b>Source:</b> US EPA. Air Pollution Control Orientation Course. Effects of Air Pollutants-Health Effects.				

The Clean Air Act, last amended in 1990, provides a framework for protecting the quality of the air, while giving the EPA the authority to set air quality standards. The national ambient air quality standards (NAAQS) are for criteria pollutants that are harmful not only to humans, but to the environment as well. Primary Standards provide public health protection, including those populations which are considered sensitive (such as those who are asthmatics, children, and elderly) while secondary standards provide public welfare protections, such as protections against decreased visibility or damage to animals, crops, vegetation and buildings (4). These standards are detailed in Table 2, while Forsyth County's performance on the NAAQS in 2011 are shown in Table 3.

**Table 2. National Ambient Air Quality Standards**

Pollutant	Primary/ Secondary	Averaging Time	Level	Form	
<a href="#">Carbon Monoxide</a>	primary	8-hour	9 ppm	Not to be exceeded more than once per year	
		1-hour	35 ppm		
<a href="#">Lead</a>	primary and secondary	Rolling 3 month average	<a href="#">0.15 µg/m<sup>3</sup></a>	Not to be exceeded	
<a href="#">Nitrogen Dioxide</a>	primary	1-hour	100 ppb	98th percentile, averaged over 3 years	
	primary and secondary	Annual	53 ppb	Annual Mean	
<a href="#">Ozone</a>	primary and secondary	8-hour	0.075 ppm	Annual fourth-highest daily maximum 8-hr concentration, averaged over 3 years	
<a href="#">Particle Pollution</a>	P M 2 . 5	primary and secondary	Annual	15 µg/m <sup>3</sup>	Annual mean, averaged over 3 years
		secondary	24-hour	35 µg/m <sup>3</sup>	98th percentile, averaged over 3 years
	P M 1 0	primary and secondary	24-hour	150 µg/m <sup>3</sup>	Not to be exceeded more than once per year on average over 3 years
<a href="#">Sulfur Dioxide</a>	primary	1-hour	<a href="#">75 ppb</a>	99th percentile of 1-hour daily maximum concentrations, averaged over 3 years	
	secondary	3-hour	0.5 ppm	Not to be exceeded more than once per year	
<b>Source:</b> Environmental Protection Agency. Air and Radiation: National Ambient Air Quality Standards.					

The Air Quality Index (AQI) is used by the EPA and others to provide the public with information regarding local air quality and whether or not air pollution levels pose a health concern. Health effects can happen within a few hours or days after breathing polluted air (3). Table 4 below gives a brief description of AQI range, level of health concern, and color symbolization.

**Table 3. Forsyth Air Quality Statistics Report, 2009**

County	CO 2nd Max 1-hr	CO 2nd Max 8-hr	NO2 98th Percentile 1 -hr	Ozone 2nd Max 1- hr	Ozone 4th Max 8- hr	SO2 2nd Max 24-hr	PM2.5 98th Percentile 24-hr	PM2.5 Weighted Mean 24- hr	PM10 2nd Max 24-hr
Forsyth	2.3	1.7	53	0.08	0.068	10	21	9.7	35
<b>Source:</b> US EPA AirData.									

**Table 4. Air Quality Index Description**

Air Quality Index (AQI) Values	Levels of Health Concern	Colors
When the AQI is in this range:	...air quality conditions are:	...as symbolized by this color:
0 to 50:	Good	Green
51 to 100:	Moderate	Yellow
101 to 150	Unhealthy for Sensitive Groups	Orange
151 to 200:	Unhealthy	Red
201 to 300:	Very Unhealthy	Purple
301 to 500:	Hazardous	Maroon
<b>Source:</b> CDC ATSDR. Air.		

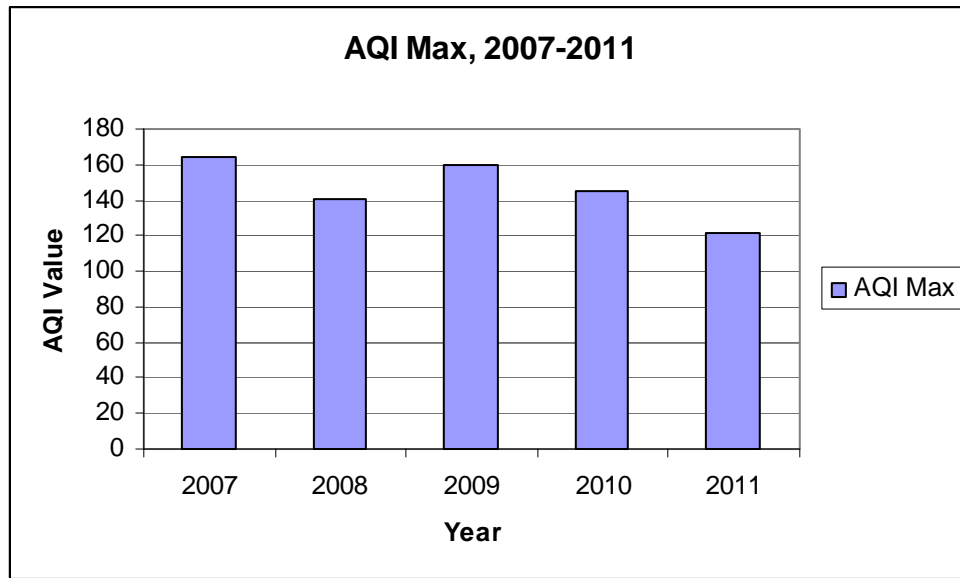
The Forsyth County Office of Environmental Assistance & Protection houses the Triad Air Awareness program which provides air quality education and outreach. During 2011, the Triad area experienced 8 days in which the AQI reached Code Orange, a level which is Unhealthy for Sensitive Groups. There were no days in 2011 in which the AQI reached Code Red, a level this is considered unhealthy for all groups (5). Table 5 shows the AQI Yearly Summary for 2007-2011. The maximum AQI reached 122, the median was 40, and the 90<sup>th</sup> percentile was 64 (5). Table 5 details Forsyth County's AQI yearly summary for 2007-2011 based on AQI Value, level and number of days at that level. Figure 1 shows the AQI value maximum level reached in Forsyth County each year for the years 2007-2011.

**Table 5. AQI Yearly Summary Index Value by Number of Days, 2007-2011**

Year	County	# Days with AQI	# Days Good (Green)	# Days Moderate (Yellow)	# Days Unhealthy for Sensitive Groups (Orange)	# Days Unhealthy (Red)	# Days Very Unhealthy (Purple)
2011	Forsyth	365	274	84	7	0	0
2010	Forsyth	365	229	125	11	0	0
2009	Forsyth	365	274	88	2	1	0
2008	Forsyth	366	222	134	10	0	0
2007	Forsyth	365	195	140	28	2	0

**Source:** US EPA AirData.

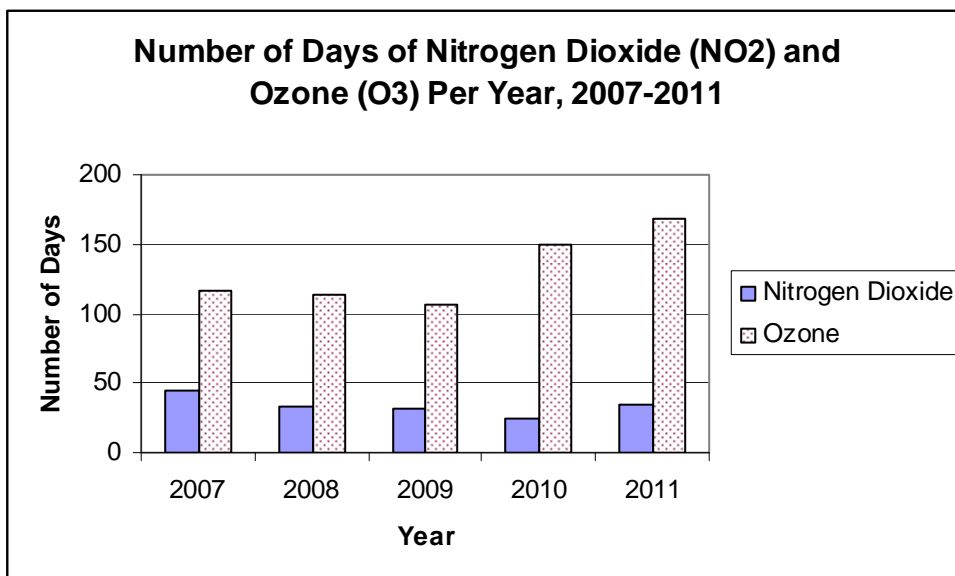
**Figure 1. AQI Maximum Value, 2007-2011**



Source: US EPA AirData.

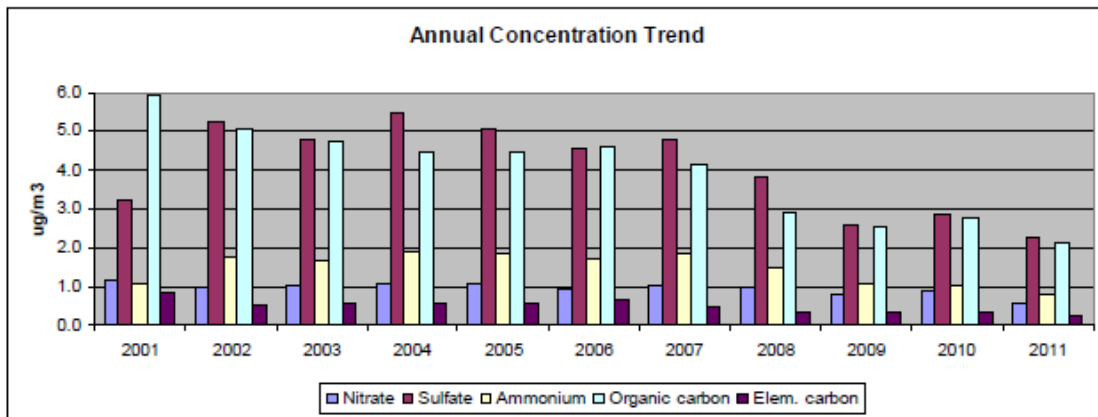
Ozone and particulate matter and ozone are common contributing factors to poor air quality. These two pollutants were the main pollutants for 90% of measured days (5). Smog is a result of nitrogen dioxide and ozone presence in the air. Figure 2 graphs the number of days per year that nitrogen dioxide and ozone was present in the air in Forsyth County between 2007 and 2011 (6).

**Figure 2. Number of Days Nitrogen Dioxide and Ozone in Air, 2007-2011**



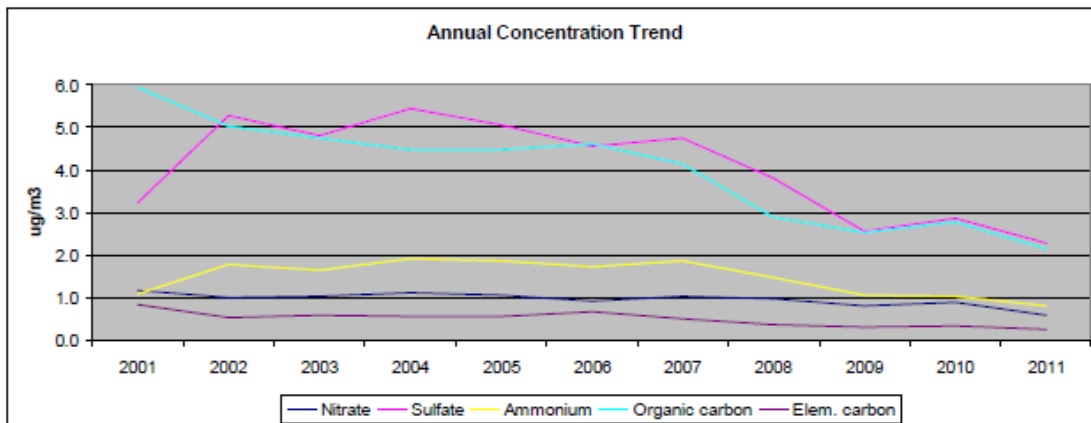
Particulate matter is monitored by the Forsyth County Office of Environmental Assistance and Protection. Individual components of particle pollution are measured which includes: nitrate, sulfate, ammonium, organic carbon, and elemental carbon. Since 2001, the values of the individual particle matters have been decreasing. Sulfate and organic carbon concentration that comprise a majority of the particulate matter measures is a result of the burning of fossil fuels (coal, diesel and gasoline). Cleaner burning technologies for industries and transportation along with stricter power plan emission control are responsible for the decrease. The reductions can mean fewer respiratory and cardiovascular health problems for area citizens. Figures 3 and 4 show the particulate concentration trends from 2001-2011.

**Figure 3. Annual Particulate Concentration, 2001-2011**



Source: Forsyth County Department of Public Health. Environmental Health Division.

**Figure 4. Line Graph of Annual Particulate Concentration, 2001-2011**

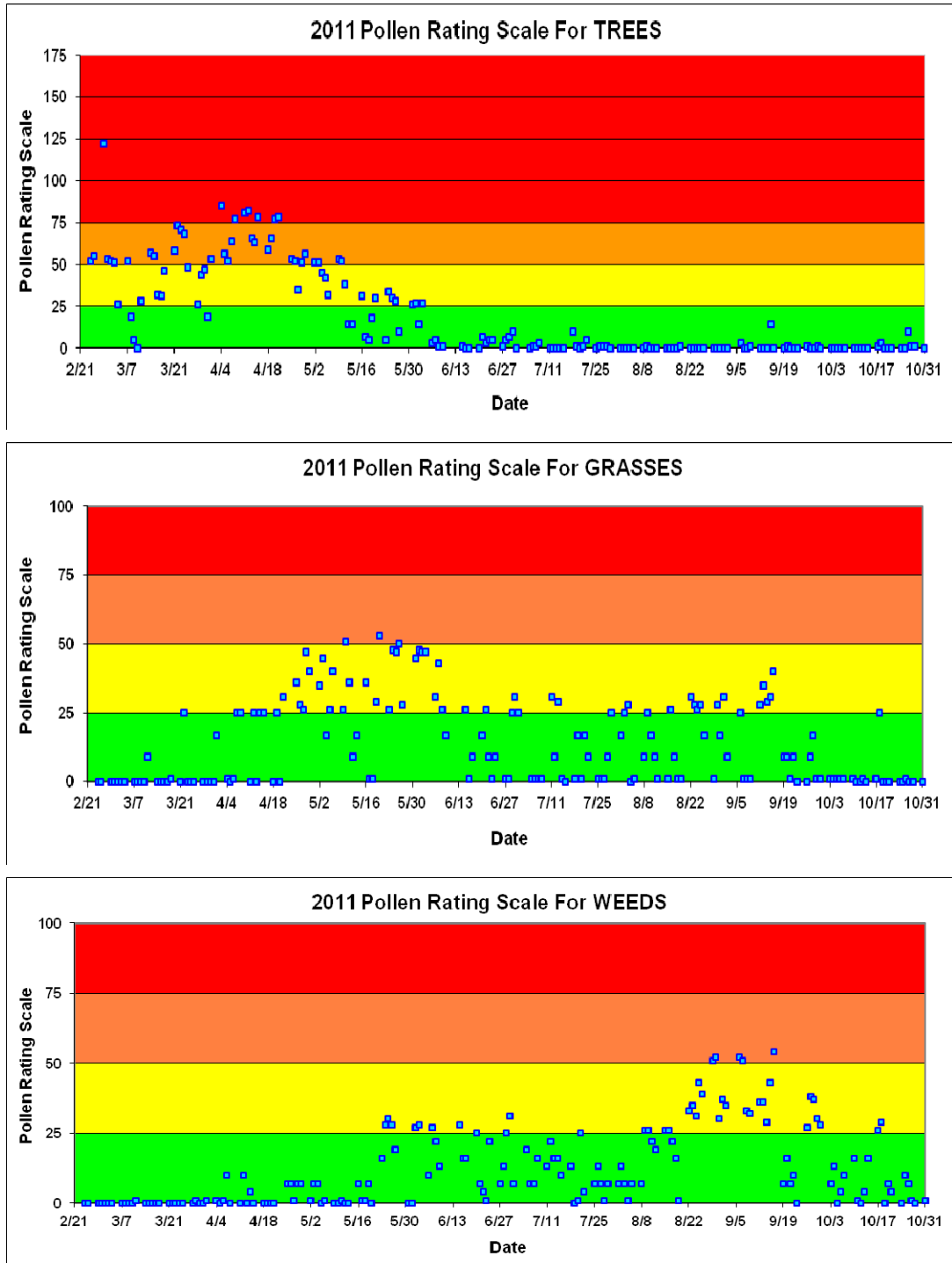


Source: Forsyth County Department of Public Health. Environmental Health Division.

**Pollen**

Increased temperatures and ground level carbon dioxide, consistent with climate change, result in increased pollen creation. Pollen is an allergen that aggravates allergic rhinitis and other respiratory diseases, such as asthma and chronic obstructive pulmonary disease. Allergic diseases are the sixth leading cause of chronic disease in the United States, with a significant portion of the nation’s population suffering from allergies. Asthma itself affects 20 million Americans. When allergens, like pollen, act with air pollution respiratory disease may worsen (7). Figure 5 shows the pollen rating scale for trees, grasses and weeds in 2011.

Figure 5. Pollen Rating Scale for Trees, Grasses and Weeds, 2011

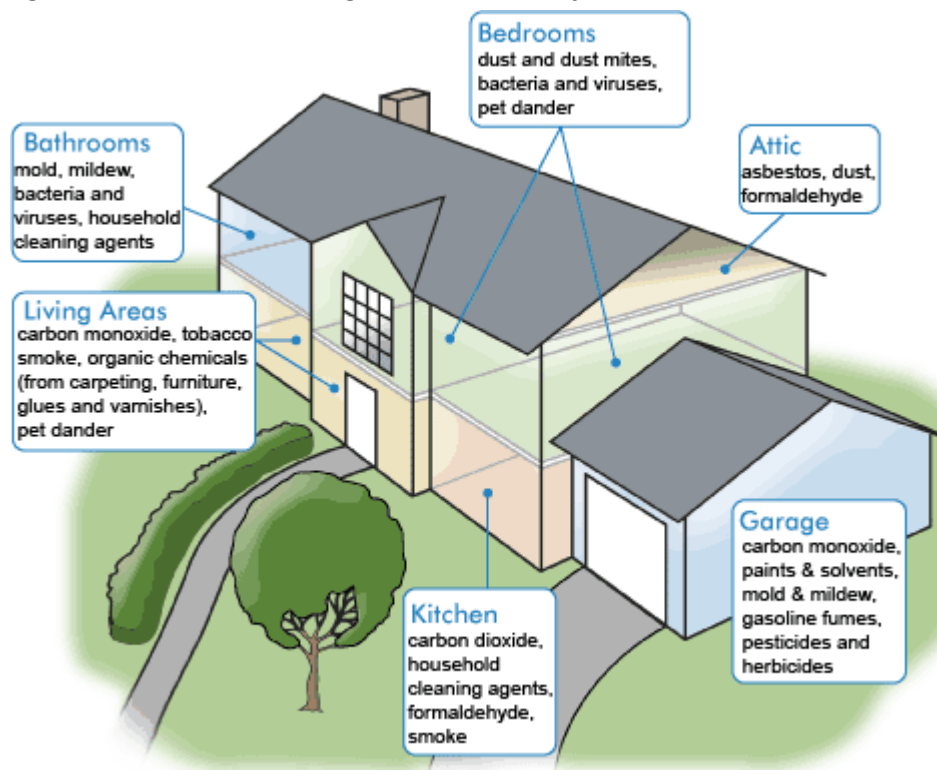


Source: Forsyth County Department of Public Health. Environmental Health Division.

## Indoor Air Quality

Indoor air consists of natural and manmade impurities that include: bacteria, viruses, fungi, radon, and combustion by-products from burning. Recently other contaminants (such as asbestos and formaldehyde) have been identified in indoor air. Mold is another contaminant that has become a common problem. Improperly designed homes and buildings can affect not only the comfort, but the health of the structure’s occupants. Air testing can be done to determine if an indoor air problem exists, although it may require a series of tests to narrow down a problem. Common indoor air pollutants include: carbon monoxide (CO), formaldehyde, radon, environmental tobacco smoke, lead, asbestos and mold (8). Figure 6 below shows the various pollutants in common home areas.

**Figure 6. Pollutants Affecting Indoor Air Quality**



Source: Forsyth County Environmental Assistance and Protection. Indoor Air Quality. .

## WATER

The quality of water used for drinking, recreation, hygiene, and other uses can be impacted by human activities related to land use and land-management practices. To protect water quality, the minimization of disruption of the natural water cycle is suggested (9). In 2011 Forsyth County residents used 51 gallons of water per capita each day, a 30% decrease from 70 gallons per capita in 2007 (5).

## River Basins

Forsyth County's watershed system impacts communities in three separate river basins; the Yadkin/Pee-Dee River Basin which occupies 76% of Forsyth County, the Roanoke River basin which occupies 21% of the northeastern section of the county, and the Cape Fear River basin which occupies less than 3% of the eastern edge of the county, including a small part of Kernersville (10). Figure 7 delineates the river basins in Forsyth County.

**Figure 7. Map of River Basins in Forsyth County**



Source: Forsyth County Environmental Assistance and Protection: Water Quality Program.

## Ground Water

More than one half of North Carolina's population relies on ground water as a source of drinking water. Approximately 98% of all public water supply systems use ground water to serve over 2 million citizens in North Carolina. Private water supplies for single family homes also use ground water. The quality of ground water in the state is considered good. Coastal areas within the state are identified as having some form of impairment. The state has potable ground water throughout (11).

## Public Water Supply

There are 26 water systems in Forsyth County shown in Table 6 below, with details about each system's number, name, type, status, primary county served, primary source, and date of last sanitary survey. Type refers to classifications from the EPA. Forsyth County has 18 Community (C) water supply systems in which there are at least 15 service connections or the system regularly serves 25 year-round residents (such as towns), and 8 Transient Non-Community (NC) water supply systems in which the system regularly serves at least 25 non-residential individuals during 60 or more days per year (such as rest-stops or parks). Status indicates whether the public water system is active (A) or inactive (I). All public water systems listed are active. Primary Source Water Type indicates the origination of the water system, 24 water systems in Forsyth County rely on ground water (GW), 1 uses surface water (SW), and 1 uses purchased surface water (SWP) in which the system purchases water that originates from a surface source (e.g. river, reservoir, intake) (12).



**Table 6. Forsyth County Active Public Water Systems, 2011**

Water System No.	Water System Name	Type	Status	Primary County Served	Primary Source Water Type	Date of Last Sanitary Survey
<a href="#">NC0234191</a>	ABINGTON S/D	C	A	FORSYTH	GW	05-05-2010
<a href="#">NC0234179</a>	APPLEGATE WATER SYSTEM	C	A	FORSYTH	GW	09-21-2010
<a href="#">NC0234197</a>	BISHOPS RIDGE S/D	C	A	FORSYTH	GW	08-10-2011
<a href="#">NC3034012</a>	BLUE WATER COVE S/D	C	A	FORSYTH	GW	08-10-2011
<a href="#">NC0234115</a>	COUNTRY CLUB ANNEX	C	A	FORSYTH	GW	08-19-2010
<a href="#">NC0234192</a>	DEERPATH S/D	C	A	FORSYTH	GW	09-21-2010
<a href="#">NC0234461</a>	FRATERNITY CH OF THE BRETHREN	NC	A	FORSYTH	GW	01-28-2011
<a href="#">NC0234464</a>	FREEDOM BAPTIST CHURCH	NC	A	FORSYTH	GW	07-14-2010
<a href="#">NC0234124</a>	GRANDVIEW WATER SYSTEM	C	A	FORSYTH	GW	12-13-2010
<a href="#">NC0234182</a>	GRAYSTONE FORREST WATER SYSTEM	C	A	FORSYTH	GW	06-22-2010
<a href="#">NC0234574</a>	KERNERSVILLE LAKE PARK	NC	A	FORSYTH	GW	07-22-2008
<a href="#">NC0234189</a>	KYNWOOD S/D	C	A	FORSYTH	GW	06-22-2010
<a href="#">NC0234475</a>	LONG CREEK CLUB	NC	A	FORSYTH	GW	09-12-2008
<a href="#">NC3034011</a>	MAPLE LEAF GOLF COURSE	NC	A	FORSYTH	GW	01-28-2011
<a href="#">NC0234167</a>	MCBRIDE'S MHP	C	A	FORSYTH	GW	11-29-2011
<a href="#">NC0234193</a>	MIKKOLA DOWNS S/D	C	A	FORSYTH	GW	02-08-2012
<a href="#">NC0234497</a>	NORTHSIDE BAPTIST CHURCH	NC	A	FORSYTH	GW	05-23-2011
<a href="#">NC0234199</a>	PEABODY FOREST S/D	C	A	FORSYTH	GW	06-22-2010
<a href="#">NC0234139</a>	PINE KNOLLS WATER SUPPLY	C	A	FORSYTH	GW	05-18-2010
<a href="#">NC0234183</a>	SMOKERISE WATER SYSTEM	C	A	FORSYTH	GW	05-18-2010
<a href="#">NC0234134</a>	SOMERSET MHP	C	A	FORSYTH	GW	01-28-2011
<a href="#">NC0234196</a>	STONINGTON S/D	C	A	FORSYTH	GW	08-10-2011
<a href="#">NC0234482</a>	TED'S FAMOUS CHICKEN	NC	A	FORSYTH	GW	11-14-2011
<a href="#">NC3034010</a>	WESTBEND WINERY	NC	A	FORSYTH	GW	06-01-2011
<a href="#">NC0234010</a>	WINSTON-SALEM, CITY OF	C	A	FORSYTH	SW	04-28-2011
<a href="#">NC0234165</a>	YORKTOWN S/D	C	A	FORSYTH	SWP	09-06-2011

Source: NC DWR. Public Water Supply. .

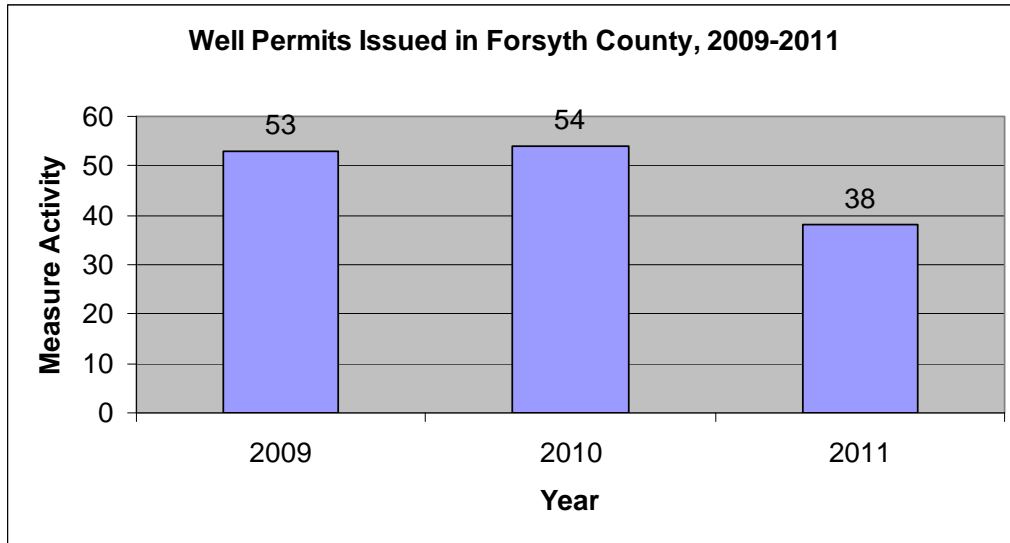
### Private Wells

Private drinking water well programs are mandated in each county by North Carolina General Statute 87-97 that requires local health departments to permit, inspect, and test the wells as they are constructed, repaired, or abandoned as of July 1, 2008. The local health department enforces this statute and associated rules in order to protect human health and groundwater quality by ensuring private drinking water wells are correctly built, repaired and abandoned. The types of well include private wells serving a single residence and transient non-community water supply wells that do not meet the criteria for a public water supply (13).

Well permits allow the health department to make sure that wells are properly located, constructed and repaired. Permits include site visits, well water sampling, laboratory testing, and notification of water analysis results.

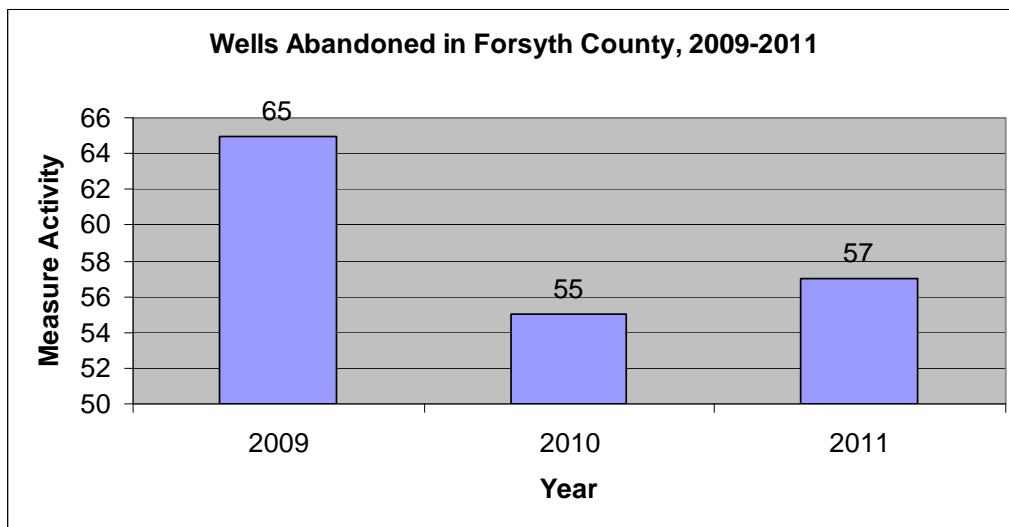
Figure 8 shows the number of well permits issued from 2009-2011. Abandoned wells can be temporary, by sealing with a watertight cap or they can be permanently abandoned by filling the well with clean clay, cement or bentonite grout in order to deter groundwater contamination. In order to abandon a well, a permit must be obtained from the local health department and the process witnessed by the local health department to ensure the abandonment procedures are correctly performed (13). Wells constructed for irrigation, household or business use require a permit for construction (14). Figure 9 shows the amount of wells abandoned in Forsyth County from 2009-2011.

**Figure 8. Well Permits, 2009-2011**



Source: Forsyth County Department of Public Health. Environmental Health Division.

**Figure 9. Wells Abandoned, 2009-2011**



Source: Forsyth County Department of Public Health. Environmental Health Division.

## Water Quality

The Winston-Salem/Forsyth County Utility Commission operates three water treatment systems, the Neilson, Swann, and Thomas Water Plants. Using water from the Yadkin River and Salem Lake, these treatment systems collectively produce 91 million gallons per day of drinking water. In 2011 and the previous year the treatment facilities met or surpassed all state and federal standards for drinking water quality. The Water Quality Report describes detected substances in the Winston-Salem/Forsyth County public water supply during 2011, as detailed in Table 7 (15).

**Table 7. Winston-Salem/Forsyth County Public Water Supply Substances, 2011**

Regulation Level	Substance	Highest Level Allowed (EPA's MCL)	Idea Goals (EPA's MCLG)	Range of Detections	Average Level Detected	Source
<b>Regulated at the Treatment Plant</b>	Barium, ppb	2000	2000	2.0-17.0	11	Natural geology; drilling operations; metal refinery wastes
	Flouride, ppm	4	4	0.57-1.17	0.88	Water additive promotes strong teeth; erosion of natural deposits
	Nitrate, ppm	10	10	0.40-0.79	0.55	Natural geology; battery manufacturing & metal refinery wastes
	Orthophosphate, ppm	0.5-5.0	1	0.55-1.17	0.84	
	Total Organic Carbon	Treatment Technique	n/a	1.02-2.57	1.45	Natural organic matter
	turbidity, NTU	Treatment Technique	n/a	0.02-0.20	0.05	Soil erosion; natural geology
<b>Regulated in the Distribution System</b>	Tital trihalomethanes, ppb	80 RAA	0	12-114	46.1	Byproducts of drinking water disinfection
	Total Haloacetic Acids, ppb	60 RAA	0	12.9-59.3	32.4 RAA	Byproducts of drinking water disinfection
	Abestos, MFL	7	0	n/a	0.39	
	Chlorine, ppm	4	4	0-1.8	0.96	
	Orthophosphate, ppm	0.25-1.5	1	0.57-0.81	0.69	Natural geology
	Alpha Emitters, pCi/L	15	0	0	0	Natural geology
	Beta Emitters, pCi/L	50	0	0	0	Natural geology and man-made sources
	Total Coliforms	Less than 5% positive	0	n/a	0	

Unregulated Substance	Sulfate, ppm	500 proposed	Not Regulated	8.49-18.4	11.8	
	Substance	Highest Level Allowed (EPA's MCL)	Ideal Goals (EPA's MCLG)	Number of Sites Sampled	Number of Sites Above the Action Level	90th Percentile Concentration, ppb
Regulated at the Consumer's Tap	Lead, ppb	15.0 (action level)	0	50	0	< 3.0
	Copper, ppb	1300 (action level)	1300	50	0	70
Source (both lead and copper): Corrosion of household plumbing; Erosion of natural deposits						

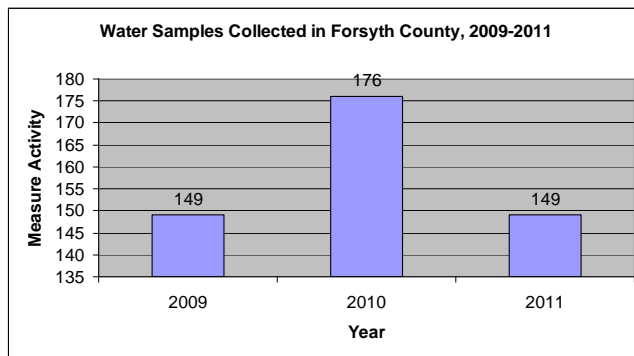
MCL: Maximum Containment Level, the highest level of a contaminant that is allowed in drinking water.  
 MCLG: Maximum Containment Level Goal, the level of a contaminant in drinking water below which there is no known or expected risk to health.  
 ppb: one part per billion (e.g. one penny in \$10,000,000).  
 ppm: one part per million (e.g. one penny in 10,000).  
 EPA MCL of Flouride is 4.0 mg/L, NC has MCL of 2.0 mg/L.  
 NTU: nephelometric turbidity unit, a measure of cloudiness of water.  
 RAA: Running annual average, last four quarterly samples collected from the system.  
 MFL: a measure of asbestos contamination as measured by millions of fibers per liter of water.  
 pCi/L: picocuries per liter is a measure of the radioactivity in water. A picourie is 10<sup>-12</sup> curies and is the quantity of radioactive material producing 2.22 nuclear transformations per minute.  
 Action level: the concentration of a contaminant that triggers treatment or other requirement that a water system must follow. Action levels are reported at the 90<sup>th</sup> percentile for homes at greatest risk.

Source: Winston-Salem /Forsyth County Utility Commission. Statistics and Reports: 2011 Water Quality Report.

### Water Sampling

The NC Division of Public Health’s State Laboratory of Public Health analyzes water samples from public and private water systems for chemical or physical substances. A private water system can have a chemical analysis performed by the state lab for alkalinity, arsenic, calcium, chloride, copper, hardness, lead, iron, magnesium, manganese, pH, fluoride, and zinc if submitted through the local health department . Additional tests can be done for fluoride and nitrate/nitrite analysis. Tests can also be completed for bacteriological analysis such as coliform bacteria which are indicators of fecal contamination. Also non-drinking water found in lakes, streams, rivers, and ponds can be submitted for testing by a health department to be examined for total and fecal coliform bacteria to determine the degree of contamination (16). Figure 10 below shows the number of water samples collected from 2009—2011.

**Figure 10. Water Samples Collected, 2009-2011**



Source: Forsyth County Department of Public Health. Environmental Health Division

**LEAD**

The metal lead has been used in the manufacturing of products including paint, plumbing pipes and solder, and gasoline among others. When these products deteriorate, small lead particles can contaminate the environment and lead to health problems when swallowed or inhaled. Regulations currently limit the amount of lead used in manufacturing, while environmental lead continues to be a health hazard. At high levels, lead can lead to seizures, coma, and death. Children less than 6 years of age are greatly affected as lead poisoning can hinder development of the brain and nervous system (17).

**Children and Lead**

Lead can greatly impair development in children. The Centers for Disease Control and Prevention (CDC) recommends that public health action be taken when blood lead levels in children aged 1-5 years reaches more than 10 micrograms of lead per deciliter of blood. In January of 2009, the Forsyth County Board of Health, in recognition: (1) that a growing body of evidence indicates that blood lead levels below 10 micrograms/deciliter are harmful to young children; (2) that the disproportionately greater age of the housing stock in Forsyth County places children at increased risk of lead exposure; and (3) that an effective housing-based program to reduce risk of lead exposure to children is not in place, recommended as an optimal standard of care for children in Forsyth County that all licensed primary care physicians providing well child care in Forsyth County should conduct blood lead screening on all children at 1 year and again at 2 years of age during their well child examinations. Children not tested at one of these times should be tested at least once before the age of 6 years. The rule also establishes a confirmed blood lead level of 5µg/dL as the public health action level. Under this local rule education and environmental investigation is offered to families with children aged 1-5 with confirmed blood lead levels from 5-7µg/dL. Education, environmental investigation and remediation of lead hazards is required when children aged 1-5 years are confirmed with blood lead levels of 8µg/dL or above. Lead can affect almost all body systems, without obvious symptoms it goes unrecognized in many instances. Table 8 details lead housing indicators and susceptible populations, while Tables 9 and 10 show lead screening results in Forsyth County between 2005 and 2009 (18). Table 11 shows lead screening from 2009-2011, based on investigation requirement

**Table 8. Forsyth County Lead Hazard Indicators, 2007**

County Name	Census 2000 Data			Estimated Population of Children < 6, 2007
	Total Housing Units	Pre-1950 Housing Units	% of Children < 6 Under Poverty	
Forsyth County	133,093	18,461	17.0%	29,381
Source: CDC Lead. North Carolina Data, Statistics and Surveillance.				

**Table 9. Children Ages 1 & 2 Lead Screening Results, 2009**

Year	County	Target Population	Number Tested	Percent Tested	Tested Among Medicaid	Lead >10*	Percent >10
2009	Forsyth	10,230	5,873	57.4	86.5	27	0.5
2008	Forsyth	10,130	5,265	52.0	84.8	28	0.5
2007	Forsyth	9,722	4,936	50.8	----	22	0.0
2006	Forsyth	9,323	4,406	47.3	56.0	39	0.9
2005	Forsyth	9,225	4,249	46.1	56.2	38	0.9

\*Reported in micrograms per deciliter ( $\mu\text{g}/\text{dL}$ )

Source: NC Department of Health and Human Services. Children's Environmental Health Bank Lead Poisoning Prevention Program.

**Table 10. Children Ages 6 Months-6 Years Lead Screening Results, 2009**

Year	County	Number Tested	Confirmed Blood Lead Level*	
			10-19	>20
2009	Forsyth	6,505	10	2
2008	Forsyth	5,836	6	3
2007	Forsyth	5,487	12	0
2006	Forsyth	4,865	13	1
2005	Forsyth	4,727	8	4

\*Reported in micrograms per deciliter ( $\mu\text{g}/\text{dL}$ )

Source: NC Department of Health and Human Services. Children's Environmental Health Bank Lead Poisoning Prevention Program.

**Table 11. Forsyth County Lead Investigations, 2009-2011**

Level of Concern 5-7 $\mu\text{g}/\text{dL}$ (Investigations Offered (not required))				
	2009	2010	2011	
Investigation	6	9	21	
Confirmed lead levels	17	37	38	
Elevated Blood Lead Level 8-19 $\mu\text{g}/\text{dL}$ (Investigation Required)				
	2009	2010	2011	
Investigation	6	17	16	
Confirmed lead levels	13	16	18	
Poison $\geq 20\mu\text{g}/\text{dL}$ (Investigation Required)				
	2009	2010	2011	
Investigation	2	1	1	
Confirmed lead levels	2	1	1	

Source: Source: Forsyth County Department of Public Health. Environmental Health Division.

## FOOD- WATER, AND VECTOR-BORNE DISEASES

When the natural environment is contaminated with microbes, chemicals or animal vectors, a number of human diseases and syndromes can be caused or exacerbated. Several of these illnesses are required to be reported to health authorities. Common food-, water-, and vector- borne diseases are described in Table 12. Reported cases of food-, water-, and vector- borne diseases in humans in Forsyth County from 2008 to 2011 are detailed in Table 13.

**Table 12. Food-, Water-, and Vector- Born Disease Description and Transmission**

Disease	Agent, Transmission, Entry	Clinical Description
Campylobacter	Contaminated poultry/sometimes found in other meats, raw milk, and unchlorinated water & live animals, including pets, can be a source	An infection that may result in diarrheal illness of variable severity
Cryptosporidiosis	Direct transmission from another human via the fecal-oral route; a variety of wild and domestic animals can harbor; thrives in contaminated recreational or drinking water.	A gastrointestinal illness characterized by diarrhea, abdominal cramping, fever, nausea, vomiting and/or anorexia.
E. Coli (Shiga toxin-producing)	Food- or waterborne disease, spread by poor hygiene, undercooked meat, and contaminated water	An infection of variable severity characterized by diarrhea (often bloody) and abdominal cramps; asymptomatic infections also may occur and the organism may cause extraintestinal infections.
Hepatitis A	Food or water contaminated with feces; entry through mouth to intestine; fecal-oral transmission; most often by direct person-to-person spread; fecal contamination of food or water by a careless food handler or improperly managed sewage disposal.	An acute illness with a) discrete onset of symptoms and b) jaundice, dark urine or elevated serum aminotransferase levels
Listeriosis	Soil bacterium that infects and colonizes livestock and finds its way into various foods, particularly unpasteurized dairy products, processed and raw meats, and raw vegetables.	In adults, invasive disease caused by <i>Listeria monocytogenes</i> manifests most commonly as meningitis or bacteremia; infection during pregnancy may result in fetal loss through miscarriage or stillbirth, or neonatal meningitis or bacteremia. Other manifestations can also be observed.
Lyme Disease	Tick bite	A systemic, tick-borne disease with protean manifestations, including dermatologic, rheumatologic, neurologic, and cardiac abnormalities. The most common clinical marker for the disease is <i>erythema migrans</i> (EM), the initial skin lesion that occurs in 60%-80% of patients.
Rocky Mountain Spotted Fever	<i>Rickettsia rickettsii</i> , a bacterial pathogen transmitted to humans through contact with ticks	Rocky Mountain spotted fever (RMSF) is an illness caused by <i>Rickettsia rickettsii</i> . <i>Dermacentor</i> species of ticks are most commonly associated with infection, including <i>Dermacentor variabilis</i> (the American dog tick), <i>Dermacentor andersoni</i> (the Rocky Mountain wood tick), and more recently <i>Rhipicephalus sanguineus</i> (the brown dog tick). Disease onset averages one week following a tick bite. Age-specific illness is highest for children and older adults. Illness is characterized by acute onset of fever, and may be accompanied by headache, malaise, myalgia, nausea/vomiting, or neurologic signs; a macular or maculopapular rash appears 4-7 days following onset in many (~80%) patients, often present on the palms and soles. RMSF may be fatal in as many as 20% of untreated cases, and severe, fulminant disease can occur.
Salmonellosis	Ingestion of raw or undercooked foods of animal origin (eggs, meat and poultry, unpasteurized milk/milk products from infected animals); or ingestion of raw or undercooked foods fecally contaminated by an infected animal or person; person to person via fecal-oral route.	An illness of variable severity commonly manifested by diarrhea, abdominal pain, nausea, and sometimes vomiting. Asymptomatic infections may occur, and the organism may cause extraintestinal infections.
Shigellosis	Person to person via fecal-oral route; spread via foods or drinks contaminated by an infected food handler or contaminated water. Food and waterborne outbreaks do with evidence of human fecal contamination in the chain of transmission	An illness of variable severity characterized by diarrhea, fever, nausea, cramps, and tenesmus. Asymptomatic infections may occur.
<b>Source:</b> CDC. Case Definitions for Infectious Conditions Under Public Health Surveillance. (NC DHHS. 2010 North Carolina Division of Public Health Communicable Disease Manual.		

**Table 13. Reported Cases of Food-, Water-, and Vector-Borne Diseases in Humans, 2008-2011**

Disease	2008	2009	2010	2011
Campylobacter	24	28	33	22
Cryptosporidiosis	8	10	4	1
E. Coli (Shiga toxin-producing)	10	2	2	3
Hepatitis A	4	2	3	1
Listeriosis	1	3	2	0
Lyme Disease	1	0	1	0
Rocky Mountain Spotted Fever	0	0	0	0
Salmonellosis	47	49	40	57
Shigellosis	5	1	9	14

**Source:** Forsyth County, Department of Public Health. 2011 Communicable Disease Report.

### Rabies

Rabies is a vaccine preventable disease found in humans and animals. The rabies virus infects the central nervous system causing disease in the brain and eventually death. Rabies can only be acquired by coming into contact with the saliva, brain, or nervous system tissue of an infected animal. This can happen when one is bitten by a rabid animal, handling a pet that has been attacked by a rabid animal, or cleaning a dead rabid animal killed while hunting. Nationally only one to two human deaths from rabies occur a year. Exposure to rabies is considered an urgent situation, as once symptoms begin to appear it is too late to start treatment and the disease is almost always fatal. North Carolina law require owners of pets, such as dogs, cats, and ferrets, to have their pets vaccinated against rabies beginning at four months of age. Rabies most often occurs in wild animals, in particular skunks, bats, foxes and raccoons. Raccoon rabies is found in raccoon populations in every North Carolina county (19). Table 14 below indicates the incidence of reported rabies cases in Forsyth from 2007-2011.

**Table 14. Forsyth County Reported Rabies Cases in Animals, 2007-2011**

Year	Bat	Bobcat	Cat	Cow	Coyote	Dog	Equine	Fox	Raccoon	Skunk	Total
2011	1	0	0	0	0	0	0	5	7	6	19
2010	5	0	0	0	0	0	0	4	6	5	20
2009	0	0	0	0	0	1	0	3	9	1	14
2008	0	0	0	0	1	0	0	8	17	6	32
2007	1	0	0	0	0	0	0	2	6	3	12

**Source:** NC DHHS Public Health. Communicable Disease Control Branch. Rabies Facts and Figures.



## WASTE MANAGEMENT

### Solid Waste

For the 2010-2011 fiscal year, Forsyth County reported to the Solid Waste Management Division of the NC Department of Environment and Natural Resources (DENR) that 431,028.54 tons of waste was landfilled in the County's name. Total calculated waste was 410,291.74 tons, equivalent to a 1.17 per capita rate. This is a 2% increase from the 1991-1992 fiscal year per capita rate of 1.14 tons per person. Forsyth County disposed of 351 tons of white goods such as refrigerators, ranges, water heaters, freezers, unit air conditioners, washing machines, clothes dryers, and other domestic and commercial appliances during the 2010-2011 fiscal year as well (20). Table 15 details tons of waste disposed in Forsyth County from 2006-2011.

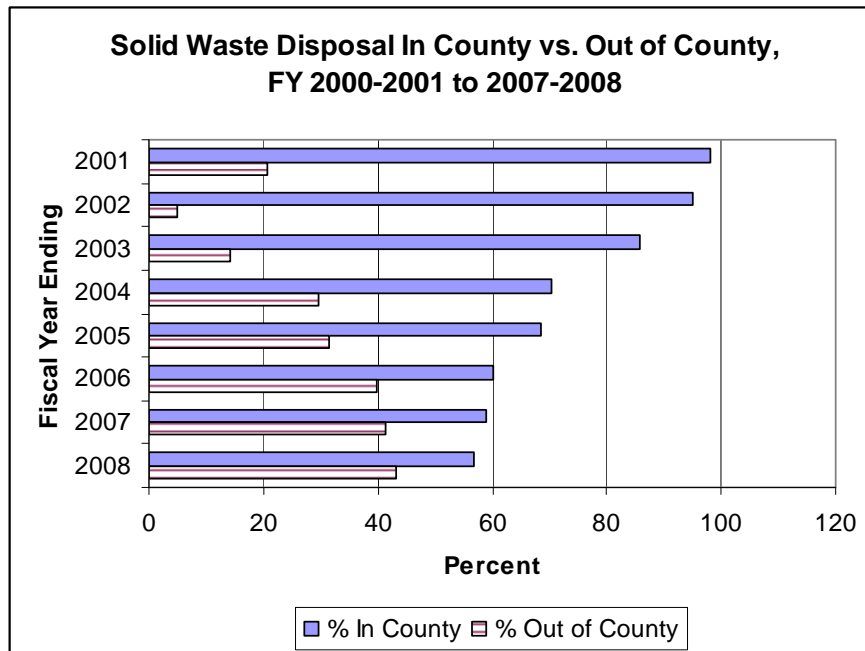
**Table 15. Forsyth County Solid Waste Disposal**

County	Population	MSW Tons Managed	MSW Tons Disposed					
			1991-1992	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011
	July 2010							
Forsyth	351,798	304,290	538,108	508,310	412,824	438,807	410,292	

Source: NC DENR. Solid Waste Management Annual Report FY 2010-2011

Solid waste has also seen changes in the percent of solid waste tons disposed in county and out of county. Since Fiscal Year 2000-2001, the percent of waste that has been disposed in county has decreased, increasing the percent of waste disposed out of county as seen in Figure 11 below (21).

**Figure 11. Solid Waste Disposal In County vs. Out of County**



Source: Winston-Salem/Forsyth County Utility Commission. 10 Year Solid Waste Management Plan.

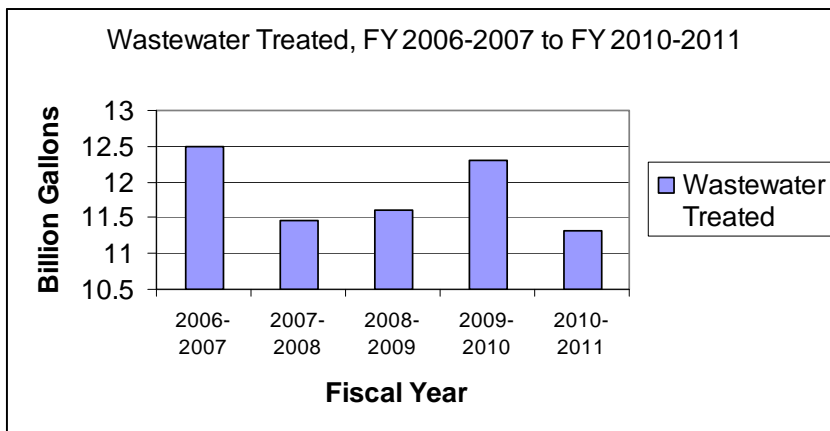
### Recycling

In the 2004-2005 fiscal year, the proportion of all waste that is recycled or recovered was 11%. This proportion saw a 44% increase by the 2010-2011 fiscal year when it reached 16%. This represents an increase to 0.20 tons per capita in FY2004-2005 to 0.23 tons per person in FY 2010-2011 (21).

### Wastewater

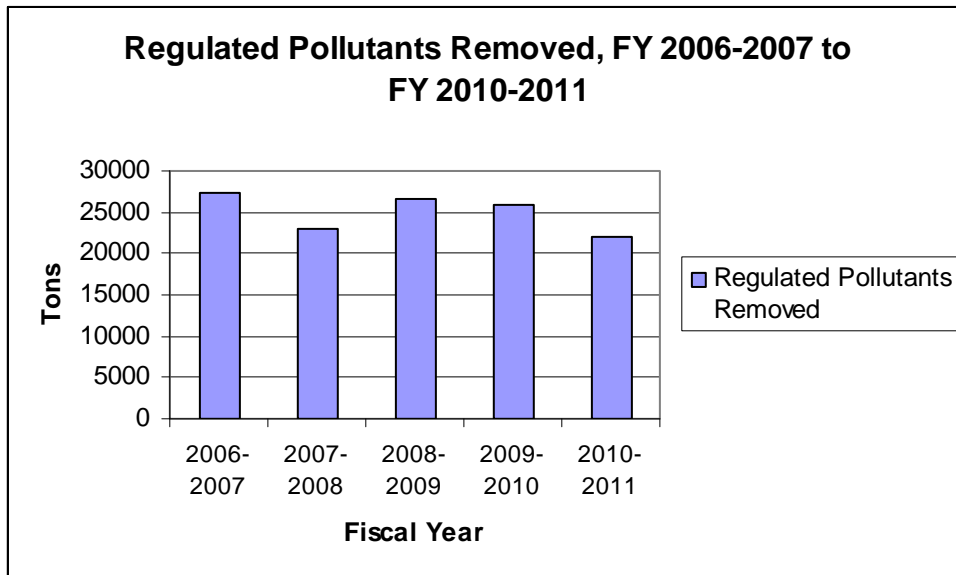
The Winston-Salem/Forsyth County Utility Commission’s Wastewater Collection and Treatment System Performance Report for fiscal year 2010-2011 indicated that its two wastewater treatment plants (WWTP), Archie Elledge and Muddy Creek, have a combined treatment capacity of 51 million gallons per day. Over the 2010-2011 fiscal year 11.327 billion gallons of wastewater was treated at the two plants. The Utility Commission met or exceeded requirements to both the North Carolina Clean Water Act and the National Pollutant Discharge Eliminate System (NPDES). Residual biosolids produced by the water treatment plant are treated and disposed through anaerobic digestion and then followed by a combination of Thermal Biosolids Drying or burial in a lined landfill. Neither WWTP nor the Thermal Biosolids Drying facility had violations of their permits during the 2010-2011 fiscal year. Both WWTPs had a safety factor of 3.79, meeting the minimum requirements of the State of North Carolina’s Division of Water Quality. The treatment processes removed 22,075.3 tons of regulated pollutants for the 2010-2011 fiscal year, while sanitary sewer overflows (SSO) accounted for 0.0008% of wastewater collected. SSO is the release of raw or partially untreated sewage with the potential to contaminate water systems. SSO were caused by grease the majority of the time, while roots, debris, pipe or equipment failure, and vandalism were accounted as other causes. The total number of SSO was approximate to the prior fiscal year, while the total volume decreased 95% when comparing 2010-2011 to 2009-2010 (22). Figures 12 and 13 show the amount of wastewater treated and pollutants removed from Fiscal Year 2006-2007 until 2010-2011.

**Figure 12. Wastewater Treated, FY 2006-2007 to FY 2010-2011**



Source: Winston-Salem /Forsyth County Utility Commission. Statistics and Reports: Wastewater Performance Report, 2010-11.

**Figure 13. Regulated Pollutants Removed, FY 2006-2007 to FY 2010-2011**

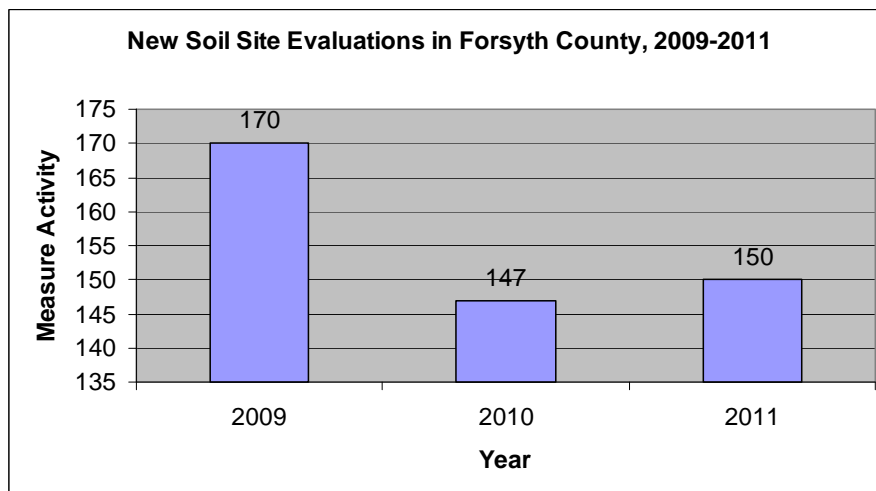


Source: Winston-Salem /Forsyth County Utility Commission. Statistics and Reports: Wastewater Performance Report, 2010-11.

### Septic Systems

In areas that are not serviced by public or community sewers, a septic tank system must be used. The first step in determining if a lot is suitable for such a system is the soil/site evaluation which is performed by the local health department and determines if the lot has the ability to support a septic tank system. An evaluation is also used when there is an existing house and septic tank system, but may require an increase in size (for example due to the addition of bedrooms) (23). Soil/Site evaluations are necessary for clean water and property protection. A properly functioning septic system ensures that wastewater is purified before being reused at that location or in a nearby well, stream or river (24). Figure 14 charts the number of new soil/site evaluations from 2009-2011.

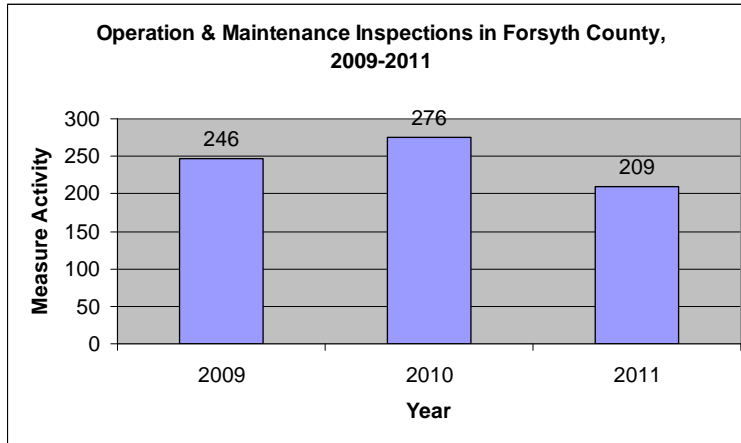
**Figure 14. New Soil/Site Evaluations, 2009-2011**



Source: Forsyth County Department of Public Health. Environmental Health Division.

Septic tank systems are also subject to routine operation and maintenance inspections. These inspections check the septic tank and pump tank’s sludge levels, as well as if the system is properly functioning. The inspections insure sewage is maintained below the ground’s surface to eliminate harmful bacteria and viruses from coming into contact with people or animals to cause disease (25). Figure 15 shows the number of operation and maintenance inspections completed from 2009-2011.

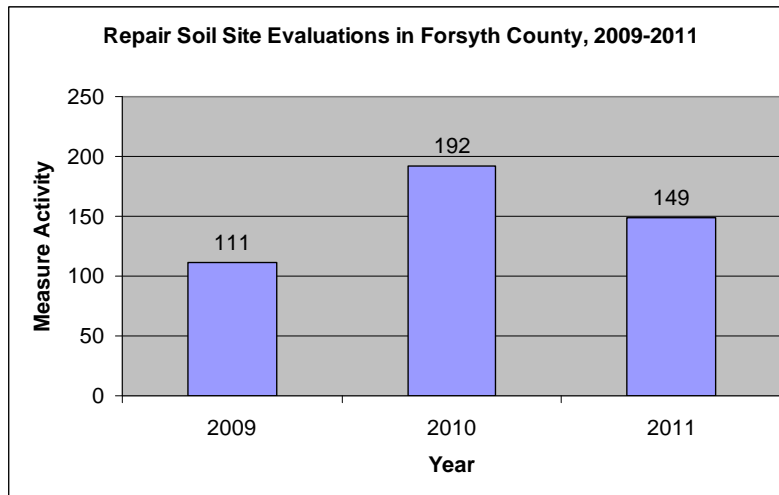
**Figure 15. Operation & Maintenance Inspections, 2009-2011**



Source: Forsyth County Department of Public Health. Environmental Health Division.

Septic tank systems may require a Repair Soil Site evaluation if problems arise in which: sewage/effluent is discharged from the system onto the surface of the ground, surface waters, or directly into groundwater; sewage/effluent is backing up into the home, facility, drains or septic tank; sewage/effluent is within 3 inches of the finished grade over the system; or it becomes necessary to have septic tank pumped more than once per month to avoid preceding issues from occurring (26). Figure 16 shows the number of repair soil/site evaluations from 2009-2011.

**Figure 16. Repair Soil/Site Evaluation, 2009-2011**



Source: Forsyth County Department of Public Health. Environmental Health Division.

## CONTAMINATION/HAZARDOUS EVENTS

### Toxic Release Inventory

The EPA measures the disposal and release of more than 650 chemicals that are considered toxic. The Toxic Release Inventory (TRI) also tracks how facilities manage chemicals in the forms of recycling, energy recovery, and treatment. The TRI is a part of the Emergency Planning and Community Right-to-Know Act (EPCRA) of 1986 whose primary purpose is to inform citizens of toxic chemical releases in their areas under the Act's Section 313. Additional data on waste management and source reduction activities was added to the TRI under the 1990 Pollution Prevention Act. The TRI reported 34 chemicals amounting to approximately 793,168 pounds that were disposed of or released in Forsyth County in 2010, as detailed in Table 16. From 2007-2010 there has been an overall decline in total chemicals released, while the top chemical released was certain glycol ethers from 2007-2010 as detailed in Table 17 (27).

**Table 16. TRI On-site and Off-site Reported Disposed of or Otherwise Released (in pounds), for All Industries, for All Chemicals, Forsyth County, North Carolina, 2010**

	Chemical	Total On- and Off-site Disposal or Other Releases
1	<a href="#">ACETALDEHYDE</a>	24,993.48
2	<a href="#">AMMONIA</a>	43,774.00
3	<a href="#">ANTIMONY</a>	1
4	<a href="#">ANTIMONY COMPOUNDS</a>	0
5	<a href="#">ARSENIC COMPOUNDS</a>	0
6	<a href="#">BENZO(G,H,I)PERYLENE</a>	0.000081
7	<a href="#">CADMIUM COMPOUNDS</a>	755
8	<a href="#">CERTAIN GLYCOL ETHERS</a>	377,567.00
9	<a href="#">CHLORINE</a>	20
10	<a href="#">CHROMIUM</a>	2,139.31
11	<a href="#">CHROMIUM COMPOUNDS(EXCEPT CHROMITE ORE MINED IN THE TRANSVAAL REGION)</a>	755
12	<a href="#">COBALT</a>	1
13	<a href="#">COPPER</a>	4,810.50
14	<a href="#">COPPER COMPOUNDS</a>	755
15	<a href="#">CYANIDE COMPOUNDS</a>	250
16	<a href="#">DIOXIN AND DIOXIN-LIKE COMPOUNDS</a>	0.0071098
17	<a href="#">ETHYLENE GLYCOL</a>	0
18	<a href="#">HYDROCHLORIC ACID (1995 AND AFTER "ACID AEROSOLS" ONLY)</a>	47,603.21
19	<a href="#">HYDROGEN FLUORIDE</a>	31.5
20	<a href="#">LEAD</a>	32.321
21	<a href="#">LEAD COMPOUNDS</a>	1,285.50
22	<a href="#">MANGANESE</a>	875.784
23	<a href="#">N,N-DIMETHYLFORMAMIDE</a>	1,037.99
24	<a href="#">N-BUTYL ALCOHOL</a>	162,784.00
25	<a href="#">N-METHYL-2-PYRROLIDONE</a>	835
26	<a href="#">NICKEL</a>	335.491
27	<a href="#">NICKEL COMPOUNDS</a>	791.429
28	<a href="#">NICOTINE AND SALTS</a>	56,723.00
29	<a href="#">NITRATE COMPOUNDS</a>	0
30	<a href="#">NITRIC ACID</a>	0
31	<a href="#">POLYCYCLIC AROMATIC COMPOUNDS</a>	36.91
32	<a href="#">PROPYLENE</a>	0
33	<a href="#">TOLUENE</a>	64,220.00
34	<a href="#">ZINC COMPOUNDS</a>	755
	<b>Total</b>	<b>145</b>
		<b>793,168.43</b>

Source: US EPA. Toxic Release Inventory. TRI Explorer.

**Table 17. Toxic Release Inventory, 2007-2010**

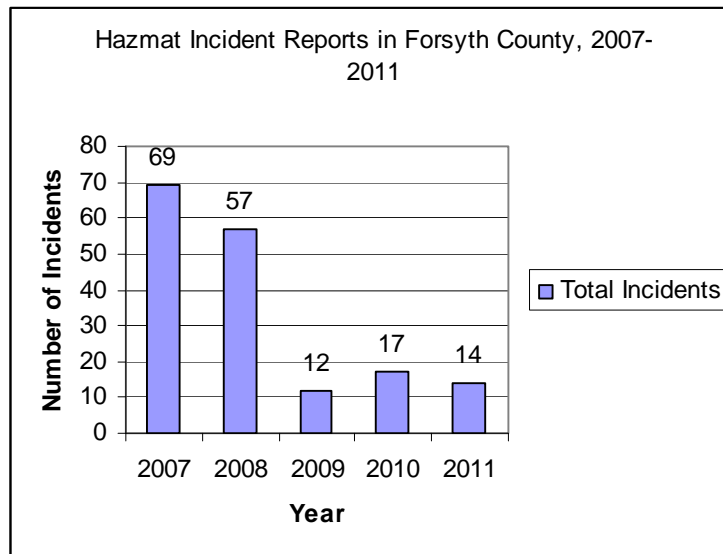
Year	Number of Chemicals	Total Amount Released	Highest Chemical Released	Highest Chemical Released Total Amount
2007	41	850,176.74	<a href="#">CERTAIN GLYCOL ETHERS</a>	344,746.00
2008	41	781,631.02	<a href="#">CERTAIN GLYCOL ETHERS</a>	295,832.00
2009	33	763,104.41	<a href="#">CERTAIN GLYCOL ETHERS</a>	344,481.00
2010	34	793,168.43	<a href="#">CERTAIN GLYCOL ETHERS</a>	377,567.00

**Source:** US EPA. Toxic Release Inventory. TRI Explorer.

**Toxic Substance Incidents**

The National Toxic Substance Incidents Program (NTSIP) collects and combines information from various sources to protect people from the harm of spills and leaks of toxic substances. It is modeled after the Hazardous Substances Emergency Events Surveillance (HSEES) Program (28). According to the Office of Hazardous Materials Safety, there were 169 incidents in Forsyth County North Carolina between January 1, 2007 and December 31, 2011 reported by the US Department of Transportation. These incidents occurred in Winston-Salem, Kernersville, High Point, and Rural Hall (29). Figure 17 below shows the number of incidents per year in Forsyth County from 2007-2011.

**Figure 17. Hazmat Incident Report, Forsyth County, 2007-2011**



**Source:** PHMSA. Office of Hazardous Materials Safety. Incident Reports Database Search.

**Brownfields**

A brownfields site is an abandoned, idled or underused property with some form of environmental contamination which has hindered its redevelopment. The North Carolina Brownfields Program, under the Division of Waste Management, is a state attempt to overcome the redevelopment barrier associated with these sites' contamination issues. Under the Brownfields Property Reuse Act of 1997, the Department of the Environment and Natural Resources (DENR) can work with prospective developers to put these brownfields sites back to reuse (30).

As of September 30, 2010 there were a total of 17 brownfields sites with finalized brownfield agreements or were active eligible participants in Forsyth County. Of those 17, 11 were projects with finalized brownfields agreements, described in Table 18, in which the projects have completed the public notice phase of the brownfields process and have either a signed agreement in place or are waiting for the agreement to be executed. There were 5 sites identified as active eligible projects, described on Table 19, which are eligible for a brownfields agreement under the Brownfield Property Reuse Act statutory criteria. The developers for the eligible projects are working with DENR in some stage of data gathering, analysis or agreement negotiation. One site, SPATCO (Southern Pump and Tank Co.), in Winston-Salem is listed as pending eligibility meaning it is in the initial stage of entering the NC Brownfields Program, but does not meet requirements to be eligible for a brownfields agreement (31).

Site and Perspective Developer	Description
<b>A GREAT ESCAPE</b> 1806 Funtime Blvd. Winston-Salem Forsyth County PD: A Great Escape LLC	Prospective developer wants to purchase this approximately 5-acre abandoned amusement park (miniature golf and go cart track), which is located on edge of a former municipal landfill, refurbish it, and re-open it with same use.
<b>AIRPORT EXXON</b> 3305 North Liberty St. Winston-Salem Forsyth Co. PD: Mrs. Becky Flowers	The Property consists of 0.56 acres and was first developed in 1989. The site has previously been used as an auto repair facility, a retail tire store and most recently as a small engine repair facility. Soil and groundwater contamination exist at the Brownfields Property as a result of past operations conducted there. Prospective Developer has redeveloped the Brownfields Property as a convenience store/gas station.
<b>CENTRAL PARK LANDFILL</b> Salem and Main Streets Winston-Salem Forsyth Co. PD: Salem Recreational Fields	Former municipal landfill for the City of Winston-Salem. Site is 7.23 acres in size, and has been used as a city park since the 1950s. Low levels of chlorinated solvents, with no surficial soil contamination. PD intends to redevelop the site for soccer and a softball field for the adjoining Salem Academy and College so their current fields can be used for additional building space. A passive methane collection system will be installed prior to installation of the recreational fields.
<b>FOOD LION</b> Waughtown & Sprague Streets Winston-Salem Forsyth Co. PD: Food Lion, Inc.	A new large supermarket placed on the site of an abandoned grocery store in urban Winston-Salem. Project had strong community support as a quality of life issue as the community had no supermarket. Land use restrictions for chlorinated solvent contamination in groundwater. Brownfield Assessment determined the source to be nearby drycleaner.
<b>GATEWAY AT OLD SALEM</b> 1198 S. Broad Street Winston-Salem Forsyth County PD: Southeast Gateway Ventures	Project size is approximately 51 acres. The property is planned for mixed-use redevelopment including offices, commercial/retail space, residences, a YWCA, a private school and parking. Contamination is from a former Duke Power Plant substation (PCBs, PAHs in soil) and groundwater contamination from a number of sources, mainly petroleum but with a few chlorinated solvents. Cleanup of contamination at the Duke Power facility under the Inactive Hazardous Sites Program is almost complete. The Duke Power site comprises only a portion of this large brownfields redevelopment project.
<b>HANESBRANDS THEATRE</b> 201 N. Spruce St. Winston-Salem For- syth Co. PD: The Arts Council	The Brownfields Property comprises approximately 0.46 acres and is located at 201 North Spruce Street, Winston-Salem, Forsyth County, North Carolina. Its previous uses have included automotive sales, service and repair businesses, and most recently an AC Delco automotive parts and service store. Groundwater at the site is contaminated with low levels of chlorinated solvents from past activities at the site. Prospective Developer plans to redevelop the site as a multi-purpose venue that can be configured to include a 300-seat theater and associated practice rooms, classrooms and office space, and that hosts events including theater, music and dance performances, film screenings, workshops, parties, fundraisers, lectures and readings.
<b>PIEDMONT TRIAD RESEARCH PARK #1 CAMEL CITY CLEANERS/MGP</b> 401 East Third Street Winston-Salem Forsyth Co. PD: PTRP Holdings, LLC	The Property consists of approximately 1.27 acres located at 415 East Third Street in Winston-Salem, Forsyth County, North Carolina. The site was most recently used as a dry-cleaning facility and was originally developed in the late 1800s as a manufactured gas plant. Soil and groundwater contamination are present on the site due to past activities conducted on or in the vicinity of the site. In conjunction with the development of the planned Piedmont Triad Research Park, Wake Forest University Health Sciences, through BRF-A1a, LLC, intends to redevelop the subject property as a bio-technology research and office facility.

Site and Perspective Developer	Description
<b>PIEDMONT TRIAD RESEARCH PARK #2</b> Various properties east and south of downtown Winston-Salem Winston-Salem Forsyth County PD: PTRP Holdings, LLC	The Brownfields Property comprises approximately 49.02 acres in Winston-Salem. The land, initially used residentially and then industrially, has been in use for more than 100 years. Site soil and groundwater are contaminated from past operations as a R. J. Reynolds Tobacco Company cigarette manufacturing facility. Prospective Developer intends to redevelop the Brownfields Property with bio-technology research facilities, offices, retail outlets, public open areas, high-density residences, performance/concert halls, hotels, community centers, swimming pools, parking and schools.
<b>SALEM UNIFORM</b> 4015 N. Cherry Street Winston-Salem Forsyth County PD: Winston Weaver Co. Inc.	2.53-acre site that has been vacant for many years. Was leased out from 1967-83 to Salem Uniform and from 1983-86 to Cintus Corporation who purchased the assets for Salem Uniform. During a Limited Site Assessment for petroleum USTs, high levels of PCE were discovered, probably from dry cleaning solvents. PD is currently leasing space, but would like to improve it for use for fertilizer storage and other commercial usage.
<b>SUN CHEMICAL</b> 1100 Fairchild Road Winston-Salem Forsyth PD: Warhal Properties, LLC	The property consists of 5.26 acres and was formerly used as an ink manufacturing facility. The property was abandoned in the 1990s. Groundwater and soil vapor at the site are contaminated with chlorinated solvents from past site operations. The property has been renovated and redeveloped for office and warehouse use and plumbing systems fabrication.
<b>WEST END VILLAGE</b> Properties on N. Broad, W. Fourth, W. Fifth, North Green, N. Spring Streets and Brookstown Avenue, Winston-Salem Forsyth County PD: West End Ventures, LLC	The Property is located in western downtown Winston-Salem, Forsyth County, North Carolina, comprises approximately eight (8) acres and is surrounded primarily by commercial development. It is bordered by West Fourth Street to the north, West Second Street to the south, North Broad Street to the east and land in commercial use to the west. The Property was mainly residential until around the 1960s to 1970s, after which time most of the site underwent commercial redevelopment in the form of offices, retail businesses and service businesses. Groundwater and soil are contaminated at the Property from past site uses. Prospective Developer has committed itself to redevelopment of the Property for no uses other than mixed commercial and/or high-density residential purposes.
<b>Source:</b> NC DENR. Division of Waste Management. Brownfields Program: Project Inventory.	

**Table 19. Active Eligible Projects as of September 2010**

<b>HANESBRANDS INDUSTRIAL FACILITY</b> 700 South Stratford Road Winston-Salem, Forsyth Co. PD: 700 South Stratford, LLC	<b>STRATFORD METAL FINISHING</b> 807 S. Marshall Street Winston-Salem, Forsyth County PD: City of Winston-Salem
<b>PIEDMONT TRIAD RESEARCH PARK CENTRAL DISTRICT</b> Various properties south of Third St and north of Bus I-40 Winston-Salem, Forsyth Co. PD: PTRP Holdings, LLC	<b>TFI FINISHING BUILDING WEST</b> 1200 Patterson Avenue Winston-Salem, Forsyth Co. PD: City of Winston-Salem
<b>PIEDMONT TRIAD RESEARCH PARK SOUTHERN DISTRICT</b> Various properties south of Bus I-40 Winston-Salem, Forsyth Co. PD: PTRP Holdings, LLC	
<b>Source:</b> NC DENR. Division of Waste Management. Brownfields Program: Project Inventory.	



## THE BUILT ENVIRONMENT

The built environment encompasses the man-made resources and infrastructures that support human activity. In comparison to natural resources, the built environment includes buildings, roads, parks, restaurants, grocery stores, and other designs that affect or influence the health of residents. The built environment can influence health outcomes such as diet and physical activity (32).

### Cycling, Parks, and Greenways

Several bicycle and pedestrian counts in May 2011 revealed 351 pedestrians and 115 bicyclists were in Winston-Salem. More than 70 miles of roads are designated as bike routes in Winston-Salem and Forsyth County as seen in Figure 18(6).

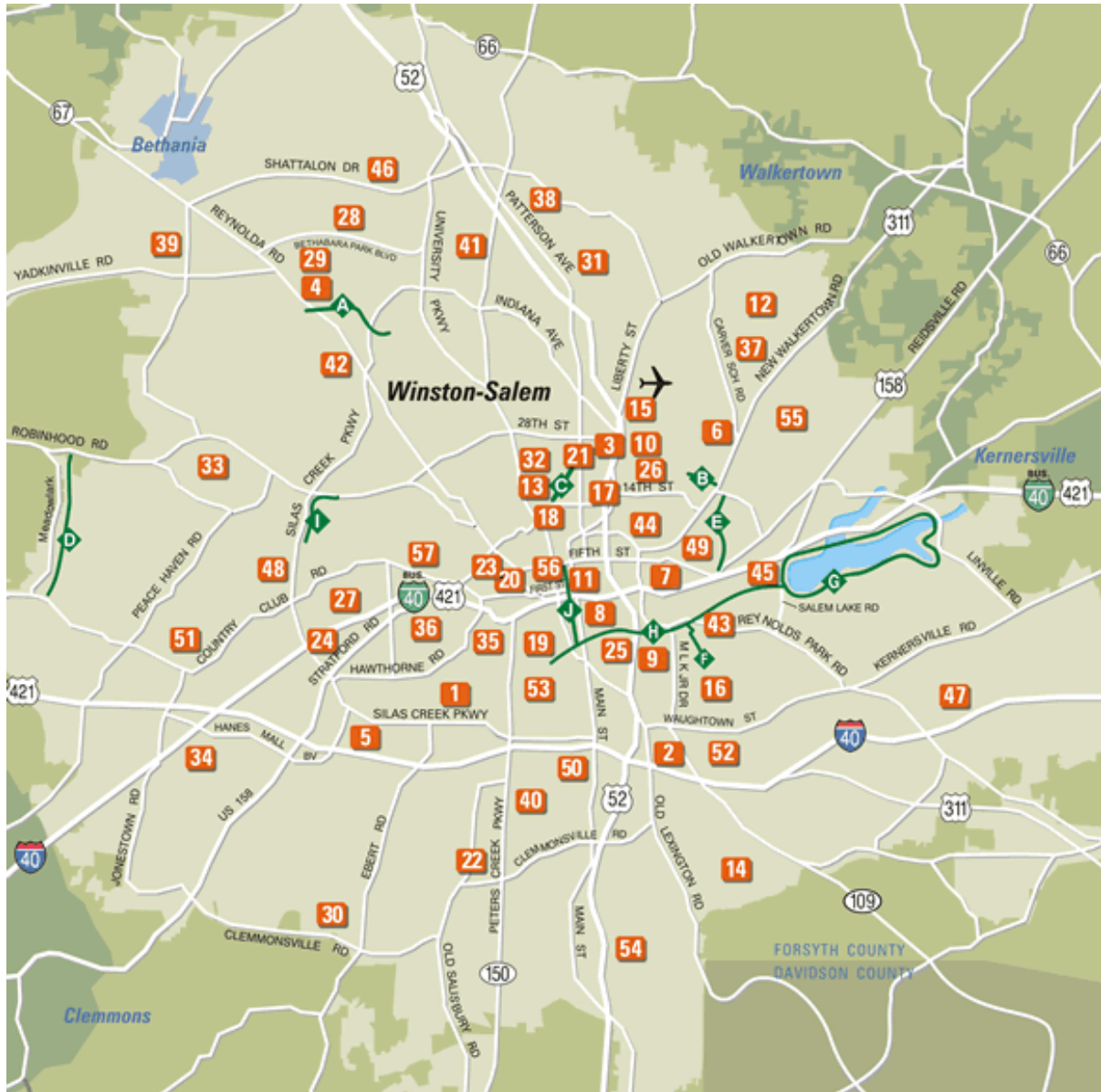
**Figure 18. Existing Bike Routes in Winston Salem**



Source- City of Winston-Salem Bike Plan. Comprehensive Bicycle Master Plan. .

In addition to bike routes, there were 10 greenways with 23 miles, with another 8 in development and prioritizes 25 miles of greenway projects (5;33). Greenways are linear open space corridors that can connect people to destinations. Greens can be used through walking, jogging, skating, and biking, with the majority of greenways built on banks of river, streams and lakes. Winston-Salem's greenways incorporate paved trails, unpaved trails, boardwalks, and bridges (33). Winston-Salem's parks and greenways are shown below in Figure 19.

Figure 19. Winston-Salem Parks and Greenways



<ol style="list-style-type: none"> <li>1. <b>Ardmore</b>, 1021 Melrose St., 4 ac.</li> <li>2. <b>Bellevue</b>, 1800 Burgamy Park, 6.3 ac.</li> <li>3. <b>Blum/Blanding</b>, 2401 Ivy Ave., 18.5 ac.</li> <li>4. <b>Bethabara Park</b>, 4451 Old Town Dr., 30.15 ac.</li> <li>5. <b>Bolton</b>, 1590 Bolton St., 35.5 ac.</li> <li>6. <b>Bowen/Thomas</b>, 2350 Bowen Blvd., 17.5 ac.</li> <li>7. <b>Brushy Fork</b>, 1860 E. First St., 4.3 ac.</li> <li>8. <b>Central</b>, 801 Salem Ave., 12.1 ac.</li> <li>9. <b>Civitan</b>, 1341 Diggs Blvd., 27.5 ac.</li> <li>10. <b>Clark-Mikens</b>, 1230 E. 17th St., 1 ac.</li> <li>11. <b>Corpening Plaza</b>, 100 W. 2nd. St, 2.36</li> <li>12. <b>Crawford</b>, 4226 Oak Ridge Dr., 8.3 ac.</li> <li>13. <b>Drayton Pines</b>, 1029 W. 14th St., 7.80 ac.</li> <li>14. <b>Easton</b>, 3599 Tyler Dr., 27 ac.</li> <li>15. <b>Fairview</b>, 1690 E. 19th St., 2.1 ac.</li> <li>16. <b>Forest</b>, 1184 Tower St., 8.9 ac.</li> <li>17. <b>Fourteenth St.</b>, 2020 E. 14th St., 6.9 ac.</li> <li>18. <b>Gateway Commons</b>, 1580 Oak Street, 10.51 ac.</li> <li>19. <b>Granville</b>, 700 Granville Dr., 6.2 ac.</li> <li>20. <b>Grace Court</b>, 931 W. 4th St., 1.22 ac.</li> <li>21. <b>Greenway</b>, 2701 Greenway Ave., 3.2 ac.</li> <li>22. <b>Griffith</b>, 1471 W. Clemmons Rd., 6.8 ac.</li> <li>23. <b>Hanes</b>, 1406 W. Northwest Blvd., 34.8 ac.</li> <li>24. <b>Hanestown</b>, 411 Olive St., 2.4 ac.</li> <li>25. <b>Happy Hill</b>, 1201 Alder St., 23.7 ac.</li> <li>26. <b>Harambee Park</b>, 1515 E. 14th St., 1.0 ac</li> <li>27. <b>Hathaway</b>, 301 Anita Dr., 17.9 ac.</li> <li>28. <b>Hine Soccer Complex</b>, 5895 Bethabara Pk. Rd., 26 ac.</li> <li>29. <b>Historic Bethabara</b>, 2163 Bethabara Rd., 115.96 ac.</li> <li>30. <b>Hobby</b>, 2301 W. Clemmons Rd., 91.5 ac.</li> <li>31. <b>Jerry King</b>, 4700 Ogburn Ave., 20.2 ac.</li> <li>32. <b>Kimberley</b>, 2001 Pittsburg Ave., 26.3 ac.</li> <li>33. <b>Leinbach</b>, 3511 Sally Kirk Rd., 9 ac.</li> <li>34. <b>Little Creek</b>, 600 Foxcroft Dr., 14.7 ac.</li> <li>35. <b>Lockland</b>, 401 Lockland Ave, 1.86 ac.</li> <li>36. <b>Miller</b>, 400 Leisure Lane, 39.5 ac.</li> <li>37. <b>Helen W. Nichols</b>, 3521 Carver School Rd., 8.3 ac.</li> <li>38. <b>Oak Summit</b>, 406 Oak Summit Rd., 16.2 ac.</li> <li>39. <b>Old Town</b>, 4550 Shattalon Dr., 16.6 ac.</li> <li>40. <b>Parkland</b>, 1660 Brewer Rd., 30.2 ac.</li> <li>41. <b>Piney Grove</b>, 4725 Indiana Ave., 15.5 ac.</li> <li>42. <b>Polo Park</b>, 1850 Polo Rd., 13.6 ac.</li> <li>43. <b>Reynolds Park</b>, 2450 Reynolds Park Rd., 222 ac.</li> <li>44. <b>Rupert Bell</b>, 1501 Mt. Zion Pl., 19 ac.</li> <li>45. <b>Salem Lake</b>, 1001 Salem Lake Rd., 1,465 ac.</li> <li>46. <b>Sara Lee Soccer</b>, 5656 Shattalon Dr., 48 ac.</li> <li>47. <b>Sedge Garden</b>, 401 Robbins Rd., 21 ac</li> <li>48. <b>Shaffner</b>, 900 Yorkshire Rd., 46.6 ac.</li> <li>49. <b>Skyland</b>, 1890 New Walkertown Rd., 17.8 ac.</li> <li>50. <b>South Park</b>, 190 W. Lemly St., 6.2 ac.</li> <li>51. <b>South Fork</b>, 4403 Country Club Rd., 14.9 ac.</li> <li>52. <b>Sprague</b>, 1350 E. Sprague St., 18.5 ac.</li> <li>53. <b>Washington</b>, 1490 S. Broad St., 75.3 ac.</li> <li>54. <b>Weston</b>, 3998 Southdale Dr., 15.9 ac.</li> <li>55. <b>Winston Lake</b>, 2801 New Walkertown Rd., 467 ac.</li> <li>56. <b>Winston Square Park</b>, 310 N. Marshall, 1.05 ac.</li> <li>57. <b>Whitaker</b>, 470 Dartmouth Road 10.77 ac.</li> </ol>	<p><b>A. <u>Bethabara Greenway</u></b> 2.7 miles, paved/natural - Mill Creek, Historic Bethabara, Reynolda Commons to Crown Oaks Apts. Bikes allowed.</p> <p><b>B. <u>Bowen Branch Greenway</u></b> .3 miles, paved - Brushy Creek from Bowen Blvd. to Highway 311. Bikes and skates allowed.</p> <p><b>C. <u>Gateway Commons Greenway</u></b> .8 mile, paved - Peter’s Creek from Northwest Blvd. to Glenn Ave. Bikes and skates allowed.</p> <p><b>D. <u>Muddy Creek Greenway</u></b> - 2.91 miles, paved - Muddy Creek between County Club and Robinhood Rds. Entrance off of Meadowlark Road. Bikes and skates allowed.</p> <p><b>E. <u>Newell/Massey Greenway</u></b> - 1.2 miles paved - Brushy Fork from Waterworks Rd. to Old Greensboro Rd. Bikes and skates allowed.</p> <p><b>F. <u>Peachtree Greenway</u></b> - .6 miles, paved - behind Reynolds Park Golf Course. Bikes and skates allowed.</p> <p><b>G. <u>Salem Lake Trail</u></b> - 6.5 miles unpaved - around Salem Lake. Bikes allowed. (Trail users please sign in at Fishing Station)</p> <p><b>H. <u>Salem Creek Greenway</u></b> - 4.5 miles, paved - Salem Creek from Peters Creek Pkwy. to Salem Lake. Bikes and skates allowed.</p> <p><b>I. <u>Silas Creek Greenway</u></b> - .81 mile, paved/unpaved - along Silas Creek from Yorkshire to Robinhood roads. Bikes and skates allowed</p> <p><b>J. <u>Strollway</u></b> - 1.2 miles, paved/gravel - from Downtown 4th St. to Salem Ave., Old Salem</p>
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Source: City of Winston-Salem. Parks and Greenways.

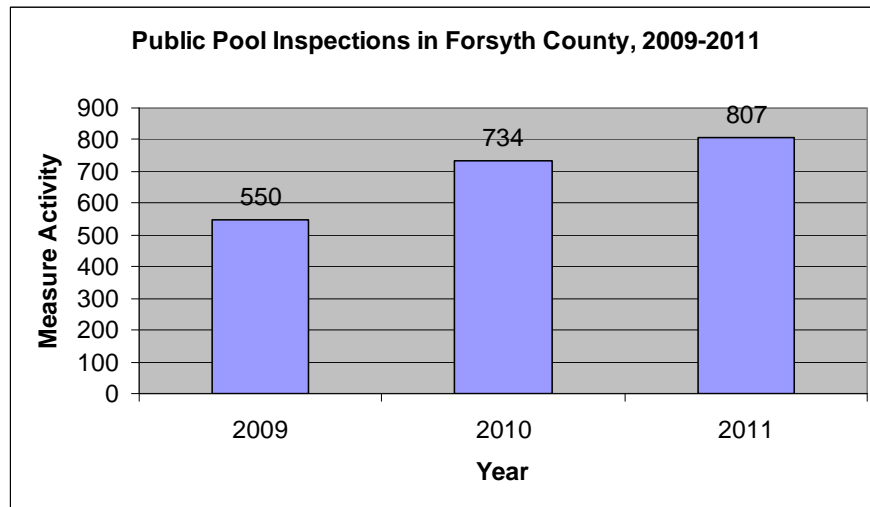
## Transportation Systems

Transportation access will influence air quality as well as a part of a healthy community. According to Forsyth Futures between 2007 and 2010 the Winston-Salem Transit Authority (WSTA) averaged 2,784,326 riders a year on its fixed routes. On average ridership increased by 4% each year and the trend continues based on ridership figures from January to April 2011. The Piedmont Authority for Regional Transportation (PART) increased routes in Forsyth County from one in 2003 to seven presently. The increase in routes has led to increases in annual ridership from 26,241 in 2003 to 271,255 riders in 2007 (5). In addition to public transportation, private transportation also has an impact on community health. In 2008 vehicles in Forsyth County produced about three million tons of carbon dioxide. In 2011 133,627 individual workers drove alone, or approximate 83% of workers, in Forsyth County (34).

## Pools

The Division of Environmental Health carries out a pool inspection program to enforce state public swimming pool regulations by permitting and inspecting all public swimming pools in the county (35). The Environmental Health Division also investigates complaints concerning the operation of public swimming pools. Pools that are open from April 1 and close on or before October 31<sup>st</sup> are required to have at least one inspection during their period of operation, while other pools are required to be inspected at least twice a year. During a pool inspection, water quality is tested and compliance with safety standards is evaluated (36). Figure 20 below shows the number of public pool inspections from 2009-2011

**Figure 20. Public Pool Inspections, 2009-2011**



Source: Forsyth County Department of Public Health. Environmental Health Division.

## Food Environment

Access to foods is another component of the built environment through grocery store access and restaurant locations. The lack of access to healthy food choice can impact health outcomes. In 2006 2.9% of households in Forsyth County had no car and had to travel at least one mile to the nearest store, while 10.77% of low income households were at least one mile from the nearest store. There was a 5.79% decrease in the number of grocery stores between 2007 and 2008, equivalent to a reduction of 4 grocery stores, totaling 65 grocery stores in 2008. There was also a 33.33% reduction in the number of convenience stores that did not sell gas between 2007 and 2008 for a total of 20 in 2008, down 10 from 30 in 2007. The number of convenience stores that sold gas increased by 5.06% during the same time period, for a total of 166 in 2008, up from 158 in 2007. The number of stores authorized to receive Supplemental Nutrition Assistance Program, known as SNAP, benefits also increased from 185 in 2008 to 226 in 2009. SNAP redemptions also increased from 221,082 in 2008 to 296,618 in 2009. The total number of fast food establishments decreased 3.84% from 286 in 2007 to 275 in 2008 (37).

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# Prevention & Promotion Programs

*The Forsyth County Department of Public Health has several programs that address child, teen, family and community health. The following programs are offered at the Health Department.*



## Child Health Programs

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**Be Healthy School Kids Program** is a nutrition education program targeting Pre K through 5th grade students at 44 Winston-Salem/Forsyth County Elementary Schools. At least 16 of the schools served have at least 80% or more of the student population eligible for free or reduced meals. At each school, we strive to reach students, staff, faculty, and parents through bulletin boards, morning announcements, quarterly newsletters, grade-level presentations, PTA workshops, and/or special events. A Public Health Educator collaborates with principals, teachers, students, and parents to support healthier lifestyle choices through individual change and environmental policies.

**The School Health Program** is provided by Public Health nurses to address the health concerns, medical problems, and health care needs of the school age population. The program places emphasis on prevention, early intervention and remediation of health issues. Public Health nurses make weekly visits to each school and home visits as indicated to help meet the health needs of students, parents, schools and the community, thus facilitating effective education and positive student outcomes. Four schools designated as ECP (Exceptional Children's Programs) have a full-time public health nurse on staff.

### **School Age Dental Health Programs**

The School Age Dental Health provides non-clinical preventive dental health services including dental screening and referral for school age children within Forsyth County. Program services are by appointment and free to the public. As part of the program, education is provided for community organizations, parents, teachers and children in an effort to reduce dental disease. The School Age Dental Health Program frequently collaborates with other organizations within the community to provide special services for underserved children including the Give Kids a Smile Program and dental sealant projects.

### **The Forsyth County Childhood Lead Poisoning Prevention Program**

If you answer "yes" to any of the questions below, your child and family are at risk of **LEAD POISONING**.

- Do you have a child under the age of 6?
- Do you live in a house built before 1978?
- Are you in an occupation where you are exposed to lead?

The Forsyth County Childhood Lead Poisoning Prevention Program (CLPPP) was formed by a grant from the Centers for Disease Control (CDC) in an effort to eliminate childhood lead poisoning in Forsyth County. Although there is an increase in lead screenings, lead poisoning is still a problem that affects children for their entire lives. The CLPPP currently provides early intervention, surveillance, abatement enforcement, monitoring inspections and risk assessments, and case management for the county to assist the CDC in its elimination goal.

The CLPPP has also formed the Forsyth County Lead Coalition made up of community leaders including parents, medical providers, and representatives of the construction and housing industries, and many others who learn about childhood lead poisoning issues in Forsyth County. The Coalition meets quarterly to discuss issues in lead poisoning and listen to guest speakers from organizations such as HUD and EPA.



## Teen Health Programs

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**The TRU Youth Advisory Council** is a community education program for teens in middle and high school. ~~delete~~—[funded by the NC Tobacco Prevention and Control Branch and Forsyth County](#). This program focuses on youth tobacco prevention. Teens involved in TRU become peer and community educators to share information about the dangers of tobacco use and second hand smoke, and they encourage youth and adult tobacco cessation. In addition to training peer educators, this programs works to advocate for tobacco-free policies at the state and local level. TRU Youth Advisory Council meetings are held twice each month at the Forsyth County Department of Public Health. For more information, please visit [www.smokefreeforsyth.org](http://www.smokefreeforsyth.org).



**The Teen Initiative Project (TIP)** is a community education program for teens between the ages of 9 -21 funded by Forsyth County. The educational sessions focus on developing positive self-esteem, improving decision making skills, effective communication, puberty, hygiene, abstinence and birth control. Other topics discussed are sexually transmitted diseases, building positive relationships and refusal skills. Teens involved in TIP become peer counselors, and work to educate their friends and community members on how to make responsible decisions. These programs are available to schools, churches, organizations, community groups and individuals in Forsyth County. TIP conducts both one-time sessions and series of classes.

**Teen Talk** is an Adolescent Pregnancy Prevention program funded by Forsyth County. Teen Talk provides ongoing educational sessions throughout the year for young women between the ages of 9-18. The program focuses on the well-being of each participant by helping participants develop positive self-esteem, make informed decisions, excel academically, and encourage career development. Teen Talk introduces young women to community service projects and various cultural activities. The program is currently offered in middle schools and community sites.

**The Teen Clinic** is for young women and men who wish to receive or learn more about birth control methods. Counseling and health education services (including abstinence education) are available. All services are confidential and most are free to teens. Services are provided by a registered nurse, health educator, physician assistant, nurse practitioner, or a doctor specializing in adolescent medicine. Teens are a priority and may schedule appointments on Thursdays 3:30-5:30 or at anytime convenient for the teen during normal business hours.

## Maternal & Child Health Programs

**WIC** is a federally-funded health and nutrition program for women, infants and children. WIC helps families by providing vouchers for buying healthy supplemental foods from WIC-authorized vendors, nutrition education, and help finding healthcare and other community services. ~~Delete—~~Participants must meet income guidelines and be pregnant women, new mothers, infants or children under age five. In Forsyth county we provide WIC services to over 11,000 women, infants and children. WIC is available to pregnant, breast feeding and postpartum women, infants and children up to age five. To participate, persons must:

- Be a resident of Forsyth County.
- Have a family income less than 185% of the U.S. Poverty Income Guidelines. A person receiving Medicaid, Work First Families Assistance , or Food Stamps automatically meets the income eligibility requirement.
- Be at nutritional risk. A nutritionist or other health professional makes the nutritional risk assessment at no cost to the participant, usually at the local WIC office.

### Care Coordination for Children (CC4C)

Care Coordination for Children (CC4C) is an at-risk population management program that serves children from birth to 5 years of age who meet certain risk criteria. The main goals of the program are to improve health outcomes and reduce costs for enrolled children.

Each child served by CC4C is linked to a specific Medical Home and CC4C Care Manager. The Care Manager works closely with the local medical practice serving as the child's Medical Home to coordinate roles and responsibilities and ensure the child obtains necessary care. CC4C staff also work in close collaboration with their local CCNC networks to access care management histories, Medicaid claims and other vital records, and to coordinate care management services. CCNC networks also assist in quality improvement and in evaluating program effectiveness.

### Referral Criteria

- Children with Special Health Care Needs (chronic physical, developmental, behavioral or emotional conditions) who require health and related services of a type and amount beyond that required by children generally.
- Children exposed to severe stress in early childhood, including:-- Extreme poverty in conjunction with continuous family chaos
  - Recurrent physical or emotional abuse
  - Chronic neglect
  - Severe and enduring maternal depression
  - Persistent parental substance abuse
  - Repeated exposure to violence in the community or within the family
- Children in foster care who need to be linked to a Medical Home
- Children in neonatal intensive care needing help transitioning to community/Medical Home care
- Identified Children with potentially "preventable" hospital costs

## Maternal & Child Health Programs

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### **Childbirth (Lamaze) Classes**

A fun, interactive class that teaches techniques to reduce child birthing fears and stress. The classes are taught by ASPO Lamaze Certified Instructors and are open to all pregnant women. There are four classes in a series, held on Tuesdays at Forsyth County Department of Public Health from 7-9 pm.

**The Pregnancy Care Management (PCM)** program provides care management for patients identified as being at risk for poor birth outcomes in Forsyth County. The level of service provided is based on the individual's identified needs. Care managers closely monitor the pregnancy through regular contact with the physician and patient to promote a healthy birth outcome. Patients are followed for two months after delivery to encourage follow up with the physician during the postpartum period and assisting patients with finding a primary care provider for routine care. The PCM model designates certain pregnancy risk factors as "priority" risk factors for the purposes of ensuring the recipients with these risk factors are assessed by a care manager to provide needed support services.

### **You may be high risk if you:**

- Have ever had a premature baby (baby born before 37 weeks).
- Are pregnant with twins, triplets, etc.
- Have diabetes, high blood pressure, HIV, sickle cell, asthma, seizure disorder, mental illness, or other conditions which can affect your pregnancy.
- Are in an unsafe living environment (homeless, unstable housing, family violence, sexual abuse, community violence).
- Smoke or use tobacco products, drugs or alcohol while you are pregnant.

## Family & Community Health Programs

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**The Healthy Beginnings Program** is a free case management service that focuses on, but is not limited to, minority women of the community that need a friend and support system through their pregnancy and during the first two years of the child's life. The mother will have one-on-one support with a health educator to help make the pregnancy and toddler years an enjoyable and healthy experience. Healthy Beginnings was originally created to encourage men to be involved in the pregnancy and the child's life. Although the program now focuses on case management for women, we still offer support and guidance to the men of our enrolled mothers.

**The Parent Education Program** is designed to reach parents and early education and child care professionals in the community to provide educational activities and interventions that seek to promote positive parenting, improve child health and reduce disease or injury. A few of the activities include a prenatal parenting class series, Infant/ Child CPR classes, SIDS training for parents and early education and child care professionals, and other classes on health related topics as requested.

### **Family Planning Health Education**

The Health Education Program in the Family Planning Clinic at the Department of Public Health provides patients with information necessary to make informed decisions about birth control and child spacing. In addition to helping patients choose a birth control method, health educators focus on assisting patients in using their chosen method accurately and consistently to achieve the highest possible level of efficacy.

### **Health Check**

Northwest Community Care Network (NCCN) oversees the Health Check Program of Forsyth County. The primary goal of this program is to ensure that all eligible children have access to health care. The Health Check Coordinator (HCC) provides outreach education to Medicaid eligible families, community providers and establishes relationships with primary care providers in the county.

## Adult Health Programs

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### **Diabetes Support Group/ Continuing Education**

- Free monthly support group meetings with supportive, continuing education for self-management
- Free educational materials and information
- Tools and other resources to help you or a loved one maintain control of diabetes

### **Wellness and Weight Loss**

- Educational materials and other resources to assist you in improving or maintaining good health
- Free workshops and lunch & learns
- Area walking trail maps and information

### **Parenting Education**

- Provides free parent classes and workshops to the community on various topics such as *Safe Sleep*, *SIDS* and child development: birth through adolescence.
- Free community resource guides

### **P.O.S.S.E ( Prevent Ongoing Spread of STI's Everywhere)**

The POSSE Team provides non-clinical, off-site HIV/STI screenings and education in non-traditional locations in Forsyth County such as churches, jails, universities, homeless shelters, night clubs, community health fairs, etc.

### **Breast & Cervical Cancer Program (BCCP)**

The WomanWise Program provides screening (breast exams, mammograms and Pap smears) for early detection of cancer in women. The WISE WOMAN Clinic provides heart disease screening for women who are already enrolled in the WomanWise Program. The services include blood pressure screening, height and weight measurements, and cholesterol tests.

### **HealthWise Chair Exercise Program**

The HealthWise Chair Exercise Program provides an great alternative to improving health and wellness of older adults, parents and children; as well as physically limited individuals; and those managing chronic conditions or chronic pain—all can benefit from this free program. Workouts consist of warm up stretches, aerobic activity, strength training and cool downs. Chair exercises are a great place to start a beginning exercise program after rehabilitation but also a good base to build up to a more intensive exercise program. Chair Exercise allows you to sit and be fit. There are multiple sites throughout the county; days, times and activity levels vary by location.

## Selected Clinics

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### **Cleveland Avenue Dental Clinic**

Our office welcomes families and individuals to our practice. We enjoy improving oral health as well as our patients' overall health. Our services include:

- Regular Checkups
- Cleanings
- Restoring Decayed Teeth
- Replacing Missing Teeth

### **Neighborhood Clinics**

- These clinics are held each month at in our community in order to serve persons who have difficulty obtaining very basic acute care and preventive health services. They are intended for adults and children who do not have private doctors. The first two clinics below offer services which include health screenings, immunizations, and laboratory testing. All services are free of charge, walk-in only (no appointments), and are provided by registered nurses from the Health Department, along with volunteer physicians. The Rescue Mission Medical Clinic only provides health screenings (every Thursday) and dental extractions (on the second and fourth Thursdays).

- Trinity Moravian Church
- **Bethany Baptist Church**
- Rescue Mission Medical Clinic
- Rescue Mission Dental Clinic

### **Low-Cost Rabies Clinics**

The Forsyth County Rabies Vaccination Committee offers low-cost rabies clinics for cats, ferrets and dogs over 3 months of age in the Spring and Fall of each year. The clinics are held at the Dixie Classic Fairgrounds Cattle Barn (Gate 9 on 27th Street) from 11:00 am until 3:00 pm. The cost to vaccinate each pet is \$5.00 in cash. It is required that dogs be on leashes and cats and ferrets be in carriers. If you do not have a carrier, loaners are available.

### **Immunization Clinic**

The Immunization Clinic provides child and adult vaccines which are administered by Registered Nurses. Vaccines that are required by NC Immunization Law, as well as those that are recommended by the Centers for Disease Control, for children and adults are available. Vaccines are provided without charge in some situations, while some vaccines require a fee. [http://www.forsyth.cc/PublicHealth/immunization\\_clinic.aspx](http://www.forsyth.cc/PublicHealth/immunization_clinic.aspx)

## Communication Plan

FORMAT	MEANS OF DISTRIBUTION	TIME LINE
Final Report		Completed June 2012
	Forsyth County Website: <a href="http://www.forsyth.cc/PublicHealth/publications.aspx">http://www.forsyth.cc/PublicHealth/publications.aspx</a>	Summer 2012
	Forsyth County Health Community Coalition Website: <a href="http://www.healthycommunity.ws/">http://www.healthycommunity.ws/</a>	Summer 2012
	Forsyth Futures Website: <a href="http://forsythfutures.org/">http://forsythfutures.org/</a>	Summer 2012
	Hard Copies available in all Forsyth County libraries	Summer 2012
Brochure	8-Page Bi-fold design to summarize findings	Design & Printed Summer 2012
	Distributed to Board of Health Members	June 2012
	Distributed to Board of Commissioners; elected officials and those who participated in the Priority Setting Session	To be Scheduled
	Mailing to Forsyth County Funders	To be Scheduled
	Available on the following websites as pdf for easy download and printing: <a href="http://www.forsyth.cc/PublicHealth/publications.aspx">http://www.forsyth.cc/PublicHealth/publications.aspx</a> <a href="http://www.healthycommunity.ws/">http://www.healthycommunity.ws/</a> <a href="http://forsythfutures.org/">http://forsythfutures.org/</a>	Summer 2012
PowerPoint Presentation	Presentation summarizing the CHA process, Primary & Secondary Data, Priority Setting, Recommendation & Action Plans	Summer 2012
	Presentation to Board of Health Members	June 2012
	Presentation to Forsyth County Health Department Expanded Staff	July 2012
	Presentation to Board of Commissioners	To be Scheduled
	Presentation to Forsyth County Healthy Community Coalition Members and CHA Working Groups	September 2012
Written Articles	Identify opportunities to write articles summarizing findings and recommendations	On-going as identified
	Press Release to Media	July 2012
	Packet materials for Community Health Forums	On-going as identified

# Appendix

- Community Health Opinion Survey Report
- Focus Group Report
- Stakeholder's Interview Report
- 2011 Youth Behavioral Risk Survey WSFCS Middle School Report
- 2011 Youth Behavioral Risk Survey WSFCS High School Report
- 2011 Forsyth County Community Health Resources
- NC Youth Behavioral Risk Survey Middle School Questionnaire
- NC Youth Behavioral Risk Survey High School Questionnaire



# 2011 Forsyth County Community Health Assessment Report



**Forsyth County Department of Public Health**  
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## Preface

This report describes the participants, process, and outcomes of the 2011 Forsyth County Community Health Assessment (CHA). Although this process takes place every four years, the fundamental findings are based on population-based measures and they often change little in such a relatively short period. Some of the critical findings of this process that remain important are:

- (a) Forsyth County residents experience a high level of preventable disease and death from tobacco use, unhealthy dietary habits, and inadequate physical exercise;
- (b) Forsyth County residents experience a disproportionately high rate of pregnancy loss and infant death; and
- (c) Health disparities are even greater in Forsyth County than in the State.

These findings were confirmed in the recent Forsyth County Health Rankings Report which indicated that the strongest predictors of better or poorer health status are better or poorer socioeconomic conditions respectively. The racial differences in socioeconomic status, neighborhood residential conditions, and access to medical care are important contributors to health disparities.

The priority health problems identified four years ago are still central issues. They are: Health Promotion (poor dietary practices, inadequate physical activity, and tobacco use); Infant Mortality (preventing repeat premature births.); Environmental Health (illegal dumping); Community Health ( economic justice); Injury (domestic violence); and Mental Health (homelessness & access to care). These priority focus areas have been somewhat reformulated as the result of the current process into the following list of new priority focus areas:

- Physical Activity and Nutrition with emphasis on Healthy Families
- Physical Activity and Nutrition with emphasis on Tobacco Prevention & Cessation
- Physical Activity and Nutrition with emphasis on Nutrition
- Physical Activity and Nutrition with emphasis on Physical Activity
- Chronic Disease with emphasis on Chronic Disease Management
- Maternal and Infant Health with emphasis on Breastfeeding Initiative
- Social Determinants of Health with emphasis on Translating Social Determinants Messages for Lay Audiences

These priority concerns, and the bases for their identification, are discussed at length in the body of this document. The Forsyth County Healthy Community Coalition, which led the process of the CHA along with the Department of Public Health, will continue its efforts to improve the health of our community – through better collaboration with both hospitals, community partners, policymakers and other leaders in our community. The strategies are outlined in the Community Health Action Plans.

Marlon B. Hunter, MAOM, Health Director  
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## Acknowledgements

I would like to thank the following individual who volunteered to participate in the 2011 community health assessment (CHA) process and for their combined contributions towards this report: the 2011 Community Health Assessment Report.

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June 2012

# Executive Summary

## Introduction

Every four years, Forsyth County Healthy Community Coalition, Forsyth County Department of Public Health and community partners conduct a comprehensive community wide assessment to identify priority health issues and plan interventions to improve the health of the community. It is required for local Health Department accreditation through the NC Health Department Accreditation Board. During this cycle, we have collaborated with both hospitals: Forsyth Medical Center and Wake Forest Baptist Health to meet the Affordable Care Act/IRS 990 Schedule H Requirements for Not for Profit Hospitals. This document will serve as the basis for prioritizing the community's health needs, and culminate in planning to meet those needs.

## Forsyth County Highlights from the Community Data Overview

- Cancer, heart disease, chronic lower respiratory diseases and stroke are the leading causes of death.
- African Americans continue to experience higher death rates for Diabetes, Heart disease, Stroke and Kidney Disease compared to Whites
- Whites experience higher death rates for Chronic Lower Respiratory Disease and Suicide compared to African Americans.
- Homicide deaths are 3.1 times higher among African Americans than Whites and 5.0 times higher among males compared to females and the leading cause of death among Hispanics.
- Prostate cancer deaths among African Americans are 2.3 times that of white men.
- Since 2005 to 2009, the non-Hispanic black babies die a rate of almost three times that of white babies
- In 2010, one in every five babies was born to a Hispanic mother and 10.6% were born to teen mothers
- 45,010 Forsyth County residents are uninsured
- In FY 2010, over 50% of Emergency department visits ( both hospitals) were by uninsured persons
- There are five(5) dentists per 10, 000 residents
- In FY 2010, more than 1,175 emergency department visits were due to dental care
- 11,000 Adults and 4,200 children were served at Center Point for mental health, developmental disabilities, and/or substance abuse, in FY 2011
- 27% of Forsyth County residents reported that they had one or more poor mental health days in the past 30 days, according to the 2009 Behavioral Risk Factor Surveillance System
- "Outpatient mental health services are needed for adolescents. Alternatives are needed to prisons or institutions" 2011 Stakeholders Interview Report
- In 2011, 21% of middle school students surveyed reported feeling sad or hopeless almost every day for two weeks or more in a row to the extent they stopped doing some usual activities; 13% reported having made a suicide plan and 19% had seriously considered attempting suicide.
- In 2011, 26% of high school students surveyed reported feeling sad or hopeless almost every day for two weeks or more in a row to the extent they stopped doing some usual activities; 12% reported having made a suicide plan and 14% had seriously considered attempting suicide in the past year.
- In 2011, 264 WFUBMC emergency department visits were due to attempted suicide.
- In 2011, 26% of middle school students and 27%of high school students surveyed reported that they were slightly or very overweight.

## Ranking Priority Focus Areas

On March 26, 2012, forty-five (45) individuals representing health care, mental health, public health, community members/leaders, education and faith community leader attended the CHA Priority Setting meeting. They were randomly assigned into eight (8) groups to prioritize the seven (7) focus areas. Random assignments allowed members to share their diverse knowledge, experience and challenges in addressing each priority area. They were presented with data specific to each priority area; and copies of the 2010 State of the County Health Report as well as other pertinent data materials for each priority area to facilitate group discussion. They were asked to review and rank each priority area based on the following five criteria:

- *Magnitude*: Proportion of the population affected or vulnerable.
- *Severity*: Impact on mortality, morbidity, disability and quality of life
- *Intervention Effectiveness*: Proven interventions exist that are feasible from a practical, economic and political viewpoint
- *Public Concern*: Degree of public concern and/or awareness
- *Urgency*: Need for action based on degree and rate of growth (decline); Potential for affecting and amplifying other health or socioeconomic issues; Timing for public awareness, collaboration, and funding is present.

The rankings were as follows:

1. Physical Activity & Nutrition
2. Chronic Disease Prevention
3. Maternal & Infant Health
4. Social Determinants of Health
5. Access to Care
6. Mental Health
7. Substance Abuse Prevention

## Recommendations

Four (4) action planning teams were formed based on the top four health issues, Physical Activity & Nutrition, Chronic Disease Prevention, Maternal & Infant Health and Social Determinants of Health. Examples of recommended actions are listed below:

### *Physical Activity & Nutrition*

- Focus on chronic disease prevention by targeting children/healthy families and efforts to reduce hospital readmissions and tailor intervention to seniors
- Create and encourage partnership among community agencies/organizations to strengthen their commitment and initiatives related to nutrition and physical activity.
- Mobilize and support specific partners such as YMCA and include Transformation Nation; FC Department of Public Health with Step up Forsyth

### *Chronic Disease Prevention*

- Review evidence-based intervention such as the Pregnancy care model for Chronic disease management
- Focus intervention with high mental health conditions or complications with those with chronic disease management complications

### *Maternal & Infant Health*

- Promote a breast feeding policy through media campaign and presentation to businesses, hospital clinicians, and private practice physicians. According to emerging research, breastfeeding reduces infant mortality by 29%. Breastfeeding needs to be promoted as the norm for infant feeding in Forsyth County.

### *Social Determinants of Health*

- Convene different community and business leaders to increase awareness of this issue
- Mobilize and support specific partners such as businesses, Forsyth Future, CHANGE

## **2011 Forsyth County Community Health Action Plans**

The action planning working groups developed seven (7) community action plans and strategies to address our top priority issues/concerns:

- Physical Activity and Nutrition with emphasis on Healthy Families
- Physical Activity and Nutrition with emphasis on Tobacco Prevention & Cessation
- Physical Activity and Nutrition with emphasis on Nutrition
- Physical Activity and Nutrition with emphasis on Physical Activity
- Chronic Disease with emphasis on Chronic Disease Management
- Maternal and Infant Health with emphasis on Breastfeeding Initiative
- Social Determinants of Health with emphasis on Translating Social Determinants Messages for Lay Audiences

## **2011 Forsyth County Community Health Report**

The full report can be accessed online at <http://www.forsyth.cc/PublicHealth/publications.aspx>; <http://forsythfutures.org/> and <http://www.healthycommunity.ws/> . This report serves as a reference for many agencies and organizations developing grant proposals and programming. A brochure summarizing findings and recommendations will be developed and mailed to community funders, elected officials; and will be easy to download and print at the websites listed above.

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**Forsyth County, North Carolina**  
**2011 Community Health Assessment**  
**Focus Group Summary**

Analysis of Data and Preparation of the Final report by  
Ayotunde Ademoyero, MPH  
Forsyth County Department of Public health  
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## Introduction

Forsyth County Department of Public Health is required by its consolidated agreement with the North Carolina Division of Public Health to conduct a comprehensive Community Health Assessment at least every 48 months. Furthermore, it is required for local health department accreditation through the NC Local Health department Accreditation Board.

During the three interim years, the local health department will issue a State-of-the County Report that will provide updated information about priority health issues specific to the county.

The Community Health Assessment (CHA) is a process by which community members gain an understanding of the health, health concerns, and health care systems of the community by identifying, collecting, analyzing, and disseminating information on community assets, strengths, resources, and needs. The CHA process involves analyzing primary data (*focus groups, stakeholders interviews & community health opinion survey among targeted FC residents*) and secondary data (data collected by other agencies & the state), combining primary and secondary data, selecting top health priorities and creating the CHA document with community health action plans.

The Forsyth County Healthy Community Coalition helps to guide and respond to the work of the CHA team. *Forsyth County Healthy Community Coalition is a community coalition whose mission is to create, build, and sustain efforts that improve the quality of life of the residents of Forsyth County.* The CHA team is made up of community residents and representatives from several organizations which reflect all facets of the community.

The goal of conducting focus groups is to synthesize the Forsyth County residents' viewpoint on important health and community issues. For the 2011 CHA process, focus group questions were specific to food access, healthcare access, neighborhood activism and other issues important to them into primary themes. These themes are often supported by quotes from the participants. Not all of the comments or themes will emerge into nice, neat categories. The summarized report will help the Forsyth County to identify its strengths, challenges, and future directions.

## Methodology

During March to August 2011, nine focus groups were conducted by the Community Health Assessment (CHA) team as part of the state-mandated community health assessment process to collect primary data via focus groups in the Forsyth County community. The purpose of the focus groups was to better understand community concerns about food access, healthcare access, neighborhood activism and to identify barriers that affect the Forsyth County residents' overall health.

Focus groups agendas were the same across all targeted groups and were conducted by the CHA team who had undergone uniform training to assure consistency of results. Focus groups are informal structured meetings in which community members discuss their thoughts on various community topics through predetermined questions. The focus groups were conducted among neighborhood associations within the Winston-Salem wards, senior communities and churches to include the diversity of the county population including Hispanic, African Americans, and White.

After the target populations were identified, the CHA team recruited focus group participants from the target group. The group size for the focus groups ranked six (6) to sixteen (16). There were ninety-three participants overall. A list of the focus group target populations, locations, dates, size and racial composition is attached as Appendix A. The research is qualitative and exploratory in nature, therefore, samples were not chosen for statistical validity, but to ensure a diverse cross-section of participants.

Prior to the focus group session, the participants were presented with a written notice of consent form (see Appendix C). The notice of consent informed potential participants that the session would be audio taped and of the need to sign the consent agreement before participating in the session. The form was explained to and read by each participant. All signed consent agreements were submitted and stored in the Forsyth County Department of Public Health.

Focus group discussions were conducted in English and Spanish. Participants were referred to by first name only to ensure confidentiality. Each session was between 60 minutes to 90 minutes in duration. The focus group guides (English & Spanish) developed by the CHA team, were used to guide each session (see Appendix B). Each group session began with brief introductions from each participant.

This report is a fair and accurate report of what was observed and discussed in each session. Actual respondent verbatim responses accompany most, if not all, points made in the report. Highlights of individual sessions are presented below. Respondent quotations are italicized. The text heading for individual focus group is a summary of group comments and is not the opinion of the author. The discussion questions and topic were used as the organizing format for the analysis. An assessment was made of group responses to all the questions addressed in the meeting.

## Conclusions/Recommendations

The participants identified specific areas of concerns regarding food access, healthcare access and neighborhood activism. A number of common themes to all the focus groups emerged:

*Community concerns and opinions on food access* included developing a habit of eating healthy; not having the time to cook; cost of healthier food; and eating out a lot. Their habits varied from style of cooking, cultural differences and selection of food. They mostly shopped at Walmart, Food Lion, Sam's Club, Costco and Aldi's because of their prices, location, convenience and buying in bulk. They stated that they went out to eat at different restaurants such as Chinese, K&W, Golden Corral, and fast food restaurants. Majority stated that they drove their cars, rode with someone else, took the bus or walked to the store or restaurants. Most of them stated that they had the skills to prepare healthy meals. Their concern regarding food preparation and storage were cross contamination, preparing food at the right temperature, labeling food properly and food spoilage.

*Community concerns and opinions on healthcare access* included medical care, mental care and going to work while sick. Most of the participants go to their primary care provider (PCP) for medical care because of the lengthy relationship and built trust; and those without health insurance go to a Hospital Emergency Department, Church clinics or health fairs. They would go to their PCP referral, Behavioral Health Plaza or Daymark for mental health concern or a Hospital Emergency Department. Their form of payment ranges from health insurance, state assistance or church assistance or payment plans. They either drive or take the bus to get to their appointments. For after hours crisis, they would call 911, their PCP on-call number or use a Hospital Emergency Department. More than half stated that they went to work sick for lack of sick paid leave.

*Overall concerns and opinions on neighborhood activism* included neighborhood concerns, bringing change to their neighborhood and success already achieved. Their major concerns were increased crime, gang activity, drug activity and public safety. They mentioned ways to activate their neighborhoods were through meetings, involving their City of Winston-Salem Neighborhood Liaisons and law enforcement. As neighborhoods, they believed that they could bring about the change they desired. Majority stated that they had an active neighborhood association and communicated through printed media, phone calls and going door to door. The success achieved included neighborhood signage, crime watch, and cleaning up their neighborhood.

*Hispanic community concerns and opinions on food access* included the difficulty of avoiding starchy food; obesity of their children and the difficulty to motivate them to eat vegetables; cost of organic food; and unhealthy food choices in schools. They mostly shopped at Walmart, Compare, Aldi's, Food Lion, and Mexican stores because of their prices, store specials and finding everything at one place. They stated that they went out to eat at different restaurants such as Chinese, K&W, Golden Corral, CC Pizza and fast food restaurants because of affordability. Majority stated that they drove their cars, took the bus or walked to the store or restaurants. Most of them stated that they had the skills to prepare healthy meals. However they thought that it was too expensive to cook healthy meals at home they cook healthy meals 2 -3 times during the week. Their concern regarding food preparation and storage was labeling food properly.

*"..They develop bad habits and only want hamburgers etc."*

*"::.. to label food properly, you can only keep food for three days..."*

*Hispanic community concerns and opinions on healthcare access* included medical care, mental care and going to work while sick. Their responses regarding where they go for medical care varied from Free Clinic, Church Clinics, Health Fairs, Prime Care, high bills from the Emergency Department, affordable payment plan at Downtown Health Plaza, too many requirements from Community Care Center to not going anywhere because of lack of health insurance. They stated they had no concerns with mental health. Their form of payment ranged from Carolina Access, state assistance or church assistance or payment plans. They rode the bus, took a taxi or drove their cars to get to their appointments. For after hours crisis, some stated that they would call 911 while others stated that they do not to call anyone because of language barriers. Majority stated that they went to work sick for lack of sick paid leave, they were temporary workers and they can't afford to miss any days of work due to the economy; so they take some medicine and go on to work.

*"...I don't call anybody because of the English barrier..."*

*"I don't call 911 because they do not have interpreters and it takes a long time..."*

*"If you don't show for work there is someone right behind you to take your place"*

*"Who's going to pay the bills if you don't work?"*

*"..There's not enough money, so we won't waste a day of work..."*

*Hispanic community concerns and opinions on neighborhood activism* included neighborhood concerns, bringing change to their neighborhood and success already achieved. Their major concerns were the need for more safe parks for children; affordable daycares; citizens' rights regarding debt collectors; lack of interest/support from the police department; robbery; gang activity; loud music; accessible dental clinics; public safety for children and mistreatment from DSS staff. They also mentioned the need for more programs for teen education about sex and pregnancy, access to eye care and healthcare; more resource information; YMCA programs are unaffordable; after school care at churches to help with homework and English. They wanted to see changes in their community but do not know how to start. They also wanted the WS Police Department to take more interest in their community; and have more support from the local businesses and the City. They communicated through the radio and pass news to **everyone in the community or church.** The success achieved included crime watch, and cleaning up their neighborhood and have security checks at Lakeside. They were unaware of First Line, 211 neighborhood liaisons with the city.

*" the police aren't interested in getting to Latino neighborhoods"*

*"They are good at giving tickets to Latinos."*

*".. we need more information to help us plan.."*

*"It's one thing not to be able to see well, but if you have a horrible tooth pain, you can't eat"*

# FINDINGS

## Voices of ----- Council Heights Neighborhood Association



### Food Access

When asked about the barriers or problems they experienced by trying to improve their diet and eat healthier, majority responded that diet food is expensive and they can not afford it due to financial constraints. They also stated that not following diet guidelines, eating alone and not being motivated to buy healthy foods were barriers to improving their diet.

When asked about their habits, concerns, and interests about food, their responses varied from eating unhealthy food (fried food); inability to develop the habit of eating healthy; health issues due to eating unhealthy food and their upbringing eating unhealthy.

*"..cooking for just one person is hard.."*

When asked about where they shop for groceries and why do they go there, they stated Walmart, Food Lion, Save-A-Lot and Harris Teeter. They unanimously reported that they go there because of cheaper prices and appearance of the store. However they also reported driving to other neighborhood stores to shop due to poor customer service, poor food quality, and long lines in the stores in their neighborhood.

*"..prices are cheaper and can use coupons.."*

When asked where do go when they want to eat out and why do they go there, they said due to the poor quality of food at the fast food restaurants and lack of good restaurants in their neighborhood, they drive to Kernersville where there are more choices.

When asked about how they get to the store or restaurants, their response varied from driving their cars; riding the bus, to riding with a friend.

When asked about having any skills to prepare healthy meals, majority responded that they had cooking skills and used cookbooks to prepare healthy meals.

When asked if they have any concern related to food preparation or storage, they mentioned cross contamination and to preparing the food at the right temperature.

### Healthcare Access

When they or their family member gets sick, they usually go to their primary care provider, Emergency Department or Downtown Health Plaza.

When they asked where do they go when they have a mental health concern, all responded that they go to their own doctor to get a referral.

When asked why they go to their primary care provider, majority responded that they have long-term relationship with their provider and they are very comfortable with their doctor.

When asked how they pay for their health care charges, almost everyone responded to have a health benefits.

**Check this out!**

When asked how they get to their doctor, majority responded they drive their cars and to ride a bus.

When asked what they do if they have a medical need or mental health crisis after hours, majority responded that they either call the nurse on call or call their primary care provider.

When asked about going to work sick because they didn't have health benefits and paid sick leave, majority responded that don't relate to this group as they all are retired seniors and enjoyed the benefits of health insurance.

### **Neighborhood Activism**

When asked about their concerns in their neighborhood, respondents expressed their concern towards keeping their neighborhood clean, unleashed animals, trash and traffic issues. They also mentioned their concern of absent landlords, parking issues in the community and most of all safety.

When asked how they activate their neighborhood to bring about the change they desire, majority relied on networking and exchange of ideas with their neighbors. They also stated they talk with police and organize meetings with their neighborhood association to bring the issue on table.

When asked if they believe that they can bring the change in their neighborhood, they responded yes by being proactive and doing the follow up on every aspect to make changes.

When asked if they think that they can bring about change in their neighborhood, majority responded "Yes".

When asked about the best ways to get information to people in the community, they stated that newsletters, approaching neighbors by calling them and going door to door to reach the other members in the community.

When asked to share their success in bringing change in their community, they responded that because of their efforts now they have speed limit signs in their neighborhood. They also mentioned crime watch and a cleaner neighborhood.

When asked if they are aware of Neighborhood Liaisons with the City, almost all mentioned the name of "Chris Mack" who attended all their association's meeting.

When asked if they know about First Line or 211, majority responded "No". Some mentioned that they heard but never used First Line or 211.

When asked what else they could tell us about their community, they said they have good neighbors and strong leadership. People are well connected and friendly.

## **Voices of..... Heritage Woods Retirement Community**

### **Food Access**

When asked about the barriers and problems they experience by trying to improve their diet and eat healthier, they responded that residents have a good diet plan and their menu was planned by a nutritionist who included a good selection of food, salad bar and soups. However their expressed their concern of having limited cooked vegetables.

When asked about the habits, concerns and interests about food, their responses varied from being raised in the North and the cooking here being Southern, being raised in a different country and high salt food items.

When asked about where did they shop for groceries and why did they go there, majority said that they shop from Food Lion, Harris Teeter, Lowes and Walmart. The facility provides them with a van service at no cost and it's very convenient for them to go to their choice of stores.

When asked about where they went to eat out and why they go there, the most common responses were eating at K&W, Village Tavern, Olive Garden and at their family members homes.

Many residents have cars and drive themselves, have a family member provide transportation and the facility also provides a bus service once a month to go out to eat.

When asked about having any skills to prepare healthy meals, they responded that there are no facilities to prepare their own food.

Residents were overall happy with the food preparation and storage and had no concerns.

### **Healthcare Access**

When they get sick for any reason, they usually go to their primary care provider. When asked who they go to when they have a mental health concern, all responded to go to their doctor to get a referral. There is also a van service available to take them to their medical appointments at no charge.

When asked what they do if they have a medical need or mental health crisis after hours, majority responded that they call their primary care provider, family or go to the Emergency Department to seek help.

When asked about working when sick because they didn't have health benefits, they responded that they had health benefits and never worked sick.

When asked how they pay for their medical care, they responded to have Medicare and Medicare supplement and pay a small co-payment during their health visits.

### **Neighborhood Activism**

When asked about their concerns for their neighborhood, they responded that their neighborhood is very nice. Staff is excellent and friendly. They mentioned that they have no concerns living in this community.

When asked how they activate their neighborhood to bring about the change they desire, they responded to bring the issue up to the Executive Director at a resident meeting that is held once in a month. They expressed concern that information and meeting minutes are not being posted and people are not aware of changes.

When asked if they can bring about the change in their neighborhood, they stated that if enough people shared a common concern, then change could take place but people do not want to be involved.



When asked about what would be the best ways to get information to people in their community, they stated that through resident council meetings and the dining room committee.

When asked if they had any success making changes in their neighborhood, they responded to have success in changing their menu.

When asked what else they could tell us about their community, they said Heritage Woods is a great place to live where people associate with each other, a great friendly place with excellent staff and a well kept building. Some mentioned that they pay a good fee to enjoy the many benefits of Heritage Woods.

## **Voices of ..... West Salem Neighborhood Association**

### **Food Access**

When asked about the barriers and problems they experience by trying to improve their diet and eat healthier, majority responded that healthier food cost more. They mentioned that they had not developed the habit of eating healthy because they do not know the recipes for healthy cooking and do not have the time to cook home made food.

When asked about the habits, concerns and interests about food, responses varies from not eating as often, interested in trying new recipes, eating organic foods, and using lots of cookbooks for cooking help. They also mentioned their concerns about the selection of food in the school system; which they said is not nutritious. They suggested that the meals needs to be prepared with more varieties of fruits and vegetables.

When asked where they shop for groceries and why do they go there, their responses were Food Lion because of cheaper cost and convenience; Aldi because of good selection of food; Whole Foods; Harris Teeter; Compare Foods; Ronny's; Farmers Market and Back Yard Produce.

When asked about where do they want to eat out and why do they go there, the most common responses were Mayflower, Mama Zoe, Mooney's, Subway, Golden Corral, Milner's and Cloverdale. Most residents have cars to go out and others get a ride; there is nothing close to walk to.

When asked about having any skills to prepare healthy meals majority stated hat they do have skills but do not prepare healthy meals because they are only cooking for one person and it is more convenient to eat out.

When asked if they have any concern related to food preparation or storage, they stated not knowing what quantity to buy and food spoilage.

### **Healthcare Access**

When asked where they go for medical care when they get sick majority stated they go to their primary care provider(PCP) or Emergency Department. Others stated that they had health issues but have no health insurance and can not pay for the care.



When asked where they go if they have a mental health concern, their responses varied from PCP referral, Daymark, to Behavioral Health Plaza. Those who worked with the school system had full mental health coverage.

When asked why they go there, majority responded that they built a great relationship with their provider and convenience.

When asked what they do if they have a medical need or mental health crisis after hours, they responded that using their PCP on-call service or go to Emergency Department for children's sickness.

When asked if they go to work sick because of not having health insurance or paid sick leave, majority responded that they go to work sick because they had to go to work. Some stated they missed work because of sick children.

*"Not having healthcare is just wrong".*

### **Neighborhood Activism**

When asked about their concerns in their neighborhood, their responses varied from crime, drugs, prostitution, poor management of properties and unleashed dogs. They also mentioned broken sewage pipes, and run off seeping into drinking water and outdated pipes in the houses and underground.

When asked how they activate their neighborhood to bring about the change they desire, they usually relied on the help line. They mentioned they have a positive relationship with their City Council member but did not know who their Neighborhood Liaison was and their role.

When asked if they believe that they can bring the change in their neighborhood, they responded positively by being proactive; starting an email chain and following up on every aspect to make changes.

When asked about what would be the best ways to get information to people in the community, they stated that through newsletters, email chains and board members.

When asked if they know about First Line or 211, majority responded yes and did know about City Link.

When asked what else they could tell us about their community, they said that it's very cohesive and protected neighborhood. They are well connected and have a great diversity of age, gender and ethnicity. They expressed some concerns on the quality of food for children; accessible healthcare; accessible supermarkets within walking distance; upkeep of property; community gardens and the crossing lanes at Peters Creek and Academy.

## **Voices of..... City View Neighborhood Association**

### **Food Access**

When asked about the barriers/problems they experience by trying to improve their diet and eat healthier, their responses included motivation, high price and quality of food, pesticides and hormones in food.

When asked where they shop for groceries and why they go there, their responses included Aldi's, Whole Foods, Costco, Sams, Walmart and wherever they could get the best price.

When asked where they go when they want to eat out, their responses varied from Japanese restaurants, Applebees, Golden Corral, Meta's to K & W. They stated that healthy food is needed in their neighborhood and they have to go across the town to get the healthy food.

When asked if they have skills to prepare healthy meals, majority stated that they do have skills. They expressed concern that younger folks do not have skills.

When asked if they have any concern related to food preparation or storage, they stated eating proper portions and food preparation.

### **Healthcare Access**

When asked what they do when they get sick and where they go for medical care, those with insurance go to their primary care provider (PCP) or VA hospital; while others stated that they had no insurance.

When asked where people in their neighborhood go if they have a mental health concern, they responded that they go to the Behavioral Health Plaza.

When asked why they go there, majority responded that it's convenient and they all have cars to commute easily to their health care provider.

When asked what they do if they have a medical need or mental health crisis after hours, they responded that they would call 911 or go to the Emergency Department.

When asked if they go to work sick because of not having health insurance or paid sick leave, they all stated that they were retired and have health benefits and never worked while being sick.

### **Neighborhood Activism**

When asked about their concerns in their neighborhood, their responses included drugs, crime, lack of healthcare, lack of jobs, trash, unleashed dogs, prostitution, abandoned houses and cars. They were also concerned about drug dealing and illegal activity in the neighborhood.

When asked how they activate their neighborhood to bring about the change they desire, they stated having neighborhood meetings and taking a stand to make change. They would invite the Housing Director, Neighborhood Liaison, Winston-Salem Police to their meetings to talk about different issues and concerns.

When asked if they believe that they can bring the change in their neighborhood, they responded positively. They have had an extensive conversation with the Crime Watch program and have Crime Watch Block Captains and report any suspicious activity to WSPD. They are working hard to getting rid of drug dealers and also they watch their neighborhood closely.

When asked about what would be the best ways to get information to people in the community, they stated that through printed materials(hand outs) and via telephone.

When asked if they know about First Line or 211, they all stated that they did.

When asked what else they could tell us about their community, they expressed their concern about safety and drug dealing in their community.

## **Voices of..... Rockford Community Association**

### **Food Access**

When asked about the barriers/problems they experience by trying to improve their diet and eat healthier, their responses included not being consistent with their diet, eating lots of sweets and eating out a lot. They stated the need to choose the right combination of food to eat.

When asked to share their habits, concerns and interests about food, some stated that traditionally, they cooked with fat meat, grease and ham hock. Others said if they wanted pesticide-free food they had to go to Whole Foods which are quite expensive; also canned foods were cheaper but had lots of sodium which is unhealthy.

When asked where they shop for groceries and why do they go there, their responses included Costco, Sam's Club and Walmart; because the food was cheaper and they could buy in bulk and freeze the food.

When asked where they go when they want to eat out, their responses were K&W, Olive Garden, Arrigato, Texas Roadhouse, Longhorn Steakhouse and Cracker Barrel. They all have cars to get to the restaurants.

When asked if they have skills to prepare healthy meals, they all stated that they do have skills.

When asked to express any of their concern related to the food preparation or storage, they mentioned food borne illness and freeze burn on food kept in freezer too long.

*"..if you don't prepare chicken and poultry right, you can get "Salmonella".*

### **Healthcare Access**

When asked what they do when they get sick and where do they go for medical care, they stated Winston-Salem Health Care and the Emergency Department.

When asked where people in their neighborhood go if they have a mental health concern, they stated the Behavioral Health Plaza or to their primary care provider for the referral.

*"Can give me a Xanax and I feel better"*

When asked why they go there, they responded that they get their prescribed medicines and feel better.

When asked what they do if they have a medical need or mental health crisis after hours, they responded that they go to the Emergency Department.

When asked if they go to work sick because of not having health insurance or paid sick leave, they all stated that they all had paid sick leave benefits.

### **Neighborhood Activism**

When asked about their concerns in their neighborhood, they mentioned the speeding, safety and house maintenance issues in the area. They stated that neighbors do not speak up or want to get involved for fear of retaliation; but they need to watch out for each other.

When asked how they activate their neighborhood to bring about the change they desire, they responded that they had organized in 2009. It was because of stolen cars, speeding, and profanity that they organized, but these problems have subsided since 2009.

When asked if they believe that they can bring the change in their neighborhood, they responded positively and stated that this is why they formed in 2009.

*“We wanted to take our community back, so we could know each other and look out and help each other.”*

When asked about what would be the best ways to get information to people in the community, they stated using flyers because they had no email, website or newsletter.

When asked if they are aware of Neighborhood Liaisons with the City, they all said they did and their liaison “Vanessa Smith” attended all their association’s meeting and she worked closely with them.

When asked what else they could tell us about their community, they stated that their strengths included pulling together, developing a relationship with WSPD and receiving a plaque from the City of Winston-Salem for their efforts. Their concerns included keeping the community, curb and gutters clean and free from debris and keeping stolen vehicles off their streets.

## **Voices of .....Stonewall Community Association**

### **Food Access**

When asked about the barriers/problems they experience by trying to improve their diet and eat healthier, some responded not wanting to change their eating habit; could not get organic vegetables and low sodium food.

When asked to share some of their habits, concern and interests about food, they responded that they avoid foods that are high in fructose corn syrup, use sea salt and avoid MSG.

When asked where they shop for groceries and why do they go there, their responses were Food Lion, Walmart, Harris Teeter and Lowes Foods, because of convenience, great value, and the lay out of the stores.

When asked where they go when they want to eat out, their responses were Ruby Tuesday, Applebee's, Macaroni Grill, Cities, Outback Steakhouse, Carrabba, Chinese food, K&W, Subway and Chi-Fil-A.

When asked if they have skills to prepare healthy meals, they all stated that they did.

When asked to express any of their concern related to the food preparation or storage, they responded that they had no concerns.

### **Healthcare Access**

When asked what they do when they get sick and where do they go for medical care, they all responded to go to their primary care provider (PCP).

When asked where people in their neighborhood go if they have a mental health concern, they responded to go to their PCP for the referral; their therapist or use emergency mental health number.

When asked why they go there, they responded that they trusted in their doctor due to length of their relationship.

*"...twenty-five years with same care provider.."*

When asked what they do if they have a medical need or mental health crisis after hours, they responded that they would call 911, Prime care or wait for the next day to go to their health care provider.

When asked if they go to work sick because of not having health insurance or paid sick leave, some said they missed work but used paid sick leave.

### **Neighborhood Activism**

When asked about their concerns in their neighborhood, they stated the protection of property; new neighbors coming in to the community and not keeping up their property.

When asked how they activate their neighborhood to bring about the change they desire, they usually called their neighborhood president (Spencer) and bring the issue to their meetings.

When asked if they believe that they can bring the change in their neighborhood, they responded positively.

When asked if they had any success making change in their neighborhood, they shared their fact sheet of successes in their neighborhood. They have organized since 1975 due to children playing in their neighborhood. They monitor zoning issues and voice their opinions, home inspection for any code violations every spring.

When asked about what would be the best ways to get information to people in the community, majority stated through printed media such as newsletter, flyers; phone calls; by organizing committees( youth, beautification, hospitality etc); annual community day and pot luck dinner.

When asked if they know about First Line or 211, majority responded “No” but knew about City link.

When asked if they are aware of neighborhood liaisons with the city, they stated that they work closely with their neighborhood liaison, Deronda Kee-Lucas.

When asked what else they could tell us about their community, they mentioned that committee leadership is important to the success of the neighborhood association. They said providing a safe walking route by connecting sidewalks from their neighborhood to Indiana Avenue.

## **Voices of .....Alpha & Omega Church**

### **Food Access**

When asked about the barriers/problems they experience by trying to improve their diet and eat healthier, majority responded the high cost of organic food; their mindset of feeling you can not eat healthy and their environment.

When asked to share some of their habits, concerns and interests about food, majority responded their concern over clean restrooms in the restaurants and grades of restaurants. They stated there was a need to develop good hygiene habits and preferred domestic chickens and eggs. Some mentioned their concern over big chicken parts because of steroids and would rather eat vegetables from their garden and not from the store.

*“people need to wash their hands if they are around food..”*

When asked where they shop for groceries and why do they go there, their responses were Food Lion, Walmart, Lowes Food, Sams, Harris Teeter and Costco. Reasons ranged from convenience, to good deals and low prices.

When asked where they go when they want to eat out, their responses included Golden Corral, Mexican, Japanese, Soul food, Chinese buffet to K&W. They stated that they ride with someone, drive or take the bus to get to the stores and /or restaurants.

When asked if they have skills to prepare healthy meals, majority stated that they do have skills and that Alpha & Omega offered cooking classes to help their residents develop skills.

When asked to express concerns related to food preparation or storage, majority responded that good sanitation and using thermometers in refrigerators was important for food safety.

### **Healthcare Access**

When asked what they do when they get sick and where they go for medical care, responses included their primary care provider, Downtown Health Plaza, Emergency Departments and RJR Health Care.

When asked where people in their neighborhood go if they have a mental health concern, their responses were Hope Ridge, Center Point, Behavioral Health Plaza, Emergency Department, DayMark and the Mental Health Association.

When asked why they go there, they responded because of referral or family recommendation.

When asked how they pay for their health care; majority stated that they had Medicare, Medicaid and SSI.

When asked what they do if they have a medical need or mental health crisis after hours, they responded that they would call 911 and go to DayMark after hour's hotline.

When asked if they go to work sick because of not having health insurance or paid sick leave, majority responded that they had gone to work while sick. They also stated that many people have died because of not having insurance, not seeking treatment and working while sick.

*" ..went to work for months when I was sick.."*

*"..many have died because they did not go to the doctor when sick for lack of health insurance.."*

### **Neighborhood Activism**

When asked about their concerns in their neighborhood, their responses included speeding, child safety, small kids playing without any adult supervision, no sidewalks and drug dealing and usage in the neighborhood.

When asked how they activate their neighborhood to bring about the change they desire, they mentioned that they are supposed to have a community watch, but it does not work in their community. There is constant drug activity; Center for Community Safety is a great help.

When asked if they believe that they can bring the change in their neighborhood, majority responded positively. They stated that there is a need to develop the community watch with trusted leadership for the betterment of their neighborhood.

*"They need to stop being afraid but some lives have been threatened."*

When asked about what would be the best ways to get information to people in the community, majority stated that they have no means of communication.

When asked if they know about First Line or 211, majority responded "No".

When asked if they are aware of neighborhood liaisons with the city, majority stated "No".

When asked what else they could tell us about their community, they stated that Alpha & Omega has a great reputation and is very positive. There is not much crime or gang activity, and that drug activity decreased with closing of a store. There is a need for community activism and involvement; getting the youth involved in church and off the streets; safety; stores overcharging and the need for healthy options in the stores. There is also social isolation of seniors with some being found dead in their residences.



## Voices of ..... Cordero de Dios Church

### Food Access

When asked about the barriers/problems they experience trying to improve their diet and eat healthier, some responded that it was difficult to avoid starchy food and eat healthier. They also stated that their children were obese and it was difficult to motivate them to eat vegetables which are important.

When asked where they shop for groceries and why they go there, their responses were Aldi, Walmart, Compare and Food Lion because of the prices, store specials and finding everything at one place.

When asked where they go when they want to eat out, majority mentioned McDonald's, Pizza and Chinese buffet because of affordability.

When asked how they get to the stores or restaurants, they responded that they drive their own cars, take the bus or walk to the store.

When asked if they have skills to prepare healthy meals, majority stated that they do have skills. However they thought that it was too expensive to cook healthy meals at home.

When asked to express any of their concern related to the food preparation or storage, they responded that foods needed to be labeled properly.

*"... to label food properly, you can only keep food for three days.."*

### Healthcare Access

When asked what they do when they get sick and where do they go for medical care, majority responded that they do not go anywhere because of lack of health insurance, high bills from the Emergency Department and too many requirements from Community Care Center. Some stated that they go to Downtown Health Plaza because of their affordable payment schedule and FC Health Department for referral to other clinics.

When asked where people in their neighborhood go if they have a mental health concern, some responded that they go to FC Health Department because they have resources and contact phone numbers.

When asked how they pay for their health care services, majority responded that they are registered with the Carolina Access program and also have a payment monthly plan.

When asked how they get there, they responded that they rode the bus, took a taxi or drove their cars.

When asked what they do if they have a medical need or mental health crisis after hours, they responded that they call 911. Some mentioned that they do not to call anyone because of language barriers.

*"...I don't call anybody because of the English barrier.."*

*"I don't call 911 because they do not have interpreters and it takes a long time.."*



When asked if they go to work sick because of not having health insurance or paid sick leave, they responded that they can't afford to miss any days of work due to the economy; so they take some medicine and go on to work.

*"..there's not enough money, so we won't waste a day of work.."*

### **Neighborhood Activism**

When asked about their concerns in their neighborhood, their responses were the need for more safe parks for children; affordable daycares; citizens rights regarding debt collectors; lack of interest/support from the police department, robbery, accessible dental clinics and mistreatment from DSS staff.

When asked how they would activate their neighborhood to bring about change, they stated that they wanted to see changes in their community but do not know how to start. They also wanted the WS Police Department to take more interest in their community; and have more support from the local businesses and the City.

*".. we need more information to help us plan.."*

When asked if they have an active neighborhood association, they stated that they had tried about four years prior but it did not work out. There was no firm agreement.

When asked if they knew about First Line or 211 or were aware of neighborhood liaisons with the city, they all responded negatively.

When asked what else they could tell us about their community, they stated that they wanted more daycares; a park for children to play; a library and accessible dental clinics.

## **Voices of ..... Aposento Alto Church**

### **Food Access**

When asked about the barriers/problems they experience when trying to improve their diet and eat healthier, majority stated that organic food was expensive and expressed their concern about unhealthy food in schools.

*"..They develop bad habits and only want hamburgers etc.."*

When asked where they shop for groceries and why do they go there, many responded that they shop at Aldi, Walmart, Compare and Mexican stores because of the prices and great variety.

When asked where they go when they want to eat out, majority mentioned CC pizza and Chinese buffet.

When asked how they get to the stores, they responded that they drove their own cars.

When asked if they have skills to prepare healthy meals, majority believes that they do have skills and they cook healthy meals 2 -3 times during the week.

When asked if they have any concern related to food preparation or storage, there was a need to label the food properly.

## **Healthcare Access**

When asked what they do when they get sick and where they go for medical care, their responses varied from Free Clinic, Church Clinics, Health Fairs and Prime Care to Emergency Department.

When asked where people in their neighborhood go if they have a mental health concern, they all responded that they do not have any mental health concerns and were all fine.

When asked how they pay for their health care services, some responded that their Church helps or the State.

When asked what they do if they have a medical need or mental health crisis after hours, they responded that they call 911.

When asked if they go to work sick because of not having health insurance or paid sick leave, majority responded that they work sick because some are temporary workers and have no paid sick leave.

*“ If you don’t show for work there is someone right behind you to take your place”*

*“Who’s going to pay the bills if you don’t work?”*

## **Neighborhood Activism**

When asked about concerns in their neighborhood, they stated robbery, gang activity, loud music and public safety for children.

*“ the police aren’t interested in getting to Latino neighborhoods”*

*“They are good at giving tickets to Latinos.”*

When asked how they would activate their neighborhood to bring about change, they stated that they talk in church or through the radio and pass news to everyone in the community.

When asked if they think that they have an active neighborhood association, they stated that they are involved in Neighborhood Watch. They communicate by putting notices on doors.

When asked if they have had any success making changes in their neighborhood they stated they have landlords to fix broken items; they put new swings but they were broken within 2 days. They have crime stoppers; they organize to clean the neighborhood and Lakeside has security checks.

When asked if they knew about First Line or 211 or aware of neighborhood liaisons with the city they all responded negatively.

When asked what else they could tell us about their community, they mentioned the need for government help to create more programs for teen education about sex and pregnancy. They also wanted access to dental care, eye care and healthcare; more resource information; YMCA programs are unaffordable; after school care at churches to help with homework and English

*“It’s one thing not to be able to see well, but if you have a horrible tooth pain, you can’t eat”*

*“They give food but sometimes it’s food we don’t eat or can’t cook”*

## **Analysis of each interview questions:**

### **FOOD ACCESS**

#### **Question 1: What barriers/problems do you think you would experience by trying to improve your diet and eat more healthfully?**

Below are the most common responses:

- Developing a habit of eating healthy
- Changing your diet is in your mind
- Not having the time to cook
- Cost of healthier food
- Limited cooked vegetables
- Eat out a lot - hard to find healthy fast food
- Avoid high fructose food; no MSG and prefer low sodium food

*“More problems as you age – eating well eliminates some of the problems that come with aging.”*

*“Price – quality foods cost more.”*

*“On the go – eat out a lot- hard to find healthy fast food.”*

*“Sticking to it, being consistent.”*

*“Not wanting to change eating habits no matter how harmful the food.”*

*“Mindset - feeling that you can’t eat healthy.”*

*“Food not the same as 30-40 years ago – now we have a lot of pesticides. Hormones get into the children and they mature earlier.”*

#### **Question 1(b): What are your habits, concerns, and interests about food?**

Below are the most common responses:

- Cooking style
- Cultural differences
- Hygienic habits
- Prefer domestic chicken/eggs and home grown vegetables
- Eating habits
- Love of fried food
- Cost of organic food

*“Concerns about the selection of food in the school system”.*

*“If you don’t prepare chicken and poultry right, you can get salmonella.”*

*“I am concerned about how big chicken parts have gotten – from steroids.”*

*“When you see seasoned chicken in the store, the chicken is old and I don’t buy it.”*

*“They eat unhealthy foods that they were raised eating knowing it is not healthy but they still do.”*

*“Getting food pesticide-free.”*

### **Question 1 (c): Where do you shop for groceries?**

Below are the most common responses:

- Walmart
- Food Lion
- Costco
- Aldi's
- Sam's Club
- Harris Teeter
- Compare

*"People drive to other neighborhood stores due to poor customer service, poor food quality, long lines, and their stores don't have the same food items as other stores across town."*

*"They have a van that goes to the grocery store 2-3 times/month...."*

*"People without cars can't go to other stores; they can only go where they can get to."*

*"Food Lion on Hwy 109 not the one on Waughtown (..... deal with attitude when you get groceries – due to young people – they bring attitude to work. At the Food Lion on 109, they greet you when you come in."*

### **Question 1 (d): Why do you go there?**

Below are the most common responses:

- Good, cheaper prices
- Closer and convenient
- Buy in bulk
- Special food items
- Better deals and use coupons

*"They have low prices - the ones on the outskirts of town have better food than in East Winston."*

*"People drive to other neighborhood stores due to poor customer service, poor food quality, long lines, and their stores don't have the same items as other stores across town."*

*"I buy in Walmart when they have specials and Aldi because it is cheaper than the Mexican store. I go where it is more economical."*

### **Question 1(e): Where do you go when you eat out?**

Below are the most common responses:

- Steak houses
- K&W
- Golden Corral
- Chinese food
- Metas
- Japanese restaurants
- Fast food restaurants
- Depends on their budget

•  
*“Have to drive far due to the lack of “good” restaurants in their neighborhood.”*  
*“Have a lot of fast food restaurants in their neighborhood with poor quality of food choices.”*  
*“Drive to Kernersville because there more choices of good restaurants.”*

### **Question 1(f): How do you get to the store and/or restaurants?**

More than half of the respondents stated that they had their own transportation; others rode the bus; walked; rode with someone else or transportation was provided.

*“Heritage provides a bus service once a month to go out to eat - they go to various restaurants in the community.”*

*“I walk to Food Lion, because it is closer”.*

*“But the truth is, sometimes we don’t want to walk and take the car instead.”*

### **Question 1(g): Do you have the skills to prepare healthy meals?**

Participants overwhelmingly stated that they had skills to prepare healthy meals.

*“Use cook books to help prepare healthy food.”*

*“No facilities to prepare own food.”*

*“Alpha & Omega has offered cooking classes and would like to do this again.”*

*“Yes, we cook them sometimes 2-3 times per week.”*

### **Question 1(h): Do you have any concerns related to food preparation or storage?**

Below are the most common responses:

- Preparing food at the right temperature
- Cross contamination
- Food getting bad (spoilage)
- Label the food properly
- Getting food pesticide free
- Eat proper portions
- Food safety
- Quantity to purchase

*“Yes preparing food at the tight temperature such as chicken to prevent food poisoning.”*

*“Concerned about food going bad (spoilage).”*

*“Getting food pesticide-free – you have to go to whole foods and it is expensive.”*

*“Canned foods are not that good for you – they have a lot of sodium and stay in the can too long (it is cheap).”*

## **Healthcare Access**

### **Question 2(a): When you get sick, where do you go for medical care?**

Majority of the participants went to their primary care provider for medical care. Other responses are listed below:

- Primary care provider
- Emergency Department
- Don't have insurance and can't get Medicare
- Downtown Health Plaza
- Church & Free Clinics
- Health fairs

*"All have a medical care provider off site".*

*"Have healthcare issues but don't go to a healthcare provider because don't have enough money to pay for care."*

*"The truth, I don't go anywhere, first of all because the hospital I used to go( Forsyth or Baptist) takes a long time to see you, then you have a huge bill of \$1000 or \$1500..... therefore I just buy something to help me at the store."*

*"Health Department, because sometimes they might refer me to some clinics."*

**Question 2(b): Where do people in your neighborhood go if you have a mental health concern, where do you get help?**

For mental health concerns, majority stated that they used the referral from their primary care provider. Other responses are listed below:

- Primary Care Provider referral
- Hope Ridge Behavioral Health Plaza
- Day Mark
- Center Point
- Mental health crisis number
- Therapist/ Psychiatrist
- Downtown Health Plaza
- Emergency Department

*"Go to own doctor and ask for a referral."*

*"Working with the school system they provided mental health coverage."*

*"Downtown Health Plaza will work with you if you don't have medical insurance."*

**Question 2(c): Why do you go there?**

Below are the most common responses:

- Length of their relationship
- Convenience
- Primary Care Provider Referral
- Bedside manners

*"..recommendation from my sister."*

*"25 years with the same provider."*

*"Have insurance but - have to take turns going to the doctor and dentist."*

**Question 2(d): Who do you see?**

Below are the most common responses:

- Primary Care Provider (PCP)
- Day Mark
- Emergency Department

**Question 2(e): How do you pay for it?**

Majority had some form of health insurance; other responses are listed below:

- Health insurance
- Church assistance
- State assistance
- Medicare and Medicare

*“I am in the program Carolina Access and just pay a co-payment.”*

*“Make a payment plan; you can pay \$20, \$30 or \$50 dollars a month.”*

*“I’ll be honest with you; I don’t [Baptist Hospital]. I haven’t paid in 3 times that I’ve been. The state pays for me.”*

**Question 2(f): How do you get there?**

The most common responses are listed below:

- Personal car
- Ride a bus
- Van service
- Taxi

**Question 2(g): What do you do if you have a medical need or mental health crisis after hours?**

Below are the most common responses:

- 911
- Primary Care Provider on-call service
- Emergency Department

*“DayMark after hour’s hotline”.*

*“Bad experience at Prime Care so waited and suffered with an injury throughout the weekend to go to primary care provider on Monday.”*

*“Only go to emergency after hours care unless have to (i.e. kids are sick).”*

**Question 2(h): Did you go to work sick because you didn't have health benefits and paid sick leave?**

The majority of the respondents stated that they go to work sick; others stated that they had health benefits and paid leave.

*"There is not enough money, so we won't waste a day of work."*

*"In my job, we don't have permission to go to the doctor."*

*"We work temporary, with 3 no shows you lose your job even with a note from a doctor."*

*"Who's going to pay the bills if you don't work? - Single mother with no benefits, you have to go."*

**Neighborhood Activism**

**Question 3(a): What are some concerns in your neighborhood?**

Their various responses are listed below:

- Increased crime, gangs & public safety
- Drug activity; gang activity
- Traffic, speeding cars & child safety
- Keeping community clean
- Maintenance and upkeep of properties
- Unleashed dogs
- Lack of job opportunities
- Prostitution
- Boarded houses
- Citizen's right regarding debt collectors
- Lack of interest by law enforcement
- Broken sewage pipes
- Affordable daycare
- Affordable teen programs

*"In the community where I lived (lakeside) there are a lot of gangs. The situation is critical. Many young children live there."*

*"Lack of interest from the police department when we ask for help."*

*"Concerned about new neighbors coming into the community and not keeping up their property."*

*"Local business not concerned about illegal activity – often, criminals duck into a store to hide from law enforcement, because they buy from the store, the store owner/worker doesn't turn them in."*

*"Neighbors that don't speak up when they know something is going on – they don't want to get involved. Maybe they are afraid - retaliation."*



**Question 3(b): If you have a concern about a neighborhood issue, how would you activate your neighborhood to bring about the change you desire?**

Their responses varied as listed below:

- Neighborhood meeting
- Exchange ideas
- Bring issue up with Executive Director
- Neighborhood Association President
- Bring in the attention of Police
- Help line
- Radio
- Church gatherings

*“We are supposed to have a community watch, but it does not work”.*

*“Invite Housing Director, WSPD, neighborhood liaison and others to meeting.”*

*“We want the Police Department to have more interest in our community. We call them for an important need, and they don’t show up at your house.”*

*“Many of us are here today because we want to see changes, but we need support from the police and the local business.”*

**Question 3(c): Do you believe you can bring about the change you desire?**

The overwhelming majority said “Yes”

*“...We need to develop the community watch...”*

*“... There are prominent signs in neighborhood for Crime Watch. She has neighborhood crime watch Block Captains, knows the boundaries of her neighborhood and the captains report problems to her, she then reports the problems to WSPD (eliminates too many calls going to WSPD). She further stated that the WSPD does a criminal background check on Block Captains- this way you now the person isn’t working for a drug dealer and just wanting to share the information with the dealer.”*

**Question 3(d): Do you have an active neighborhood association? If yes, how do they communicate with you?**

Majority stated that they had an active neighborhood association. The best ways to communicate within their community is listed below:

- Printed media: flyers, newsletter
- Email chain
- Calling neighbors
- Door to door
- Dining Room Committee
- Contact Board members
- Suggestion box

*“Use door to door due their age and could use younger people involved.”*

*“Have a Residents Council with officers. Meetings happen and minutes are taken but information /minutes are not posted so people don’t know what is going on or aware of changes. Information not posted.”*

*“We are supposed to have a neighborhood watch, but have no communication.”*

**Question 3(e): Have you had any success making change in your neighborhood?**

Their responses are listed below:

- Put speeding signage in neighborhood
- Crimes watch
- Clean up neighborhood
- Menu changes
- Zoning issues
- Inspection for housing code violation

*“We need parks for kids. Many times kids are playing in the streets.”*

*“On Peters Creek they put up new swings and in 2 days they were broken. It had to be bigger kids. There were trash and cigarette butts.”*

*“Stop building stores in neighborhoods.”*

**Question 3(f): Are you aware of the Neighborhood Liaisons with the City?**

More than half of the responses stated that they were aware of the Neighborhood Liaisons with the City

**Question 3(g): Do you know about First Line or 211?**

About 82% of the respondents stated that they knew about First Line or 211.

**Closing Question: What else do you think we should know about your neighborhood and community?**

**Positive feedback**

- Built relationship with WSPD
- Community day event
- Diversity in age, gender and ethnicity
- Excellent staff in retirement home
- Good neighbors
- Strong leadership
- Very cohesive neighborhood
- Very protective neighbors
- Well connected and very friendly
- Well kept building

## Concerns

- Accessible dental care
- Accessible eye care
- Accessible healthcare
- Affordable tubal ligations
- Affordable YMCA programs
- Afterschool care @ church for home work and teaching English
- Break-ins
- Crossing lane on Peters Creek parkway and Academy Street
- Drug activity
- Get youth involved and off the streets
- Healthy food options in schools
- Keep community, curbs and gutters clean
- Maintenance and upkeep of property
- More affordable daycare for Hispanics
- Need community activities
- Need for community garden
- Programs to prevent teen pregnancy
- Safe walking route on Indiana Avenue
- Social isolation of senior citizens
- Stores over-charging
- Safety

# **APPENDIX A**

## **Focus Groups**

**Group 1**

Date: March 21, 2011  
Time: 11.00am  
Location: Sold Rock Church  
Target Group: Council Heights  
Neighborhood  
Racial Composition: African Americans  
Number of Participants: 16

**Group 2**

Date: March 23, 2011  
Time: 11:00am  
Location: Heritage Woods  
Target Group: Seniors  
Racial Composition: Whites  
Number of Participants: 6

**Group 3**

Date: March 28, 2011  
Time: 6:00pm  
Location: Christ Moravian Church  
Target Group: West Salem Neighborhood  
Racial Composition: White & African  
Americans  
Number of Participants: 12

**Group 4**

Date: March 31, 2011  
Time: 6.00pm  
Location: Fine Delta Arts Center  
Target Group: City View Neighborhood  
Racial Composition: African American  
Number of Participants: 8

**Group 5**

Date: April 4, 2011  
Time: 6.00pm  
Location: Sprague Recreational Center  
Target Group: Rockford Community  
Association  
Racial Composition: African Americans &  
White  
Number of Participants: 7

**Group 6**

Date: April 17, 2011  
Time: 6:00pm  
Location: Bethabara Visitors Center  
Target Group: Stonewall Neighborhood  
Association  
Racial Composition: African Americans &  
White  
Number of Participants: 13

**Group 7**

Date: August 17, 2011  
Time: 12:30pm  
Location: Alpha & Omega Church of Faith  
Target Group: Congregation  
Racial Composition: African Americans  
Number of Participants: 9

**Group 8**

Date: August 19, 2011  
Time: 1.00pm  
Location: Cordero de Dios  
Target Group: Congregation  
Racial Composition: Hispanics  
Number of Participants: 14

**Group 9**

Date: August 25, 2011  
Time: 7:00pm  
Location: El Aposento Alto  
Target Group: Congregation  
Racial Composition: Hispanics  
Number of Participants: 8

## **APPENDIX B**

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### **Focus Group Guide (English & Spanish)**

## 2011 Community Health Assessment FOCUS GROUP GUIDE

### Opening

- *Thank you* for taking the time to meet with us for this discussion group. We recognize that your time is valuable and we appreciate your participation.
- We are part of a community health assessment team made up of community residents and representatives from several organizations which reflect all facets of the community.

The purpose of the group is to help the Forsyth County community to identify its strengths, challenges, and future directions.

My name is \_\_\_\_\_ and I am from \_\_\_\_\_ (*fill in appropriate agency*). I am here today with \_\_\_\_\_ from \_\_\_\_\_, who will be taking notes on what is said during the discussion. The information we gather will be summarized and shared with the community and agencies within Forsyth County. The community assessment will also be used to update the Forsyth County Community Health Assessment Report. A copy of the report will be sent to the NC State Office of the Department of Health and Human Services. The document will be used to support health planning and advocacy needs in Forsyth County. We will share with the community through the local libraries and the Health Department website. If you would like to receive a copy of the executive summary by mail or e-mail, please put your name and address on the sign-up sheet.

- The purpose of speaking with you today is to find out about your thoughts and experiences of living in Forsyth County. We are interested in your opinions. **There are no right or wrong answers.**
- The discussion should last about 60-90minutes.

### Confidentiality

- Your comments today will remain confidential. We will be reporting summaries of the comments made by community members but will not identify who said what, nor will we identify the names of the individuals who participate. We would like to only use first names in the discussion, if that is okay.
- We would also like to take notes and tape record this interview. Your input is important and we want to make sure that we accurately record what you tell us. After we are finished using the tapes to summarize what people say, the tapes will be stored at the Forsyth County Department of Public Health. However, your full name will not be attached to the tape. Is this okay with everyone?

### Ground Rules

- You are not required to answer any question you may not wish to answer.
- If at any time while we are talking you do not feel comfortable, you do not need to respond.
- Please speak clearly, listen to the responses of other participants, and do not interrupt others.
- If you cannot hear what I am saying or what the other participants are saying, please ask us to speak up.
- Also, please do not discuss responses of the people in this discussion with others when you leave here today – this is one of our confidentiality guidelines.
- Limit your answers to **30 seconds.**

### Ice-breaker (10min)

*The point of this exercise is to have everyone introduce someone else. After forming into pairs, the first person interviews the other person to find out their name and institution/work situation and other non-professional things such as hobbies, pets, or favorite vacation spot. At three minutes, the leader calls time and the second person interviews the first. At three minutes everyone returns to the circle and then each member of the group introduces their partner.*

### Food Access (15 mins.)

- What barriers/problems do you think you would experience by trying to improve your diet and eat more healthfully?
- Probe or Follow-up questions:
  - What are your habits, concerns, and interests about food?
  - Where do you shop for groceries? Why do you go there?
  - Where do you go when you want to eat out? Why do you go there?
  - How do you get to the store and/or restaurants?
  - Do you have the skills to prepare healthy meals?
  - Do you have any concerns related to food preparation or storage?

### Healthcare Access (15 mins.)

- When you get sick, where do you go for medical care?
- If you have a mental health concern, where do you get help?
- Probe or Follow-up questions:
  - Why do you go there?
  - Who do you see?
  - How do you pay for it?
  - How do you get there?
  - What do you do if you have a medical need or mental health crisis after hours?
  - How many days did you miss work last year because you were sick?
  - Did you go to work sick because you didn't have health benefits and paid sick leave?

### Neighborhood Activism (15 mins.)

- What are some concerns in your neighborhood?
- Probe or Follow-up questions:
  - If you have a concern about a neighborhood issue, how would you activate your neighborhood to bring about the change you desire?
  - Do you believe you can bring about change in your neighborhood?
  - Do you have an active neighborhood association? If yes, how do they communicate with you?
  - Have you had any success making change in your neighborhood?
  - Are you aware of the Neighborhood Liaisons with the City?
  - Do you know about First Line or 211?

### Closing (5 mins.)

- What else do you think we should know about your neighborhood and community?  
**Probe:** *What do you see as strengths or good things about your community?*
- Of all the issues we have talked about today, which one do you think is the most important for your community to address?



Condado de Forsyth  
Evaluación de Salud en la Comunidad 2011  
GUIA DE ENFOQUE EN GRUPO

Apertura

- Gracias por haber tomado el tiempo de reunirse con nosotros para un intercambio de opiniones en grupo, sabemos que su tiempo es valioso por eso apreciamos su participación.
- Somos parte de un equipo de evaluaciones en salud para la comunidad, formado por residentes y representantes de varias organizaciones que reflejan todas las facetas de la comunidad.

El propósito de este grupo es de ayudar a la comunidad del Condado de Forsyth a identificar cuales son sus puntos fuertes, desafíos y orientación futura.

Mi Nombre es \_\_\_\_\_ y soy de \_\_\_\_\_  
(llenar la agencia apropiada) Estoy hoy con \_\_\_\_\_ de \_\_\_\_\_  
\_\_\_\_\_ que va a estar tomando nota de lo que sea mencionado durante este debate. De la información obtenida se va hacer un resumen y compartir en la comunidad y con las agencias dentro del Condado. La evaluación en la comunidad también va a ser usada para actualizar el reporte de evaluación de la salud comunitaria del Condado de Forsyth.

Una copia del informe será enviado a la oficina del estado de Carolina del Norte del Departamento de Salud y de Servicios Humanos. El documento será utilizado para apoyar las necesidades de planificación y recomendaciones de salud en el Condado de Forsyth. También compartiremos la información con la comunidad a través de las bibliotecas locales y por la red de Internet (website) del Departamento de Salud. Si usted desea recibir una copia del resumen por correo o correo electrónico, por favor anote su nombre y dirección en la hoja de asistencia.

- El propósito de hablar con ustedes es de conocer sus ideas y experiencias que están viviendo aquí en el Condado de Forsyth, estamos interesados en sus opiniones. No hay respuestas correctas ni incorrectas.
- Este debate tomara un promedio de 60 a 90 minutos.

**Es confidencial**

- Sus comentarios se mantendrán confidencialmente. Nosotros haremos un resumen de los comentarios hechos por los miembros de la comunidad, pero no se identificará a nadie, ni identificaremos a ningún nombre de los que participen. Solo nos gustaría usar su primer nombre durante nuestro debate, sí es que están de acuerdo
- También nos gustaría escribir notas y usar la grabadora para esta entrevista. Su aportación es importante y queremos asegurarnos de que estamos grabando precisamente lo que nos expresa. Después de que hayamos usado las grabaciones para hacer un resumen de lo que los participantes han mencionado; las cintas serán guardadas en el Departamento de Salud del Condado de Forsyth. No obstante su nombre no estará escrito en la cinta. ¿Están de acuerdo todos?

Reglas generales

- No es requerido que conteste alguna pregunta que no desee responder.
- Si en cualquier momento no se siente cómodo(a) mientras hablamos, no necesita responder.
- Por favor hable claro, escuche las respuestas de los demás participantes y no interrumpa a otros.
- Si en algún momento usted no me escucha o no escucha lo que esta diciendo algún participante, siéntase en confianza de pedir que se hable más alto.
- También les pedimos que al salir de aquí, no discuta con otros las manifestaciones de los demás participantes. Esta es parte de las instrucciones de confidencialidad.
- Limite sus respuestas a **30 segundos**

- Actividad de acogida (10 min.)

*El punto de este ejercicio es que alguien tiene que presentar a otra persona. Después de formar parejas, la primera persona entrevista a la otra persona para averiguar su nombre y situación del trabajo o la institución y otras cosas no relacionadas a la profesión como los pasatiempos, mascotas, o el lugar preferido para ir de vacaciones. A los tres minutos, el líder suspende la entrevista diciendo “tiempo” y la persona que fué entrevistada ahora entrevista a la que le preguntó. A los tres minutos todos volvemos al círculo y entonces cada miembro del grupo presenta a su compañero.*

**Food Access (15 mins.)**

- What barriers/problems do you think you would experience by trying to improve your diet and eat more healthfully?
- Probe or Follow-up questions:
  - What are your habits, concerns, and interests about food?
  - Where do you shop for groceries? Why do you go there?
  - Where do you go when you want to eat out? Why do you go there?
  - How do you get to the store and/or restaurants?
  - Do you have the skills to prepare healthy meals?
  - Do you have any concerns related to food preparation or storage?

**Healthcare Access (15 mins.)**

- When you get sick, where do you go for medical care?
- If you have a mental health concern, where do you get help?
- Probe or Follow-up questions:
  - Why do you go there?
  - Who do you see?
  - How do you pay for it?
  - How do you get there?
  - What do you do if you have a medical need or mental health crisis after hours?
  - How many days did you miss work last year because you were sick?
  - Did you go to work sick because you didn't have health benefits and paid sick leave?

**Neighborhood Activism (15 mins.)**

- What are some concerns in your neighborhood?
- Probe or Follow-up questions:
  - If you have a concern about a neighborhood issue, how would you activate your neighborhood to bring about the change you desire?
  - Do you believe you can bring about change in your neighborhood?
  - Do you have an active neighborhood association? If yes, how do they communicate with you?
  - Have you had any success making change in your neighborhood?
  - Are you aware of the Neighborhood Liaisons with the City?
  - Do you know about First Line or 211?

**Cierre del debate (5min.)**

¿Qué otra cosa piensa usted que debemos de saber sobre su comunidad y vecindario?

**Investigue:** ¿Cuáles puntos fuertes o cosas buenas mira en su comunidad?

• De todos los problemas planteados, ¿Cuál de ellos opina usted que es el más importante, que su comunidad debe de abordar?

## **APPENDIX C**

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### **Informed Consent Forms (English & Spanish)**

**INFORMED CONSENT FORM**

The Forsyth County Department of Public Health is conducting the 2011 Community Health Assessment process which includes gathering opinions and experiences from Forsyth County residents on community health issues. The purpose of the process is to help the Forsyth County community to identify its strengths, challenges, and future directions.

**I AGREE TO PARTICIPATE IN THIS RESEARCH STUDY UNDER THE FOLLOWING CONDITIONS:**

1. I understand the purpose of the study is to have a discussion group to find out my opinions about community health issues.
2. I understand the study involves a focus group interview that lasts 60-90 minutes and will be audio taped.
3. My participation will be kept confidential and no reference to my name will be used in any reports or documentation.
4. I agree to arrive on time and stay for the entire discussion.
5. My participation is voluntary.
6. I understand that I may not receive any direct benefit from participating in the study, but that my participation may help others in the future.

I have read and understand this information, and I agree to take part in this focus group.

\_\_\_\_\_  
PARTICIPANT'S SIGNATURE

\_\_\_\_\_  
DATE

## **FORMULARIO DE CONSENTIMIENTO E INFORMACIÓN**

El Departamento de Salud Publica del Condado Forsyth esta llevando acabo el proceso 2011 de evaluación y sugerencias sobre la Salud de la Comunidad. La cual incluirá una recopilación de opiniones y experiencias de residents del Condado Forsyth sobre temas de salud. El propósito de este proceso es de ayudar a la comunidad del Condado Forsyth a identificar sus puntos fuertes y su orientación futura.

### **ESTOY DE ACUERDO EN PARTICIPAR EN ESTE ANÁLISIS BAJO LAS SIGUIENTES CONDICIONES:**

1. Entiendo que el propósito de este análisis es de tener una discusión en grupo para saber mis opiniones sobre el tema de salud en la comunidad.
2. Entiendo que el estudio envuelve una entrevista de enfoque en grupo que durara de 60 a 90 minutos y será grabado en una cinta.
3. Mi participación se conservara confidencial y no habrá referencias sobre mi nombre, ni será usado en ningún reporte o documentación.
4. Estoy de acuerdo de llegar a tiempo y quedarme hasta que acabe este análisis.
5. Mi participación es voluntaria.
6. Entiendo que quizás no pueda recibir beneficio directo participando en este análisis, pero mi participación puede ayudar a otros en el futuro.

\_\_\_\_\_  
Firma del Participante

\_\_\_\_\_  
Fecha

**Community Stakeholders Interview**  
2011 Community Health Assessment  
Forsyth County, North Carolina

Analysis of Data and Preparation of the Final report by

Ayotunde Ademoyero, MPH

Forsyth County Department of Public health

January 2012

## Community Stakeholders Interview

### Methodology

From March to June of 2011, Forsyth County Department of Public Health; Forsyth Futures staff and Forsyth County Healthy Community Coalition members conducted telephone interviews with 41 stakeholders representing multiple organizations in Forsyth County. The interviewees worked in the key sectors of the community, including cultural, recreation, healthcare, education, business, law enforcement and social services.

Participating stakeholders were assured that their personal identities would be protected and would not be connected to the report during the interview consent. Stakeholders shared information about the services they provide, their perceptions on current and emerging community issues, the strengths of the community, and areas that need improvement.

Data was recorded in the written form and analyzed by counting the number of participants comments made about a topic or issue. Only the most often mentioned topics or issues are presented in this report, and illustrative quotes that reflect the themes have been included. In instances in which identifying information is included, statements were paraphrased. The interview results are summarized below.

### Interview Participants

There were 41 interviews conducted. Participants from the following agencies and organizations participated in the stakeholders interviews:

Arts Council of Winston-Salem/Forsyth County	Piedmont Environmental Alliance
BB&T Corporation	Carolina Farm Stewardship Association
Centerpoint Human Services	Senior Services
City of Winston-Salem	SmartStart of Forsyth County
Data Max	Tanglewood Park
Department of Juvenile Justice	Temple Emmanuel
Department of Social Services	The Children's Home
Family Services, Inc	UNC School of the Arts
Forsyth County Government	Wake Forest University
Forsyth County Sheriff's Office	Winston-Salem Foundation
Forsyth Technical Community College	Winston-Salem Police Department
Goler Community Development Center	Winston-Salem State University
Goodwill Industries	Winston-Salem Symphony
Insight Human Services	Winston-Salem/Forsyth County School System
Kate B. Reynolds Foundation	WS Sustainability Resource Center
Mental Health Association of Forsyth County	WSSU Center for Community Safety
Neighborhood Solutions	YMCA
Novant Health	Z. Smith Reynolds Foundation

## **Analysis of each interview question**

### **1. What services does your agency or organization provide for community residents?**

Most agencies offered a multiple services to the community. The most-provided services were related to youth and physical health (9), mental health and/or substance abuse (8), education (5), social services (5), government and public safety(4), grants and funding (4), and the arts (4).

### **2. What populations benefit from the services of your organization?**

Approximately half of all participants stated that their agencies benefited all populations (19), while others reported that their agencies were to benefit children and/or youth (9), and low income individuals (5).

### **3. What are some of the main barriers that county residents face in accessing your services?**

Participating stakeholders stated that the main barriers for residents seeking to access their agencies' services were as follows:

- Lack of accessibility and awareness of services (17)
- Economic Stress/ Affordability (11)
- Transportation (8)

Language Barriers (5)

*"...stigma associated with mental illness; Lack of awareness of the Mental Health Association and its related services"*

*"The perception of a language barrier; Lack of awareness regarding specialty and newer services"*

*"...worry about transportation in centralized location particularly homebound/elderly"*

*"Social/economic stress factors prevent parents from seeking access & lack of awareness of mental health services"*

### **4. What would you consider to be the major strengths in our county?**

Stakeholders indicated that Forsyth County has much strength. The most often mentioned strengths are listed below:

- Caring and philanthropic nature of the community (13)
- Good health care system and two well managed hospitals (12)
- Quality schools and post-secondary educational institutions (12)

Variety of services and resources available, including non-profits, foundations, and community agencies/ organizations (10)

*"We have a positively engaged community with much philanthropy and volunteerism..."*

*"Two major medical centers; active EMS; on the whole our community is well"*

*"Quality of life; local health care; local colleges and universities; strong public schools and private schools"*

*"...very livable place, easy to get around, people are personable..."*



**5a. What do you consider to be the major challenges or needs for residents that are not being addressed?**

Stakeholders indicated that the major challenges or needs for residents that are not being addressed are as follows:

- Employment opportunities/Retraining & Job Skills (7)
- Financial constraint (5)
- Mental health issues (5)
- Wealth disparity (4)
- Access to healthcare (3)

*“Rising rates of co-morbidities in older adults with cardiovascular disease, diabetes, and cancer; Obesity epidemic in kids – a generation of kids getting early diabetes and Type 2 diabetes”*

*“Gaps in service - mental health - not addressing mental health in terms of types of services”*

*“...increasing gap between low and high SES not being addressed in our current conversations;”*

*“Underemployment; Employment - We need more appropriate level compensation and skills for jobs.”*

**5b. In your opinion, why are the major challenges not being addressed?**

The most often mentioned major challenges not being addressed were as follows:

- Inadequate funding/legislatures cutting funding (11)
- Slow job growth/underemployment (3)
- Racial segregation (3)

*“....general stress of inadequate funding for HHS creates competition for funding”*

*“When employers sent jobs out of county, no system (job retraining) was put into place for people to train for new jobs”*

*“Racial divide is not being addressed. There is no recognition that it truly exists”*

**6. What do you perceive to be the major health related problems in our county?**

The most often mentioned major health-related problems they perceived in their county are listed below:

- Overweight and obesity (18)
- Mental health issues; lack of mental illnesses services (8)
- Chronic illnesses such as diabetes, high blood pressure, heart disease (8)
- Access to healthcare; no health insurance (7)
- Infant mortality (5)
- Substance abuse /addiction (4)

*“...youth-unhealthy/inactive lifestyles; obesity, child diabetes, high blood pressure, stress..”*

*“Extreme use of emergency room for non-emergency issues due to lack of insurance.”*

*“Smoking – RJR has been a great community partner, but tobacco is still a bad product and shows up in our infant morality rates. “*

*“Mental Health (due to restructuring at the state level); Obesity”*

## **7. How would you try to reduce these health related problems?**

Stakeholders gave many valuable suggestions and ideas to reduce those health-related problems mentioned in question 6 as listed below:

### **Obesity/overweight, Nutrition, Physical Activity and Lifestyle**

*“...sidewalks, easier access to walk around, how we plan our community - not pedestrian friendly- kids can't walk”*

*“Obesity efforts across the whole community including schools and businesses”*

*“More sidewalks – expanded parks and greenways, especially in poor neighborhoods;”*

*“Improve access to healthy foods; create more physical activity opportunities; early treatment of high blood pressure;*

*“...education on resources low/free recreation; physical self assessment; run/rollerblade/walk, start a walking club at work*

### **Mental Health**

*“...address mental health issues, provide access to mental health care”*

*”Improve education in the community at large to improve understanding and knowledge about the benefits of good mental health services – this would help us all – not just those who are mentally ill.”*

*“Mental health needs to be restructured and addressed at the state level with input from local providers;”*

### **Chronic and/ Or Preventable Illnesses**

*“...implement a wellness initiative as part of insurance program”*

*“...programs to assist eliminating smoking habits - not a cost burden, the problem ; need more prenatal screening”*

*“Create more recreational opportunities that engage whole families in physical activity and other healthy habits; Make physical activity part of our culture, with more employee wellness and community support.”*

*“Keeping diabetes and blood lipids under control; Early cancer screenings”*

## **8. What are the strengths of the health services available in our county?**

The most often identified strengths in their county were:

- Having two large hospitals (22)
- Abundant and top notch health care services (15)
- Access to health care (13)

*“...excellent hospitals and physicians access is good; affordability is the issue”*

*“We have the best resources (hospital providers) around for major “diseases” and “injuries”, but we lack services for everyday health and well-being.”*

*“We have a broad base of specialists; Very accessible services; First rate services”*

*“..high quality care access, lots of organizations, best safety net”*

## **9. What health services are needed for children and adolescents that are not being provided in our county?**

The most identified health services that are needed for children and adolescents were:

- Access to mental health (8)
- Lack of education and awareness (5)
- Basic dental health (5)
- Recreation facilities and activities (4)

*“...mental health long term services - few for preschool/ early childhood services.”*

*“Outpatient mental health services are needed for adolescents. Alternatives are needed to institutions and prisons.”*

*“We have Brenner Children’s Hospital (excellent), but we need more public awareness about the available services offered.”*

*“Recreational activities and facilities are needed – more outside activities to get kids away from screens – we need bigger capacity.”*

*“.....dental care for certain populations, regular primary care”*

## **10. In your opinion, which one service needs the most improvement in our county? (Stakeholders were read a list of 20 options from which they could select. The list included “other” and “none.”)**

Their selection of services was as follows:

- Availability of employment (11).
- Universal health care and more affordable health services (7)
- Counseling/ mental health/ support groups (4)
- Positive teen activities (3)
- More affordable housing (3)
- Healthy family activities(2)
- Higher paying employment(2)
- Better/ more healthy food choices(2)
- Transportation options(1)

## **11. In your opinion, what could be done to make the job market better for our county?**

The responses varied from providing business incentives to policies as listed below:

- Business Incentives (7)
- Education (6)
- Investment in small Business (5)
- Job training in high school; trained workforce (4)
- Opportunity for entrepreneur (4)
- Better policies and effective planning (3)

*“Attract businesses with reasonable taxes and investment in workforce.”*

*“Give incentives for businesses to locate and expand. Having good schools, medical system, and art make it attractive for businesses to locate.”*

*” Provide job training classes in high schools for students not pursuing college.”*

*“We have a lot of proposals on the table on that - continue to be road blocks in policies that cause it to make it difficult”*

*“Improve graduation rates; literacy rates and decrease dropouts”*

## **12. Which community organizations would you say are most active in the county?**

The most mentioned active organizations were:

- United Way (16).
- Forsyth Future (10)
- Faith-based communities/ organizations (8)
- CHANGE (8)
- YMCA/YWCA (5)
- Art community (5)
- Chamber of commerce (5)

## **13. How would you characterize the way different races or ethnic groups get along?**

Race relations were characterized as follows:

- Great diversity (9)
- Relation between different races and ethnic groups are getting better (9)
- Too much segregation in jobs, schools, neighborhoods (6)
- Lots of room for improvement and to increase understanding (5)

*“There is a troubled history in Winston-Salem. Separate health care in the past created lack of trust. It has improved but lots of work to be done. Healthy efforts going on - Church groups and public health are very active in addressing this issue.”*

*“Deep long history of racial animosity, getting along better. There has been lots of progress in worship, playing, and working together.”*

*“...reasonably well with reservations and concerns on all sides.”*

*“There is much history in this community. Focusing on the past and not moving forward on race issues threatens to jeopardize our future.”*

*“We have a tri-ethnic community, race relations are modestly good. Hispanics are getting their feet on the ground, but not yet assimilated into community activities.”*

## **14. What are the things you like most about living or working here?**

The most likeable features they liked living here are listed below:

- Right size (10)
- Good climate (6)
- Good quality of life (6)
- Great environment (5)
- Arts/Entertainment (5)

*“...small enough community that there are still spaces to enjoy (green ways parks - Tanglewood)”*

*“Beautiful setting; Wonderful people; Safe place”*

*“..there is a good balance of activities and cultural events, but things are still a quiet and relaxed; We have an urban feel with a rural mentality;..”*

### **15. What are the things that concern you most about living or working here?**

The top two concerns mentioned were:

- Joblessness and unemployment in the county (10)
- Stressful economic environment (7)

*“It is hard to keep the young here, they leave for jobs. We need to create an attractive environment to keep young people working and living here.”*

*“Employment improves stability of a community; Lack of full-time jobs – underemployment.”*

*“Economy / long term viability; Not growing as we could; Disappearing manufacturing base is not being replaced; Generate more jobs; Improve public schools.”*

### **16. Name some things that you and others do to stay healthy?**

Overwhelmingly the two responses named were:

- Exercise, physically healthy and active life style (32)
- Healthy and nutritious food (17)

*“Annual physical, eat healthy, exercise daily-golf/walking, activities with children.”*

*“....exercise/walk on treadmill, got a dietician - get sleep, try to eat right, active family.”*

*“Bike regularly; Walk the dogs, we have a very walkable neighborhood; Gardening.”*

*“Cook from scratch; Eat lots of fruits and vegetables.”*

### **17. What are some of the main health problems that you or family members have had to deal with?**

The most often mentioned health problems were:

- Cancer (14)
- Mental health (11)
- Heart-related issues (11)
- Overweight/obesity; weight control (7)
- Diabetes (6)

### **18. Which groups in the county do you belong to?**

The most common groups mentioned were:

- Faith based Organizations/ Churches (15)
- Coalitions, Boards (13)
- Different clubs (12)
- Professional (7)
- Sorority/ Fraternity (6)

**19. Is there any other information that you would like to share about community health in our county?**

Below are some of the closing comments regarding community health:

*“Mental health should be fully embraced as a public health issue.”*

*“...would like community health to be seen as an economic driver on the same level as education and business economic.”*

*“I would like to see more integrated services for mental and physical health, as they now practice as separate entities.”*

*“Young people smoking and drinking alcohol is an issue.”*

*“The health department needs to continue to advocate for public health in Forsyth County, and keep on keeping on.”*

*“...access is biggest issue; homelessness not readily available; dissemination of information.”*

# 2011 Youth Risk Behavior Survey

## Winston-Salem/Forsyth County Middle School Students

### Survey Highlights



June 2012  
Supported By:

Winston-Salem/Forsyth County School System &  
Forsyth County Department of Public Health  
Epidemiology and Surveillance Division



Summary Report Preparation: Whitney Rouse, Statistical Research Assistant  
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Special Thanks:

Data Collection: Forsyth County Department of Public Health Staff and Forsyth County Healthy  
Community Coalition Members

Data Analysis and Preparation of Report: Gramercy Research Group

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## Introduction & Overview

The Youth Risk and Behavior Survey (YRBS) was developed by the Centers for Disease Control and Prevention (CDC) to monitor behaviors which contribute to death and other health and social problems that affect youth and young adults. The data is used to help schools, government agencies, and community organizations develop programs that address the most pertinent issues in their community.



The survey has been adapted to meet the needs of North Carolina as both middle school and high school students are sampled across the state by North Carolina Healthy Schools. The survey is conducted every 2 years to assess health risk behaviors that contribute to some of the leading causes of morbidity and mortality in youth.

In addition to the state's administration of the YRBS, the survey is administered locally to Winston-Salem/Forsyth County School System (WSFC) students. In 2011, the YRBS was administered to 15 public middle schools in WSFC to a total of 2,184 middle school students. The survey was administered during 2nd period to randomly selected classes. Parents had the option to decline their child's participation in the survey by returning the Passive Parental Consent Form that was sent home before the scheduled survey day.

Characteristic	WSFC Middle (%)	Surveyed Youth (%)
<b>Grades</b>		
6th	34.1	28.7
7th	33.2	36.8
8th	32.6	34.2
<b>Race</b>		
White	46.2	58.4
Black	28.0	29.8
Other	25.8	11.9

These highlights should be taken with caution with interpretation as trend and (multi-year) analysis would be more reliable. For more information, please contact Ayotunde Ademoyero, Director of Epidemiology and Surveillance, Forsyth County Department of Public Health at [ademoyat@forsyth.cc](mailto:ademoyat@forsyth.cc)

### Alcohol, Tobacco, & Other Drugs

The use of alcohol, tobacco, and other drugs (ATOD) in youth has been linked to the causation of unintentional injuries, physical fights, illegal behavior, and academic and occupational problems. Alcohol is used by youth more than tobacco and other drugs while among illicit drugs, marijuana is the most used in youth.<sup>1</sup>

Overall WSFC middle school students reported having used alcohol, cigarettes and other tobacco, inhalants, marijuana, cocaine, steroids and other prescription drugs. Among ATOD use, students had the highest lifetime prevalence-of-use rates for alcohol (27.6%), marijuana (13.0%), cigarettes (12.8%), and inhalants (12.0%).



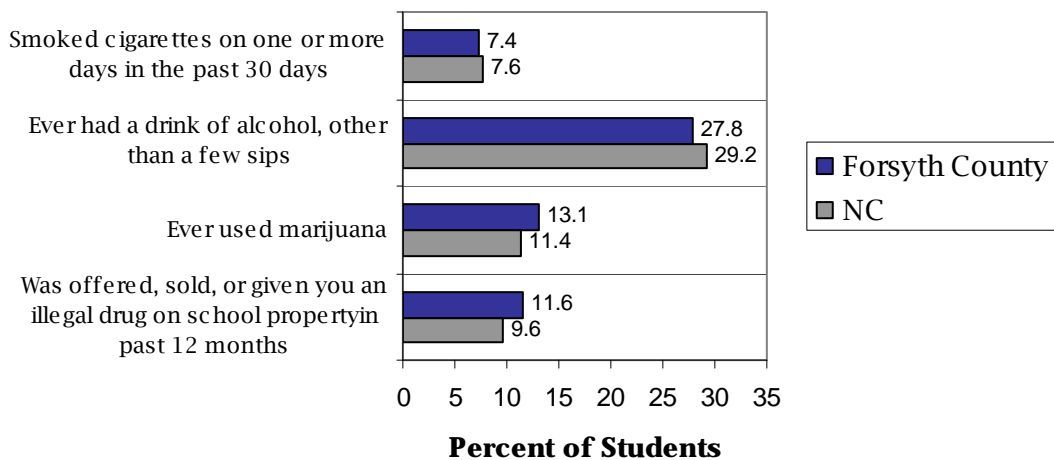
### Age of First Use

WSFC eighth grade students reported the age of first use:

- For alcohol at age 11.4
- For cigarettes as age 11.1
- For marijuana at age 11.4

Marijuana use begin before age 11 for 5.1% of WSFC middle school students in comparison to the North Carolina reporting use began before age 11 3.9%.

**Alcohol, Tobacco & Other Drugs**  
Forsyth County & North Carolina, 2011



### Alcohol Use

Students reported getting alcohol in the past 30 days by some other way (5.4%), someone gave it to them (4.7%), took it from store or family member (3.1%), someone bought it for me (2.0%), and store (2.0%). Restaurants or bar (0.3%) and public events (0.2%) were instances in which students reported they were less likely to get alcohol.

### Tobacco Use

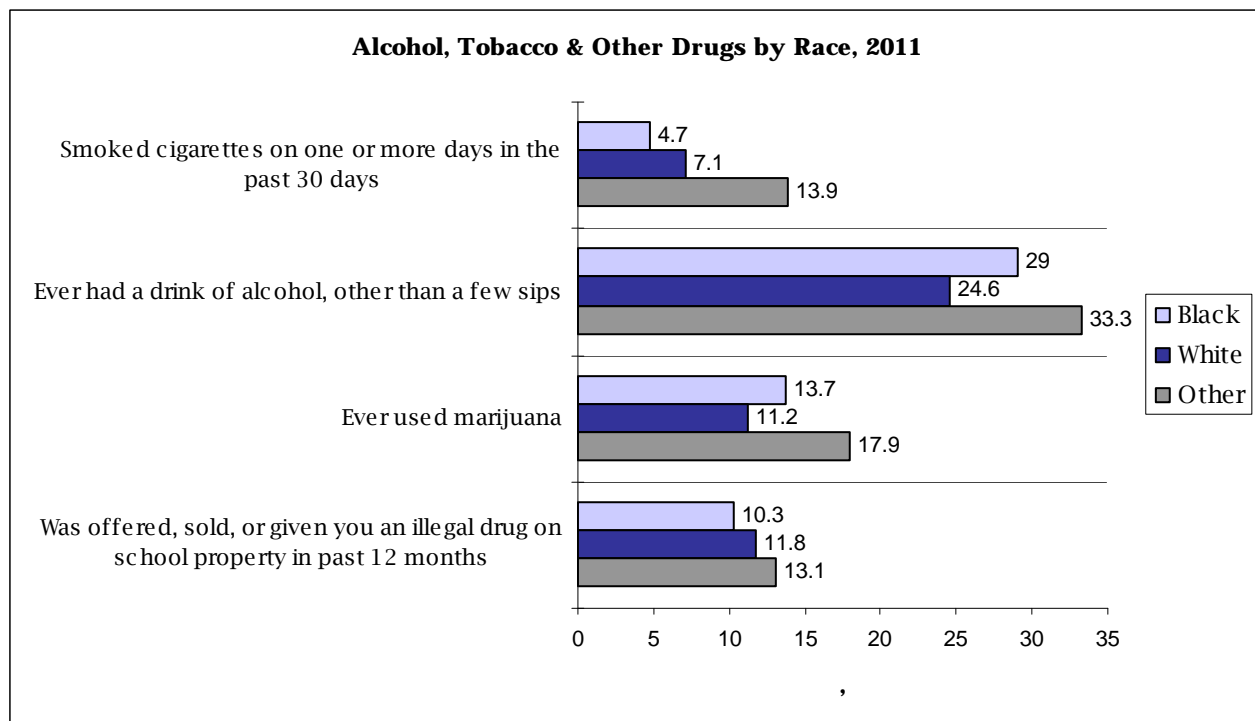
Cigarette use by all middle school students was reported at any point in their lives was 12.8% with 12.4% of females and 13.4% of males having smoked at some point in their lives. In the past 30 days, 4.5% of students reported using chewing tobacco, snuff, or dip on more than 1 day.

Alcohol, Tobacco & Other Drugs	2011 WSFCS	2011 NC	2009 WSFCS	2009 NC
Smoked cigarettes on one or more days in the past 30 days	7.4%	7.6%	7%	8%
Ever had a drink of alcohol, other than a few sips	27.8%	29.2%	29%	30%
Ever used marijuana	13.1%	11.4%	13%	10%
Been offered, sold or given an illegal drug on school property	11.6%	9.6%	12%	9%

### Other Drugs

Other drugs had lower reported use among middle school students. Cocaine, including crack or freebase, was reported having been used by 3.6% of WSFC middle school students slightly higher than the state's 3.1%. Inhalant use was reported by 12% of students. Students also reported the following prescription drug use:

- 2.0% reported using steroid pills or shots not prescribed to them
- 5.8% reported using other prescription drugs (OxyContin, Percocet, Vicodin, Adderall, Ritalin, or Xanax) that were not prescribed to them



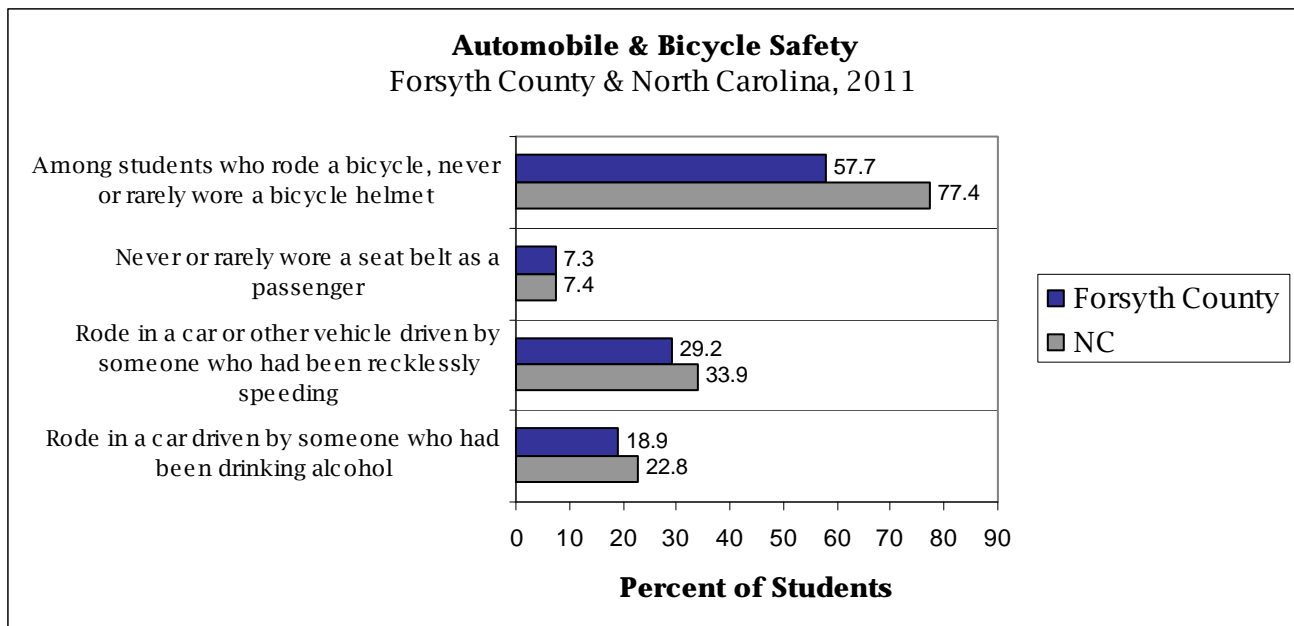
### Automobile & Bicycle Safety

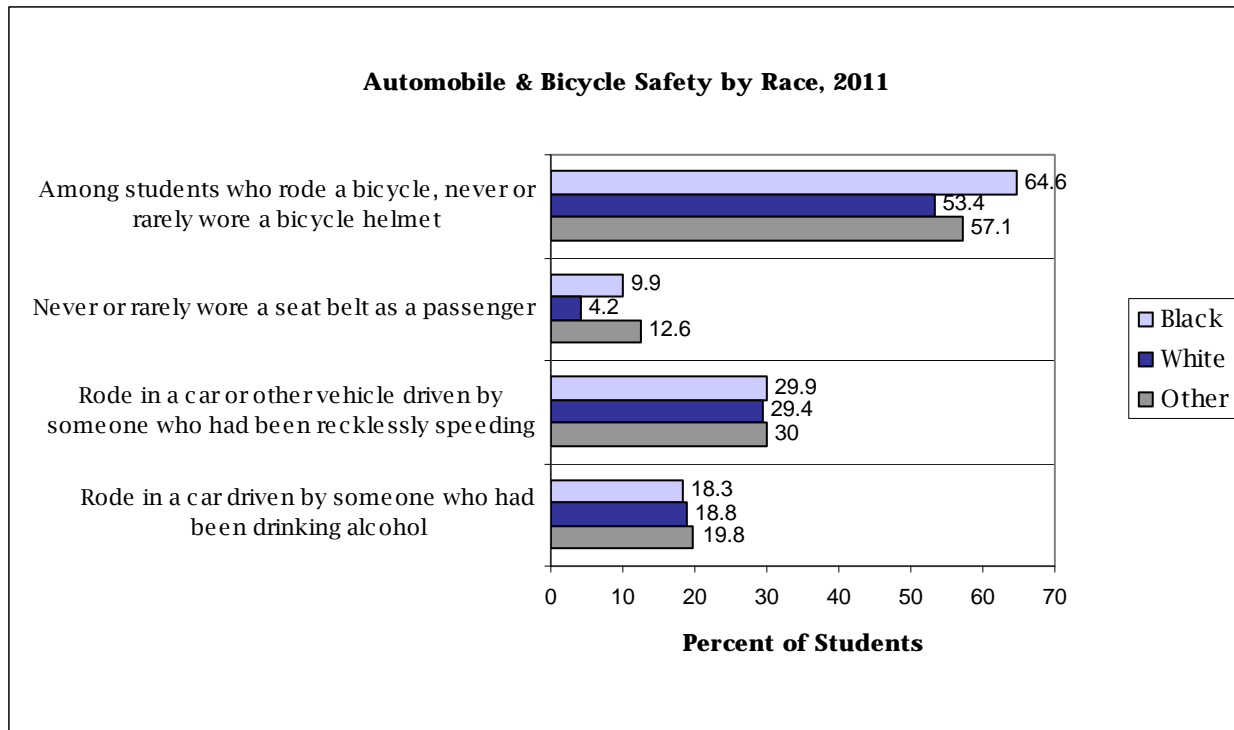
Injuries are the leading cause of death or disability for individuals aged 1-44 years. For adolescents aged 10-24 years olds motor vehicle crashes attributed to 30% of deaths in this group from injuries sustained in the crash.<sup>2</sup>

Automobile & Bicycle Safety	2011 WSFCS	2011 NC	2009 WSFCS	2009 NC
Among students who rode a bicycle, never or rarely wore a bicycle helmet	57.7%	77.4%	55%	76%
Never or rarely wore a seat belt as a passenger	7.3%	7.4%	7%	7%
Rode in a car driven by someone who had been recklessly speeding	29.2%	33.9%	33%	38%
Rode in a car driven by someone who had been drinking alcohol	18.9%	22.8%	24%	27%



Among WSFC middle school students, 57.7% reported always wearing a seatbelt. Females were more likely to always wear a seatbelt at 59.2% in comparison to males at 56.0%. Eighth grade students were less likely to report always wearing a seatbelt at 50.4% in comparison to 60.7% of seventh grade students and 62.9% of sixth grade students.





When riding a bike, 14.4% reported wearing a helmet most of the time or always. Males were less likely wear a helmet when biking as 51.5% of male students reported never wearing a helmet in comparison to 39.8% of females. WSFC middle school students were less likely than the state average to never or rarely wear a helmet when biking.

When asked about helmet use when rollerblading or skateboarding, 50.5% did not ride, 33.9% never wore one, 6.6% rarely wore one, 3.9% sometimes wore one, 3.0% wore one most of the time, and 2.2% always wore one.

Eighth grade students were more likely than sixth and seventh grade students to ride in a car with someone who had been recklessly speeding or drinking alcohol. WSFC middle school students reported an increase of 5.1 percentage points since 2009 in riding in a car driven by someone who had been drinking alcohol, while the state average saw a decrease of 4.2 percentage points.

***21% less students reported riding in car driven by someone who had been drinking alcohol in 2011 than in 2009***

**Violence- Related Behavior**

Youth violence includes two types of behavior—violent acts and robbery or assault. Violent acts can cause both emotional and physical harm through bullying, slapping, or hitting while robbery or assault can lead to injury or death and performed with or without weapons.<sup>3</sup> Youth violence is considered the second leading cause of death for young people between 10 and 24 years old.<sup>3</sup> Violence can lead to death, injuries, and disabilities while also affecting the health of communities.<sup>3</sup> Among those youth killed by homicide 86% were males.



WSFC middle school students reported that 5.1% of them had been threatened or injured with a gun, knife, or club on school property in the past 12 months, while 25.8% have carried a weapon such as a gun, knife, or club. Similar to NC, WSFC saw in a decrease in students carrying weapons since 2009, although WSFC middle school students are less likely to carry weapons in comparison to the state. A smaller amount of students, 3.0%, did not go to school on one or more of the past 30 days because it felt unsafe. Of the students who were in a physical fight (50.1%), 4.7% reported sustaining an injury that needed medical treatment. WSFC middle school students reported at a higher rate that there was gang activity at their school at 30.1% than the state’s average of 22.5%.

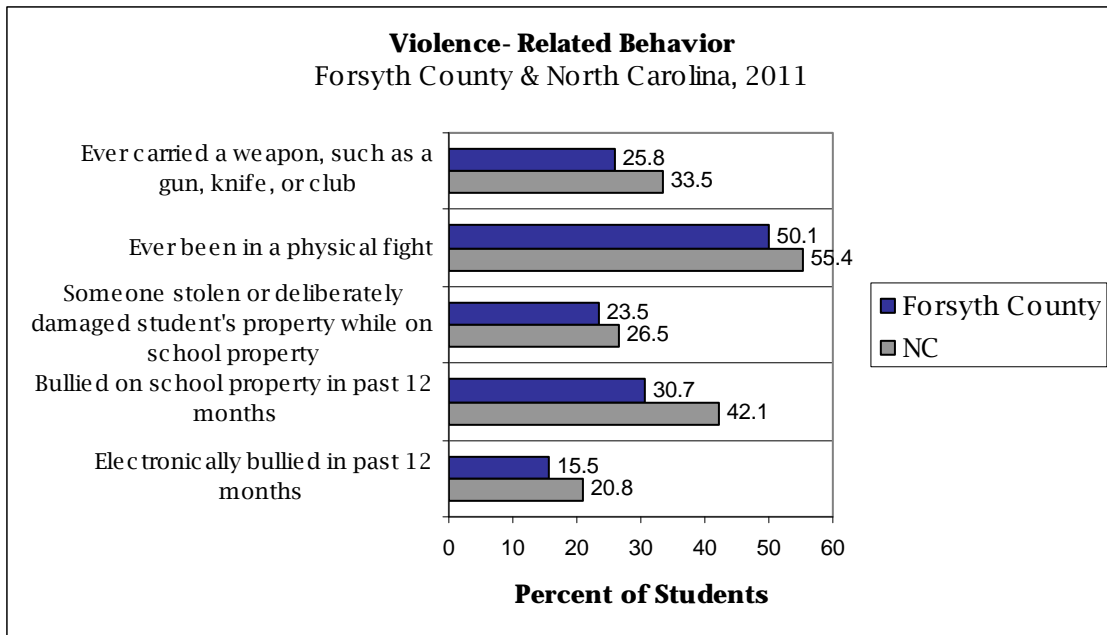
***WSFC middle school students reported decreases on all selected Violence-Related Behavior questions in 2011.***

**Bullying**

Bullying is considered a form of youth violence and includes: attack or intimidation with intention to cause

<b>Violence- Related Behavior</b>	<b>2011 WSFCS</b>	<b>2011 NC</b>	<b>2009 WSFCS</b>	<b>2009 NC</b>
Ever carried a weapon such as a gun, knife, club	25.8%	33.5%	32%	39%
Ever in a physical fight	50.1%	55.4%	53%	53%
Someone stole or damage student’s property while at school	23.5%	26.5%	28%	28%
Bullied on school property in past 12 months	30.7%	42.1%	34%	42%
Electronically bullied in past 12 months	15.5%	20.8%	19%	21%

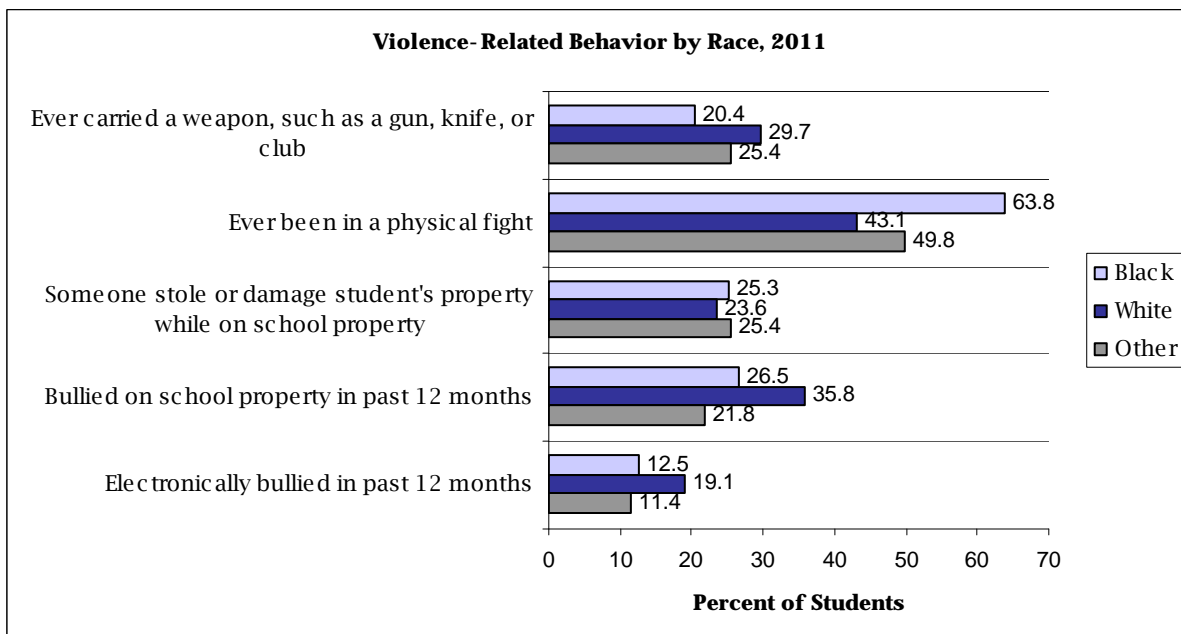
fear, distress, or harm through physical, verbal, or psychological/ relational means; imbalance of power between the bully and victim; or repeated attacks or intimidation between the same children over time.<sup>3</sup> Bullying can occur both in-person in through the use of technology in an electronic form.<sup>5</sup> In the 2007-2008 school year, a higher percentage of middle schools reported daily or weekly occurrences of bullying in comparison to elementary and high schools.<sup>5</sup>



Bullying affects health in the form of physical injury, social and emotional distress, and even death.<sup>5</sup>

Victims of bullying have an increased risk for mental health problems, psychosomatic complaints, and poor school adjustment while the youth who are committing acts of bullying have an increased risk for substance use, academic problems and violence later in life.<sup>3</sup>

A higher percentage of females, 19.6%, reported being electronically bullied than males at 10.9%. In the past 12 months, 64.7% of students witness other students being bullied in schools. Students reported that 17.3% of them had been victims of teasing or name calling because someone thought they were gay, lesbian, or bisexual.





**Sex Education**

Sex education is deemed an important health topic as youth are affected by pregnancy, sexually transmitted diseases, and other behaviors that place them at risk for HIV infection.



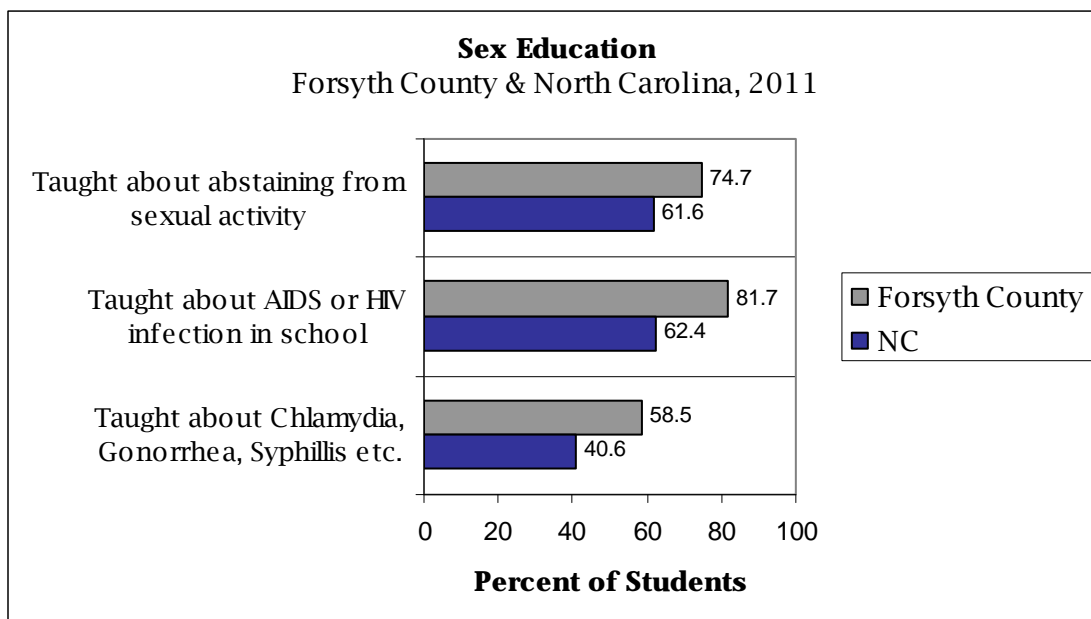
**Abstinence**

Most middle schools students, 74.7%, reported being taught about abstinence, while females reported a higher percentage level, at 78.5%, than males at 70.4%. The percent of students reporting being taught abstinence also increased with grade levels, as 56.4% of 6<sup>th</sup> grade students, 77.7% of 7<sup>th</sup> grade students, and 86.3% of 8<sup>th</sup> grade students reported that they had been taught about abstinence. WSFC middle school students reported higher than the state average in being taught about abstinence from sexual activity.

**AIDS/HIV and other STDs**

Most students, 81.7% also reported being taught about AIDS/HIV in schools. Similar to abstinence education, the levels increase with grade levels as 60.2% of 6<sup>th</sup> grade students, 87.8% of 7<sup>th</sup> grade students, and 93.0% of 8<sup>th</sup> grade students reported being taught about AIDS/HIV in school.

There is a difference also between grade levels when asked if taught about other STDs, 22.5% of 6<sup>th</sup> grade students, 61.5% of 7<sup>th</sup> grade students, and 85.3% of 8<sup>th</sup> grade students reported they had been taught. Overall 58.5% of middle school students reported being taught about other STDs. Similar to being taught about abstinence, WSFC middle school students reported higher than the state total of being taught about AIDS and





Sex Education	2011 WSFCS	2011 NC	2009 WSFCS	2009 NC
Taught about abstaining from sexual activity	74.7%	61.6%	72%	66%
Taught about AIDS or HIV infection	81.7%	62.4%	83%	69%
Taught about Chlamydia, Gonorrhea, Syphilis etc	58.5%	40.6%	55%	49%

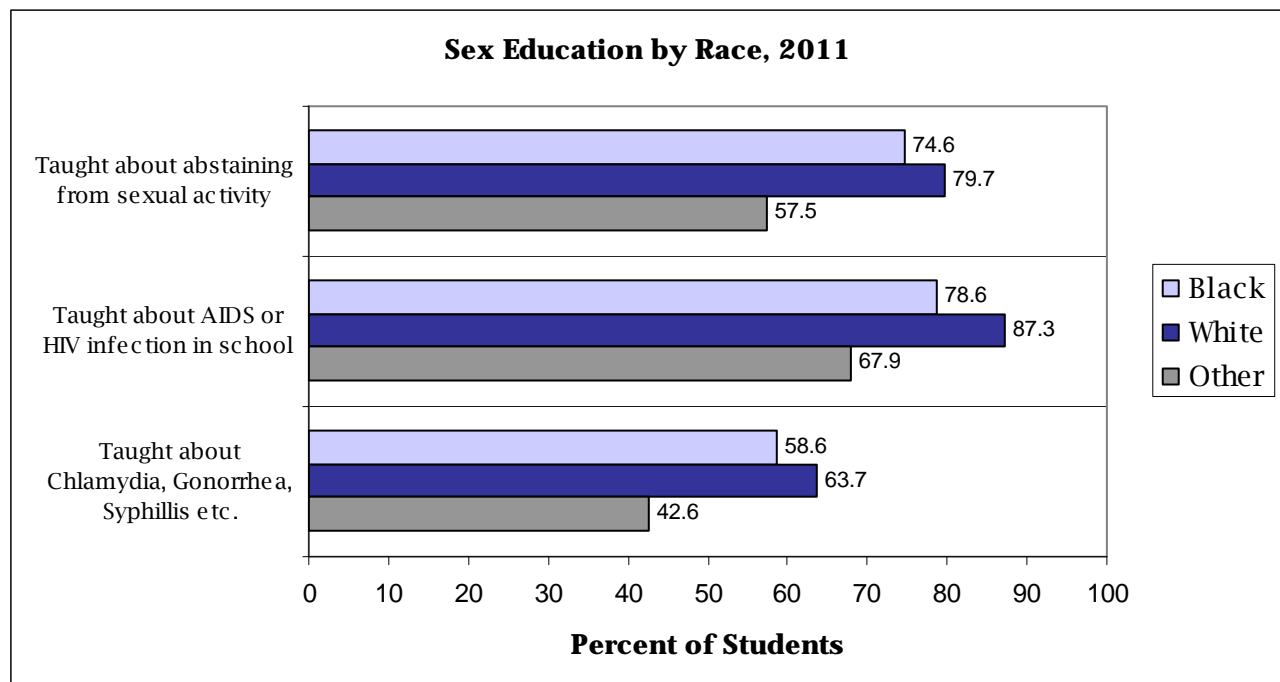


HIV as well as Chlamydia, Gonorrhea, Syphilis and other STDs. In contrast to the state total, WSFC middle school females are more likely to have been taught about STDS than middle school males

**Parental Expectation**

WSFC middle school students reported that 59.6% of them have had their parents or other adults in their family talk with them about what they expected the student to do or not to do when it comes to sex, while 29.0% had not, and 11.4% were unsure.

*In between 2009 and 2011 Forsyth County saw increases in the percent of students being taught about abstinence and other STDS, while in comparison North Carolina had decreases in the number of students taught about abstinence and other STDS.*



**Suicide- Related Attitudes & Behavior**

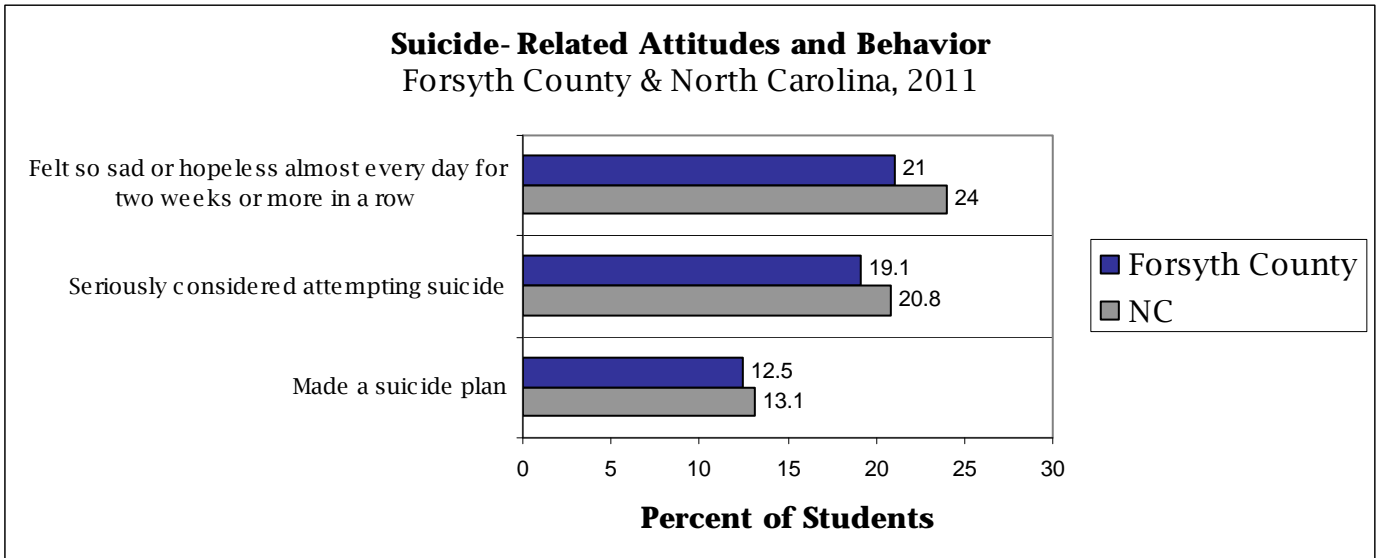
Suicide is the third leading cause of death for youth ages 10-24 years, and accounts for 12% of all deaths for this age group.<sup>2</sup> Males are more likely to die from suicide than females in the 10-24 years old age group, while females are more likely to report having attempted suicide than males. Hispanic youth were more likely to report attempting suicide than their white or black counterparts, while Native American/Alaskan Native youth have higher rates of suicide related fatalities.

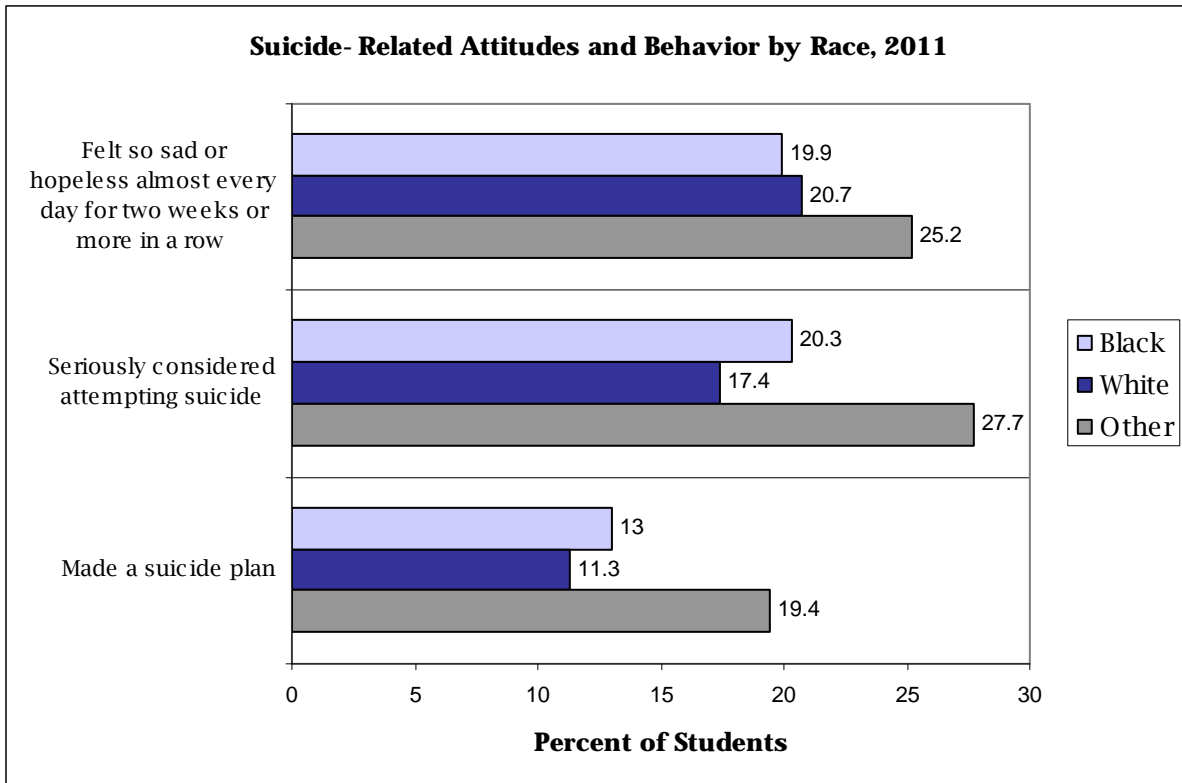
Suicide- Related Attitudes & Behavior	2011 WSFCS	2011 NC	2009 WSFCS	2009 NC
Felt so sad or hopeless almost every day for two weeks or more in a row	21%	24%	26%	23%
Seriously considered attempting suicide	19.1%	20.8%	20%	19%
Made a suicide plan	12.5%	13.1%	15%	13%

**12% less students made a suicide plan in Forsyth County in 2011 than in 2009, while North Carolina saw no changes**

WSFC middle school students reported that 21.0% of them had feelings of sadness or hopelessness for two weeks or more in a row that they stopped doing some usual activities. When asked about suicide, 19.1% reported seriously considering attempting suicide, with 22.2% of females reporting that while 15.6% of males said they did. Females were also more likely than males to report having made a suicide plan, 14.8% vs. 10.0%.

Students reported that 9.3% of them had tried to kill themselves. A higher percentage females, 10.8%, reported that they have tried to kill themselves than males at 7.5%.





Middle school students talk to friends or siblings (40.8%), parent or other adult family member (24.6%), or some other person (5.7%) when they feel sad, empty, hopeless, angry, or anxious. A higher rate of males, 34.9%, reported not feeling sad in comparison to 17.6% of females.



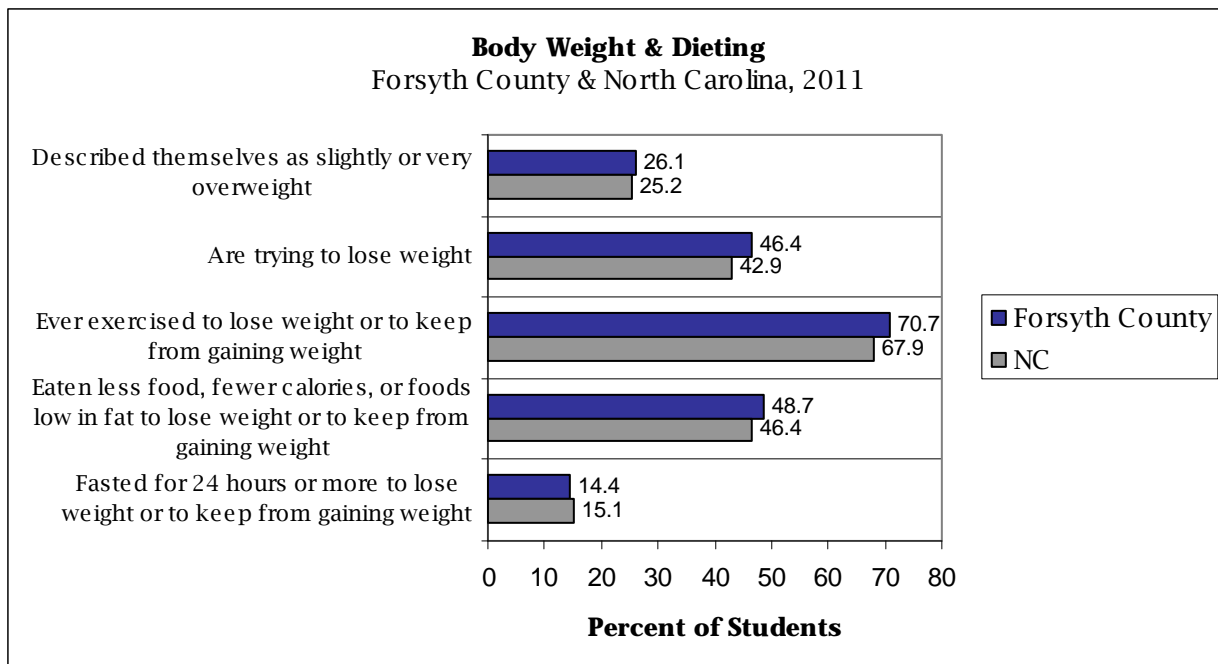
### Body Weight & Dieting

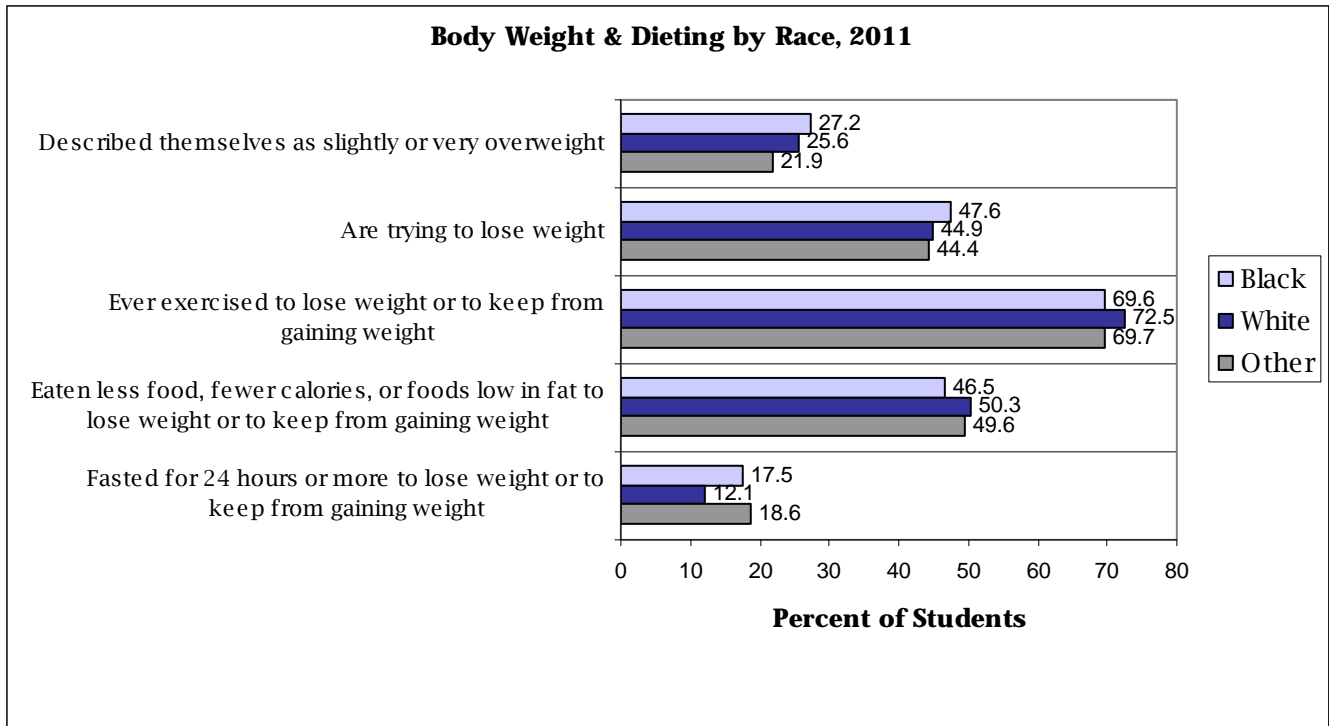
Obesity in children has more than tripled in the past 30 years. In 2008 of the nation's children 20% of children between 6-11 years old were obese, while 18% adolescents aged 12-19 were considered obese.<sup>6</sup> There are both immediate and long-term effects on health and well-being for youth who are obese.<sup>6</sup>

Body Weight & Dieting	2011 WSFCS	2011 NC	2009 WSFCS	2009 NC
Described themselves as slightly or very overweight	26.1%	25.2%	26%	26%
Are trying to lose weight	46.4%	42.9%	47%	46%
Ever exercised to lose weight or to keep from gaining weight	70.7%	67.9%	70%	71%
Eaten less food, fewer calories, or foods low in fat to lose weight or to keep from gaining weight	48.7%	46.4%	43%	46%
Fasted for 24 hours or more to lose weight or to keep from gaining weight	14.4%	15.1%	15%	15%

These effects include<sup>6</sup>:

- Increased risk factor for cardiovascular disease (high cholesterol, high blood pressure)
- Increased likelihood to have pre-diabetes
- Increased risk for bone and joint problems, sleep apnea, and social and psychological problems (stigmatization and poor self-esteem)
- Increased likelihood to be obese adults
- Increased risk for cancers





In WSFC middle schools 28.6% of female students and 23.2% of male students described themselves as either “slightly overweight” or “very overweight.” Most students, 56.5%, described themselves as being at “about the right weight.” More females, 54.9%, were trying to lose weight in comparison to 36.7% of males.

- 5.2% of students reported they had taken diet pills, powders or liquids without doctor’s advice to lose weight or keep from gaining weight (excluding meal replacement products like Slim Fast)
- 6.7% reported they have vomited or taken laxatives to lose weight or to keep from gaining weight
  - Males and females reported about the same percentages with 6.4% and 6.8% respectively
- 18.4% reported skipping meals to lose weight or keep from gaining weight in the past 30 days

### Meals

Students reported in the past 7 days:

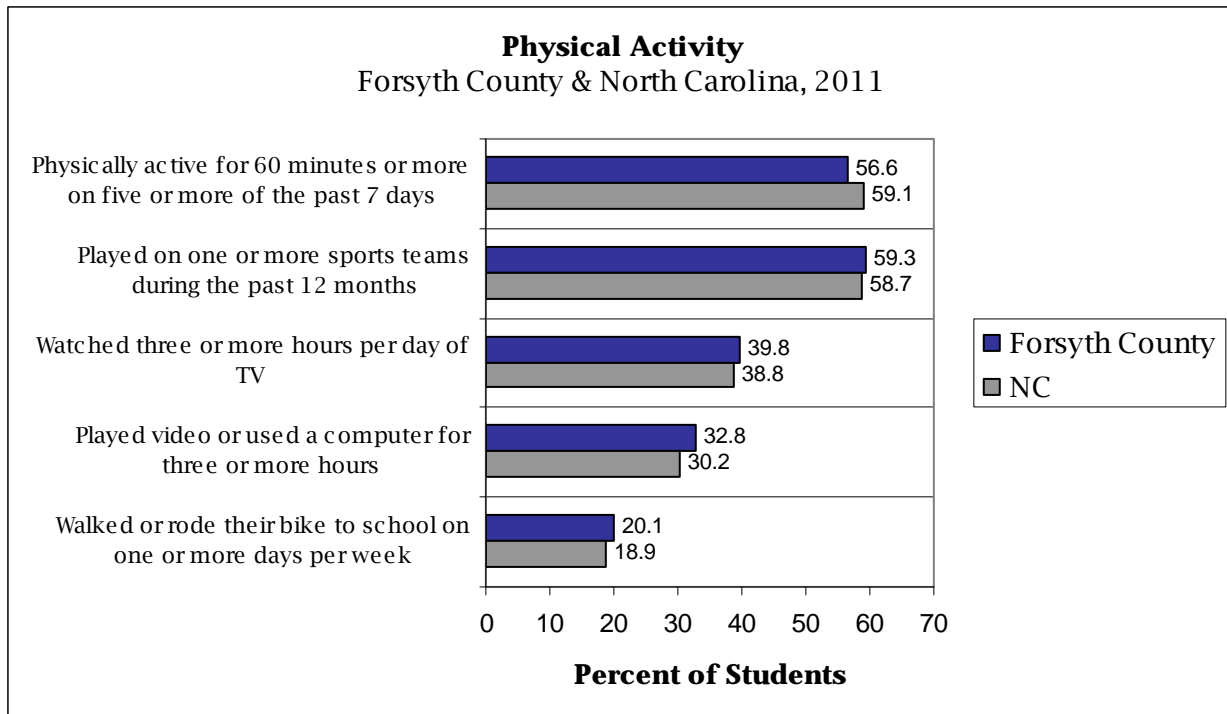
- 45.9% ate breakfast on all days
- 48.7% ate dinner at home on all days with family



### Physical Activity and Health

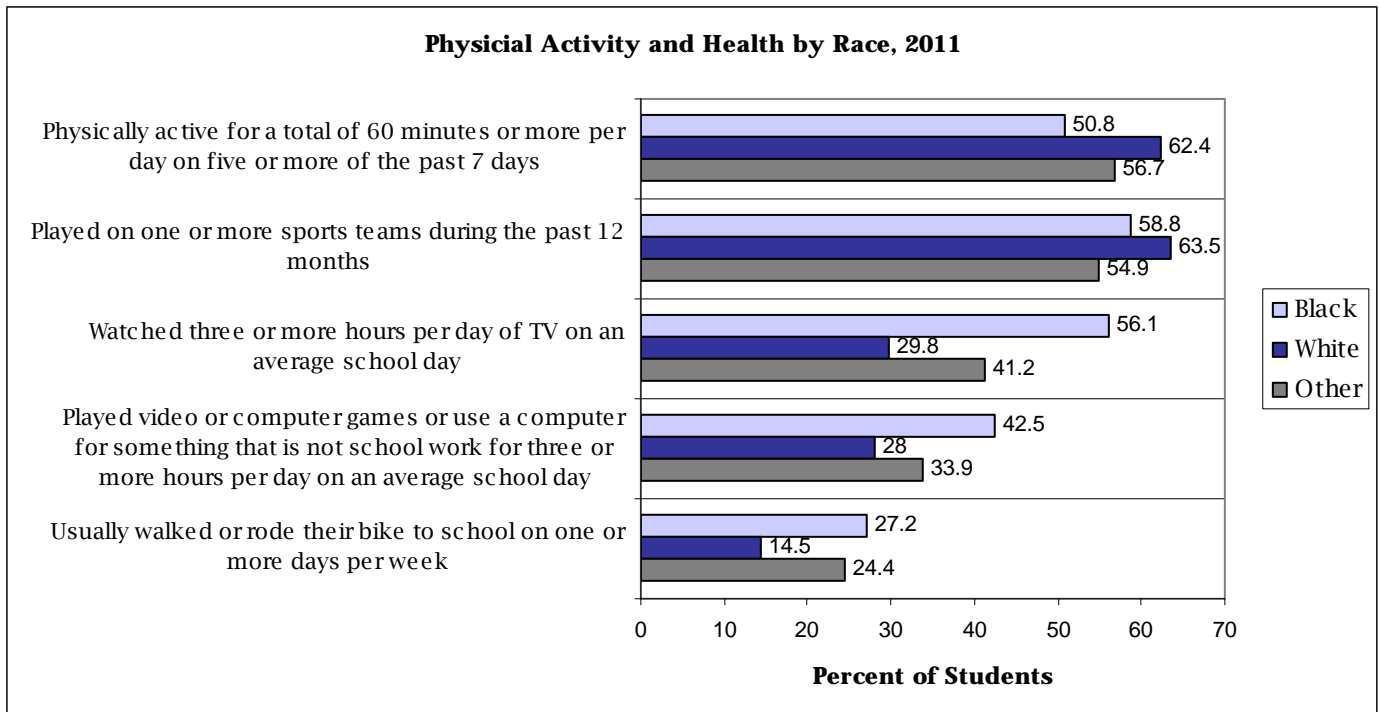
Physical activity has multiple benefits for children and adolescents that include<sup>7</sup>:

- Improvements in strength and endurance
- Builds healthy bones and muscles
- Controls weight
- Reduces anxiety and stress
- Improves self-esteem levels
- Improves blood pressure and cholesterol levels
- Improves academic performance
- Reduces risk for developing chronic diseases



Youth between the ages of 6 and 17 years old are recommended to receive at least 60 minutes of physical activity daily.<sup>7</sup> Physical inactivity can result in increased risk for diseases and illnesses related to overweight and obesity.

<b>Physical Activity &amp; Health</b>	<b>2011 WSFCS</b>	<b>2011 NC</b>	<b>2009 WSFCS</b>	<b>2009 NC</b>
Physically active for a total of 60 minutes or more per day on five or more of the past seven days	56.6%	59.1%	55%	60%
Played on one or more sports teams during the past 12 months	59.3%	58.7%	57%	62%
Watched three or more hours per day of TV on an average school day	39.8%	38.8%	41%	38%
Played video or computer games or use computer for something that is not school work for three or more hours per day on an average school day	32.8%	30.2%	28%	26%
Usually walked or rode their bike to school on one or more days per week	20.1%	18.9%	20%	19%

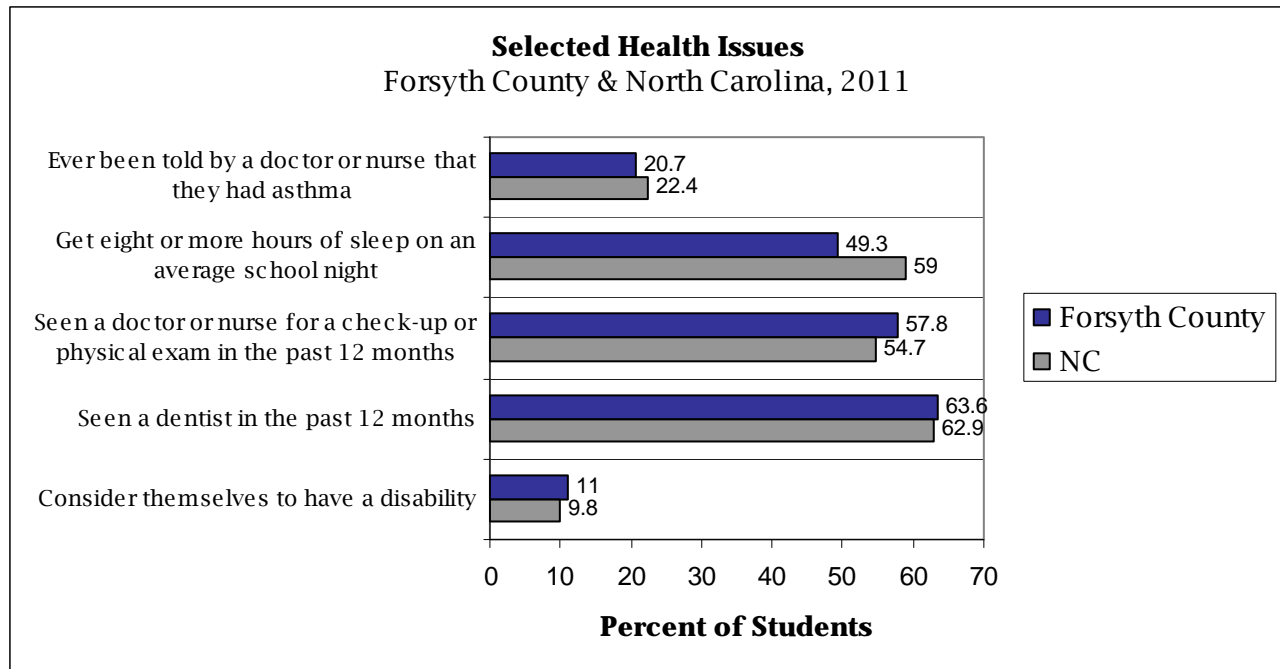


**Selected Health Issues**

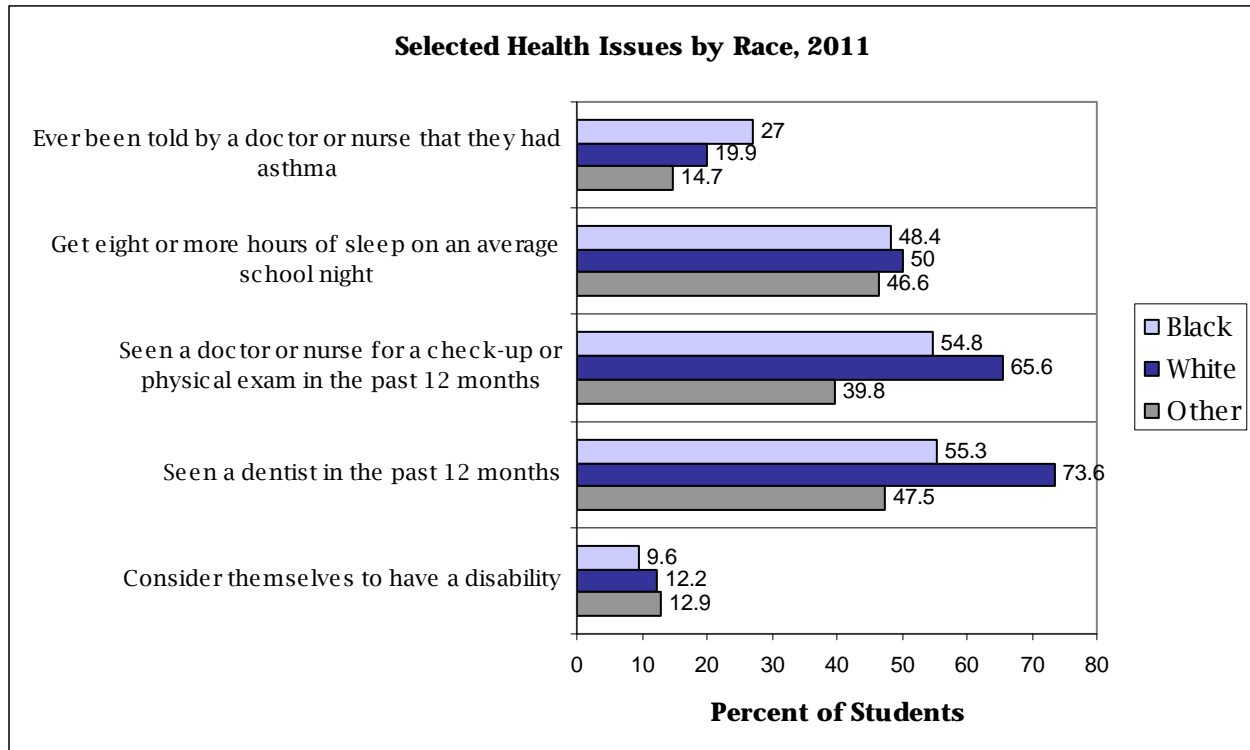
Other conditions also affect youth. Health conditions such as asthma is common among youth. Asthma is one of the leading chronic diseases among youth in the Nation and a leading cause of school absenteeism.<sup>8</sup> Youth who are low-income, minorities, or live in inner cities experience asthma that results in more emergency department visits, hospitalizations, and death than the general population.<sup>8</sup>

<b>Selected Health Issues</b>	<b>2011 WSFCS</b>	<b>2011 NC</b>	<b>2009 WSFCS</b>	<b>2009 NC</b>
Ever been told by a doctor or nurse that they had asthma	20.7%	22.4%	20%	19%
Get eight or more hours of sleep on an average school night	49.3%	59%	51%	58%
Seen a doctor or nurse for a check-up or physical exam in the past 12 months	57.8%	54.7%	58%	58%
Seen a dentist in the past 12 months	63.6%	62.9%	61%	63%
Consider themselves to have a disability	11%	9.8%	11%	12%

The amount of sleep teens receive is another health issue as sleep is recognized as important to public health. Sleep deficiency is linked to motor vehicle crashes, industrial disasters, as well as errors in medical and other occupations.<sup>9</sup> Sleep deficiency also increases risk for chronic diseases. Teens ages 10-17 years old are recommended to receive 8.5-9.25 hours of sleep a night.<sup>10</sup> In addition the overall health of teens rely on both regular physical visits for physicals and dental visits twice a year.







Overall, WSFC middle school students reported that:

- 17.0% strongly agreed or agreed that they felt alone in life
- 77.9% strongly agreed or agreed that they feel good about themselves
- Average hours of sleep per night was 7.3 hours
- 50.4% participated in school activities other than sports, such as band, drama, student government etc.
- 60% strongly agreed or agreed that their teacher really cares about them and gives them encouragement
- Reported higher percentages than the state total for seeing a doctor or nurse for a check-up
- Reported higher percentages for having an asthma action plan on file at school than the state total (13.3% versus 5.0%)





## References

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# **2011 Youth Risk Behavior Survey**

## **Winston- Salem/Forsyth County High School Students**

### **Survey Highlights**



June 2012

Supported By:

Winston-Salem/Forsyth County School System &  
Forsyth County Department of Public Health  
Epidemiology and Surveillance Division



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## Introduction & Overview

The Youth Risk and Behavior Survey (YRBS) was developed by the Centers for Disease Control and Prevention (CDC) to monitor behaviors which contribute to death and other health and social problems among youth and young adults. The data is used to help schools, government agencies, and community organizations develop programs that address the most pertinent issues in their communities.



The survey has been adapted to meet the needs of North Carolina as both middle school and high school students are sampled across the state by North Carolina Healthy Schools. The survey is conducted every 2 years to assess health risk behaviors that contribute to some of the leading cause of morbidity and mortality in youth.

Characteristic	WSFC High Schools (%)	Survey Participants (%)
<b>Grade</b>		
9 <sup>th</sup>	28.4	32.6
10 <sup>th</sup>	25.3	30.9
11 <sup>th</sup>	25.0	21.6
12 <sup>th</sup>	21.3	14.9
<b>Race</b>		
White	47.2	58.3
Black	34.1	32.8
Other	18.7	8.9

In addition to the state's administration of the YRBS, the survey is administered locally to Winston-Salem/Forsyth County School System (WSFC) students. In 2011, the YRBS was administered to 13 public high schools in WSFC to a total of 1,532 high school students. The survey was administered during 2nd period to randomly selected classes. Parents had the option to decline their child's participation in the survey by returning the Passive Parental Consent Form that was sent home before the scheduled survey day.

These highlights should be taken with caution with interpretation as trend and (multi-year) analysis would be more reliable. For more information, please contact Ayotunde Ademoyero, Director of Epidemiology and Surveillance, Forsyth County Department of Public Health at [ademoyat@forsyth.cc](mailto:ademoyat@forsyth.cc)

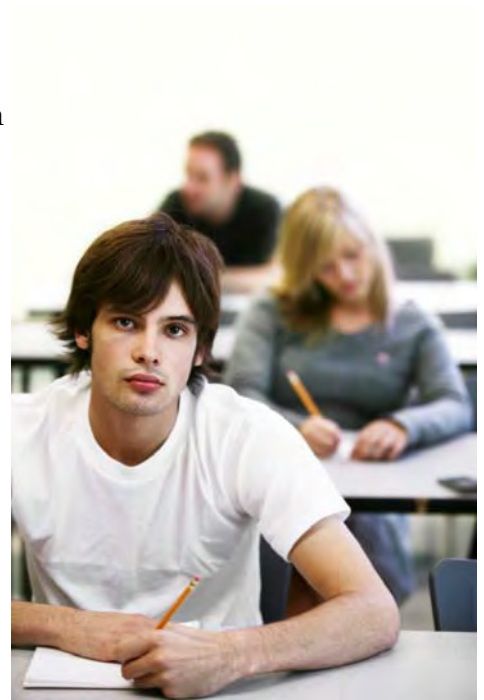
## Alcohol, Tobacco, & Other Drugs

The use of alcohol and other drugs in youth has been linked to the causation of unintentional injuries, physical fights, illegal behavior, and academic and occupational problems. Alcohol is used by youth more than tobacco and other drugs. <sup>1</sup> Among illicit drugs, marijuana is the most used in youth.<sup>1</sup>

Overall WSFC high school students reported having used alcohol, cigarettes and other tobacco, inhalants, marijuana, cocaine, steroids and other prescription drugs. Males have higher rates of lifetime alcohol, tobacco, and other drugs (ATOD) use in all categories. WSFC 12<sup>th</sup> grade students reported the age of first use for alcohol, cigarettes, and marijuana occurred between the average age of 11.3-11.9 years.

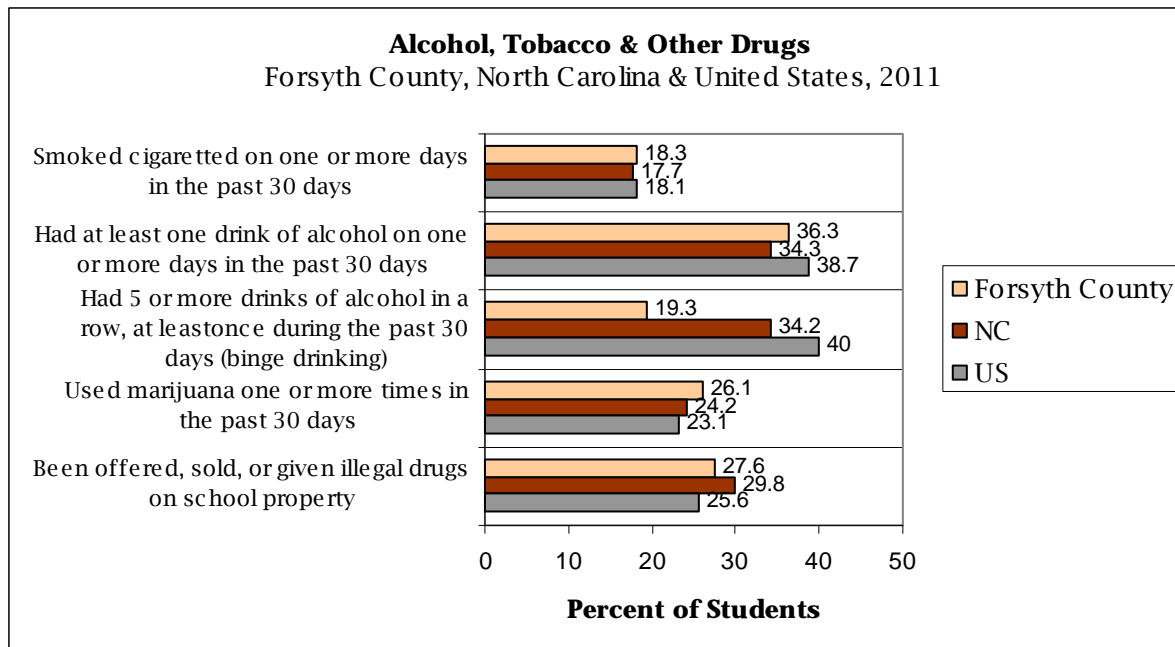
WSFC high school students reported the following lifetime prevalence-of-use rates:

- 61.5% consumed alcohol
- 42.8% used marijuana
- 31.2% smoked cigarettes
- 17.7% used prescription drugs without a prescription



### Alcohol Use

Students reported that 40% of them had their first drink of alcohol between 13 and 16 years old. Students reported that 7.3% of them had at least one drink of alcohol on school property in the past 30 days. Overall, 63.7% of students reported not drinking in the past 30 days.



### Tobacco Use

Cigarette use by all high school students at any point in their lives was reported by 28.8% of females and 33.2% of males. In the past 30 days, 8.2% of students reported using chewing tobacco, snuff, or dip on more than 1 day.

**Other Drugs**

Other drugs had lower reported rates of use. Over half of students, 57.4%, said they have never tried marijuana. Most students, 30.6%, were between the ages of 13-16 when they tried marijuana for the first time. Only 7.5% of students reported using marijuana on school property at least once in the past 30 days.

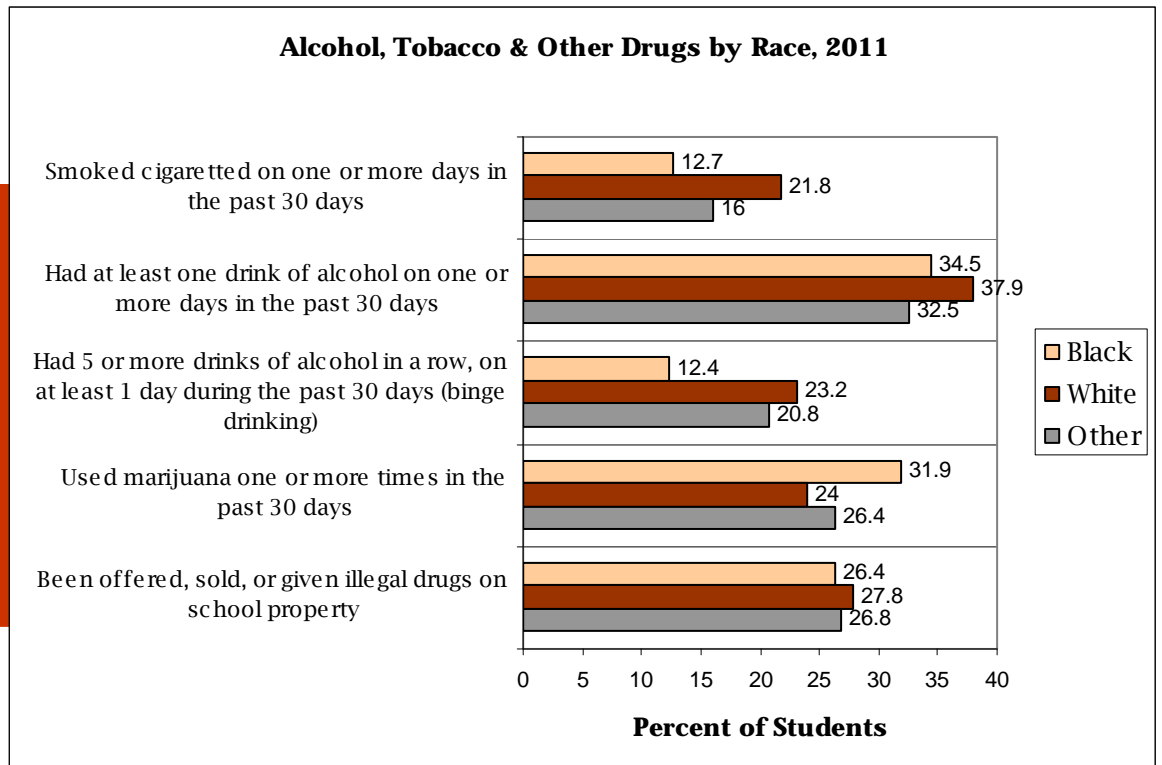
Alcohol, Tobacco, & Other Drugs	2011	2011	2011	2009	2009	2009
	WSFCS	NC	US	WSFCS	NC	US
Smoked cigarettes on one or more days in the past 30 days	18.3%	17.7%	18.1%	19%	18%	20%
Had at least one drink of alcohol on one or more days in the past 30 days	36.3%	34.3%	38.7%	37%	35%	42%
Had 5 or more drinks of alcohol in a row, on at least 1 day during the past 30 day (binge)	19.3%	34.2%	40.0%	20%	19%	24%
Used marijuana one or more times in the past 30 days	26.1%	24.4%	23.1%	22%	20%	21%
Been offered, sold, or given illegal drugs on school property	27.6%	29.8%	25.6%	30%	30%	23%

Other drug use reported by WSFC high school students:

- 7.5% have used cocaine (crack or freebase)
- 11.5% have used inhalants (aerosol spray cans, paints, other sprays)
- 5.4% have used methamphetamines (speed, crystal, crank, or ice)
- 4.1% have taken steroid pills or shots without a doctor's prescription
- 17.7% have used prescription drugs (OxyContin, Percocet, Vicodin, Adderall, Ritalin, Xanax) without a doctor's prescription

**18.6% more students reported using marijuana one or more times in the past 30 days in 2011 than in 2009**

When using alcohol or drugs, 16.2% of students have gotten into trouble with family or friends, missed school, or gotten into fights



## Automobile and Bicycle Safety

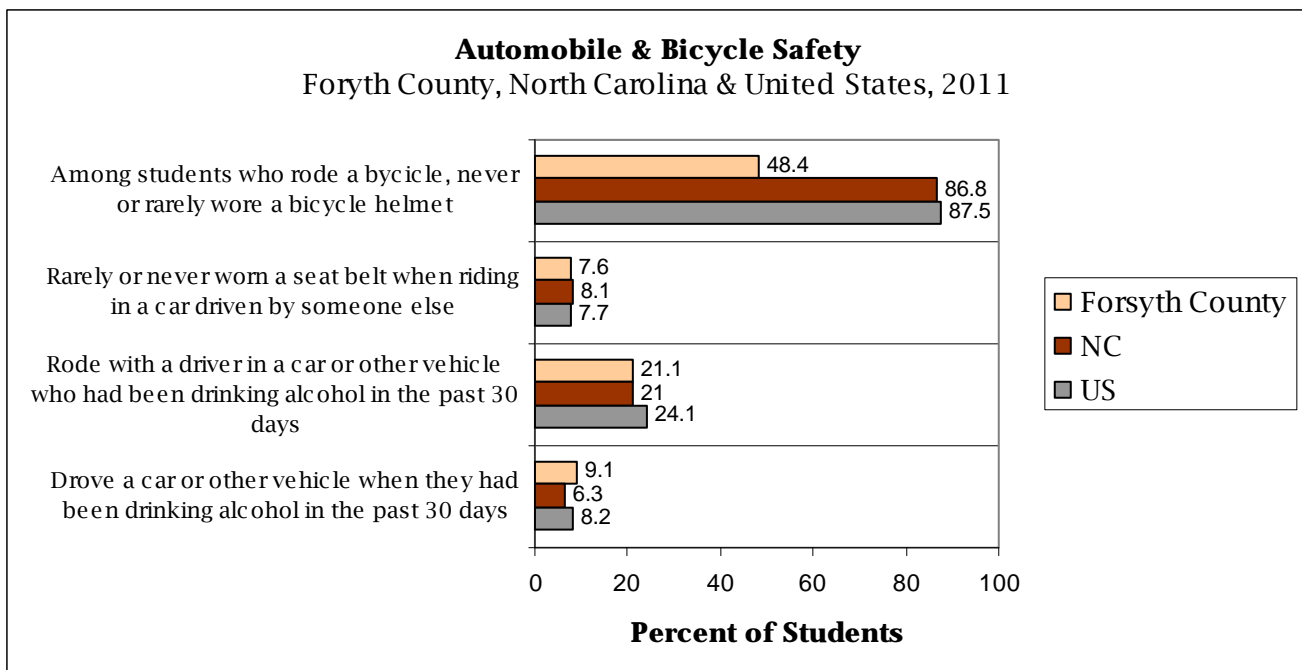
Injuries are the leading cause of death or disability for individuals aged 1-44 years. For adolescents aged 10-24 years old motor vehicle crashes attributed to 30% of deaths in this group from injuries sustained in the crash.<sup>2</sup>

<b>Automobile &amp; Bicycle Safety</b>	<b>2011 WSFCS</b>	<b>2011 NC</b>	<b>2011 US</b>	<b>2009 WSFCS</b>	<b>2009 NC</b>	<b>2009 US</b>
Among students who rode a bicycle, never or rarely wore a bicycle helmet	48.4%	86.8%	87.5%	44%	84%	85%
Rarely or never worn a seat belt when riding in a car driven by someone else	7.6%	8.1%	7.7%	8%	7%	10%
Rode with a driver in a car or other vehicle who had been drinking alcohol in the past 30 days	21.1%	21.0%	24.1%	21%	21%	28%
Drove a car or other vehicle when they had been drinking alcohol in the past 30 days	9.1%	6.3%	8.2%	8%	8%	10%

Among WSFC high school students, 56.3% reported always wearing a seatbelt. When riding a bike, 7.0% reported wearing a helmet most of the time or always.

During the past 30 days, 30.2% of high school students reported they text or email while driving a car or other vehicle more than once. The percent of students texting or emailing while driving a car or other vehicle in the past 30 days increases with grade level :

- 55.1% of 12<sup>th</sup> grade students
- 41.9% of 11<sup>th</sup> grade students
- 28.7% of 10<sup>th</sup> grade students

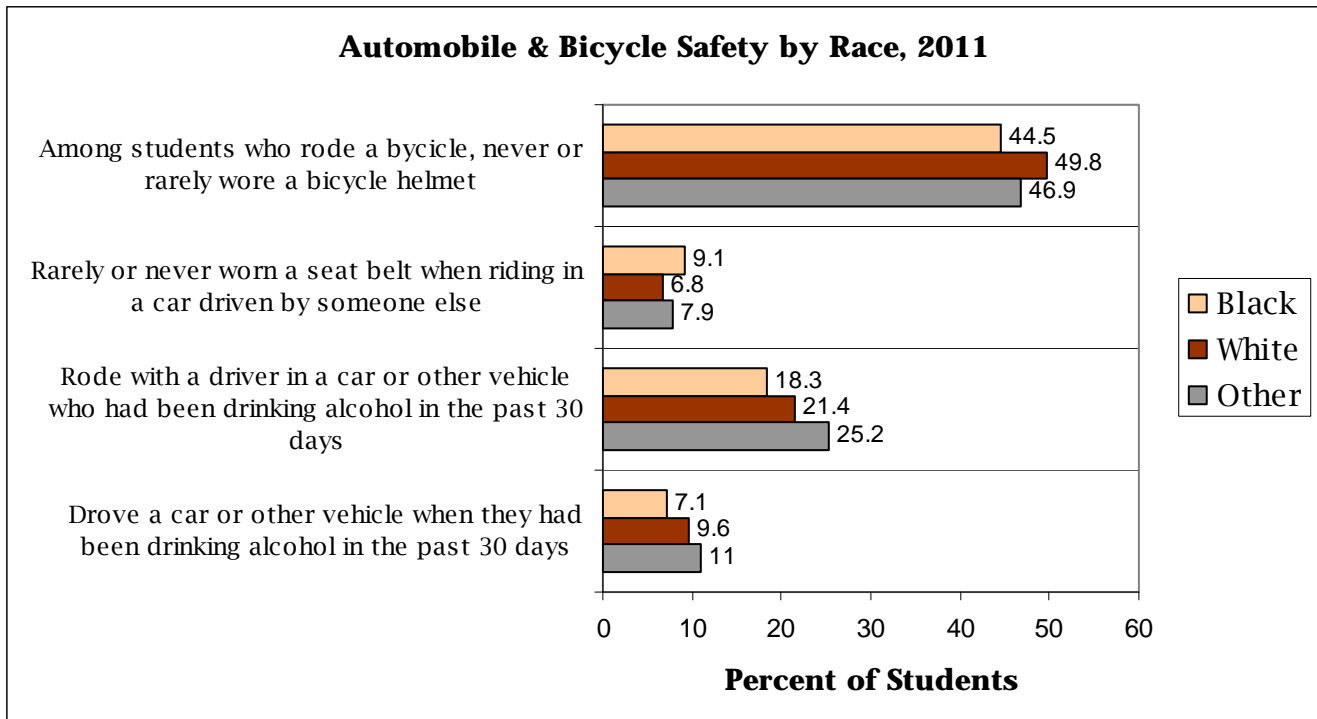






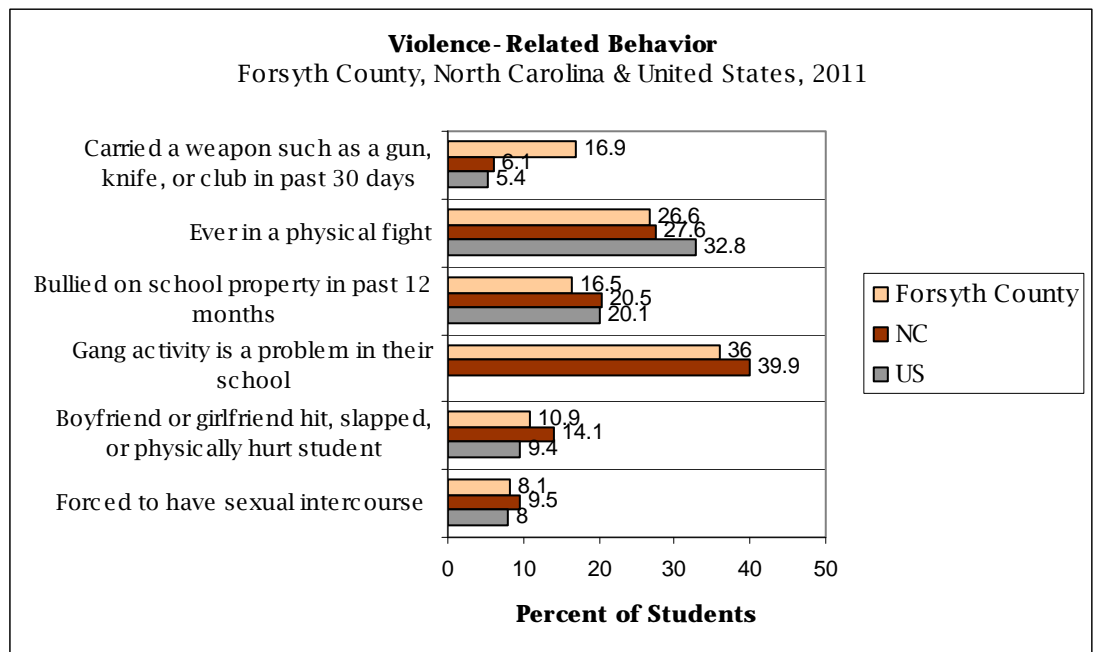
***10% more students reported never or rarely wearing a helmet when riding a bicycle in 2011 than in 2009***

Males were more likely to drive a car under the influence of alcohol (10.4% versus 7.4%) or send a text or email (32.5% versus 27.6%). Females were more likely than males to ride in a car with someone who had been drinking alcohol (21.5% versus 20.6%).



## Violence & Bullying

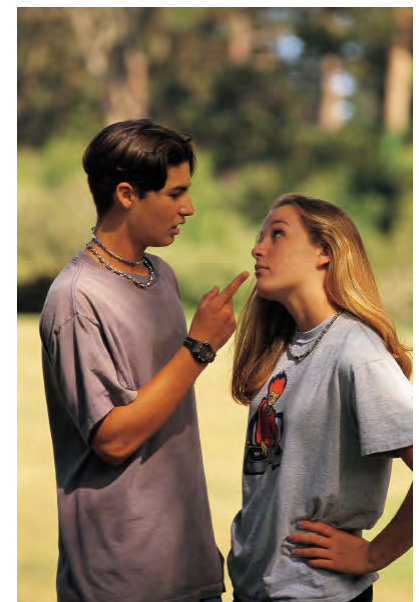
Youth violence includes two types of behavior—violent acts and robbery or assault.<sup>3</sup> Violent acts can cause both emotional and physical harm through bullying, slapping, or hitting.<sup>3</sup> Robbery or assault can lead to injury or death and performed with or without weapons.<sup>3</sup> Youth violence is considered the second leading cause of death for young people between 10 and 24 years old.<sup>3</sup> Violence can lead to death, injuries, and disabilities while also affecting the health of communities.<sup>3</sup>

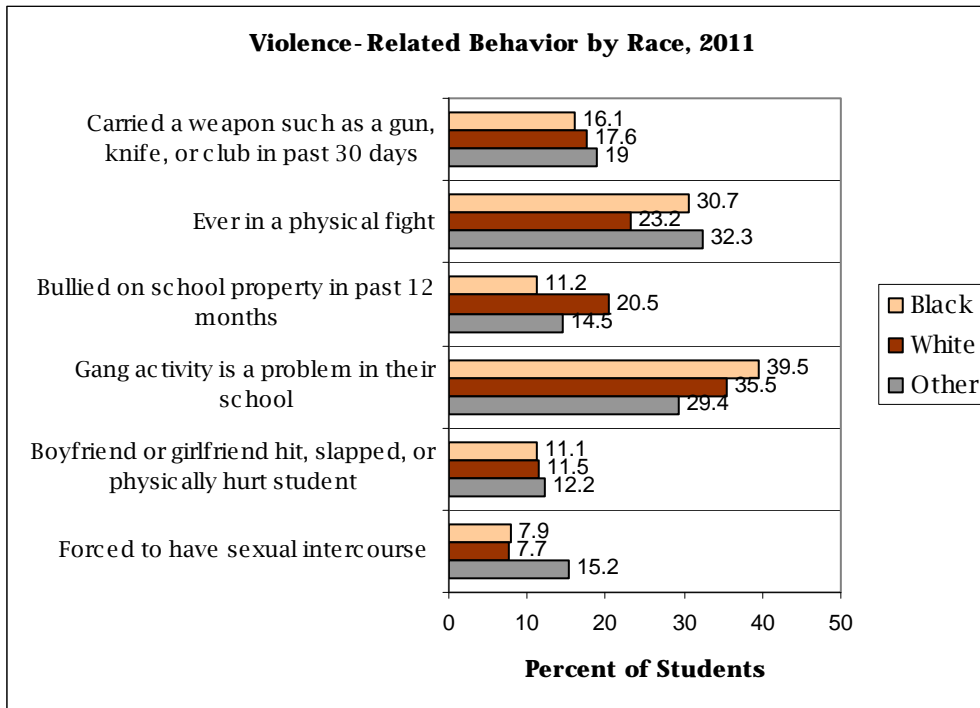


WSFC high school students reported that 6.4% of them had been threatened or injured with a gun, knife, or club on school property in the past 12 months. Males students had a higher percentage reporting that they did not go to school on one or more days in the past 30 days due to feeling unsafe, at 6.5% compared to 4.9% of females. In the past 12 months, 4.2% of students reported sustaining an injury from a physical fight that needed medical treatment.

### *Dating Violence*

- 10.9% of them had been hit, slapped, or physically hurt by their boyfriend or girlfriend on purpose
  - 12.7% of males had been physically hurt
  - 8.8% of females had been physically hurt
- 8.1% of students reported being physically forced to have sexual intercourse when they did not want to
  - 6.3% of males were physically forced to have intercourse
  - 10.2% of females were physically forced to have intercourse





### Bullying

Bullying is considered a form of youth violence and includes: attack or intimidation with intention to cause fear, distress, or harm through physical, verbal, or psychological/relational means; imbalance of power between the bully and victim; or repeated attacks or intimidation between the same children over time.<sup>4</sup> Victims of bullying have an increased risk for mental health problems, psychosomatic complaints, and poor school adjustment while the youth abusers of bullying have an increased risk for substance use, academic problems and violence later in life.<sup>4</sup>

Additionally:

- 18.3% of females were electronically bullied in past 12 months
- 8.4% of males electronically bullied in past 12 months
- 57.0% witnessed other students being bullied in past 12 months
- 10.7% were teased or called names because someone thought they were gay, lesbian, or bisexual.

Violence-Related Behavior	2011	2011	2011	2009	2009	2009
	WSFCS	NC	US	WSFCS	NC	US
Carried a weapon such as a gun, knife, club in past 30 days	16.9%	6.1%	5.4%	17%	20%	18%
Ever in a physical fight	26.6%	27.6%	32.8%	29%	29%	32%
Bullied on school property in past 12 months	16.5%	20.5%	20.1%	14%	17%	20%
Gang activity is a problem in their school	36.0%	39.9%	n/a	32%	36%	n/a
Boyfriend or girlfriend hit, slapped, or physically hurt student	10.9%	14.1%	9.4%	12%	13%	10%
Forced to have sexual intercourse	8.7%	9.5%	8.0%	8%	9%	7%

## Sexual Behavior

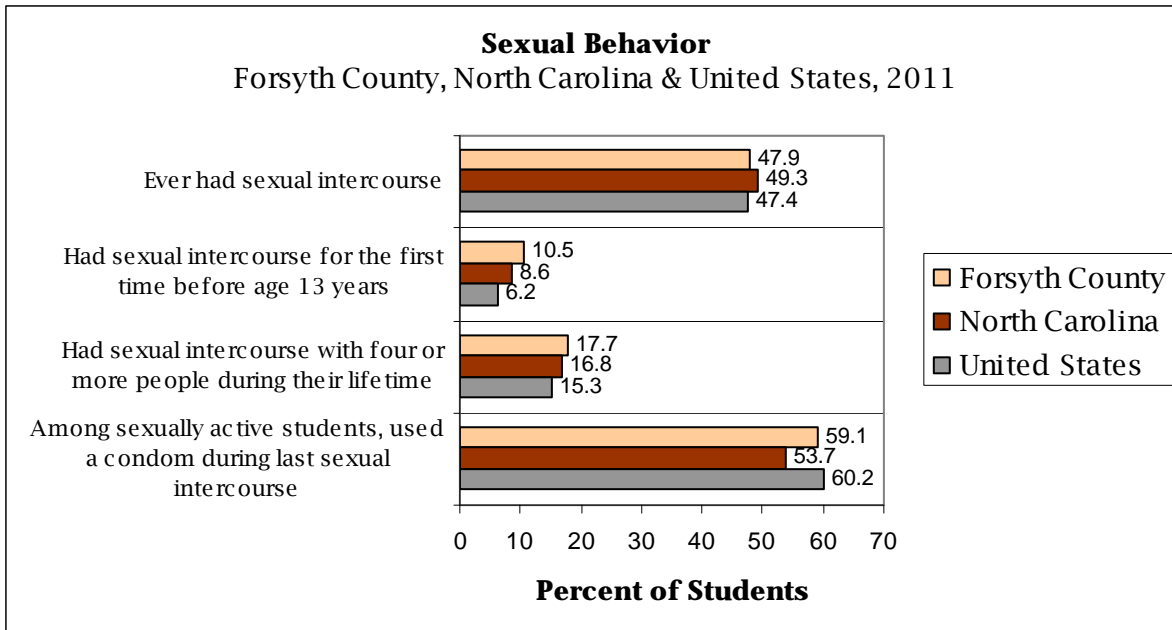
Sex education is deemed a health topic as youth engage in behaviors that lead to pregnancy, sexually transmitted diseases, and place them at risk for HIV infection. Nationally 46% of high school students have had sex, with 39% not using a condom during last sexual intercourse.<sup>5</sup> In 2010 Forsyth County had 636 pregnancies for teens between the ages of 15-19 years old.<sup>6</sup> The same year there were 1,010 sexually transmitted diseases among youth ages 10-19 years including syphilis, chlamydia, and gonorrhea additionally 4 cases of HIV were diagnosed and 1 case of AIDS was diagnosed among this age group.<sup>6</sup>



### Sexual Intercourse

The average age of first sexual intercourse for WSFC high school students is 14. Students who engaged in sexual intercourse increased with grade levels:

- 36.7% of 9<sup>th</sup> grade students
- 45.6% of 10<sup>th</sup> grade students
- 55.1% of 11<sup>th</sup> grade students
- 67.6% of 12<sup>th</sup> grade students
- Males had an average of 3.3 partners during their lifetime
- Females had an average of 2.8 partners during their lifetime
- Males who were sexually active in the past 3 months had an average of 2.1 sex partners
- Females who were sexually active in the past 3 months had an average of 1.4 sex partners
- 10.7% of students reported drinking alcohol or using drugs prior to having sexual intercourse
  - 12.7% of males drank alcohol or used drugs prior to having sexual intercourse
  - 8.6% of females drank alcohol or used drugs prior to having sexual intercourse

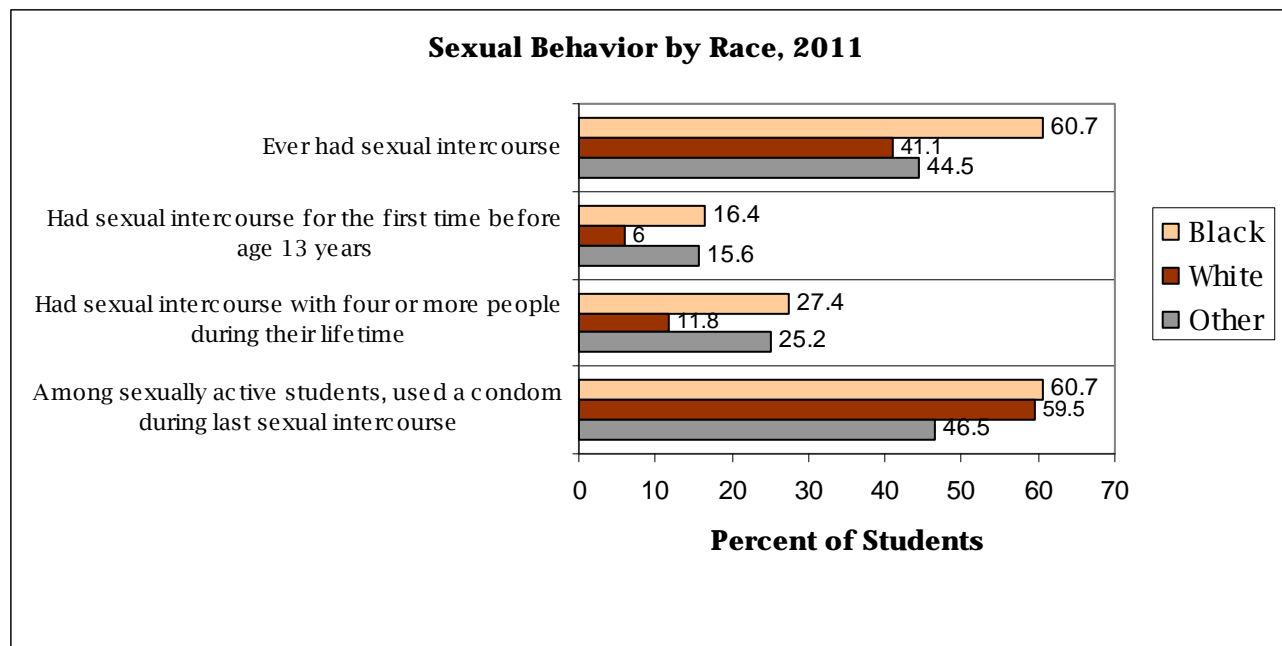


<b>Sex Behavior</b>	<b>2011 WSFCS</b>	<b>2011 NC</b>	<b>2011 US</b>	<b>2009 WSFCS</b>	<b>2009 NC</b>	<b>2009 US</b>
Ever had sexual intercourse	47.9%	49.3%	47.4%	50%	51%	46%
Had sexual intercourse for the first time before age 13 years	10.5%	8.6%	6.2%	10%	8%	6%
Had sexual intercourse with four or more people during their lifetime	17.7%	16.8%	15.3%	16%	16%	14%
Among sexually active students, used a condom during last sexual intercourse	59.1%	53.7%	60.2%	63%	62%	61%

Partner age also varied with gender as 2.9% of females had partners 3 or more years younger than them, and 10.7% of females responding yes to having sexual partners 3 or more years older than they. A higher percentage, 4.2%, of males had sexual partners that were 3 or more years younger, while 8.4% of males had sexual partners that were 3 or more years older than them.

### Parental Expectations

WSFC high school students reported that 75.8% of them have had their parents or other adults in their family talk with them about they expected the student to do or not to do when it comes to sex, while 17.7% had not, and 6.6% were unsure. Females had a higher percentage at 81.8% of parental discussion in contrast to males at 70.6%.

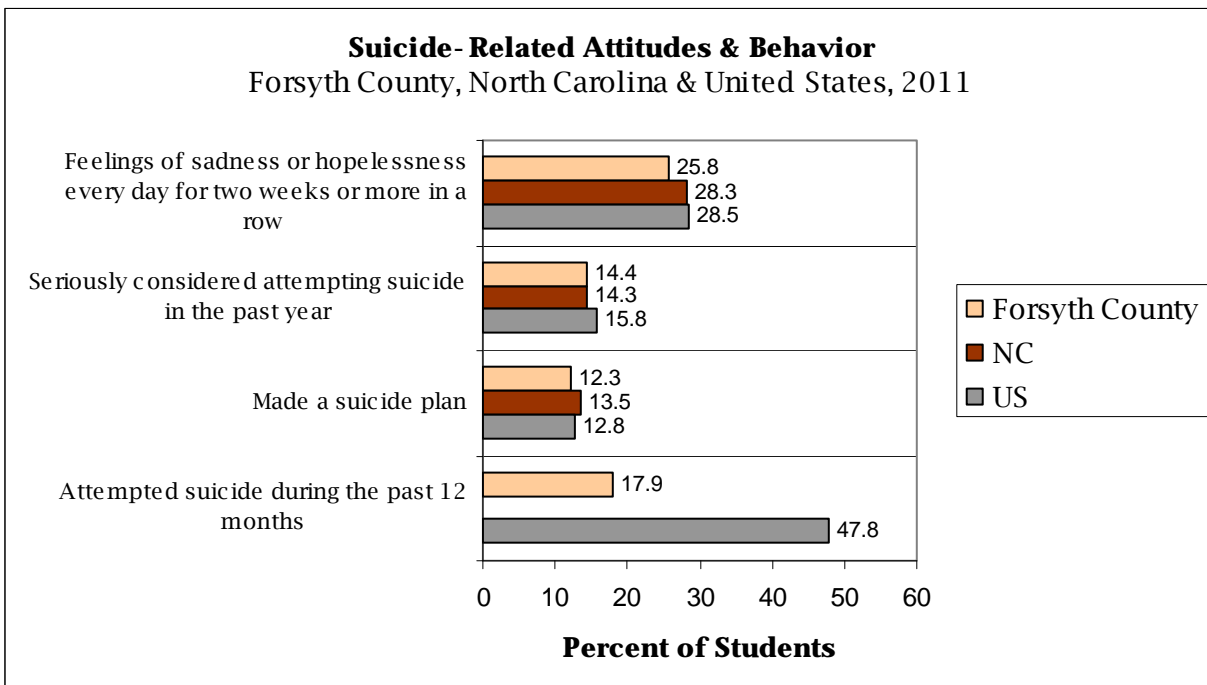


### Suicide- Related Attitudes & Behavior

Suicide is the third leading cause of death, accounting for 12% of deaths, for youth ages 10-24 years.<sup>2</sup> For youth ages 10-14, suicide is the fourth leading cause of death.<sup>7</sup> The feelings that lead to suicide are highly treatable if tied to mental or substance abuse disorder.<sup>7</sup>

A higher percentage of females, 32.0%, felt sad and hopeless almost everyday for two weeks or more in row in the past 12 months that they stopped doing usual activities, in contrast to 20.2% of males who felt the same. Others were more likely to report feeling so sad or hopeless almost every day for two weeks or more that they stopped doing some usual activities in comparison to Blacks or Whites.

Overall 14.4% of WSFC high school students seriously considered suicide, with 17.2% 9th grade students reporting they had considered it in comparison to 12.4% of 12th grade students. There was a 7.3 percentage point gap between male and females, with 11% of males considered suicide in comparison to 18.3% of females.



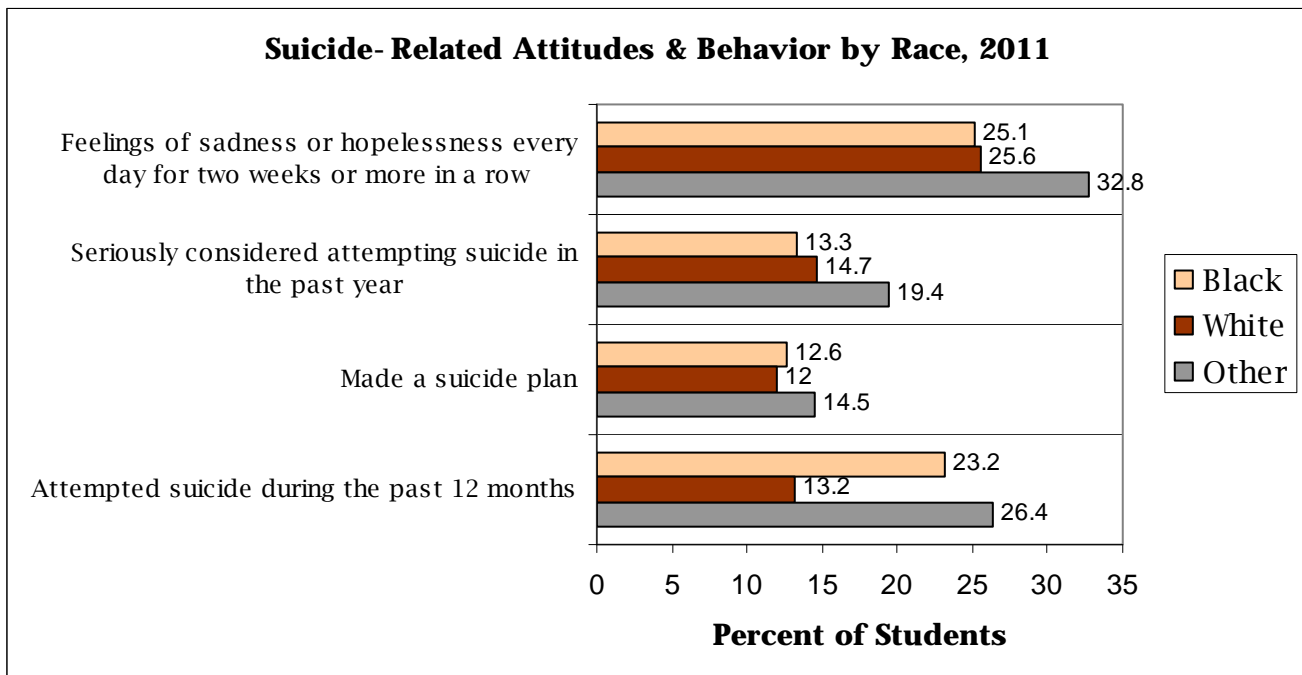


Suicide-Related Attitudes & Behavior	2011 WSFCS	2011 NC	2011 US	2009 WSFCS	2009 NC	2009 US
Feelings of sadness or hopelessness every day for two weeks or more in a row	25.8%	28.3%	28.5%	25%	27%	26%
Seriously considered attempting suicide in the past year	14.4%	14.3%	15.8%	14%	13%	14%
Made a suicide plan	12.3%	13.5%	12.8%	11%	10%	11%
Attempted suicide one or more times in the past year	17.9%	n/a	7.8%	12%	10%	6%

Females reported that 14.5% of them had made suicide plans in comparison to 10.3% of males. Students reported that 17.9% of them had tried to kill themselves. WSFC high school students reported that 5.6% of them had been seriously injured from a suicide attempt, more than 1 in 20 respondents. Males reported that 6.5% of them had to be treated by a doctor or nurse following a suicide attempt in comparison to 4.7% of females needing treatment. Others also were more likely to report needing treatment at 10.4% in comparison to 7.6% of Black students and 4.0% of White students.

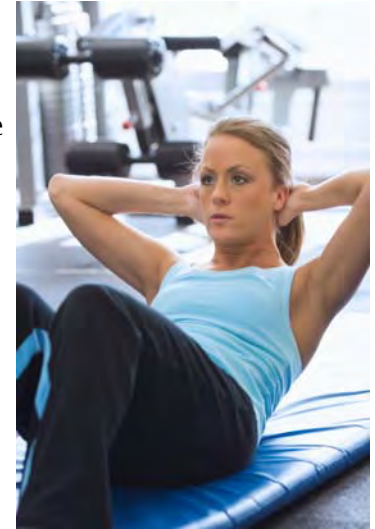
High school students turn to their friends or siblings (45.7%), parent or other adult family member (15.5%), or some other person (8.9%) when they feel sad, empty, hopeless, angry, or anxious. A higher rate of males, 79.8%, reported not feeling sad in comparison to 68.0% of females.

**49% more students reported that they attempted suicide one or more times in the past year in 2011 than in 2009**



## Weight Management & Nutrition

Childhood obesity has more than tripled in the past 30 years. In 2008, 20% of children between 6-11 years old were obese, while 18% adolescents aged 12-19 are obese.<sup>8</sup> There are both immediate and long-term effects on health and well-being for youth who are obese.<sup>8</sup> These effects include<sup>8</sup>:

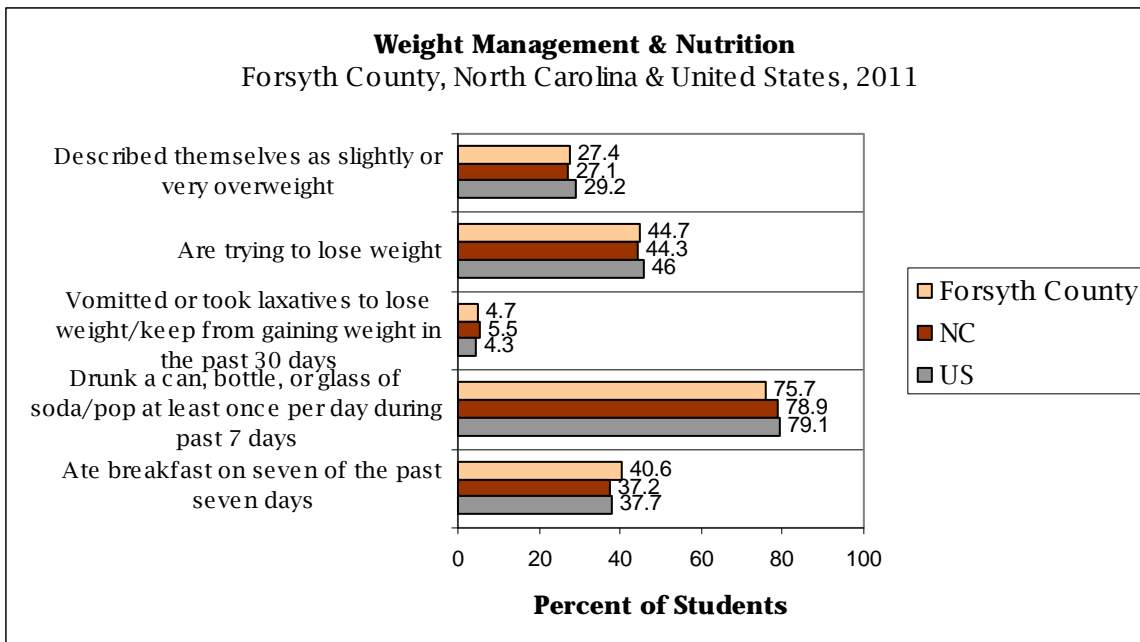


- Increases risk for cardiovascular disease (high cholesterol, high blood pressure)
- Increases likelihood to have pre-diabetes
- Increases risk for bone and joint problems, sleep apnea, and social and psychological problems (stigmatization and poor self-esteem)
- Increases likelihood to be obese adults
- Increases risk for cancers

In WSFC high schools, 32.3% of female students and 23.1% of male students described themselves as either “slightly overweight” or “very overweight”. Most students, 57.0%, described themselves as being at “about the right weight”. More females, 59.8%, were trying to lose weight in comparison to 31.3% of males. In the past 30 days, to either lose weight or keep from gaining weight:

- 69.7% of female students and 52.5% of male students exercised
- 53.0% of female students and 27.1% of male students ate less food
- 5.6% of female students and 5.3% of male students took diet pills, powders, or liquids without a doctor’s advice
- 5.8% of female students and 3.7% of male students vomited or took laxatives

**64% less students reported drinking a can, bottle, or glass of soda or pop at least once a day in 2011 than in 2009.**



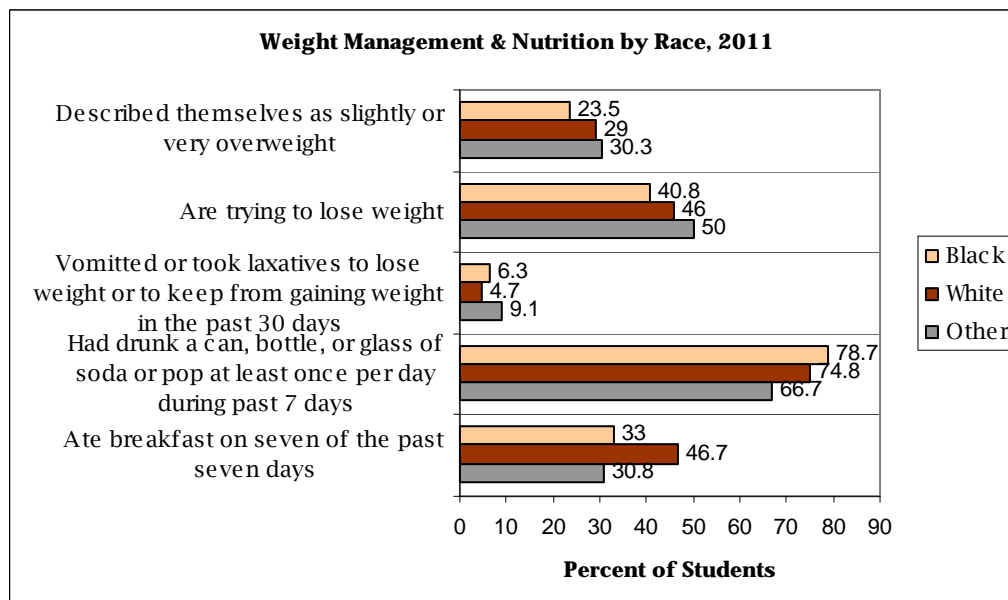


<b>Weight Management &amp; Nutrition</b>	<b>2011 WSFCS</b>	<b>2011 NC</b>	<b>2011 US</b>	<b>2009 WSFCS</b>	<b>2009 NC</b>	<b>2009 US</b>
Described themselves as slightly or very overweight	27.4%	27.1%	29.2%	25%	28%	28%
Are trying to lose weight	44.7%	44.3%	46.0%	43%	46%	45%
Vomited or took laxatives to lose weight or to keep from gaining weight in the past 30 days	4.7%	5.5%	4.30%	5%	5%	4%
Had drunk a can, bottle, or glass of soda or pop at least once per day during past 7 days	23%	30.4%	27.8%	36%	33%	29%
Ate breakfast on seven of the past seven days	40.6%	37.2%	37.7%	38%	34%	n/a

## Nutrition

Students reported in the past 7 days they:

- Drank an average of 5 sodas
- Consumed fruit or vegetables an average of 16.4 times
- Ate breakfast an average of 5.5 times
- Had dinner with family an average of 5.3 times
- 78% drank 100% fruit juice one or more times
- 87.3% ate fruit on one or more times
- 60.7% ate a green salad one or more times
- 62.9% ate potatoes one or more times
- 42.4% ate carrots one or more times
- 83.1% ate other vegetables one or more times
- 83.4% drank a sugar sweetened beverage



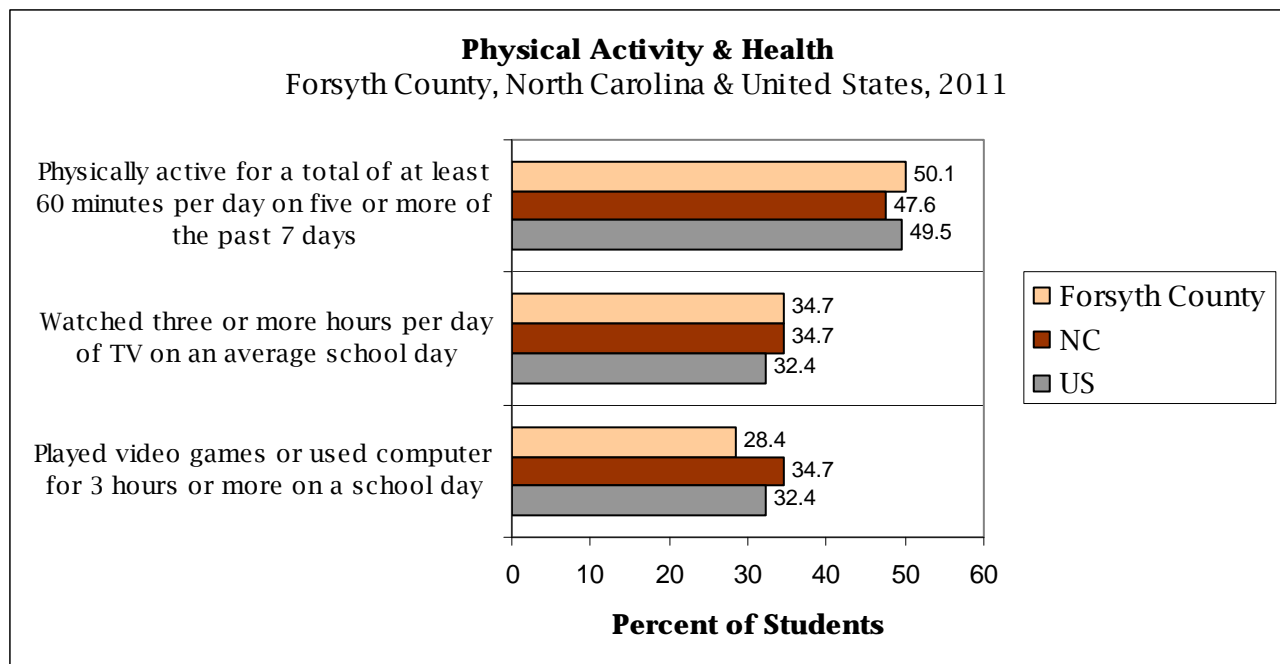
## Physical Activity and Health

Physical activity has multiple benefits for children and adolescents that include<sup>9</sup>:

- Improves strength and endurance
- Builds healthy bones and muscles
- Controls weight
- Reduces anxiety and stress
- Improves self-esteem levels
- Improves blood pressure and cholesterol levels
- Improves academic performance
- Reduces risk for developing chronic diseases

Youth between the ages of 6 and 17 years old are recommended to receive at least 60 minutes of physical activity daily.<sup>9</sup> Physical inactivity can result in increased risk for diseases and illnesses related to overweight and obesity.<sup>9</sup>

Students reported being physically active for at least 60 minutes an average of 5.1 days, with 42.6% of students participating in team sports and 23.6% participating individual sports.

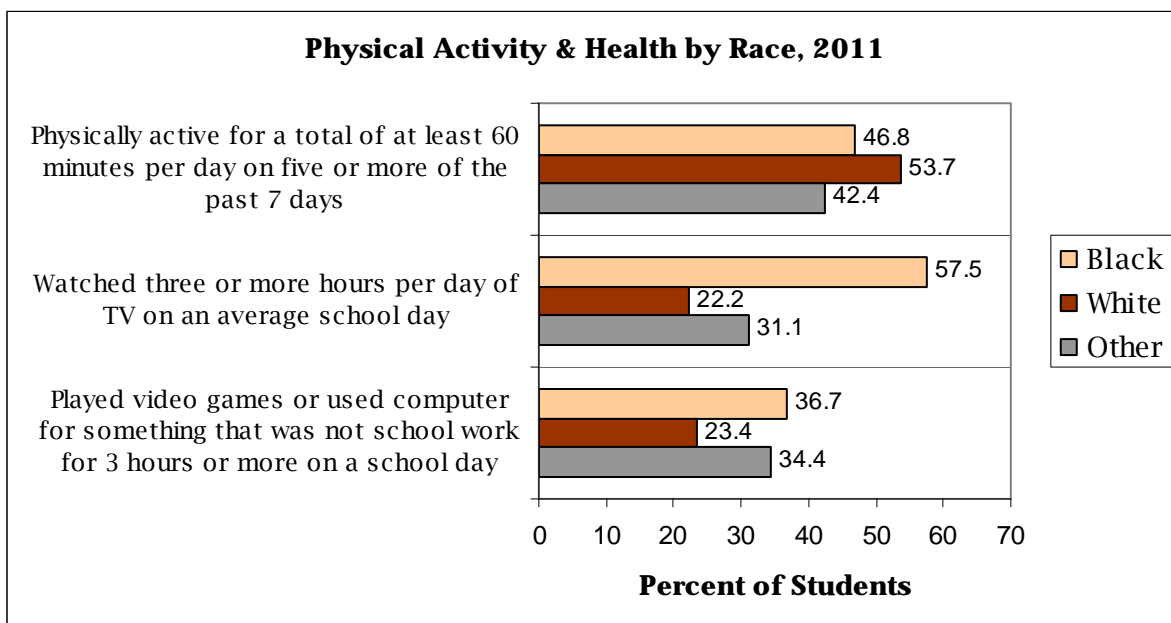


Physical Activity & Health	2011 WSFCS	2011 NC	2011 US	2009 WSFCS	2009 NC	2009 US
Physically active for a total of at least 60 minutes on five or more of the past seven days	50.1%	47.6%	49.5%	46%	46%	37%
Watched three or more hours per day of TV on an average school day	34.7%	34.7%	32.4%	35%	36%	33%
Played video games or used computer for something that was not school work for 3 hours or more a school day	28.4%	34.7%	32.4%	23%	24%	25%

Additionally:

- 5.4% of males and 4.6% of females reported being physically active.
- 5.3% of 9th grade students reported being physically active, above the all average of 5.1%
- 48.5% of males participated in team sports in comparison to 36.0% of females
- Team sport participation decreased with grade level
  - 46.0% of 9th grade students
  - 44.9% of 10th grade students
  - 39.1% of 11th grade students
  - 33.8% of 12th grade students
- 30.7% of males participated in individual sports in comparison to 15.6% of females

**23% more students played video games or used computers for something that was not school work 3 or more hours a school day in 2011 than in 2009**

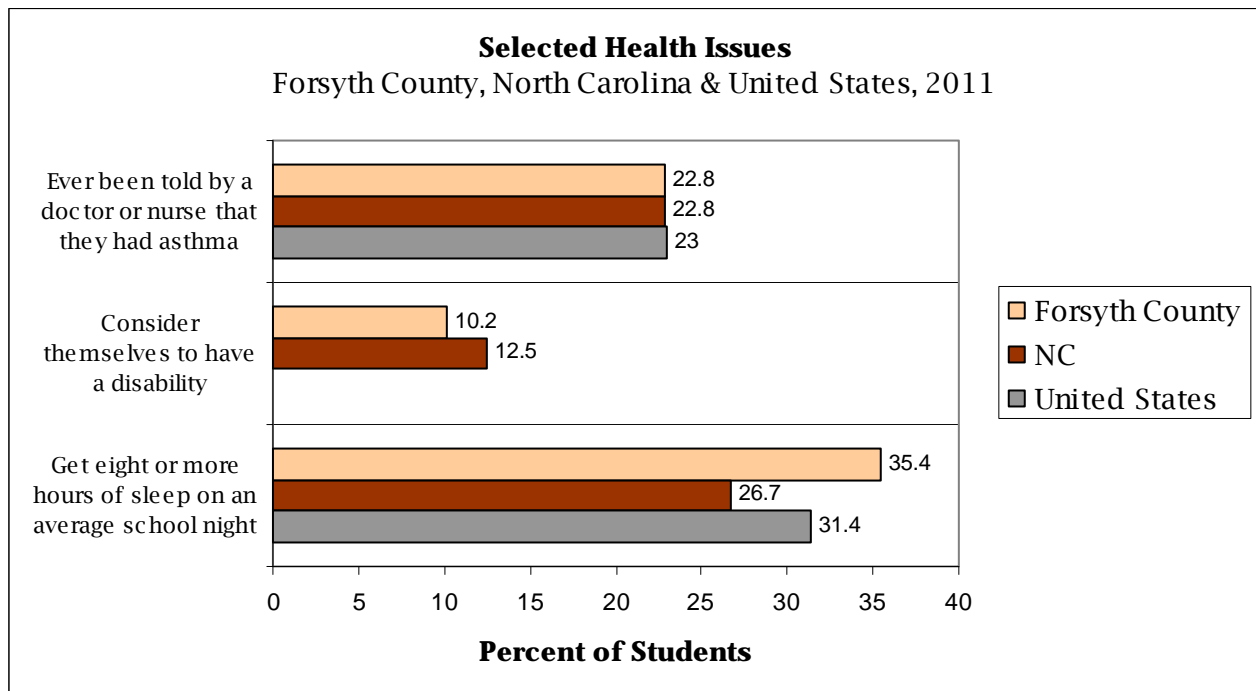


### Selected Health Issues

Other conditions also affect adolescents. Health conditions like asthma is common among youth. Asthma is one of the leading chronic diseases among youth in the Nation and a leading cause of school absenteeism<sup>10</sup> Youth who are low-income, minorities, or live in inner cities experience asthma that results in more emergency department visits, hospitalizations, and death than the general population.<sup>10</sup> Another health issue among teens is the amount of sleep teens receive. Sleep is recognized as important to public health, with sleep deficiency linked to motor vehicle crashes, industrial disasters, as well as errors in medical and other occupations.<sup>11</sup> Sleep deficiency also increases risk for chronic diseases. Teens ages 10-17 years old are recommended to receive 8.5-9.25 hours of sleep a night. <sup>12</sup> In addition the overall health of teens rely on both regular physical visits for physicals and dental visits twice a year.

WSFC high school students reported:

- An average of 6.9 hours of sleep per night
- 16.3% strongly agreed or agreed that they felt alone in life
- 80.0% strongly agreed or agreed that they feel good about themselves
- 54.8% strongly agreed or agreed that their teacher really cares about them and gives them encouragement.
- 15.9% had been tested for HIV
- 10.2% considered themselves to have a disability
- 35.6% have gambled one or more times in the past 3 months
- 16% still had asthma

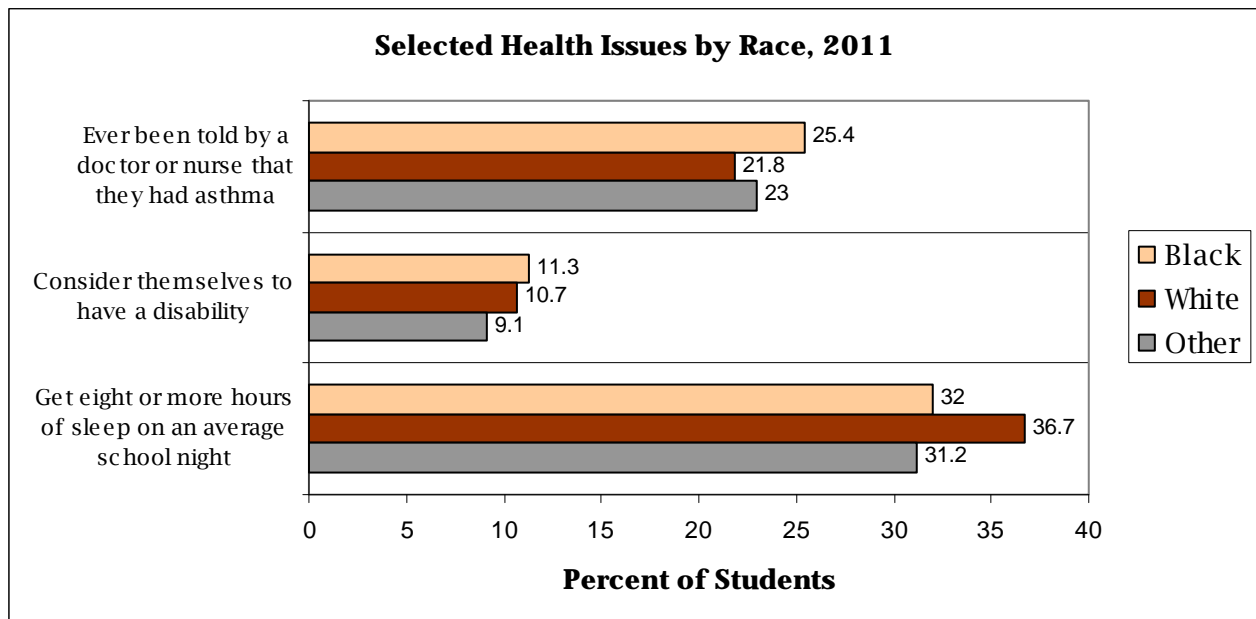




Selected Health Issues	2011 WSFCS	2011 NC	2011 US	2009 WSFCS	2009 NC	2009 US
Ever been told by a doctor or nurse that they had asthma	22.8%	22.8%	23.0%	22%	22%	22%
Consider themselves to have a disability	10.2%	12.5%	0%	12%	11%	n/a
Get eight or more hours of sleep on an average school night	35.4%	26.7%	31.4%	34%	29%	31%

Additional Differences:

- 11.9% of males considered themselves to have a disability in comparison to 8.25 of females
- 14.3% of White students reported trouble learning, remembering, or concentrating because of a disability or health problem in comparison to 10.7% of Black students and 10.7% of Other students
- For HIV Testing
  - 18.7% of female students and 13.5% of males students were tested tested
  - 23.9% of Black students, 11.5% of White students and 17.5% of Other students were tested







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**2011 Forsyth County  
Community Health Resources**

Type of Agency and Name of Agency/Provider	Location/Phone Number	Services Provided and Hours Available
<b>AIDS/HIV</b>		
<b>AMIGOS Peer Educators</b> <b>Agency: AIDS Care Services</b>	995 Northwest Blvd Winston-Salem, NC 27101 Phone: (336) 725-8682	The AMIGOS program offered by AIDS Care Service recruits and coordinates training of volunteers to educate the Spanish-speaking community about AIDS prevention, testing and care. Hours: Monday - Friday 9:00 am - 5:00 pm.
<b>Back to Basics</b>	995 Northwest Blvd Winston-Salem, NC 27101 Phone: (336) 777 - 0116 Email: <a href="mailto:acswnsnc@bellsouth.net">acswnsnc@bellsouth.net</a>	The Back to Basics program provides home visits and phone interviews to follow up with housing clients. Staff conducts life skills training classes, and supports HIV+ and AIDS-affected people and families with information and referrals. Hours: Monday - Friday 9:00 am - 5:00 pm.
<b>Comprehensive Risk Counseling Service</b> <b>Agency: AIDS Care Service, Inc.</b>	995 Northwest Blvd Winston-Salem, NC 27101 Phone: (336) 777 - 0116 Email: <a href="mailto:acswnsnc@bellsouth.net">acswnsnc@bellsouth.net</a>	The Comprehensive Risk Counseling Services of Aids Care Service provides a combination of individually focused prevention activities focused on multiple objectives such as: risk reduction, increased participation in medical care, and adherence interventions for HIV+ persons. Hours: Monday - Friday 9:00 am - 5:00 pm.
<b>Housing Program</b> <b>Agency: AIDS Care Service, Inc.</b>	995 Northwest Blvd Winston-Salem, NC 27101 Phone: (336) 722 - 6551 Email: <a href="mailto:acswnsnc@bellsouth.net">acswnsnc@bellsouth.net</a>	The AIDS Care Service Housing Program offers temporary housing for up to five families at a time in their Horseshoe Apartments. The assist clients with finding affordable permanent housing via coordination and administration of Shelter Plus Care, HOPWA and Section 8 vouchers. They also provide HOPWA Emergency Housing Funding for rent and utility assistance. Hours: Monday - Friday 9:00 am - 5:00 pm.



<b>Type of Agency and Name of Agency/Provider</b>	<b>Location/Phone Number</b>	<b>Services Provided and Hours Available</b>
<p><b>Holly Haven Family Care Home</b></p> <p><b>Agency: AIDS Care Service, Inc.</b></p>	<p>995 Northwest Blvd Winston-Salem, NC 27101 Phone: (336) 725-3555 Email: <a href="mailto:acswnsnc@bellsouth.net">acswnsnc@bellsouth.net</a></p>	<p>Holly Haven provides residential treatment and other services for persons with HIV/AIDS and their families. AIDS Care Service provides 24-hour holistic care at Holly Haven, a six-bed family care home built to meet the unique needs of persons seriously ill with AIDS-related symptoms. Hours: Monday - Friday 9:00 am - 5:00 pm</p>
<p><b>Latino Client Health Educators</b></p> <p><b>Agency: AIDS Care Service, Inc.</b></p>	<p>995 Northwest Blvd Winston-Salem, NC 27101 Phone: (336) 725 - 8438 Email: <a href="mailto:acswnsnc@bellsouth.net">acswnsnc@bellsouth.net</a></p>	<p>Provides home and hospital visits, support services, caregiver support referral, translation, and access to transportation. Hours: Monday - Friday 9:00 am - 5:00 pm.</p>
<p><b>Positive Action Club Support Groups</b></p> <p><b>Agency: AIDS Care Service, Inc.</b></p>	<p>995 Northwest Blvd. Winston-Salem, NC 27101 Phone: (336) 777-0208</p>	<p>This program offers group networking and counseling with others about living with HIV/ AIDS. Hours: Monday - Friday 9:00 am- 5:00 pm.</p>
<p><b>Client Supportive Program: Referrals for HIV/AIDS Social Service Agencies</b></p>	<p>PO Box 21373 Winston-Salem, NC, 27120 Phone: (336) 777 – 0142</p>	<p>The program provides referrals for individuals with HIV/AIDS to local social services agencies and treatment organizations.</p>
<p><b>Communicable Disease Control</b></p> <p><b>Agency: Forsyth County Department of Public Health</b></p>	<p>799 N Highland Ave Winston-Salem, NC, 27101 Phone: (336) 703-3100</p>	<p>Communicable Disease Control includes the investigation of disease outbreaks and unusual situations and to implement control measures to minimize further transmission of disease. Hours: Monday, Tuesday, Thursday, 8:30 am-3:45 pm; Wednesday, 9:30 am- 6:45 pm, Friday, 8:30 am-11:45 am.</p>

Type of Agency and Name of Agency/Provider	Location/Phone Number	Services Provided and Hours Available
<p><b>HIV/AIDS Case Management</b></p> <p><b>Agency: Abundant Quality Care (AQC)</b></p>	<p>651 Akron Dr Winston-Salem, NC, 27105 Phone: (336) 744-9293</p>	<p>AQC (Abundant Quality Care) - provides case management to bring about a positive change in the lives of individual infected with HIV/AIDS as well as bring beneficial relief, assistance and change to the family unit. Hours: Monday - Friday 8:30 am - 4:30 pm.</p>
<p><b>Northwest Care Consortium</b></p>	<p>301 N Main St, Ste 1700 Winston-Salem, NC, 27101 Phone: (336) 721-9332</p>	<p>The Consortium serves the HIV/AIDS population in fourteen counties in Northwest North Carolina (Alexander, Burke, Alleghany, Ashe, Caldwell, Catawba, Davidson, Davie, Forsyth, Stokes, Surry, Watauga, Wilkes, and Yadkin).</p>
<p><b>Positive Wellness Alliance</b></p>	<p>1001 S Marshall St, Ste 257 &amp; 258 Phone: (336)-722-0976</p>	<p>Positive Wellness Alliance provides services and support to people infected with and affected by HIV/AIDS through case management, outreach, and prevention education in Davidson, Forsyth, Davie, and Yadkin counties. Hours: Mondays and Wednesdays-Fridays, 8:00 am to 5:00 pm.</p>
<p><b>The Pantry</b></p> <p><b>Agency: Aids Care Service, Inc.</b></p>	<p>995 Northwest Blvd Winston-Salem, NC 27101 Phone: (336) 777 - 0116 Email: <a href="mailto:acswnsnc@bellsouth.net">acswnsnc@bellsouth.net</a></p>	<p>The Pantry offered by AIDS Care Service provides monthly supplies of food to persons with HIV. Hours: Monday - Friday 9:00 am - 5:00 pm.</p>
<p><b>Serenity's Haven, Inc:</b></p> <p><b>HIV/AIDS Case Management</b></p>	<p>163 Stratford Ct, Ste 214 Winston-Salem, NC, 27103 Phone: (336) 723 - 7717</p>	<p>Coordinate care for HIV+ persons with NC Medicaid and link them to other community resources. Monday - Friday 9:00 am - 5:00 pm.</p>

Type of Agency and Name of Agency/Provider	Location/Phone Number	Services Provided and Hours Available
<b>Ancillary Services</b>		
<p><b>Ancillary Services - Forsyth County</b></p> <p><b>Agency: Forsyth County Department of Public</b></p>	<p>799 N Highland Ave Winston-Salem, NC 27101 Phone: (336) 727-8231</p>	<p>Provides support for all health department clinics with services that include: testing for sexually transmitted diseases, hematology, blood chemistry and urinalysis. In addition to clinical testing, the lab also works closely with Environmental Health to monitor the quality of drinking water from wells in the area and to ensure that local package treatment plants are performing properly. Hours: Monday-Friday, 8:00 am - 5:00 pm.</p>
<b>Chiropractic Services</b>		
<p><b>Advance Chiropractic and Health Center</b></p>	<p><b>2505 Neudorf Rd Clemmons, NC 27012 (336) 766-0888</b></p>	<p><b>Care may include massage, acupuncture, nutrition, exercise and stress counseling in addition to the chiropractic adjustments.</b></p>
<p><b>Body Care Chiropractic</b></p>	<p><b>5919 James St, Ste C Clemmons, NC 27012 Phone: (336) 766-3993</b></p>	<p><b>Help people who suffer from a variety of health issues. Naturally, chiropractors help traditional neck and back problems, but chiropractic has also produced wonderful results with a variety of problems you wouldn't normally associate with the spine. Hours: Monday, Wednesday &amp; Friday 9:00 am -12:00pm; Monday-Wednesday 2:00 pm- 5:30 pm and Thursday 2:00 pm – 5:15 pm.</b></p>
<p><b>Brittan Chiropractic Center, PLLC</b></p>	<p>205 S Stratford Rd Winston-Salem, NC 27103 Phone: (336) 293-8931</p>	<p>Chiropractic Clinic offering a full range of services including adjusting techniques, physiotherapy, rehab exercise, and nutritional counseling to help patients toward optimal health and wellness.</p>

<b>Type of Agency and Name of Agency/Provider</b>	<b>Location/Phone Number</b>	<b>Services Provided and Hours Available</b>
<b>Bronson Chiropractic and Acupuncture Clinic of the Triad</b>	4526 Country Club Rd Winston-Salem, NC 27104 Phone: (336) 765-0404	BC&A is a clinic offering many complimentary and alternative options for the care and treatment of patients. Functional Medicine and Nutrition are used to address chronic pain, digestive problems, hormonal imbalances, and allergies as well as diabetes, heart disease and cancer, etc. Acupuncture is used in the treatment of pain, arthritis, digestive issues, allergies and other autoimmune diseases. Chiropractic care is available for musculoskeletal issues. Hours are by appointment Monday – Thursday.
<b>Gray Chiropractic &amp; Sports Associates, P.A.</b>	223 Harper St Winston-Salem, NC 27104 Phone: (336) 774-1624	Offers a diverse array of cutting edge techniques that address health and wellness, including chiropractic care, laser therapy, soft tissue treatment, acupuncture and body performance.
<b>Robinson Center for Chiropractic</b>	3300 Reynolda Rd, #102 Winston-Salem, NC 27106 Phone: (336) 782-3243	Winston Salem Chiropractic Clinic and Wellness Center offering a full range of services. Hours: Monday – Thursday, 8:00 am to 6:00 pm, Friday, 8:00 am to 1:00 pm, and Saturday, 8:00 am to 12:00 pm.
<b>Salama Chiropractic Center</b>	Oak Ridge Office: 1692 NC Hwy 68 N, Ste E Oak Ridge, NC 27310 Phone: (336) 644-6446  Winston-Salem Office: 1515 Hanes Mall Blvd Winston-Salem, NC 27103 Phone: (336) 773-7373	Treats headaches, migraines, neck pain, arthritis, whiplash, lumbar pain, disc pain, carpal tunnel pain, back pain, knee pain, wrist pain, arm & shoulder pain, numbness and tingling, extremity pain, auto/work/sports injuries, muscle aches, sprains and strains, fibromyalgia, and scoliosis. Appointments are available Monday through Saturday.
<b>Sharp Chiropractic</b>	4622 Country Club Rd, # 140, Winston-Salem, NC 27104 Phone: (336) 768-7227	Hours: Monday to Thursday 9:00 am to 1:00 pm and 3:00 pm to 6:00 pm.

Type of Agency and Name of Agency/Provider	Location/Phone Number	Services Provided and Hours Available
<b>Dental Health Providers</b>		
<b>Cleveland Avenue Dental Health Center</b>	501 Cleveland Ave Winston Salem, NC 27101 Phone: (336) 703-3090	A full range of basic dental care services are offered to children of all ages and adults. Medicaid and Health Choice are accepted. Hours: Monday- Thursday 8:00 am - 5:00 pm and Friday 8:00 am - 12:00 pm.
<b>Community Care Center</b>	2135 New Walkertown Rd Winston-Salem, NC 27101 Phone: (336) 723 – 7904	Safety Net Dental Clinics are non-profit dental facilities where low income families can go for dental care.
<b>Preschool Dental Health Program/ School Age Dental Health Program</b>  <b>Agency: Forsyth County Department of Public Health/Smart Start of Forsyth County</b>	799 North Highland Ave Winston-Salem, NC 27102  <i>Preschool</i> Phone: (336) 703-3376  <i>School Age</i> Phone: (336) 703-3090	Promotes and protects good oral health for the citizens of Forsyth County, specifically children ages 0 - 5, their parents, child care providers and women of childbearing age.  Provides calibrated dental assessment, preventive education, and liaison services for school age children.
<b>Forsyth Tech Dental Education Clinic</b>	2100 Silas Creek Pkwy Winston-Salem, NC 27103 Phone: (336) 734-7550	Offers dental hygiene and dental assisting services including: cleanings, x-rays, sealants, complete examinations, fillings, extractions, root canals and additional services if selected as a patient. No insurance accepted. Services range from \$5.00 to \$450.00.
<b>Health Check</b>	799 North Highland Ave Winston-Salem, NC 27101 Phone: (336) 703-3100	Health Check is Medicaid for children. Health Check covers complete medical and dental check-ups, and provides vision and hearing screenings and referrals for treatment. Hours: Monday, Tuesday, Thursday, 8:30 am-3:45 pm; Wednesday, 9:30 am- 6:45 pm, Friday, 8:30 am-11:45 am.

Type of Agency and Name of Agency/Provider	Location/Phone Number	Services Provided and Hours Available
<b>Rescue Mission Dental Clinic</b>	710 North Trade St Winston-Salem, NC 27101 Phone: (336) 723-7904	<p>Safety Net Dental Clinics are non-profit dental facilities where low income families can go for dental care. Most accept insurance and Medicaid, and some have payment on a sliding scale.</p> <p>Hours: 6:30am on the 2nd &amp; 4th Thursday of each month            Only take 10 clients by appointment, occasionally a walk in can be seen for clients that do not show.            Dental extractions only.</p>
<b>Smile Starters</b>	2041 Silas Creek Pkwy Winston-Salem, NC 27103 Phone: (336) 777-1272	Provides dental treatment to underserved children and young adults up to age 20. Accepts Medicaid and Health Choice.
<b>Domestic Violence &amp; Sexual Assault</b>		
<b>Battered Women's Shelter - Safe Relationships</b>  <b>Agency: Family Services, Inc.</b>	24 HourCrisis Line: (336) 723-8125	Provides safe temporary shelter for women and children who are victims of domestic violence or sexual assault. Partners with other agencies to assist victims of human trafficking
<b>Advocacy for Domestic Violence Victims</b>  <b>Agency: Next Step Ministries</b>	PO Box 793 Kernersville, NC 27285 Phone: (336) 413-3156 Email: <a href="mailto:marthashouse@embarqmail.com">marthashouse@embarqmail.com</a>	Next Step Ministries assist domestic violence victims by helping them process 50B restraining orders, providing transportation related to domestic violence court procedures and appointment, coordinated programming with community agencies, assistance with obtaining employment and assistance with securing permanent housing. Call 336-413-3156 (Domestic Violence Crisis Line)

<b>Type of Agency and Name of Agency/Provider</b>	<b>Location/Phone Number</b>	<b>Services Provided and Hours Available</b>
<p><b>Safe on Seven: Forsyth Domestic Violence Center</b></p> <p><b>Agency: Family Services, Inc.</b></p>	<p>1200 S Broad St Winston-Salem, NC 27101 Phone: (336) 722-8173</p>	<p>Safe on Seven: (SOS) Forsyth Domestic Violence Center is a multi-agency approach to provide services for victims of domestic violence. The Center is located on the seventh floor of the Forsyth County Hall of Justice, Winston-Salem, NC. The Safe on Seven Center provides a "one-stop shop" for domestic violence victims by bringing together key service providers from the criminal and civil justice systems, law enforcement, victim advocates, legal advocates and social services, providing access to a variety of services to victims in one centralized location.</p> <p>Hours: Monday-Friday, 8:00 AM-12:30 PM and 2:00 PM-5:00 PM. For screening for 50B, hours are 8:30-12:30 and 2:00-3:30.</p>
<p><b>Time Out - Safe Relationships</b></p> <p><b>Agency: Family Services, Inc.</b></p>	<p>1200 S Broad St Winston-Salem, NC, 27101 Phone: (336) 722-8173</p>	<p>State-approved, psycho-educational program for batterers that addresses issues regarding abuse and control in relationships.</p>
<p><b>Sexual Assault Crisis</b></p> <p><b>Agency: Family Services, Inc.</b></p>	<p>Sexual Assault Line: (336) 722-4457</p>	<p>Advocates are available to assist through the legal and court processes in applying for Victim's Compensation, crisis intervention, support, information, survivor groups, and trained nurses and representatives in sexual assault.</p>

Type of Agency and Name of Agency/Provider	Location/Phone Number	Services Provided and Hours Available
<b>Foundations &amp; Nonprofit Agencies</b>		
<b>Arts Council</b>	305 W 4 <sup>th</sup> St, Ste 1-C Winston-Salem, NC 27101 Phone: (336) 722-2585	The Arts Council offers five competitive grant and award programs. Hours: Monday - Friday 8:30 am - 5:00 pm.
<b>Jaycees, Winston-Salem</b>	1001 S Marshall St, Ste 89 Winston-Salem, NC 27101 Phone: (336) 776 - 0690	The Jaycees is an organization of young professionals, age 21 to 40 years-old, involved in a variety of community, individual development, networking and financial projects.
<b>Kate B. Reynolds Charitable Trust</b>	128 Reynolda Village Winston-Salem, NC 27106 Phone: (336) 397-5514	The Trust is a private foundation with two grant making divisions: the Poor and Need Division which responds to the basic needs and invests in solutions that improve the quality of life for financially needs residents of Forsyth County through two programs: 1) increasing self reliance; 2) providing basic needs. Hours: Monday-Friday, 8:00 am-5:00 pm.
<b>Lupus Foundation of America</b>	2841 Foxwood Ln Winston-Salem, NC 27103 Phone: (336) 768 – 1493 Email: <a href="mailto:lfawinston-t.ncf@juno.com">lfawinston-t.ncf@juno.com</a>	Non-profit, all volunteer organization operated primarily by Lupus patients which lends support to people (and their families) with Lupus and related diseases.
<b>March of Dime, Greater Triad Division</b>	410 Brookstown Ave Winston-Salem, NC 27101 Phone: (336) 723 - 4386	The March of Dimes works toward prevention of birth defects through research and public professional health education. They Contribute to seminars, continuing education relating to birth defects, and to research being done at Bowman Gray School of Medicine. Hours: Monday - Friday 8:30 am - 4:30 pm.



<b>Type of Agency and Name of Agency/Provider</b>	<b>Location/Phone Number</b>	<b>Services Provided and Hours Available</b>
<b>Mary Reynolds Babcock Foundation</b>	2920 Reynolda Rd Winston-Salem, NC 27106 Phone: (336) 748 – 9222 Email: <a href="mailto:info@mrbf.org">info@mrbf.org</a>	Assists people in the Southeast to build just and caring communities that nurture people, spur enterprise, bridge differences and foster fairness.
<b>Reynolds American Foundation</b>	P.O. Box 2990 Winston-Salem, NC 27102 Phone: (336)741-7693	The Reynolds American Foundation's main focus is funding educational, arts and human services programs through direct grants and employee giving programs.
<b>Ronald-McDonald House of Winston-Salem</b>	419 S Hawthorne Rd Winston-Salem, NC 27103 Phone: (336) 723-0228	The Ronald McDonald House of Winston-Salem provides a “home away from home” for families of children who are receiving medical care in our community’s hospitals. The House and Family Room programs offer physical comforts, emotional support, education, and referral services designed to promote the well-being of the whole family. Must be referred from provider. Hours: Monday-Friday, 9:00 am – 9:00 pm; Saturday, 9:00 am-2:00 pm; and Sunday 2:00 pm – 9:00 pm.
<b>SECU Family House on the Richard J. Reynolds III &amp; Marie M. Reynolds Campus</b>	1970 Baldwin Ln Winston-Salem, NC 27103 Phone: (336) 793-2822	The SECU Family House provides affordable lodging in a caring environment for referred adult patients and/or their caregivers who travel to Winston-Salem, N.C., for medical treatment. Referrals to SECU Family House will be made by Forsyth Medical Center, Wake Forest Baptist Medical Center and by Hospice & Palliative CareCenter.

<b>Type of Agency and Name of Agency/Provider</b>	<b>Location/Phone Number</b>	<b>Services Provided and Hours Available</b>
<b>The Winston-Salem Foundation</b>	860 W 5 <sup>th</sup> St Winston-Salem, NC 27101 Phone: (336) 725-2382	Make grants to charitable organizations serving the greater Forsyth County area for a wide range of charitable purposes including new staff positions, capacity building projects, planning work, and new programs in areas of arts and culture, education, health, human services, community development and building social capital.
<b>Z. Smith Reynolds Foundation</b>	147 S Cherry St, Ste 200 Winston-Salem, NC 27101 Phone: 1 (800) 443-8319	The Foundation makes grants only to nonprofit, tax-exempt, charitable organizations and institutions that are exempt under Section 501(c)(3) of the Internal Revenue Code or to governmental units. This Foundation is restricted to making grants supporting projects in North Carolina with the purpose of benefiting residents of North Carolina.
<b>Free Clinic &amp; Community Health Centers</b>		
<b>Bethany Baptist Church Medical Clinic</b>	600 Old Hollow Rd Winston-Salem, NC 27105 Phone: (336) 767-0760	Provides services to those who can not afford health care. General medicine (no dental), school sports physicals, pediatrics, men's clinic, women's clinic (OB/GYN). Medical Clinic held once a month on the second Saturday from 9:00 am - noon.
<b>Community Care Center</b>	2135 New Walkertown Rd Winston-Salem, NC 27101 Phone: (336) 723 - 7904 Email: <a href="mailto:operationsccc@bellsouth.net">operationsccc@bellsouth.net</a>	New patients must come for an initial financial eligibility screening on Tuesdays and Wednesdays from 3:00pm to 5:00 pm

<b>Type of Agency and Name of Agency/Provider</b>	<b>Location/Phone Number</b>	<b>Services Provided and Hours Available</b>
<b>Community Mosque Clinic</b>	1419 Waughtown St Winston-Salem, NC 27107 Phone: (336) 756-7766	Services provided for chronic conditions, acute care, physicals, primary care, pharmacy samples and lab testing (selective tests only). Held the 3 <sup>rd</sup> Saturday of each month.
<b>Downtown Health Plaza</b>	1200 Martin Luther King Jr. Dr Winston-Salem, NC 27101 Phone: (336) 713-9800	Provides for chronic and acute condition, immunizations, primary care, adult care, pharmacy and lab testing. Hours: Monday – Friday 7:45 am to 5:00 pm (by appointment only).
<b>Forsyth County Department of Public Health</b>	799 N Highland Ave Winston-Salem, NC 27101 Phone: (336) 703-3100	Offers HIV/STD Clinic, Family Planning Clinic, WIC Program, and Child and Adult Immunizations. Hours: Monday, Tuesdays and Thursdays:8:30 am to 3:45 Pm, Wednesdays 9:30 am to 6:45 pm, Fridays 8:30 to 11:45 pm.
<b>Green Street United Methodist Church Clinic</b>	639 S Green St Winston-Salem, NC 27101 Phone: (336) 722-8379	Physicals, Primary Care, Chronic Condition Care, Pharmacy samples. Meal is also served at 5:58pm. \$1 donation is recommended for meal. Open to all, Wednesdays 6:30-7:15pm.
<b>Healthcare Access</b>	501 Cleveland Ave, Ste 4 Winston-Salem, NC 27101 Phone: (336) 723-6565	Links patients with a doctor for primary care and specialist services. Program works with local hospital for special procedures and hospitalization. Hours: Monday – Friday 8:30 am to 5:00 pm.
<b>Northwest Community Care Network</b>	2000 W 1 <sup>st</sup> St, Ste 704 Winston-Salem, NC 27104 Phone: (336) 716-2698	A network of primary care providers who provide medical care to the Medicaid population in northwest North Carolina with local care managers, system-wide education, and disease management protocols.

<b>Type of Agency and Name of Agency/Provider</b>	<b>Location/Phone Number</b>	<b>Services Provided and Hours Available</b>
<b>Planned Parenthood</b>	3000 Maplewood Ave, Ste 112 Winston-Salem, NC 27103 Phone: (336) 768-2980	Provides sexual and reproductive health care. Must schedule appointment. Hours: Monday, Thursday, and Friday 9:00 am- 5:00 pm; Tuesday and Wednesday, 10:00 am – 7:00 pm; and Saturday 7:00 am- 1:00 pm.
<b>Southside United Health and Wellness Center</b>	3009-A Waughtown St Winston-Salem, NC 27107 Phone: (336) 293-8730	Services include adult general medicine, prenatal and well child. Cost is \$25 per appointment, lab costs are additional. Call for appointments. Hours: Monday-Thursday, 8:00am- 5:00pm and Friday 8:00am -12:00pm.
<b>Sunnyside Clinic – Trinity Moravian Church</b>	319 Haled St Winston-Salem, NC 27127 Phone: (336) 724-7558	Provides physicals, immunizations, primary care and health education on the first and third Thursdays 5:00pm – 9:00 pm.
<b>Today's Women Health and Wellness Center</b> Agency: Novant Health	2001 Today's Woman Ave Winston-Salem, NC 27105 Phone: (336) 722-1818	Offers free pregnancy tests Monday 3:00 pm -4:30 pm.
<b>Winston-Salem Rescue Mission, Inc: Medical &amp; Dental Clinic</b>	718 N Trade St Winston-Salem, NC 27101 Phone: (336) 723-1848	The clinic provides free medical and dental services to patients. All walk-ins are seen on a first come/first served basis. Hours: Medical Clinic: Every Thursday, 7:00 am - 9:00 am; Dental Clinic: 2nd and 4th Thursdays of each month from 7:00 am - 9:00 am.

Type of Agency and Name of Agency/Provider	Location/Phone Number	Services Provided and Hours Available
<b>Home Health Care</b>		
<b>Advanced Homecare</b>	1100 S Stratford Rd Building B, Ste 410 Winston-Salem, NC 27103 Phone: (336) 896-3100	Provides clinical services, products and supplies needed regardless of medical condition, injury or illness. Services and programs aim to improve personal health and maximize independence to keep clients out of hospitals and in home.
<b>Amedisys Home Health</b>	1100 S Stratford Rd, Ste 531 Winston-Salem, NC 27103 Phone: (336) 768-7200	Amedisys Home Health helps clients manage a chronic disease; provide palliative care for terminal illness, or hospice care at the end of life. Our experienced, friendly clinicians deliver personalized health care services to patients and families in their homes
<b>Bayada Home Health Care</b>	1605 Westbrook Plaza Dr, Ste 102 Winston-Salem, NC 27103  <i>Winston-Salem Adults</i> Phone: (336) 768-4000 <i>Pediatrics of Winston-Salem</i> Phone: (336) 331-1000	Services include home health care, pediatrics, hospice and habilitation. Staff includes nurses, therapists, home health aides, and medical social workers to provide care to multiple ages and stages of life.
<b>Gentiva Health Services</b>	3187 Peters Creek Pkwy, Ste B Winston-Salem, NC 27127 Phone: (336) 397-3331  145 Kimel Park Dr, Ste 200 Winston-Salem, NC 27103 Phone: (336) 760-8336  720 Parke Centre, Ste A Kernersville, NC 27284 Phone: (336) 564-0185	Provider of home health and hospice services which include a full range of clinical services: skilled nursing, physical, occupational, and speech language therapy, cardiac and pulmonary care, neurorehabilitation, wound care, disease and pain management, medication management and education, patient education, treatment for balance problems, and hospice services.

<b>Type of Agency and Name of Agency/Provider</b>	<b>Location/Phone Number</b>	<b>Services Provided and Hours Available</b>
<b>Hospice and Palliative CareCenter</b>	101 Hospice Ln Winston-Salem, NC 27103 Phone: (336) 768-3972	Hospice and Palliative CareCenter provides skilled nursing for patients with serious illness. Skilled nursing need such as wound care, catheter care, or education related to diagnosis or seeking curative therapy in order to be eligible for home health care. Home health services provided: spiritual care as requested, nursing assistance, medical social workers, volunteers, physical/occupational/ speech therapy as needed and assistance in obtaining medical equipment and supplies.
<b>Interim HealthCare of the Triad, Inc.</b>	3325 Healy Dr, Ste A Winston-Salem, NC 27103 Phone: (336) 768-6997	Services include personal care and support, home care, and healthcare staffing.
<b>Homeless Services</b>		
<b>Advocacy for the Poor, Inc.</b>	608 Summit St, Ste 4 Winston-Salem, NC 27101 Phone: (336) 519-8355	A non-profit organization committed to speaking out for the financially poor of the community. Hours: Monday - Friday 8:30 am - 5:00 pm.
<b>Community Action Agency</b>	1550 University Ct Winston-Salem, NC 27101 Phone: (336) 722-9400 Email: twellman@webitxpress.com	Community Action provides aid for the homeless which includes transitional housing, basis education and GED Program, First Time Homeowners Program, NC Save, and Earned Income Credit.
<b>Transitional Services to Homeless Families</b>	1550 University Ct Winston-Salem, NC 27101 Phone: (336) 722 - 9400 Email: <a href="mailto:patricia.mumford@eisr.org">patricia.mumford@eisr.org</a>	Provides case management primarily to clients classified as "chronic homeless" by HUD Guidelines, and experiencing debilitating crisis. Goal is to help these people find and keep permanent shelter. Hours: Monday - Friday 8:00 am - 6:00 pm.

<b>Type of Agency and Name of Agency/Provider</b>	<b>Location/Phone Number</b>	<b>Services Provided and Hours Available</b>
<b>Battered Women Shelter- Safe Relationships</b>  <b>Agency: Family Services, Inc.</b>	1200 S Broad St Winston-Salem, NC 27101 Phone: (336) 723-8125	Provides safe temporary shelter for women and children who are victims of domestic violence or sexual assault. Partners with other agencies to assist victims of human trafficking.
<b>Bethesda Center for the Homeless</b>	930 N Patterson Ave Winston Salem, NC 27101 Phone: (336) 722-9951	The largest provider of emergency night shelter as well as continuing to be the area's only day shelter. Has a 100-bed night shelter. Day shelter opens at 8:00 am each morning.
<b>Samaritan Inn Shelter</b>  <b>Agency: Samaritan Ministries</b>	1243 Patterson Ave Winston-Salem, NC 27101 Phone: (336) 748-1962	The Samaritan Inn provides a 69 bed homeless shelters for homeless men with safe, temporary shelter for a maximum of 90 days.
<b>Winston-Salem Rescue Mission Shelter</b>	718 N Trade St Winston-Salem, NC 27101 Phone: (336) 723-1848	Serves adult men only. Ministers to physical and spiritual needs of those requesting help. Provides food, clothing and shelter.
<b>Hospice</b>		
<b>Hospice and Palliative Care Center</b>	101 Hospice Ln Winston-Salem, NC 27103 Phone: (336) 768-3972	Hospice care to patients of all ages who are dealing with any potentially life limiting illness including Alzheimer's, congestive heart failure, COPD, dementia, emphysema, and etc.
<b>Hospice of the Piedmont</b>	1801 Westchester Dr High Point, NC 27262 Phone: (336) 889-8446	Offers five programs (Hospice and Palliative Care, Kids Path, Hospice Home at High Point, and the Grief Counseling Center) to Forsyth, Guilford, Randolph, and Davidson counties.
<b>Kate B. Reynolds Hospice Home</b>	101 Hospice Ln Winston-Salem, NC 27103 Phone: (336) 760-1114	Kate B. Reynolds Hospice Home provides in-patient care for both acute and residential. A place where hospice patients, who for whatever reason cannot remain at home, will receive hospice's professional care and support, in personal, homelike surroundings.

Type of Agency and Name of Agency/Provider	Location/Phone Number	Services Provided and Hours Available
<b>Hospitals &amp; Urgent Care</b>		
<b>Brenner Children's Hospital and Health Services</b> <b>Agency: Wake Forest University Baptist Medical Center</b>	301 Medical Center Blvd Winston-Salem, NC 27157 Phone: (336) 716-2255	Brenner Children's Hospital, is the expert in children's medicine. Brenner Children's Hospital is western North Carolina's only full-service pediatric hospital provides care for neonates through teens.
<b>FastMED Urgent Care Winston-Salem</b>	4937 Old Country Club Rd Winston-Salem, NC 27104 Phone: (336) 546-1666	Provides both urgent care with walk-in attention for non-life-threatening injuries or illness as well as family medicine needs with scheduled appointments. Hours: Monday-Friday, 8:00 am- 7:45 pm; Saturday 9:00 am- 4:45 pm; and Sunday 10:00 am- 5:45 pm.
<b>Forsyth County Emergency Medical Services</b> <b>Agency: Forsyth County Emergency Medical Services</b>	911 E 5 <sup>th</sup> St Winston-Salem, NC 27101 Phone: (336) 703-2750	911 Emergency response and ambulance transportation. Serves as coordination point for 20 volunteer rescue squads and fire departments when appropriate. Ambulance bills are collected and handled by the Forsyth County EMS.
<b>Forsyth Medical Center</b> <b>Agency: Novant Health</b>	3333 Silas Creek Pkwy Winston-Salem, NC 27103, Phone: (336) 718-5000	A 921-bed, not-for-profit tertiary care hospital, offering a emergency, medical, surgical, rehabilitative and behavioral health services. Open 24 hours, 7 days a week.
<b>Kernersville Medical Center</b> <b>Agency: Novant Health</b>	1750 Kernersville Medical Pkwy Kernersville, NC 27284 Phone: (336) 564-4000	Open to serve 24 / 7 / 365 with emergency department. Other services includes inpatient hospital rooms, surgery services, diagnostic and support services, and inpatient and outpatient medical care.



<b>Type of Agency and Name of Agency/Provider</b>	<b>Location/Phone Number</b>	<b>Services Provided and Hours Available</b>
<b>Medical Park Hospital</b>  Agency: <b>Novant Health</b>	1950 South Hawthorne Rd Winston-Salem, NC 27103 Phone: (336) 718-0785	A 22-bed, not-for-profit hospital that specializes in elective inpatient and outpatient surgeries. Open 24 hours, 7 days a week.
<b>North Carolina Baptist Hospital</b>  Agency: Wake Forest <b>Baptist Medical Center</b>	Medical Center Blvd Winston-Salem, NC 27157 Phone: (336) 716-2011	A 855-bed teaching hospital integrated with Baptist Medical Center. The Medical Center also includes the Comprehensive Cancer Center, Heart Center, and Institute of Regenerative Medicine which are a few of the resources available to patients.
<b>Oldtowne Immediate &amp; Family Care</b>	3734 Reynolda Rd Winston-Salem, NC 27106 Phone: (336) 922-1102	Provides urgent care services 7 days a week as well as routine medical care. Offers the following services: sports medicine, occupational services, internal medicine, primary care. Industrial medicine, podiatry care, diabetic treatment and care, and worker's compensation claims.
<b>Select Specialty Hospital-Winston-Salem</b>  <b>Forsyth Medical Center</b>	3333 Silas Creek Pkwy 6 <sup>th</sup> Floor Winston-Salem, NC 27103 Phone: (336) 718-6300	Provides care for patients in the hospital with a need for a longer acute care stay due to their illness, multiple injuries, trauma, or medical complications. Specialized services include wound care and pulmonary services.
<b>Immunizations</b>		
<b>Immunizations</b>  Agency: Forsyth County <b>Department of Public Health</b>	799 N Highland Ave Winston-Salem, NC 27101 Phone: (336) 703 - 3100 Email: <a href="mailto:monroect@co.forsyth.nc.us">monroect@co.forsyth.nc.us</a>	Children and Adults may obtain immunizations in order to prevent and control communicable diseases. All childhood immunizations are provided free of charge. Hours: Monday, Tuesday, Thursday, 8:30 am-3:45 pm; Wednesday, 9:30 am- 6:45 pm, Friday, 8:30 am-11:45 am.

<b>Type of Agency and Name of Agency/Provider</b>	<b>Location/Phone Number</b>	<b>Services Provided and Hours Available</b>
<b>Passport Health</b>	2803 Lyndhurst Ave Winston-Salem, NC 27103 Phone: (336) 768-0717	Travel health medical services, information, and immunizations needed before travel.
<b>Insurance Providers and Employee Health Benefits/Services</b>		
<b>Action for Children  Children's Health Insurance Coverage</b>	1300 Saint Mary's St, Ste 500 Raleigh, NC 27605 Phone: (919) 843-6623	Works to ensure that all children have access to high-quality, affordable health insurance coverage by advocating for Medicaid, Health Choice and N.C. Kids Care -- public programs that expand children's access to care.
<b>Adult/Family &amp; Children Medicaid  Agency: Forsyth County Department of Social Services</b>	741 N Highland Ave Winston-Salem, NC 27101 <i>Adult Medicaid</i> Phone: (336) 703-3502 <i>Family &amp; Children Medicaid</i> Phone: (336) 703-3803	Adult Medicaid: Assist persons in registering for Medicaid. Income limits for individuals are \$903 a month and \$1215 for couples for the disabled (under age 64) and the aged (over age 65). Family and Children Medicaid pays medical bills for low-income families and children.
<b>Alliance Insurance Services, LLC</b>	348 Summit Square Blvd Winston Salem , NC 27105 Phone: (336) 377-9003	Offers health insurance, as well as homes, auto, life, and business insurance. Hours: Monday-Friday, 9:00 am to 6:00 pm and Saturday 9:00 am to 1:00 pm.
<b>Infinite Wellness Solutions</b>	3300 Reynolda Rd Winston-Salem, NC 27106 Phone: (336) 725-8624	A partial list of wellness programs Infinite Wellness Solutions can help with includes: health risk assessment, health coaching, online wellness programs, gym discounts, wellness incentives and tracking, onsite health promotion staffing and fitness center staffing, executive wellness, corporate fitness programs, wellness newsletters, health fairs, health screening, flu shots and much more. Offers help to all types of organizations including employers, insurance brokers and companies, EAP's and even wellness companies.

Type of Agency and Name of Agency/Provider	Location/Phone Number	Services Provided and Hours Available
<p><b>MedCost Benefit Services</b></p>	<p>165 Kimel Park Dr Winston-Salem, NC 27103 Phone: (336) 774-4400</p>	<p>Largest, leading independent PPO network and health management innovator in the Carolinas providing benefit administration, comprehensive care management programs, health and wellness, preferred provider network services, and help in managing health care trends.</p>
<p><b>Nationwide Insurance</b></p>	<p>3445 Robinhood Rd Winston-Salem, NC 27106 Phone: (800) 254-5183</p>	<p>Offers life insurance, auto insurance, and other insurance products. Hours: Monday – Friday, 9:00 am -5:00 pm, and Saturday, by appointment.</p>
<p><b>NC Health Check and NC Health Choice</b></p> <p><b>Agency: Forsyth County Department of Social Services</b></p>	<p>741 N Highland Ave Winston-Salem, NC 27101 Phone: (336) 703-3223</p>	<p>Health Check(Medicaid) or NC Health choice is free or low-cost Health insurance for children and teens under 19 years old .</p>
<p><b>State Farm Insurance Agency</b></p> <p><b>*Additional Local Agents are Available</b></p>	<p>Steff Hamilton: 1624 S Hawthorne Rd Winston Salem, NC 27104 Phone: (336) 765-0301</p> <p>Matt Murphy: 5019 Country Club Rd Winston-Salem, NC 27104 Phone: (336) 722-1718</p> <p>Joe Daniels: 2200 Silas Creek Pkwy #7 Winston-Salem, NC 27103 Phone(336) 724-9257</p>	<p>State Farm Insurance offers health, automobile, homeowner, condo owner, renter, long-term care, and life insurance. Local agents have various hours.</p>

Type of Agency and Name of Agency/Provider	Location/Phone Number	Services Provided and Hours Available
<b>Wilson Insurance Services</b>	3288 Robinhood Rd, # 102 Winston-Salem, NC 27016 Phone: (336) 794-2810	Provides information regarding health, automobile, home, life, liability, and property insurance.
<b>Health Services for Jail Inmates</b>		
<b>Forsyth Correctional Center</b>	307 Craft Dr Winston-Salem, NC 27105 Phone: (336) 896-7041	Inmates can initiate visits for medical care, and no inmate is denied health care access.
<b>Maternal and Child Care</b>		
<b>Baby Love/ Maternity Care Coordination</b>  <b>Agency: Forsyth County Department of Public Health</b>	799 N Highland Ave Winston-Salem, NC, 27101 Phone: (336) 703-3100 Email: <a href="mailto:monroect@co.forsyth.nc.us">monroect@co.forsyth.nc.us</a>	Baby Love is program designed by the Forsyth County Department of Public Health to help pregnant women have healthy babies. This program provides care management services for high risk women during pregnancy and for two months after delivery by a social worker or nurse.
<b>Birthright, Inc.</b>	1400 Millgate Dr, Ste B Winston-Salem, NC 27103 Phone: (336) 774-0456	Birthright, Inc. offers free pregnancy testing, abortion alternatives, and Medical referrals (including Medicaid Pregnancy Referral) through confidential non-judgmental and caring advice. Offers a gift of friendship and emotional support to each women may it be prenatal information, medical, educational, and/or housing referrals, or information on other community services, as well as adoption contacts if needed. Hours: Monday, Wednesday, and Friday, 11:00am- 2:00pm.

<b>Type of Agency and Name of Agency/Provider</b>	<b>Location/Phone Number</b>	<b>Services Provided and Hours Available</b>
<p><b>Care Coordination for Children (CC4C)</b></p> <p><b>Agency: Forsyth County Department of Public Health</b></p>	<p>799 N Highland Ave Winston-Salem, NC, 27101 Phone: (336) 703-3242</p>	<p>A free and voluntary program for children from birth to age three who are at risk for or birth to age 5 who have been diagnosed with developmental delay, disability, long-term illness, and or social/emotional disorders. with care managers who assist with finding medical care, transportation, childcare and/or financial aid. The program goals are: to connect your family with services for children and families; to support your children in reaching their developmental potential; to help ensure that children are raised in healthy, safe, and nurturing environments.</p>
<p><b>Her Choice of Forsyth County, Inc.</b></p>	<p>1927 Angelo St Winston-Salem, NC 27104 Phone: (336) 748-8777</p>	<p>A Christian pro-life organization dedicated to educating Forsyth County and surrounding areas to the trauma that abortion causes to women and men throughout their lives.</p>
<p><b>Center for Women's Healthcare</b></p> <p><b>Agency: MedCenter Kernersville, Cone Health</b></p>	<p>1635 NC 66 South, Ste 245 Kernersville, NC 27284 Phone: (336) 992-5120</p>	<p>With an all-female staff, the Center for Women's Healthcare features an exceptional balance of expertise and compassion for patients in different life stages. Supporting our physicians are highly-qualified Certified Nurse Midwives, whose services to patients extend beyond delivering babies. We can also help you coordinate yearly screenings for your convenience and as part of our dedicated focus on wellness. Services: obstetrics, gynecology, pap smears, and ultrasound. Hours: Monday-Thursday, 8:00am- 5:00pm and Friday, 8:00am-12:00pm (closed for lunch 12:00pm-1:00pm).</p>

Type of Agency and Name of Agency/Provider	Location/Phone Number	Services Provided and Hours Available
<p><b>Nursing Mother Center</b></p> <p><b>Agency: Forsyth Medical Center- Maya Angelou Center for Women's Health &amp; Wellness</b></p>	<p>3333 Silas Creek Pkwy Winston-Salem, NC 27103 <i>(First Floor of the North Tower at Forsyth Medical Center)</i> Nursing Mother Helpline (336) 718-5636 (336) 718-8233</p>	<p>Comprehensive lactation center in Winston-Salem, featuring exceptional services, supplies, equipment and support for nursing mothers. Goal of helping mother and baby enjoy the best possible nursing experience. Provides: In-room hospital consultations after baby's birth; Free infant weight check to ensure proper weight gain after discharge from the hospital; Infant nutritional advice; Private breastfeeding consultations (fee); Retail shop with top-quality supplies, nursing clothing, accessories and equipment, including brand-name breast pumps at value prices. Any mother (self-referred or referred by healthcare provider) can use our services, regardless of her delivery hospital. Hours: Monday – Friday, 8:30 a.m. - 5:00 p.m., Saturday and Sunday, 9:00 a.m. - 1:00 p.m.</p>
<p><b>Maya Angelou Center for Women's Health and Wellness</b></p> <p><b>Agency: Novant Health</b></p>	<p>333 Silas Creek Parkway Winston-Salem, NC, 27103 Phone: (336) 718 - 0060</p>	<p>The facility, located on the Forsyth Medical Center campus, delivers nearly 7,000 babies a year - more than any other hospital in the region. The Center offers comprehensive care for women. Hours: Monday - Friday 8:00 am - 5:00 pm for most services, but emergency services are 24/7/365.</p>
<p><b>Women's and Children's Health</b></p> <p><b>Agency: Forsyth County Department of Public Health</b></p>	<p>799 N Highland Ave Winston-Salem, NC, 27101 Phone: (336) 703-3100</p>	<p>The mission of the Women's and Children's Health Section (WCH) is to assure, promote and protect the health and development of families with emphasis on women, infants, children and youth. WCH programs place a major emphasis on the provision of preventive health services beginning in the pre-pregnancy period and extending throughout childhood.</p>

Type of Agency and Name of Agency/Provider	Location/Phone Number	Services Provided and Hours Available
<b>Medical Schools</b>		
<b>Wake Forest University</b>	1834 Wake Forest Rd Winston-Salem, NC 27106 Phone: (336) 758-5000	A collegiate university in Winston-Salem, North Carolina distinguished by small classes and faculty-student engagement.
<b>Salem College</b>	601 S Church St Winston-Salem, NC 27101 Phone: (336) 721-2600	Offers degrees in Biological and biomedical sciences, Clinical Laboratory Science and Medical Technology/Technologist.
<b>Forsyth Technical Community College</b>	2100 Silas Creek Pkwy Winston-Salem, NC 27103 Phone: (336) 723-0371	Forsyth Tech is the community college services included: Biological and biomedical sciences, Clinical/Medical Laboratory Technician, Diagnostic Medical Sonography/Sonographer, Ultrasound Technician and Emergency Medical Technology.
<b>Medical and Health Transportation</b>		
<b>Ardmore United Methodist Church</b>	630 S Hawthorne Rd Winston-Salem, NC 27103 Phone: (336) 722-5686	Ministry of Ardmore area churches. Serves Ardmore residents 60+ years old (not flexible) and ambulatory. Primarily set up to transport to life-support. Hours: Monday-Friday, 8:30 am - 12:00 pm.
<b>Cavalry Medical Transport Service Company</b>	1095 Fairchild Rd Winston-Salem, NC 27105 Phone: (336) 725-9119	Cavalry Medical Transport is a a medical transport service company providing local medical transportation in Winston-Salem.
<b>Clemmons First Baptist Church Transportation Ministry</b>	3530 Clemmons Rd Clemmons, NC 27012 Phone: (336) 766-6486	Must live in Clemmons, and request transportation 2 weeks in advance. Transportation provided to medical appointments, pick up medications, and other.
<b>Lewisville Transportation Ministry</b>	Phone: (336) 723-6377	Older adults and adults with disabilities living in Lewisville area only. Need 2-3 days notice for transportation to medical and dental appointments.

<b>Type of Agency and Name of Agency/Provider</b>	<b>Location/Phone Number</b>	<b>Services Provided and Hours Available</b>
<b>LifeStar Emergency Transport</b>	3475 Myer Lee Dr Winston-Salem, NC 27101 Phone: (336) 722-5433	Provides medical transportation at basic life support level for Forsyth County. Also completed inter-facility transports of bed ridden patients and other medically necessary transports, but must originate or end in Forsyth County. Long distance transports available.
<b>The Shepherd's Center of Greater Winston-Salem</b>	1700 Ebert St Winston-Salem, NC 27103 Phone: (336) 748-0217	Provides 1 medical transportation trip per week in addition to home visitation, respite care for family caregivers, minor home repairs, and grocery shopping for older adults.
<b>The Shepherd's Center of Kernersville</b>	431-B W Bodenhamer St Kernersville, NC 27284 Phone: (336) 996-6696	Transportation provided for medical appointments in Winston-Salem, Greensboro, High Point and for any destination in Kernersville. Recipients must be disabled or 60 years or older. Other services available for older or disabled adults in eastern Forsyth County.
<b>Medication Assistance</b>		
<b>Forsyth County Department of Public Health Pharmacy</b>	725 N Highland Ave Winston-Salem, NC 27101 Phone: (336) 703-3250	Pharmacy can help in applying for MedAssist, if qualify may be able to obtain medications for free.
<b>Med-Aid</b> <b>Agency: Community Care Center for Forsyth County, Inc.</b>	1900 S Hawthorne Rd, Ste 664 Winston-Salem, NC 27103 Phone: (336) 714-2359	Medication Assistance Program providing access to free prescription medications for uninsured, low-income families.
<b>Medication &amp; Financial Assistance</b> <b>Agency: Cancer Services, Inc.</b>	3175 Maplewood Ave Winston-Salem, NC 27103 Phone: (336) 760-9983	Clients residing in Davie, Forsyth, Stokes and Yadkin Counties and meeting our eligibility requirements may be able to obtain assistance from Cancer Services and/or other prescription assistance resources with obtaining their cancer related prescription medications. Financial eligibility is based upon 200% of the Federal Poverty Guideline, as well as household expenses and current need.



<b>Type of Agency and Name of Agency/Provider</b>	<b>Location/Phone Number</b>	<b>Services Provided and Hours Available</b>
<b>Pharmacy</b>  <b>Agency: Crisis Control Ministry</b>	200 E 10 <sup>th</sup> St Winston-Salem, NC 27101 Phone: (336) 724-7875	Provide free life sustaining medications to persons who can't afford them. Must be a resident of Forsyth County who demonstrates true financial need.
<b>Mental Health Services</b>  <i>(Day Treatment, Psychosocial Rehabilitation, Residential Level II &amp; III)</i>		
<b>Advanced Placement BHHS, Inc.</b>	2295 E 14 <sup>th</sup> St, Ste 400 Winston-Salem, NC Phone: (336) 722-1862	Offers behavioral health and human services: case management, therapy and counseling, diagnostic assessment, intensive in home service, substance abuse counseling, and level III residential care/group homes.
<b>Associates in Christian Counseling</b>	8025 North Point Blvd, Ste 231, Winston-Salem, NC 27106 Phone: (336) 896-0065 Ext: 205	Provides complete counseling and psychological services for a wide range of emotional difficulties.
<b>A Sure House, Inc.</b>	1265 Arbor Rd Winston-Salem, NC 27104 Phone: (336) 773-7627	A Sure House is a level III residential treatment facility for children and adolescents.
<b>CenterPoint Human Services</b>	4045 University Parkway Winston-Salem, NC 27106 Phone: (336) 714-9100 Consumer Affairs: (866) 804-4323	Local Management Entity for publically funded Mental Health, Developmental Disabilities, and Substance Abuse Services in Forsyth, Stokes, Davie and Rockingham Counties.
<b>The Children's Home, Inc.</b>	1001 Reynolda Rd Winston-Salem, NC 27104 Phone: (336) 721-7600	Programs include child/adolescent day treatment, 24 hour respite care services, assessment, counseling, hourly respite services, intensive In-home services, level II and III residential group services, and targeted case management.

<b>Type of Agency and Name of Agency/Provider</b>	<b>Location/Phone Number</b>	<b>Services Provided and Hours Available</b>
<b>Counseling, Catholic Social Services</b>	627 West Second Street, Winston-Salem, NC 27101 Phone: (336) 727-0705	Offers marriage, family and individual counseling. Clients do not have to be Catholic to be eligible for services. Post-abortion counseling also available. Sliding scale fee. Hours: Monday - Friday 9:00 am - 12:30 pm and 1:30 pm - 5:00 pm.
<b>Direct Care Community Base Services, LLC</b>	4401 Providence Ln, Ste 121 Winston-Salem, NC 27106 Phone: (336) 397-9983	Provides Medicaid CAP services to adults and children including home and community support, individual/caregiver training and education, personal care services, respite care (non-institutional), specialized consultative services, and supported employment.
<b>Essence of Care, Inc.</b>	1137 Pine Knolls Rd Kernersville, NC 27284 Phone: (336) 272-3095	A licensed Level III residential treatment facility for children and adolescents.
<b>Forsyth Medical Center Behavioral Health</b>  <b>Agency: Novant Health</b>	3333 Silas Creek Parkway Winston-Salem, NC 27103 Phone: (336) 718-5000  <i>Forsyth Medical Center Behavioral Health Services</i> Suite 100 175 Kimel Park Drive Winston-Salem, NC 27103 Phone: (336) 718-3550  <i>Winston-Salem Health Care Psychiatry</i> 250 Charlois Boulevard Winston-Salem, NC 27103 Phone: (336) 718-1000	Forsyth Medical Center Behavioral Health provides excellent patient care with mental health and substances abuse problems. The Crisis Response Team is a 24 hour, seven day a week service provided by Forsyth Medical Center Behavioral Health to help people with mental health or substance abuse crises in the community. Provides both inpatient and outpatient services.

<b>Type of Agency and Name of Agency/Provider</b>	<b>Location/Phone Number</b>	<b>Services Provided and Hours Available</b>
<b>Foundation Strong, LLC</b>	1677 Banbridge Rd Kernersville, NC 27285 Phone: (336) 307-3198	Foundation Strong, LLC is a residential level III service for teenagers. Services include: social and recreational skills, building self-esteem, group therapy, anger management classes, life skills training, and educational assistance. Hours: Monday-Friday, 9:00 am-5:00 pm.
<b>Hands to Hands Rehabilitation Center, LLC</b>	500 West 4th Street, Winston-Salem, NC 27101 Phone: (336) 723-7589	Provides assessment, individual and group therapy, psychosocial rehabilitation, substance abuse outpatient services, referral to medication management, and support services to adults with mental illness throughout North Carolina.
<b>Inspirationz, LLC</b>	607 Hillhaven Dr Winston-Salem, NC 27107 Phone: (336) 788-8579	Inspirationz, LLC is therapeutic residential level III facility for children and adolescents. That offers services to develop social and independent living skills including daily group sessions, individual and group therapy, adolescent family therapy, and counseling for grief and loss.
<b>Lutheran Family Services in the Carolinas-TAP Program</b>  <b>Agency: Lutheran Family Services in the Carolinas</b>	5712 Shattalon Drive Winston-Salem, NC 27105 Phone: (336) 744-7350  General Information Phone: (704) 940 - 3333 <a href="mailto:info@lfscarolinas.org">info@lfscarolinas.org</a>	Human service agency providing Foster Care, Adoption, ACTT, Youth & Adult Residential Care (for Mentally Ill & Developmentally Disabled Individuals). Hours: Monday-Friday 9:00am-5:00 pm.  Provides residential services for adults (with traumatic brain injuries or mentally retarded) and transitional apartments for homeless adults with severe and persistent mental illness and for those with traumatic brain injuries.

<b>Type of Agency and Name of Agency/Provider</b>	<b>Location/Phone Number</b>	<b>Services Provided and Hours Available</b>
<b>Mental Health Association</b>	1509 South Hawthorne Rd. Winston-Salem, NC 27103 Phone: (336) 768-3880	Offers consumer support through hospital outreach program and representative payee services and support groups. Family support is offered through the Court Assistance Program, and advocacy and outreach. Community education is conducted through information and referral, resource center, speakers bureau and systems advocacy.
<b>My Sister's Place Community Services, Inc.</b>	595 Waughtown St Winston-Salem, NC 27107 Phone: (336) 784-5922	Offers psychosocial rehabilitation and adult developmental vocational programs for adult and children. Provides the following Medicaid services: (CAP) day supports, home and community support, personal care services, residential support (level 1) and supported employment.
<b>New-Lite Living Choices, Inc.</b>	3634 Vest Mill Rd Winston Salem, NC 27103  Phone: (336) 602-2016	A human services provider that offers Sexually Aggressive Youth (S.A.Y.) Program, outpatient services, family and therapeutic level II foster care, and female adolescent dual-diagnosed program.
<b>Old Vineyard Behavioral Health Services</b>	3637 Old Vineyard Rd Winston-Salem, NC 27104 Phone: (336) 794-3550	Old Vineyard Behavioral Health Services specializes in acute treatment for adolescents, acute treatment for adults, and partial hospitalization and intensive out-patient programs for adults.
<b>People Helping People of North Carolina, LLC</b>	1510 Martin St Winston-Salem, NC 27103 Phone: (336) 760-133 1100 W 1 <sup>st</sup> St Winston-Salem, NC 27101 Phone: (336) 724-9768	Provides the following Medicaid services: assertive community treatment team (ACTT), CAP home and community supports, CAP residential supports Level 1-3, CAP respite non-institution, CAP supported employment, community support team, diagnostic assessment, intensive in-home services, and targeted case management. Non-Medicaid services provided are developmental therapy, personal assistance, and targeted case management for both mental health and substance abuse.

<b>Type of Agency and Name of Agency/Provider</b>	<b>Location/Phone Number</b>	<b>Services Provided and Hours Available</b>
<b>PQA Healthcare, Inc.</b>	300 Northgate Park Dr Winston-Salem, NC 27106 Phone: (336) 306-9690	Offers psychosocial rehabilitation (Alpha Club 6) in addition to non-Medicaid services of : Assertive Community Treatment Team, and community support teams for adults; services to children and adult include counseling, personal assistance, while children are also eligible for intensive in-home services
<b>Triumph LLC</b>	ACTT Program 1010 Northwest Blvd Winston-Salem, NC 27101 Phone: (336) 722-4000  Forsyth Program 725 N Highland Ave, 2nd Floor Winston-Salem, NC 27101 Phone: (336) 607-8501	Triumph LLC offers: psychiatric evaluations and medication monitoring, psychological evaluations and testing, clinical assessment, outpatient therapy, community support, intensive in-home services, psychosocial rehabilitation, and assertive community treatment teams. Hours: Monday –Friday 8:30am to 5:00 pm.
<b>V.I.P. Care Services, Inc: Intensive In Home for Children and Youth Up to Age 20</b>	7830 North Point Blvd, Ste 203 Winston-Salem, NC 27106 Phone: (336) 896-0680	Time-limited, intensive child and family intervention based on the clinical needs of the youth.
<b>Vision Behavioral Health Services, LLC</b>	100 S Marshall St, Ste 2 Winston-Salem, NC 27101 Phone: (336) 723-4130	This is a time-limited intensive family preservation intervention intended to stabilize the living arrangement, promote reunification or prevent the utilization of out-of-home therapeutic resources (i.e., psychiatric hospital, therapeutic foster care, residential treatment facility) for the identified youth through the age of 20. Services include: community support team, diagnostic assessment, intensive in-home services, substance abuse comprehensive outpatient treatment, and substance abuse intensive outpatient program.

Type of Agency and Name of Agency/Provider	Location/Phone Number	Services Provided and Hours Available
<p><b>Wake Forest Baptist Health-Psychiatry and Behavioral Medicine</b></p>	<p>Medical Center Blvd Winston-Salem, NC 27157</p> <p><i>General Psychiatry</i> <i>Appointments and Information</i> Phone: (336) 716-4551</p> <p><i>Child Guidance</i> Phone: (336) 715-5511</p> <p><i>Sticht Center</i> Phone: (336) 713-8100</p>	<p>Offers inpatient services for adults at the Sticht Center and children and adolescents in Brenner Children’s Hospital. Services include: evaluation, treatment of depressions, bipolar disorder, anxiety disorders and schizophrenia and electroconvulsive therapy (ECT). Children inpatient services include evaluations and treatment for depressive disorders, anxiety disorders, oppositional defiant disorder, and conduct disorder. Outpatient services for adults: evaluation and treatment for the full range of psychiatric disorders, alcoholism, and substance abuse, group therapy, and ECT. Child/adolescent outpatient services: evaluation and treatment of all childhood psychiatric disorders. Geriatric house calls are available.</p>
<p><b>Wilson’s Constant Care, LLC</b></p>	<p>1228 N Highland Ave Winston-Salem, NC 27101 Phone: (336) 703-9650</p>	<p>A licensed residential treatment level III facility for children/adolescents.</p>
<p><b>Youth Opportunities</b></p>	<p>2020 E 12<sup>th</sup> St Winston-Salem, NC 27101 Phone: (336) 748-4133</p>	<p>Offers family-centered mental health services to children and youth with services offered in office, family home or other community locations. Programs and services include: structured day programs (treatment) delivered in group settings in partnership with schools; clinical assessments; and psychiatric services which include both intensive in-home and outpatient therapy. Targeted case management for mental health substance abuse is also available.</p>

<b>Type of Agency and Name of Agency/Provider</b>	<b>Location/Phone Number</b>	<b>Services Provided and Hours Available</b>
<b>Nursing Homes and Intermediate &amp; Skilled Care Facilities</b>		
<b>Arbor Acres United Methodist Retirement Community</b>	1240 Arbor Rd Winston-Salem, NC 27104 Phone: (336) 724-7921	A full service accredited continuing care retirement community. Offers independent living, elite care, assisted care, skilled care and memory care. The Fitzgerald Health Center is the skilled care portion of the Arbor Acres community.
<b>Brian Center Health and Retirement, Winston-Salem</b>	4911 Brian Center Ln Winston-Salem, NC 27106 Phone: (336) 744 - 5674	The Brian Center provides skilled nursing, rehabilitation services, and rest home services for short and long term residents. The Center has 40 skilled nursing beds. Open 7 days a week 24 hours a day.
<b>Brookridge Retirement Community</b>	1199 Hayes Forest Dr Winston-Salem, NC 27106 Phone: (336) 759-1044	A continuing care retirement community. Offers 4 living options: active retirement, assisted living, memory enhanced residence, and nursing care (Prince Nursing Care Center).
<b>Clemmons Nursing Home and Rehab Center</b>	3905 Clemmons Rd Clemmons, NC 27012 Phone: (336) 766-9158	Skilled nursing facility located in Clemmons with 120 beds.
<b>Kindred Transitional Care and Rehab-Silas Creek</b>	3350 Silas Creek Pkwy Winston-Salem, NC 27103 Phone: (336) 765-0550	Part of a network of post-acute care for short-term rehabilitation therapy to longer-term restorative care. The center offers a full range of nursing care and social services.  Silas Creek Manor is a skilled nursing facility owned by the Kindred Healthcare Community
<b>Oak Forest Health &amp; Rehabilitation</b>	5680 Windy Hill Dr Winston-Salem, NC 27105 Phone: (336) 776-5000	A skilled nursing facility that provides nursing home and short term care rehabilitation.

Type of Agency and Name of Agency/Provider	Location/Phone Number	Services Provided and Hours Available
<b>The Oaks at Forsyth</b>	901 Bethesda Ct Winston-Salem, NC 27103 Phone: (336) 768-2211	Provides short term in-patient rehabilitation services; physical, occupational and speech therapy; and long term care with 24 hour nursing.
<b>Piney Grove Nursing and Rehabilitation Center</b>	728 Piney Grove Rd Kernersville, NC 27284 Phone: (336) 996-4038	Provides residents with 24-hour skilled nursing care in a 92-bed facility.
<b>Salemtowne Moravian Retirement Community</b>	<i>Physical Address</i> 190 Moravian Way Dr Winston-Salem, NC 27106 <i>Mailing Address</i> 1000 Salemtowne Dr Winston-Salem, NC 27106 Phone: (336) 767-8130	Provides short term rehabilitation, long term care, Alzheimer's care, assisted and independent living.
<b>Springwood Care Center</b>  <b>Agency: Novant Health</b>	5755 Shattalon Dr Winston Salem, NC 27105 Phone: (336) 767-2750	This 200-bed facility offers residential skilled nursing care, Alzheimer's care program, infusion, physical and occupational therapies, speech pathology, and recreation for long-term residents or patients transitioning from hospital care. Open 24 hours/ 7 days a week.
<b>Trinity Glen</b>	849 Waterworks Rd Winston-Salem, NC 27105 Phone: (336) 595-2166	Trinity Glen offers short-stay guests and long-term residents a 24-hour skilled nursing care and state-of-the-art rehabilitation services for those recovering from an injury, surgery, or a recent hospitalization.
<b>Winston-Salem Nursing and Rehabilitation</b>	1900 West First St Winston Salem, NC 27104 Phone: (336) 724-2821	The facility is a five story nursing facility with 230 skilled nursing beds. Provides a full range of services to elderly or medically challenged individual.
<b>Nursing School</b>		
<b>Forsyth Tech</b>	2100 Silas Creek Pkwy Winston-Salem, NC 27103 Phone: (336) 723-0371	Forsyth Tech is the community college. It's the source for affordable college education, offering two-year AAS degrees and college transfer opportunities.



Type of Agency and Name of Agency/Provider	Location/Phone Number	Services Provided and Hours Available
<b>Winston-Salem State University</b>	601 S. Martin Luther King Jr. Dr Winston-Salem, NC 27110 Phone: (336) 750-2000	Winston-Salem State University, a constituent institution of the University of North Carolina, is a historically black university that today is a recognized regional institution offering baccalaureate and graduate programs to a diverse student population.
<b>Nutrition Services</b>		
<b>Barb Andresen, R.D., L.D.N.</b>  <b>Medical Nutrition Services</b>	3447 Robinhood Rd, Ste 201 Winston-Salem, NC 27106 Phone: (336) 659-8622	Specializes in medical nutrition treatment for patients with eating disorders or unhealthy eating practices. Services include individualized nutrition counseling for weight loss, heart disease, sports nutrition and women's health issues. Also provides healthy eating coaching from grocery store tours to cooking basics and recipe ideas. Presentations and nutrition courses are available for groups, schools and classrooms from preschool to college courses.
<b>Forsyth Medical Center Diabetes and Nutrition Counseling</b>  Agency: <b>Novant Health</b>	<i>Nutrition Counseling &amp; Planning</i> 3333 Silas Creek Pkwy Winston-Salem, NC 27103 Phone: (336) 718-5000  <i>Nutrition Planning</i> 1900 S Hawthorne Rd, Ste 504 Winston-Salem, NC 27103 Phone: (336) 277-1660	Provides nutrition counseling to develop heart healthy eating plan to reduce cholesterol and maintain a healthy body weight. Nutrition Planning offers a diet analysis and consultation for weight control (loss or gain), implementing a healthy eating pattern, or plan to assist in the prevention of disease.

<b>Type of Agency and Name of Agency/Provider</b>	<b>Location/Phone Number</b>	<b>Services Provided and Hours Available</b>
<b>Wake Forest Baptist Medical Center- Outpatient Clinical Nutrition</b>	Medical Center Boulevard, Winston-Salem, NC 27157 (2nd Floor, Sticht Center) Phone: (336) 713-3043	Medical Nutrition Therapy involves the assessment of nutritional needs of neonatal, pediatric, adolescent, adult, and geriatric age groups and culturally diverse populations based on Disease Specific Needs so that medical care is optimized. Based on this assessment, the clinical nutritionist will develop an Individualized Plan of Care which will include treatment goals. Services include provision of Medical Nutrition Therapy to pediatric and adult patients from the Outpatient Nutrition Office located on the 2nd floor of the Sticht Center. Consultation with the referring and primary care physicians is integral to developing a comprehensive nutritional plan of care.
<b>WomanCare Nutrition Services</b>	Stratford Executive Park 114 Charlois Blvd Winston-Salem, NC 27103 Phone: (336) 765-5470	WomanCare's nutrition experts can help clients develop a personal health improvement plan that addresses their special nutritional needs. Nutrition experts work closely with a referring physician to ensure client is on the path to a healthier lifestyle. Our dietitians specialize in: Adolescent Nutrition, including weight loss; Breastfeeding Assistance; Cholesterol Reduction; Diabetes Care; Eating Disorders, such as Anorexia Nervosa, Bulimia Nervosa, and Binge Eating; Gastrointestinal Diseases, such as Crohn's Disease; Irritable Bowel Syndrome; Reflux; Hypertension; Pre-Menstrual Syndrome (PMS); Menopause Management; Polycystic Ovarian Syndrome; Prenatal Nutrition and Weight Control; Vegetarian Diets; and Weight Management.

<b>Type of Agency and Name of Agency/Provider</b>	<b>Location/Phone Number</b>	<b>Services Provided and Hours Available</b>
<b>Renal Dialysis Center</b>		
<b>WFU Baptists Medical Center Dialysis Unit</b>	8 N Hemodialysis Medical Center Blvd Winston-Salem, NC 27157 Phone: (336) 716-3170	WFU Baptist Medical Center Dialysis Unit is a Non-Profit dialysis facility in Winston Salem, North Carolina with 4 stations.
<b>Miller St Dialysis Center</b>  <b>Agency: Wake Forest Baptist Health</b>	120 Miller St Winston-Salem, NC 27103 Phone: (336) 724-0468	Miller St Dialysis Center is a Non-Profit dialysis facility in Winston Salem, North Carolina with 36 stations.
<b>Northside Dialysis Center</b>  <b>Agency: Wake Forest Baptist Health</b>	500 W Hanes Mill Rd Winston-Salem, NC 27105 Phone: (336) 744-0577	Northside Dialysis Center is a Non-Profit dialysis facility in Winston Salem, North Carolina with 45 stations.
<b>Piedmont Dialysis Center</b>  <b>Agency: Wake Forest Baptist Health</b>	655 Cotton St Winston-Salem, NC 27101 Phone: (336) 721-1360	Piedmont Dialysis Center is a Non-Profit dialysis facility in Winston Salem, North Carolina with 62 stations.
<b>Salem Kidney Center</b>  <b>Agency: Wake Forest Baptist Health</b>	2705 Boulder Park Ct Winston-Salem, NC 27101 Phone: (336) 761-8808	Salem Kidney Center is a Non-Profit dialysis facility in Winston Salem, North Carolina with 36 stations
<b>School Health Services</b>		
<b>Ashley Elementary School Wellness Center</b>	1647 NE Ashley School Cir Winston-Salem, NC 27105 Phone: (336) 748-4143	Provides treatment for minor illness and injury, immunizations, nutrition services, laboratory services, comprehensive physicals, health education, chronic illness management, and dental screenings.

<b>Type of Agency and Name of Agency/Provider</b>	<b>Location/Phone Number</b>	<b>Services Provided and Hours Available</b>
<b>Bulldog Health Center at Mineral Springs Elementary &amp; Middle Schools</b>	4555 Ogburn Ave Winston-Salem, NC 27105 Phone: (336) 661-4952	Provides treatment for minor illness and injury, immunizations, nutrition services, laboratory services, comprehensive physicals, health education, chronic illness management, and dental screenings.
<b>North Forsyth High School Health Promotion Program</b>	5705 Shattalon Dr Winston-Salem, NC 27105 Phone: (336) 661-4880, ext 50	Provides treatment for minor illness and injury, immunizations, nutrition services, laboratory services, comprehensive physicals, health education, chronic illness management, and dental screenings.
<b>Winston-Salem Preparatory Academy Wellness Center at Atkins</b>	1215 N Cameron Ave Winston-Salem, NC 27101 Phone: (336) 703-6737	Provides treatment for minor illness and injury, immunizations, nutrition services, laboratory services, comprehensive physicals, health education, chronic illness management, and dental screenings.
<b>Screening, Testing and Diagnosis</b>		
<b>Cardiac and Vascular Services</b>  Agency: <b>Novant Health</b>	3333 Silas Creek Pkwy Winston-Salem, NC 27103 Phone: (336) 718-5000  <i>Winston-Salem Cardiology</i> 186 Kimel Park Dr Winston-Salem, NC 27103 Phone: (336) 277-2000  <i>Winston-Salem Cardiology (Kernersville)</i> 3rd Floor 1750 Kernersville Medical Center Pkwy Kernersville, NC 27284 Phone: (336) 996-7076	Ranked among the top heart centers in the country, Forsyth Cardiac and Vascular Center provides comprehensive diagnosis, treatment, rehabilitation, and support, as well as educational, prevention, and screening programs.

<b>Type of Agency and Name of Agency/Provider</b>	<b>Location/Phone Number</b>	<b>Services Provided and Hours Available</b>
<b>Downtown Health Plaza X ray Services</b>  <b>Agency: Wake Forest Baptist Hospital</b>	1200 Martin Luther King, Jr. Dr., Winston-Salem, NC 27101 Phone: (336) 713-9800	Downtown Health Plaza laboratory. Hours: Monday - Friday, 8:00 am - 5:00 pm.
<b>Epidemiology Clinic</b>  <b>Agency: Forsyth County Department of Public Health</b>	799 N Highland Ave Winston-Salem, NC 27101 Phone: (336) 703-3100	The Epidemiology Clinic provides screenings for reportable communicable diseases.
<b>Blind Services</b>  <b>Agency: Forsyth County Department of Social Services</b>	741 Highland Ave Winston-Salem, NC 27101 Phone: (336) 703-3400	There is a case worker for the blind that assists visually impaired persons in developing their maximum individual capabilities and in becoming self-sufficient.
<b>Health Check</b>  <b>Agency: Forsyth County Department of Public Health</b>	799 N Highland Ave Winston-Salem, NC 27101 Phone: (336) 703-3100	Health Check is Medicaid for children. Health Check covers complete medical and dental check-ups, and provides vision and hearing screenings and referrals for treatment.
<b>WomanCare</b>  <b>Agency: Novant Health</b>	Stratford Executive Park 114 Charlois Blvd Winston-Salem, NC 27103 Phone: (336) 765-5470	WomanCare's healthcare team offers a comprehensive range of preventive, diagnostic and chronic and acute care treatments to meet the wide range of women's healthcare needs.

<b>Type of Agency and Name of Agency/Provider</b>	<b>Location/Phone Number</b>	<b>Services Provided and Hours Available</b>
<p><b>Forsyth Medical Center Imaging</b></p> <p><b>Agency: Novant Health</b></p>	<p>Winston-Salem Health Care: 250 Charlois Blvd Winston-Salem, NC 27103 Phone: (336) 718-1007</p> <p>The Breast Clinic: 2025 Frontis Plaza Blvd Winston-Salem, NC 27103 Phone: (336) 397-6035</p> <p>Kernersville Imaging Center: 445 Pineview, Ste 100 Kernersville, NC 27284 Phone: (336) 397-6102</p> <p>Maplewood imaging Center: 3155 Maplewood Dr Winston-Salem, NC 27103 Phone: (336) 397-6000</p> <p><i>North Carolina Diagnostic Imaging</i></p> <p>Piedmont Imaging: 185 Kimel Park Dri Winston-Salem, NC 27103 Phone: (336) 760-1880</p>	<p>Forsyth Medical Center Imaging is a network of diagnostic imaging centers committed to providing excellent quality and customer service to the patients in Winston-Salem, Kernersville and surrounding communities. With 4 locations in the area Forsyth Medical Center Imaging offer services such as magnetic resonance imaging (MRI), computed tomography (CT), nuclear medicine, ultrasound, mammography, bone densitometry, fluoroscopy and x-ray. Hours: Monday - Friday 8:00 am - 5:00 pm for most services, but emergency services are 24/7/365.</p>
<p><b>Forsyth Regional Orthopaedic Center</b></p> <p>Agency: <b>Forsyth Medical Center/Novant Health</b></p>	<p>3333 Silas Creek Pkwy Winston-Salem , NC 27103 Phone: (336) 718-7000</p>	<p>Recognized as one of the top 100 orthopaedic centers in the country, the center focuses on prevention, diagnosis, treatment, and rehabilitation of injuries and diseases of the musculoskeletal system, including broken bones, back problems, work injuries, knee and hip joints, and damage to tendons, muscles, and nerves.</p>

<b>Type of Agency and Name of Agency/Provider</b>	<b>Location/Phone Number</b>	<b>Services Provided and Hours Available</b>
<b>Breast Health Services</b>  <b>Agency: Forsyth Medical Center/Novant Health</b>	The Breast Clinic 2025 Frontis Plaza Blvd Winston-Salem, NC 27103 Phone: (336) 397-6035	Forsyth Medical Center has comprehensive breast health services for women from breast cancer screening using the latest in digital mammography to diagnostic services, leading-edge breast cancer treatment and support services to help every step of the way. Offers same and next day appointments. Hours: Monday-Friday, 7:00am-5:30pm.
<b>Substance and Alcohol Abuse Services</b>		
<b>Addiction Recovery Care Association</b>	1931 Union Cross Rd Winston-Salem, NC 27107 Phone: (336) 784-9470	ARCA offers detoxification from withdrawal for: alcohol; Benzodiazepines and other sedatives; and Heroin, Oxycodone (Oxy) and other opioids. A residential treatment program offers: a twelve step introduction and philosophy, recovery support groups, individual therapy, group therapy, community guest lectures, weekly multi-family therapy, weekly family education, and bilingual counselors for Spanish-speaking clients. Hours: Monday–Friday 8:00 am to 5:00 pm.
<b>A Greater Divine Place, Inc.</b>	1409 W Plaza Rd, Ste J Winston-Salem, NC 27103 Phone: (336) 293-8788	Is a substance abuse intensive outpatient program licensed by the state of North Carolina. Counseling for addiction (substance use disorder), mental health, and marriage and family therapy.
<b>Day Treatment</b>  <b>Agency: Advanced Placement</b>	2295 E 14 <sup>th</sup> St, Ste 4 Winston-Salem, NC 27105 Phone: (336) 722 - 1862	Day Treatment provides mental health and/or substance abuse interventions, which focus on achieving functional gains and on reintegrating the child back into school or transitioning into employment. Hours: Monday-Friday 8:00 am to 5:00 pm.
<b>Substance Abuse Counseling</b>  <b>Agency: Advanced Placement</b>	2295 E 14 <sup>th</sup> St, Ste 4 Winston-Salem, NC 27105 Phone: (336) 722-1862	Substance Abuse Counseling involves a Licensed Addictions specialist who is trained in the area of Substance Abuse and a Certified Clinical Supervisor. Hours: Monday – Friday 8:00 am to 5:00 pm.

<b>Type of Agency and Name of Agency/Provider</b>	<b>Location/Phone Number</b>	<b>Services Provided and Hours Available</b>
<b>DUI and Other Court Ordered Services</b>  <b>Agency: Advanced Placement</b>	2295 E 14 <sup>th</sup> St, Ste 4 Winston-Salem, NC 27105 Phone: (336) 722-1862	Advanced Placement is authorized by the NC Division of Mental Health DUI Services Section to provide DUI services. Hours: Monday-Friday 8:00 am to 5:00 pm.
<b>Alcoholics Anonymous</b>	1020 Brookstown Ave, #10 Winston-Salem, NC 27108 Phone: (336) 725-6031	Alcoholics Anonymous is a fellowship of men and women who share their common experience, strength and hope with each other. 24 hour answering service
<b>WISH (Women and Infant Services for Health)</b>  <b>Agency: Community Choices Inc.</b>	725 N Highland Ave Winston-Salem, NC 27101 Phone: (336) 607-8513 Referrals: (336) 397-7500	Community Choices, Inc provides a holistic, gender-specific substance abuse treatment program for pregnant, postpartum and parenting adult women and their children. The WISH Program provides outpatient treatment.
<b>Substance Abuse Outpatient Treatment</b>  <b>Agency: DayMark Recovery Services, Inc.</b>	725 N Highland Ave First Floor Winston-Salem, NC 27101 Phone: (336) 607-8523	Group and individual therapy for youth and adults with chemical dependency and abuse. Hours: Monday-Friday 8:00am to 5:00pm.
<b>Epiphany Family Services</b>	1001 S Marshall St, Ste I-29 Winston-Salem, NC 27101 Phone: (336) 782-8485	Provides a substance abuse intensive outpatient program.
<b>Essential Life Connections</b>  <b>Agency: Winford Brown-Ramseur &amp; Associates, LLC.</b>	4680-D Brownsboro Rd, Ste 201 Winston-Salem, NC 27106 Phone: (336) 896-9771	Offers diagnostic assessments for both children and adults, and adult substance abuse intensive outpatient programs.



<b>Type of Agency and Name of Agency/Provider</b>	<b>Location/Phone Number</b>	<b>Services Provided and Hours Available</b>
<b>Glenn's Assessment and Counseling Service</b>	8005 N Point Blvd, Ste A, Winston-Salem, NC 27106 Phone: (336) 896-9990	Treats patients suffering from alcoholism, drug addiction, substance abuse, DWI charges, and recurring relapses. Hours: Monday and Wednesday, 9:00 am- 8:00pm, Tuesday and Thursday 9:00 am -5:00 pm, Friday is by appointment only, and Saturday 9:00 am- 1:00 pm.
<b>Insight Human Services Agency: Partnership for a Drug-Free NC, Inc.</b>	665 W 4 <sup>th</sup> St Winston-Salem, NC 27101 Phone: (336) 725-8389  24 Hour Crisis Assistance Phone: 1-800-758-6077	Insight Human Services has both outpatient and residential clinical facilities that serve individuals by providing counseling, psychiatric services and substance abuse treatment. Begin Again Treatment Services (BATS) is a community based service for adults. Adolescent Substance Abuse Intensive Outpatient Program (SAIOP) for those age 13-18 who have not had success with outpatient services or are being discharged from a residential treatment program.
<b>Ivy House Center for Self-Sufficiency</b>	502 E 15 <sup>th</sup> St Winston-Salem, NC 27105 Phone: (336) 331-3440 Phone: (336) 602-1730	Services include: assessment, substance abuse comprehensive outpatient treatment, and substance abuse intensive outpatient program.
<b>LifeSkills Counseling Center</b>	1001 S Marshall St, Ste 260 Winston-Salem, NC 27101 Phone: (336) 631-8904	Provide counseling, intervention, and substance abuse services. Other services offered: DWI assessments, group counseling sessions, domestic violence classes, and ADETS classes.

<b>Type of Agency and Name of Agency/Provider</b>	<b>Location/Phone Number</b>	<b>Services Provided and Hours Available</b>
<b>OSA Assessment &amp; Counseling Services</b>	220 Century Blvd Kernersville, NC 27284 Phone: (336) 996-0900  6345 Cook Ave, Ste A Clemmons, NC 27012 Phone: (336) 766-2229	Provides counseling and treatment for persons addicted to alcohol or other drugs or substances. Services include Alcohol Drug Education Traffic School (ADETS); short term, longer term, and intensive outpatient treatment for substance abuse; and substance abuse, court-ordered substance abuse assessments and DOT/SAP evaluations.
<b>The Recovery Center of the Triad, LLC.</b>	8064 N Point Blvd, #102 Winston-Salem, NC 27106 Phone: (336) 293-7101	A group of psychotherapists that offer group therapy for those suffering from substance abuse, substance abuse and mental illness, as well as individual therapy.
<b>Top Priority Care Services</b>	7990 N Point Blvd, Ste 204, Winston-Salem, NC 27106 Phone: (336) 896-1323	Community Support (CS) consists of mental health and substance abuse rehabilitation services and supports necessary to assist the client in achieving and maintaining rehabilitative, sobriety, and recovery goals.
<b>Triad Homes-NC / ED-CORE, Inc.</b>	5016 Sunny Ln Walkertown, NC 27051 Phone: (336) 995-1442	Residential Treatment for boys and girls ages 0-17 with emotional issues, Mental health issues, developmental disabilities, and substance abuse, homelessness, foster care, and therapeutic foster care services.
<b>Twin City Area Narcotics Anonymous</b>	PO Box 24682 Winston-Salem, NC 27114 Helpline: (800) 365-1035	The Twin City Area holds NA meetings in the following communities in North Carolina: Winston-Salem, Clemmons, King, Lewisville, Lexington, Mocksville, Mount Airy, Pilot Mountain and Yadkinville.
<b>Alpha Acres Agency: Winston-Salem Rescue Mission</b>	718 N Trade St Winston-Salem, NC 27101 Phone: (336) 463-5155	A drug and alcohol recovery center for men located in Yadkin County. Uses a 12 month program with bible study, academic instruction, hard work, and recreation.

<b>Type of Agency and Name of Agency/Provider</b>	<b>Location/Phone Number</b>	<b>Services Provided and Hours Available</b>
<b>YWCA Hawley House</b>	941 West Dr Winston-Salem, NC 27101 Phone: (336) 721-0733	A substance abuse recovery facility that houses women for 9-12 months and offers 6 months of aftercare for women ages 18 and older diagnosed with the disease of addiction.
<b>Suppliers of Medical Equipment</b>		
<b>Forsyth Medical Supply</b>	3041 Trenwest Dr Winston-Salem, NC 27103 Phone: (336) 768-5512	Medical supply location. Offers compression garments, ostomy and wound care, ambulation aids, bath safety, post-mastectomy care, braces and supports, and diabetic shoes. Hours: Monday- Friday, 9:00am- 5:30pm; and Saturday, 9:00am-12:00pm.
<b>Majors Medical Supply</b>	6311A Stadium Dr Clemmons, NC 27012 Phone: (336) 712-1040	Majors Medical Supply provides a wide array of durable medical equipment, aids, and supplies. From mobility products, ambulatory aids, post-breast surgery products, aids to daily living, and ostomy supplies to compression therapy, incontinence products, orthopedic supports and braces, and bathroom safety products.
<b>American HomePatient, Inc.</b>	4305 Enterprise Dr, # D Winston-Salem, NC 27106 Phone: (336) 767-7600	We offer a comprehensive range of services and products that go beyond respiratory care, including: nebulizer treatment, nutrition, home medical equipment, & infusion.
<b>Triad Respiratory Solutions</b>	3061-B Trenwest Dr Winston-Salem, NC 27103 Phone: (336) 774-6500	Triad Respiratory Solutions is a provider for respiratory and durable home medical equipment.
<b>Carolina Mobility Homecare</b>	4500 Indiana Ave, #45 Winston-Salem, NC 27106 Phone: (336) 245-4736	Provides home health supplies such as: power wheel chairs, power scooters, rollators, diabetic shoes, diabetic supplies, oxygen & oxygen products, semi-electric beds, gel overlay, gel seat cushion and back braces.

<b>Type of Agency and Name of Agency/Provider</b>	<b>Location/Phone Number</b>	<b>Services Provided and Hours Available</b>
<p><b>Holladay Surgical Supply</b></p>	<p>2551 Landmark Dr Winston-Salem, NC 27103 Toll Free Phone: (800) 227-7602 Local Phone: (336) 760-2111</p>	<p>Holladay Surgical Supply can meet the needs of patients receiving services of a nursing home, hospice or home health agency. Offers medical products such as nutritional supplements, oxygen, oral care, personal care, personal protective equipment, respiratory, urological, advanced wound care, tapes, decubitus, diabetic, diagnostics, IV solutions, durable medical equipment, incontinence, needles, syringes and sharp's collectors.</p>
<b>Uninsured/ Financial Assistance (Hospital)</b>		
<p><b>Financial Assistance for the Uninsured</b></p> <p><b>Agency: Forsyth Medical Center</b></p>	<p>3333 Silas Creek Pkwy Winston-Salem, NC 27101 Phone: (336) 718-5000</p>	<p>Forsyth Medical Center provides free care to uninsured patients with incomes of up to 300 percent of the federal poverty level, with 100 percent write-off. Uninsured patients with income over 300 percent of the federal poverty level are eligible for a self-pay discount. Any patient (even with health insurance) with a balance over \$5,000 and income over 300 percent of the federal poverty level is eligible for a catastrophic discount. Any patient is eligible for an individualized payment plan based on the amount due and the patient's financial status, with terms extending up to five years. No interest charged, unless appropriate.</p>
<p><b>Uninsured Financial Assistance</b></p> <p><b>Agency: Wake Forest University Baptist Medical Center</b></p>	<p>Billing Dept. Inquiries Medical Center Blvd Winston-Salem, NC 27157 Phone: (336) 716-4729</p>	<p>Provides catastrophic discounts, payment plans, and charity care discounts for patients who have difficulty paying due to income.</p>

# **2011 NORTH CAROLINA YOUTH RISK BEHAVIOR SURVEY**

## **MIDDLE SCHOOL QUESTIONNAIRE**

This survey is about health behavior. It has been developed so you can tell us what you do that may affect your health. The information you give will be used to improve health education for young people like yourself.

DO NOT write your name on this survey. The answers you give will be kept private. No one will know what you write. Answer the questions based on what you really do.

Completing the survey is voluntary. Whether or not you answer the questions will not affect your grade in this class. If you are not comfortable answering a question, just leave it blank.

The questions that ask about your background will be used only to describe the types of students completing this survey. The information will not be used to find out your name. No names will ever be reported.

Make sure to read every question. Fill in the circles completely. When you are finished, follow the instructions of the person giving you the survey.

**Thank you very much for your help.**

**Directions**

- Use a #2 pencil only.
- Make dark marks.
- Fill in a response like this: A B ● D.
- If you change your answer, erase your old answer completely.

1. How old are you?
  - A. 10 years old or younger
  - B. 11 years old
  - C. 12 years old
  - D. 13 years old
  - E. 14 years old
  - F. 15 years old
  - G. 16 years old or older
2. What is your sex?
  - A. Female
  - B. Male
3. In what grade are you?
  - A. 6th grade
  - B. 7th grade
  - C. 8th grade
  - D. Ungraded or other grade
4. Are you Hispanic or Latino?
  - A. Yes
  - B. No
5. What is your race? **(Select one or more responses.)**
  - A. American Indian or Alaska Native
  - B. Asian
  - C. Black or African American
  - D. Native Hawaiian or Other Pacific Islander
  - E. White

6. During the past 12 months, how would you describe your grades in school?
  - A. Mostly A's
  - B. Mostly B's
  - C. Mostly C's
  - D. Mostly D's
  - E. Mostly F's
  - F. None of these grades
  - G. Not sure

**The next 12 questions ask about personal safety and violence-related behaviors.**

7. **When you ride a bicycle**, how often do you wear a helmet?
  - A. I do not ride a bicycle
  - B. Never wear a helmet
  - C. Rarely wear a helmet
  - D. Sometimes wear a helmet
  - E. Most of the time wear a helmet
  - F. Always wear a helmet
8. **When you rollerblade or ride a skateboard**, how often do you wear a helmet?
  - A. I do not rollerblade or ride a skateboard
  - B. Never wear a helmet
  - C. Rarely wear a helmet
  - D. Sometimes wear a helmet
  - E. Most of the time wear a helmet
  - F. Always wear a helmet
9. How often do you wear a seat belt when **riding** in a car?
  - A. Never
  - B. Rarely
  - C. Sometimes
  - D. Most of the time
  - E. Always

10. Have you ever **ridden** in a car or other vehicle **driven by someone who had been recklessly speeding**?
- A. Yes  
B. No  
C. Not sure
11. Have you ever ridden in a car driven by someone who had been drinking alcohol?
- A. Yes  
B. No  
C. Not sure
12. Have you ever carried a **weapon**, such as a gun, knife, or club?
- A. Yes  
B. No
13. During the past 12 months, did someone threaten or injure you with a weapon such as a gun, knife, or club **on school property**?
- A. Yes  
B. No
14. Have you ever been in a physical fight?
- A. Yes  
B. No
15. Have you ever been in a physical fight in which you were hurt and had to be treated by a doctor or nurse?
- A. Yes  
B. No
16. During the past 30 days, did you **not** go to school because you felt you would be unsafe at school or on your way to or from school?
- A. Yes  
B. No

17. During the past 12 months, has someone stolen or deliberately damaged your property, such as your clothing or books, **on school property**?
- A. Yes  
B. No
18. Is there gang activity in your school?
- A. Yes  
B. No  
C. Not sure

**The next 4 questions ask about bullying. Bullying is when 1 or more students tease, threaten, spread rumors about, hit, shove, or hurt another student over and over again. It is not bullying when 2 students of about the same strength or power argue or fight or tease each other in a friendly way.**

19. Have you ever been bullied **on school property**?
- A. Yes  
B. No
20. Have you ever been **electronically bullied**? (Include being bullied through e-mail, chat rooms, instant messaging, Web sites, or texting.)
- A. Yes  
B. No
21. Have you seen other students being bullied in your school?
- A. Yes  
B. No  
C. Not sure
22. Have you ever been the victim of teasing or name calling because someone thought you were gay, lesbian, or bisexual?
- A. Yes  
B. No

The next 5 questions ask about attempted suicide. Sometimes people feel so depressed about the future that they may consider attempting suicide or killing themselves.

23. During the past 12 months, did you ever feel so sad or hopeless almost every day for **two weeks or more** in a row that you stopped doing some usual activities?  
A. Yes  
B. No
24. When you feel sad, empty, hopeless angry, or anxious, with whom do you **usually** talk?  
A. I do not feel sad, empty, hopeless, angry, or anxious  
B. Parent or other adult family member  
C. Teacher or other adult in this  
D. Religious leader  
E. Doctor or nurse  
F. Other adult  
G. Friend or sibling  
H. Some other person
25. Have you ever **seriously** thought about killing yourself?  
A. Yes  
B. No
26. Have you ever made a **plan** about how you would kill yourself?  
A. Yes  
B. No
27. Have you ever **tried** to kill yourself?  
A. Yes  
B. No

The next 4 questions ask about tobacco use.

28. How old were you when you smoked a whole cigarette for the first time?  
A. I have never smoked a whole cigarette  
B. 8 years old or younger  
C. 9 years old  
D. 10 years old  
E. 11 years old  
F. 12 years old  
G. 13 years old or older
29. During the past 30 days, on how many days did you smoke cigarettes?  
A. 0 days  
B. 1 or 2 days  
C. 3 to 5 days  
D. 6 to 9 days  
E. 10 to 19 days  
F. 20 to 29 days  
G. All 30 days
30. During the past 12 months, did you ever try **to quit** smoking cigarettes?  
A. I did not smoke cigarettes during the past 12 months  
B. Yes  
C. No
31. During the past 30 days, on how many days did you use **chewing tobacco, snuff, or dip**, such as Redman, Levi Garrett, Beechnut, Skoal, Skoal Bandits, or Copenhagen?  
A. 0 days  
B. 1 or 2 days  
C. 3 to 5 days  
D. 6 to 9 days  
E. 10 to 19 days  
F. 20 to 29 days  
G. All 30 days



The next 3 questions ask about drinking alcohol. This includes drinking beer, wine, wine coolers, and liquor such as rum, gin, vodka, or whiskey. For these questions drinking alcohol does not include drinking a few sips of wine for religious purposes.

32. Have you ever had a drink of alcohol, other than a few sips?  
A. Yes  
B. No
33. How old were you when you had your first drink of alcohol other than a few sips?  
A. I have never had a drink of alcohol other than a few sips  
B. 8 years old or younger  
C. 9 years old  
D. 10 years old  
E. 11 years old  
F. 12 years old  
G. 13 years old or older
34. During the past 30 days, how did you **usually** get the alcohol you drank?  
A. I did not drink alcohol during the past 30 days  
B. I bought it in a store such as a liquor store, convenience store, supermarket, discount store, or gas station  
C. I bought it at a restaurant, bar, or club  
D. I bought it at a public event such as a concert or sporting event  
E. I gave someone else money to buy it for me  
F. Someone gave it to me  
G. I took it from a store or family member  
H. I got it some other way

The next 4 questions ask about marijuana use. Marijuana also is called grass or pot.

35. Have you ever used marijuana?  
A. Yes  
B. No
36. How old were you when you tried marijuana for the first time?  
A. I have never tried marijuana  
B. 8 years old or younger  
C. 9 years old  
D. 10 years old  
E. 11 years old  
F. 12 years old  
G. 13 years old or older
37. During the past 30 days, did you use marijuana?  
A. Yes  
B. No
38. During the past 30 days, did you use marijuana **on school property**?  
A. Yes  
B. No

The next 5 questions ask about other drug use.

39. Have you ever used **any** form of cocaine, including powder, crack, or freebase?  
A. Yes  
B. No
40. Have you ever sniffed glue, breathed the contents of spray cans, or inhaled any paints or sprays to get high?  
A. Yes  
B. No

41. Have you ever taken **steroid pills or shots** without a doctor's prescription?  
 A. Yes  
 B. No
42. Have you ever taken a **prescription drug** (such as OxyContin, Percocet, Vicodin, codeine, Adderall, Ritalin, or Xanax) without a doctor's prescription?  
 A. Yes  
 B. No
43. During the past 12 months, has anyone offered, sold, or given you an illegal drug **on school property**?  
 A. Yes  
 B. No

**The next 5 questions ask about abstinence, AIDS, and STD education.**

44. Have you ever been taught about abstaining from sexual activity?  
 A. Yes  
 B. No  
 C. Not sure
45. Have you ever been taught about AIDS or HIV infection in school?  
 A. Yes  
 B. No  
 C. Not sure
46. Have you ever been taught about chlamydia, gonorrhea, syphilis, human papillomavirus, or genital warts?  
 A. Yes  
 B. No  
 C. Not sure

47. When you have questions about sexually transmitted diseases (STD), HIV, AIDS, or pregnancy prevention, with whom do you **usually** talk?  
 A. I do not have questions about sexually transmitted diseases (STD), HIV, AIDS, or pregnancy prevention  
 B. Parent or other adult family member  
 C. Teacher or other adult in this school  
 D. Religious leader  
 E. Doctor or nurse  
 F. Other adult  
 G. Friend or sibling  
 H. Some other person
48. Have your parents or other adults in your family ever talked with you about what they expect you to do or not to do when it comes to sex?  
 A. Yes  
 B. No  
 C. Not sure

**The next 8 questions ask about body weight.**

49. How do **you** describe your weight?  
 A. Very underweight  
 B. Slightly underweight  
 C. About the right weight  
 D. Slightly overweight  
 E. Very overweight
50. Which of the following are you trying to do about your weight?  
 A. **Lose** weight  
 B. **Gain** weight  
 C. **Stay** the same weight  
 D. I am **not trying to do anything** about my weight

51. Have you ever **exercised** to lose weight or to keep from gaining weight?  
A. Yes  
B. No
52. Have you ever **eaten less food, fewer calories, or foods low in fat** to lose weight or to keep from gaining weight?  
A. Yes  
B. No
53. Have you ever **gone without eating for 24 hours or more** (also called fasting) to lose weight or to keep from gaining weight?  
A. Yes  
B. No
54. Have you ever **taken any diet pills, powders, or liquids** without a doctor's advice to lose weight or to keep from gaining weight? (Do not include meal replacement products such as Slim Fast.)  
A. Yes  
B. No
55. Have you ever **vomited or taken laxatives** to lose weight or to keep from gaining weight?  
A. Yes  
B. No
56. During the past 30 days, did you **skip meals** to lose weight or to keep from gaining weight?  
A. Yes  
B. No

**The next 2 questions ask about food you ate or drank during the past 7 days.**

57. During the past 7 days, on how many days did you eat **breakfast**?  
A. 0 days  
B. 1 day  
C. 2 days  
D. 3 days  
E. 4 days  
F. 5 days  
G. 6 days  
H. 7 days
58. During the past 7 days, on how many days did you eat dinner at home with your family?  
A. 0 days  
B. 1 day  
C. 2 days  
D. 3 days  
E. 4 days  
F. 5 days  
G. 6 days  
H. 7 days

**The next 5 questions ask about physical activity.**

59. During the past 7 days, on how many days were you physically active for a total of **at least 60 minutes per day**? (Add up all the time you spent in any kind of physical activity that increased your heart rate and made you breathe hard some of the time.)  
A. 0 days  
B. 1 day  
C. 2 days  
D. 3 days  
E. 4 days  
F. 5 days  
G. 6 days  
H. 7 days

60. During the past 12 months, on how many sports teams did you play? (Count any teams run by your school or community groups.)
- A. 0 teams
  - B. 1 team
  - C. 2 teams
  - D. 3 or more teams
61. On an average school day, how many hours do you watch TV?
- A. I do not watch TV on an average school day
  - B. Less than 1 hour per day
  - C. 1 hour per day
  - D. 2 hours per day
  - E. 3 hours per day
  - F. 4 hours per day
  - G. 5 or more hours per day
62. On an average school day, how many hours do you play video or computer games or use a computer for something that is not school work? (Include activities such as Xbox, PlayStation, Nintendo DS, iPod touch, Facebook, and the Internet.)
- A. I do not play video or computer games or use a computer for something that is not school work
  - B. Less than 1 hour per day
  - C. 1 hour per day
  - D. 2 hours per day
  - E. 3 hours per day
  - F. 4 hours per day
  - G. 5 or more hours per day
63. How many days per week do you usually walk or ride your bike to school?
- A. 0 days
  - B. 1 day
  - C. 2 days
  - D. 3 days
  - E. 4 days
  - F. 5 days

**The next 8 questions ask about other health-related topics.**

64. Has a doctor or nurse ever told you that you have asthma?
- A. Yes
  - B. No
  - C. Not sure
65. Do you still have asthma?
- A. I have never had asthma
  - B. Yes
  - C. No
  - D. Not sure
66. An asthma action/management plan contains instructions about how to care for your asthma. Do you have a written asthma action plan or asthma management plan on file at school?
- A. I do not have asthma
  - B. No
  - C. Yes
  - D. Don't Know
67. On an average school night, how many hours of sleep do you get?
- A. 4 or less hours
  - B. 5 hours
  - C. 6 hours
  - D. 7 hours
  - E. 8 hours
  - F. 9 hours
  - G. 10 or more hours
68. On an average school day, how long after school are you alone without a parent or adult?
- A. I am not alone after school
  - B. Less than 1 hour per day
  - C. 1 or 2 hours per day
  - D. 3 hours per day
  - E. 4 hours per day
  - F. 5 hours per day
  - G. 6 or more hours per day

69. Do you participate in school activities other than sports, such as band, drama, clubs, or student government?  
A. Yes  
B. No
70. When was the last time you saw a doctor or nurse for a check-up or physical exam when you were not sick or injured?  
A. During the past 12 months  
B. Between 12 and 24 months ago  
C. More than 24 months ago  
D. Never  
E. Not sure
71. When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?  
A. During the past 12 months  
B. Between 12 and 24 months ago  
C. More than 24 months ago  
D. Never  
E. Not sure

**The next 3 questions ask about disabilities. A disability can be physical, mental, emotional, or communication-related.**

72. Do you consider yourself to have a disability?  
A. Yes  
B. No  
C. Not sure
73. Are you limited in any way in any activities because of any disability or health problem?  
A. Yes  
B. No  
C. Not sure

74. Do you have trouble learning, remembering, or concentrating because of disability or health problem?  
A. Yes  
B. No  
C. Not sure

**For the next 3 questions, indicate how much you agree or disagree.**

75. Do you agree or disagree that you feel alone in your life?  
A. Strongly agree  
B. Agree  
C. Not sure  
D. Disagree  
E. Strongly disagree
76. Do you agree or disagree that you feel good about yourself?  
A. Strongly agree  
B. Agree  
C. Not sure  
D. Disagree  
E. Strongly disagree
77. Do you agree or disagree that your teachers really care about you and give you a lot of encouragement?  
A. Strongly agree  
B. Agree  
C. Not sure  
D. Disagree  
E. Strongly disagree

**This is the end of the survey.  
Thanks you very much for your help.**

# 2011 North Carolina Youth Risk Behavior Survey High School Questionnaire

This survey is about health behavior. It has been developed so you can tell us what you do that may affect your health. The information you give will be used to improve health education for young people like yourself.

DO NOT write your name on this survey. The answers you give will be kept private. No one will know what you write. Answer the questions based on what you really do.

Completing the survey is voluntary. Whether or not you answer the questions will not affect your grade in this class. If you are not comfortable answering a question, just leave it blank.

The questions that ask about your background will be used only to describe the types of students completing this survey. The information will not be used to find out your name. No names will ever be reported.

Make sure to read every question. Fill in the ovals completely. When you are finished, follow the instructions of the person giving you the survey.

***Thank you very much for your help.***

**Directions**

- Use a #2 pencil only.
- Make dark marks.
- Fill in a response like this: A B ●
- D.
- If you change your answer, erase your old answer completely.

1. How old are you?
  - A. 12 years old or younger
  - B. 13 years old
  - C. 14 years old
  - D. 15 years old
  - E. 16 years old
  - F. 17 years old
  - G. 18 years old or older
  
2. What is your sex?
  - A. Female
  - B. Male
  
3. In what grade are you?
  - A. 9th grade
  - B. 10th grade
  - C. 11th grade
  - D. 12th grade
  - E. Ungraded or other grade
  
4. Are you Hispanic or Latino?
  - A. Yes
  - B. No
  
5. What is your race? **(Select one or more responses.)**
  - A. American Indian or Alaska Native
  - B. Asian
  - C. Black or African American
  - D. Native Hawaiian or Other Pacific Islander
  - E. White

6. How tall are you without your shoes on?  
 Directions: Write your height in the shaded blank boxes. Fill in the matching oval below each number.

Example

Height	
Feet	Inches
5	7
③	⑩
④	①
●	②
⑥	③
⑦	④
	⑤
	⑥
	●
	⑧
	⑨
	⑩
	⑪

7. How much do you weigh without your shoes on?  
 Directions: Write your weight in the shaded blank boxes. Fill in the matching oval below each number.

Example

Weight		
Pounds		
1	5	2
①	①	①
●	①	①
②	②	●
③	③	③
	④	④
	●	⑤
	⑥	⑥
	⑦	⑦
	⑧	⑧
	⑨	⑨

8. During the past 12 months, how would you describe your grades in school?
- A. Mostly A's
  - B. Mostly B's
  - C. Mostly C's
  - D. Mostly D's
  - E. Mostly F's
  - F. None of these grades
  - G. Not sure

**The next 5 questions ask about safety.**

9. **When you rode a bicycle** during the past 12 months, how often did you wear a helmet?
- A. I did not ride a bicycle during the past 12 months
  - B. Never wore a helmet
  - C. Rarely wore a helmet
  - D. Sometimes wore a helmet
  - E. Most of the time wore a helmet
  - F. Always wore a helmet
10. How often do you wear a seat belt when **riding** in a car driven by someone else?
- A. Never
  - B. Rarely
  - C. Sometimes
  - D. Most of the time
  - E. Always
11. During the past 30 days, how many times did you **ride** in a car or other vehicle **driven by someone who had been drinking alcohol**?
- A. 0 times
  - B. 1 time
  - C. 2 or 3 times
  - D. 4 or 5 times
  - E. 6 or more times

12. During the past 30 days, how many times did you **drive** a car or other vehicle **when you had been drinking alcohol**?
- A. 0 times
  - B. 1 time
  - C. 2 or 3 times
  - D. 4 or 5 times
  - E. 6 or more times
13. During the past 30 days, on how many days did you **text or e-mail** while **driving** a car or other vehicle?
- A. 0 days
  - B. 1 or 2 days
  - C. 3 to 5 days
  - D. 6 to 9 days
  - E. 10 to 19 days
  - F. 20 to 29 days
  - G. All 30 days

**The next 10 questions ask about violence-related behaviors.**

14. During the past 30 days, on how many days did you carry a **weapon** such as a gun, knife, or club?
- A. 0 days
  - B. 1 day
  - C. 2 or 3 days
  - D. 4 or 5 days
  - E. 6 or more days
15. During the past 30 days, on how many days did you carry a weapon such as a gun, knife, or club **on school property**?
- A. 0 days
  - B. 1 day
  - C. 2 or 3 days
  - D. 4 or 5 days
  - E. 6 or more days



16. During the past 30 days, on how many days did you **not** go to school because you felt you would be unsafe at school or on your way to or from school?
- A. 0 days
  - B. 1 day
  - C. 2 or 3 days
  - D. 4 or 5 days
  - E. 6 or more days
17. During the past 12 months, how many times has someone threatened or injured you with a weapon such as a gun, knife, or club **on school property**?
- A. 0 times
  - B. 1 time
  - C. 2 or 3 times
  - D. 4 or 5 times
  - E. 6 or 7 times
  - F. 8 or 9 times
  - G. 10 or 11 times
  - H. 12 or more times
18. During the past 12 months, how many times were you in a physical fight?
- A. 0 times
  - B. 1 time
  - C. 2 or 3 times
  - D. 4 or 5 times
  - E. 6 or 7 times
  - F. 8 or 9 times
  - G. 10 or 11 times
  - H. 12 or more times
19. During the past 12 months, how many times were you in a physical fight in which you were injured and had to be treated by a doctor or nurse?
- A. 0 times
  - B. 1 time
  - C. 2 or 3 times
  - D. 4 or 5 times
  - E. 6 or more times

20. During the past 12 months, how many times were you in a physical fight **on school property**?
- A. 0 times
  - B. 1 time
  - C. 2 or 3 times
  - D. 4 or 5 times
  - E. 6 or 7 times
  - F. 8 or 9 times
  - G. 10 or 11 times
  - H. 12 or more times
21. During the past 12 months, did your boyfriend or girlfriend ever hit, slap, or physically hurt you on purpose?
- A. Yes
  - B. No
22. Have you ever been physically forced to have sexual intercourse when you did not want to?
- A. Yes
  - B. No
23. Is there gang activity in your school?
- A. Yes
  - B. No
  - C. Not sure

**The next 4 questions ask about bullying. Bullying is when 1 or more students tease, threaten, spread rumors about, hit, shove, or hurt another student over and over again. It is not bullying when 2 students of about the same strength or power argue or fight or tease each other in a friendly way.**

24. During the past 12 months, have you ever been bullied **on school property**?
- A. Yes
  - B. No

25. During the past 12 months, have you ever been **electronically bullied**? (Include being bullied through e-mail, chat rooms, instant messaging, Web sites, or texting.)  
 A. Yes  
 B. No
26. During the past 12 months, have you ever seen other students being bullied in your school?  
 A. Yes  
 B. No
27. During the past 12 months, have you ever been the victim of teasing or name calling because someone **thought** you were gay, lesbian, or bisexual?  
 A. Yes  
 B. No

**The next 5 questions ask about sad feelings and attempted suicide. Sometimes people feel so depressed about the future that they may consider attempting suicide, which is, taking some action to end their own life.**

28. During the past 12 months, did you ever feel so sad or hopeless almost every day for **two weeks or more** in a row that you stopped doing some usual activities?  
 A. Yes  
 B. No

29. When you feel sad, empty, hopeless, angry, or anxious, with whom do you **usually** talk?  
 A. I do not feel sad, empty, hopeless, angry, or anxious  
 B. Parent or other adult family member  
 C. Teacher or other adult in this school  
 D. Religious leader  
 E. Doctor or nurse  
 F. Other adult  
 G. Friend or sibling  
 H. Some other person
30. During the past 12 months, did you ever **seriously** consider attempting suicide?  
 A. Yes  
 B. No
31. During the past 12 months, did you make a plan about how you would attempt suicide?  
 A. Yes  
 B. No
32. **If you attempted suicide** during the past 12 months, did any attempt result in an injury, poisoning, or overdose that had to be treated by a doctor or nurse?  
 A. **I did not attempt suicide** during the past 12 months  
 B. Yes  
 C. No

**The next 4 questions ask about tobacco use.**

33. How old were you when you smoked a whole cigarette for the first time?
- A. I have never smoked a whole cigarette
  - B. 8 years old or younger
  - C. 9 or 10 years old
  - D. 11 or 12 years old
  - E. 13 or 14 years old
  - F. 15 or 16 years old
  - G. 17 years old or older
34. During the past 30 days, on how many days did you smoke cigarettes?
- A. 0 days
  - B. 1 or 2 days
  - C. 3 to 5 days
  - D. 6 to 9 days
  - E. 10 to 19 days
  - F. 20 to 29 days
  - G. All 30 days
35. During the past 12 months, did you ever try to **quit** smoking cigarettes?
- A. I did not smoke during the past 12 months
  - B. Yes
  - C. No
36. During the past 30 days, on how many days did you use **chewing tobacco, snuff, or dip**, such as Redman, Levi Garrett, Beechnut, Skoal, Skoal Bandits, or Copenhagen?
- A. 0 days
  - B. 1 or 2 days
  - C. 3 to 5 days
  - D. 6 to 9 days
  - E. 10 to 19 days
  - F. 20 to 29 days
  - G. All 30 days

**The next 5 questions ask about drinking alcohol. This includes drinking beer, wine, wine coolers, and liquor such as rum, gin, vodka, or whiskey. For these questions, drinking alcohol does not include drinking a few sips of wine for religious purposes.**

37. How old were you when you had your first drink of alcohol other than a few sips?
- A. I have never had a drink of alcohol other than a few sips
  - B. 8 years old or younger
  - C. 9 or 10 years old
  - D. 11 or 12 years old
  - E. 13 or 14 years old
  - F. 15 or 16 years old
  - G. 17 years old or older
38. During the past 30 days, on how many days did you have at least one drink of alcohol?
- A. 0 days
  - B. 1 or 2 days
  - C. 3 to 5 days
  - D. 6 to 9 days
  - E. 10 to 19 days
  - F. 20 to 29 days
  - G. All 30 days
39. During the past 30 days, on how many days did you have 5 or more drinks of alcohol in a row, that is, within a couple of hours?
- A. 0 days
  - B. 1 day
  - C. 2 days
  - D. 3 to 5 days
  - E. 6 to 9 days
  - F. 10 to 19 days
  - G. 20 or more days

40. During the past 30 days, on how many days did you have at least one drink of alcohol **on school property**?
- A. 0 days
  - B. 1 or 2 days
  - C. 3 to 5 days
  - D. 6 to 9 days
  - E. 10 to 19 days
  - F. 20 to 29 days
  - G. All 30 days
41. During the past 30 days, how did you **usually** get the alcohol you drank?
- A. I did not drink alcohol during the past 30 days
  - B. I bought it in a store such as a liquor store, convenience store, supermarket, discount store, or gas station
  - C. I bought it at a restaurant, bar, or club
  - D. I bought it at a public event such as a concert or sporting event
  - E. I gave someone else money to buy it for me
  - F. Someone gave it to me
  - G. I took it from a store or family member
  - H. I got it some other way

**The next 4 questions ask about marijuana use. Marijuana also is called grass or pot.**

42. During your life, how many times have you used marijuana?
- A. 0 times
  - B. 1 or 2 times
  - C. 3 to 9 times
  - D. 10 to 19 times
  - E. 20 to 39 times
  - F. 40 to 99 times
  - G. 100 or more times

43. How old were you when you tried marijuana for the first time?
- A. I have never tried marijuana
  - B. 8 years old or younger
  - C. 9 or 10 years old
  - D. 11 or 12 years old
  - E. 13 or 14 years old
  - F. 15 or 16 years old
  - G. 17 years old or older
44. During the past 30 days, how many times did you use marijuana?
- A. 0 times
  - B. 1 or 2 times
  - C. 3 to 9 times
  - D. 10 to 19 times
  - E. 20 to 39 times
  - F. 40 or more times
45. During the past 30 days, how many times did you use marijuana **on school property**?
- A. 0 times
  - B. 1 or 2 times
  - C. 3 to 9 times
  - D. 10 to 19 times
  - E. 20 to 39 times
  - F. 40 or more times

**The next 7 questions ask about other drugs.**

46. During your life, how many times have you used **any** form of cocaine, including powder, crack, or freebase?
- A. 0 times
  - B. 1 or 2 times
  - C. 3 to 9 times
  - D. 10 to 19 times
  - E. 20 to 39 times
  - F. 40 or more times

47. During your life, how many times have you sniffed glue, breathed the contents of aerosol spray cans, or inhaled any paints or sprays to get high?
- A. 0 times
  - B. 1 or 2 times
  - C. 3 to 9 times
  - D. 10 to 19 times
  - E. 20 to 39 times
  - F. 40 or more times
48. During your life, how many times have you used **methamphetamines** (also called speed, crystal, crank, or ice)?
- A. 0 times
  - B. 1 or 2 times
  - C. 3 to 9 times
  - D. 10 to 19 times
  - E. 20 to 39 times
  - F. 40 or more times
49. During your life, how many times have you taken **steroid pills or shots** without a doctor's prescription?
- A. 0 times
  - B. 1 or 2 times
  - C. 3 to 9 times
  - D. 10 to 19 times
  - E. 20 to 39 times
  - F. 40 or more times
50. During your life, how many times have you taken a **prescription drug** (such as OxyContin, Percocet, Vicodin, codeine, Adderall, Ritalin, or Xanax) without a doctor's prescription?
- A. 0 times
  - B. 1 or 2 times
  - C. 3 to 9 times
  - D. 10 to 19 times
  - E. 20 to 39 times
  - F. 40 or more times

51. During the past 12 months, has anyone offered, sold, or given you an illegal drug **on school property**?
- A. Yes
  - B. No
52. Have you ever gotten into trouble with your family or friends, missed school, or gotten into fights, while using alcohol or drugs?
- A. Yes
  - B. No

**The next 9 questions ask about sexual behavior.**

53. Have you ever had sexual intercourse?
- A. Yes
  - B. No
54. How old were you when you had sexual intercourse for the first time?
- A. I have never had sexual intercourse
  - B. 11 years old or younger
  - C. 12 years old
  - D. 13 years old
  - E. 14 years old
  - F. 15 years old
  - G. 16 years old
  - H. 17 years old or older
55. During your life, with how many people have you had sexual intercourse?
- A. I have never had sexual intercourse
  - B. 1 person
  - C. 2 people
  - D. 3 people
  - E. 4 people
  - F. 5 people
  - G. 6 or more people

56. During the past 3 months, with how many people did you have sexual intercourse?
- A. I have never had sexual intercourse
  - B. I have had sexual intercourse, but not during the past 3 months
  - C. 1 person
  - D. 2 people
  - E. 3 people
  - F. 4 people
  - G. 5 people
  - H. 6 or more people
57. Did you drink alcohol or use drugs before you had sexual intercourse the **last time**?
- A. I have never had sexual intercourse
  - B. Yes
  - C. No
58. The **last time** you had sexual intercourse, did you or your partner use a condom?
- A. I have never had sexual intercourse
  - B. Yes
  - C. No
59. The **last time** you had sexual intercourse, how many years younger or older than you was your partner?
- A. I have never had sexual intercourse
  - B. 5 or more years younger
  - C. 3 to 4 years younger
  - D. About the same age
  - E. 3 to 4 years older
  - F. 5 or more years older
  - G. Not sure

60. When you have questions about sexually transmitted diseases (STD), HIV, AIDS, or pregnancy prevention, with whom do you **usually** talk?
- A. I do not have questions about sexually transmitted diseases (STD), HIV, AIDS, or pregnancy prevention
  - B. Parent or other adult family member
  - C. Teacher or other adults in this school
  - D. Religious leader
  - E. Doctor or nurse
  - F. Other adult
  - G. Friend or sibling
  - H. Some other person
61. Have your parents or other adults in your family ever talked with you about what they expect you to do or not to do when it comes to sex?
- A. Yes
  - B. No
  - C. Not sure

**The next 6 questions ask about body weight.**

62. How do **you** describe your weight?
- A. Very underweight
  - B. Slightly underweight
  - C. About the right weight
  - D. Slightly overweight
  - E. Very overweight
63. Which of the following are you trying to do about your weight?
- A. **Lose** weight
  - B. **Gain** weight
  - C. **Stay** the same weight
  - D. I am **not trying to do anything** about my weight

64. During the past 30 days, did you **exercise** to lose weight or to keep from gaining weight?  
A. Yes  
B. No
65. During the past 30 days, did you **eat less food, fewer calories, or foods low in fat** to lose weight or to keep from gaining weight?  
A. Yes  
B. No
66. During the past 30 days, did you **take any diet pills, powders, or liquids** without a doctor's advice to lose weight or to keep from gaining weight? (Do **not** include meal replacement products such as Slim Fast.)  
A. Yes  
B. No
67. During the past 30 days, did you **vomit or take laxatives** to lose weight or to keep from gaining weight?  
A. Yes  
B. No

**The next 10 questions ask about food you ate or drank during the past 7 days. Think about all the meals and snacks you had from the time you got up until you went to bed. Be sure to include food you ate at home, at school, at restaurants, or anywhere else.**

68. During the past 7 days, how many times did you drink **100% fruit juices** such as orange juice, apple juice, or grape juice? (Do **not** count punch, Kool-Aid, sports drinks, or other fruit-flavored drinks.)  
A. I did not drink 100% fruit juice during the past 7 days  
B. 1 to 3 times during the past 7 days  
C. 4 to 6 times during the past 7 days  
D. 1 time per day  
E. 2 times per day  
F. 3 times per day  
G. 4 or more times per day
69. During the past 7 days, how many times did you eat **fruit**? (Do **not** count fruit juice.)  
A. I did not eat fruit during the past 7 days  
B. 1 to 3 times during the past 7 days  
C. 4 to 6 times during the past 7 days  
D. 1 time per day  
E. 2 times per day  
F. 3 times per day  
G. 4 or more times per day

70. During the past 7 days, how many times did you eat **green salad**?
- A. I did not eat green salad during the past 7 days
  - B. 1 to 3 times during the past 7 days
  - C. 4 to 6 times during the past 7 days
  - D. 1 time per day
  - E. 2 times per day
  - F. 3 times per day
  - G. 4 or more times per day
71. During the past 7 days, how many times did you eat **potatoes**? (Do **not** count french fries, fried potatoes, or potato chips.)
- A. I did not eat potatoes during the past 7 days
  - B. 1 to 3 times during the past 7 days
  - C. 4 to 6 times during the past 7 days
  - D. 1 time per day
  - E. 2 times per day
  - F. 3 times per day
  - G. 4 or more times per day
72. During the past 7 days, how many times did you eat **carrots**?
- A. I did not eat carrots during the past 7 days
  - B. 1 to 3 times during the past 7 days
  - C. 4 to 6 times during the past 7 days
  - D. 1 time per day
  - E. 2 times per day
  - F. 3 times per day
  - G. 4 or more times per day

73. During the past 7 days, how many times did you eat **other vegetables**? (Do **not** count green salad, potatoes, or carrots.)
- A. I did not eat other vegetables during the past 7 days
  - B. 1 to 3 times during the past 7 days
  - C. 4 to 6 times during the past 7 days
  - D. 1 time per day
  - E. 2 times per day
  - F. 3 times per day
  - G. 4 or more times per day
74. During the past 7 days, how many times did you drink a **can, bottle, or glass of soda or pop**, such as Coke, Pepsi, or Sprite? (Do **not** count diet soda or diet pop.)
- A. I did not drink soda or pop during the past 7 days
  - B. 1 to 3 times during the past 7 days
  - C. 4 to 6 times during the past 7 days
  - D. 1 time per day
  - E. 2 times per day
  - F. 3 times per day
  - G. 4 or more times per day



75. During the past 7 days, how many times did you drink a can, bottle, or glass of any other sugar-sweetened beverage? (Include sweet tea, punch, Kool-Aid, fruit-flavored drinks, energy drinks, and sports drinks. Do **not** include diet or sugar-free drinks.)
- A. I did not drink sugar-sweetened beverages during the past 7 days
  - B. 1 to 3 times during the past 7 days
  - C. 4 to 6 times during the past 7 days
  - D. 1 time per day
  - E. 2 times per day
  - F. 3 times per day
  - G. 4 or more times per day
76. During the past 7 days, on how many days did you eat **breakfast**?
- A. 0 days
  - B. 1 day
  - C. 2 days
  - D. 3 days
  - E. 4 days
  - F. 5 days
  - G. 6 days
  - H. 7 days
77. During the past 7 days, on how many days did you eat dinner at home with your family?
- A. 0 days
  - B. 1 day
  - C. 2 days
  - D. 3 days
  - E. 4 days
  - F. 5 days
  - G. 6 days
  - H. 7 days

**The next 5 questions ask about physical activity.**

78. During the past 7 days, on how many days were you physically active for a total of **at least 60 minutes per day**? (Add up all the time you spent in any kind of physical activity that increased your heart rate and made you breathe hard some of the time.)
- A. 0 days
  - B. 1 day
  - C. 2 days
  - D. 3 days
  - E. 4 days
  - F. 5 days
  - G. 6 days
  - H. 7 days
79. On an average school day, how many hours do you watch TV?
- A. I do not watch TV on an average school day
  - B. Less than 1 hour per day
  - C. 1 hour per day
  - D. 2 hours per day
  - E. 3 hours per day
  - F. 4 hours per day
  - G. 5 or more hours per day
80. On an average school day, how many hours do you play video or computer games or use a computer for something that is not school work? (Include activities such as Xbox, PlayStation, Nintendo DS, iPod touch, Facebook, and the Internet.)
- A. I do not play video or computer games or use a computer for something that is not school work
  - B. Less than 1 hour per day
  - C. 1 hour per day
  - D. 2 hours per day
  - E. 3 hours per day
  - F. 4 hours per day
  - G. 5 or more hours per day

81. During the current school year, do you participate in an official school sport or sports where you play as part of a team such as baseball, basketball, football, volleyball, softball, or soccer?
- A. Yes  
B. No
82. During the current school year, do you participate in an official school sport or sports where you play as an individual such as golf, track and field, swimming, diving, wrestling, or tennis?
- A. Yes  
B. No

**The next 3 questions ask about disabilities. A disability can be physical, mental, emotional, or communication-related.**

83. Do you consider yourself to have a disability?
- A. Yes  
B. No  
C. Not sure
84. Are you limited in any way in any activities because of disability or health problem?
- A. Yes  
B. No  
C. Not sure
85. Do you have trouble learning, remembering, or concentrating because of disability or health problem?
- A. Yes  
B. No  
C. Not sure

**The next question asks about gambling. Gambling involves betting anything of value such as money, a watch, a soda, other possessions.**

86. During the past 12 months, how many times have you gambled on a sports team, gambled when playing cards or when playing a dice game, played the lottery or scratch off tickets, gambled on the internet, or bet on a game of personal skill such as pool or a video game?
- A. 0 times  
B. 1 or 2 times  
C. 3 to 9 times  
D. 10 to 19 times  
E. 20 to 39 times  
F. 40 or more times

**The next 9 questions ask about other health-related topics.**

87. Have you ever been **tested** for HIV, the virus that causes AIDS? (Do **not** count tests done if you donated blood.)
- A. Yes  
B. No  
C. Not sure
88. Has a doctor or nurse ever told you that you have asthma?
- A. Yes  
B. No  
C. Not sure
89. Do you still have asthma?
- A. I have never had asthma  
B. Yes  
C. No  
D. Not sure

90. An asthma action/management plan contains instructions about how to care for your asthma. Do you have a written asthma action plan or asthma management plan on file at school?
- A. I do not have asthma
  - B. Yes
  - C. No
  - D. Not sure
91. On an average school night, how many hours of sleep do you get?
- A. 4 or less hours
  - B. 5 hours
  - C. 6 hours
  - D. 7 hours
  - E. 8 hours
  - F. 9 hours
  - G. 10 or more hours
92. On an average school day, how long after school are you alone without a parent or adult?
- A. I am not alone after school
  - B. Less than 1 hour per day
  - C. 1 or 2 hours per day
  - D. 3 hours per day
  - E. 4 hours per day
  - F. 5 hours per day
  - G. 6 or more hours per day

93. Do you agree or disagree that you feel good about yourself?
- A. Strongly agree
  - B. Agree
  - C. Not sure
  - D. Disagree
  - E. Strongly disagree
94. Do you agree or disagree that your teachers really care about you and give you a lot of encouragement?
- A. Strongly agree
  - B. Agree
  - C. Not sure
  - D. Disagree
  - E. Strongly disagree
95. Do you agree or disagree that you feel alone in your life?
- A. Strongly agree
  - B. Agree
  - C. Not sure
  - D. Disagree
  - E. Strongly disagree

**This is the end of the survey.  
Thank you very much for your  
help.**