



2012 State of the County HEALTH REPORT *Forsyth County*

About this report

Forsyth County Healthy Community Coalition (FCHCC) and the Forsyth County Department of Public Health (FCDPH) are pleased to present the 2012 State-of-the-County Health (SOTCH) Report. The report describes the latest data for key measures of community health and well being in Forsyth County, North Carolina.

The SOTCH Report is designed to inform residents about Forsyth County's progress over the last year on key health issues. It is also designed to influence the development of policies that improve community health and is a tool to recruit community members interested in participating in health-related coalitions and activities.

If you would like to get involved with the Forsyth County Healthy Community Coalition, call (336) 703-3260 and visit our website at www.healthycommunity.ws/. This report is available in electronic form at www.forsyth.cc/publichealth/publications.aspx.



In 2011 in Forsyth County:

- There were an estimated 354,952 residents.
- The median household income was \$42,911.
- As of August 2012, unemployment was 9.2%.
- About 18.9% of people live below the poverty line (less than \$22,350 for a family of 4).

Data Sources: American FactFinder, US Census Bureau. US Bureau of Labor Statistics.

Inside this report

Findings and Recommendation from 2011 Community Health Assessment	2	Mortality	20
Action Plan Updates from Coalitions & Teams	3	Sexually Transmitted Infections	21
Emerging Issues	9	Behavioral Risk Factor Surveillance Survey	24
New Forsyth County Initiatives	10	Youth Risk Behavior Survey	25
Forsyth County Current Data	11	Environmental Health	27
Demographics & Social Determinants of Health	14	Violence/Crime	28
Maternal & Child Health	17		





Findings and Recommendations from Community Health Assessment

The 2011 Community Health Assessment (CHA) identified seven health focus areas selected by the CHA working group that needed action to improve community health outcomes. On March 26, 2012 a group of community members met and selected four focus areas to address. These four priority areas are listed below.

Chronic Disease Prevention

- Review evidence-based interventions 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
- Focus intervention on mental health conditions or complications with those with chronic disease management complications

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 the healthy family model
- Create and encourage partnerships among community agencies/organizations to strengthen their commitment and initiatives related to nutrition and physical activity mobilize and support specific partners
Expand resources, financial support, and promotion efforts

Maternal & Infant Health

- Promote breastfeeding policy through media campaign and presentations to businesses, hospital clinicians and private practice physicians
- Focus on pre-conception health for women of childbearing age through FC Infant Mortality Reduction Coalition (FC IMRC)

Social Determinants of Health

- Convene different community and business leaders to increase awareness of this issue
- Mobilize and support specific partners such as businesses and non-profits
- Research evidence-based interventions and models
- Strengthen the social structure in the community to reduce the effects of the barrier of social isolation
- Assure resources are equitable, and advocate for discussion around limited resources
- Support public health leadership during this process

Additional information on the 2011 Forsyth Community Health Assessment and Action Plans can be found at <http://www.forsyth.cc/PublicHealth/publications.aspx>.



New Priority Health Focus Areas

The 2011 Community Health Assessment reinforced that the priority health problems that were identified during the 2007 Community Health Assessment were still central health issues in Forsyth County. The priority focus areas have been reformulated, with continuing and new community coalitions working to address the identified health issues. On September 24, 2012, FCDPH staff and FCHCC members reported our 2011 CHA findings and action plans to the community at the Forsyth Medical Center. Below are the new priority focus areas with each action team or coalition addressing each area:

- Physical Activity & Nutrition with emphasis on Healthy Families (*Healthy Families Community Collaborations*)
- Physical Activity and Nutrition with emphasis on Tobacco Prevention & Cessation (*Tobacco Reality Unfiltered-TRU*)
- Physical Activity and Nutrition with emphasis on Nutrition (*Behealthy Coalition*)
- Physical Activity and Nutrition with emphasis on Physical Activity (*Behealthy Coalition*)
- Chronic Disease with emphasis on Chronic Disease Management (*FC Chronic Disease Coalition*)
- Maternal and Infant Health with emphasis on Breastfeeding Initiative (*Infant Mortality Reduction Coalition*)
- Social Determinants of Health with emphasis on Translating Social Determinants Messages for Lay Audiences (*Health Equity Action Team-HEAT*)

Healthy Families Community Collaborations

Forsyth County Department of Public Health and the Winston-Salem/Forsyth County School District are collaborating to create obesity prevention efforts and initiatives for the entire family. FCDPH Staff are participating with the Winston-Salem/Forsyth County Schools' Healthful Living Project Team to develop a two year strategic plan to increase college or career-ready skills for students. The team will be addressing health, nutrition, and physical activity issues that may impact the student's readiness.

While healthy living objectives are being created within the school system, similar objectives are being devised at the health department. Both agencies have included or will collaborate on an intervention to conduct peer education on nutrition and physical activity topics. They will also be developing community collaborations to increase the health of individuals and families, and implementing and evaluating the School Wellness Policy.

The agency collaborative has been seeking advice and technical assistance from Youth Empowered Solutions (YES!), a statewide nonprofit organization that empowers youth in partnership with adults to create community change. YES! uses the Youth Empowerment Model to activate their mission and vision with an approach to engage youth in skill development, critical awareness, and opportunities. The agencies are currently seeking funding that will enable youth to gain skills through trainings in various topics under the Real Food, Active Living umbrella. Trainings include; Real Food 101, Active Living 101, Youth Advocacy, and Media Literacy. Youth from two different pilot sites, West Forsyth High School and the YMCA Youth in Government, will obtain the skills and knowledge to train their peers on issues that foster community change efforts to increase access to real food and active living and address the childhood obesity epidemic. For more information about YES! Visit: www.youthempoweredolutions.org

Behealthy School Kids program is also providing technical assistance to School Wellness Committees for all 44 elementary schools to comply with the district School Wellness Policy. FCDPH is currently working with Speas Elementary School and The Special Children's School to help their committees align with wellness practices and programs. For more information about Healthy Family Collaborations contact the health department at 336-703-3217 or 336-703-3219.

Healthy Families in Action



Promoting health for the entire family: 2012 Family Fitness Night, Jefferson Elementary students doing Instant Recess.



South Fork Elementary School received a PE sports pack for having most participants at Family Fun Day 2012!



Youth Tobacco Prevention - TRU Youth in Action! 2012

Since 2005, the Youth Tobacco Prevention Program has been active in teen tobacco prevention and cessation by empowering local teens to lead the efforts towards a tobacco free future for our community. The Tobacco Reality Unfiltered (TRU) Youth Advisory Council is made up of middle and high school students who are dedicated to tobacco prevention and cessation, and who serve as youth advocates and peer educators. TRU implements between 40-50 events annually that are specifically targeted toward youth in our community, and approximately 2,400 students are impacted by TRU each year.

Peer Education: To be effective peer educators, TRU members are trained in public speaking, youth advocacy, media literacy, tobacco health facts, and peer leadership skills.



Providing peer education at Reynolds High School

In May, 2012 their peer educator skills were put to the test when the TRU program was invited by the Kernersville Cares for Kids committee to lead a half day training for Kernersville area middle and high schools on the topics of : Tobacco 101, Media Literacy, and Youth Advocacy. The training was held at First Christian Academy in Kernersville; and TRU youth planned the workshop and taught each session for their peers.

Youth Advocacy: As part of the youth advocacy training, TRU members were encouraged to contact their elected officials and share information about the local efforts of TRU. Forsyth County TRU was eager to share their message with local elected officials. “The Heart of the Matter” Valentines cards were mailed to all local elected officials; and in March, TRU president Kiera Wade and Vice-President Darriana Christmas met with Senator Brunstetter to share with him about the work of TRU in Forsyth County.



Darriana and Kiera with Senator Brunstetter

*“I support tobacco prevention because with the information we share, we can save a life!”
- Darriana, 11th Grade*

Collaboration: Community collaboration is important to the youth. One example of this is the youth led a kick-butts campaign with Baptist Medical Center’s Action Health employee wellness program. In 2012, youth attended Action Health’s employee wellness health fair to distribute information about the NC Quitline, created and distributed “quit kits” to employees and patient families, and conducted a cigarette butt clean-up at the medical center. The youth are planning to continue their partnership with Action Health, and have great ideas for 2013!



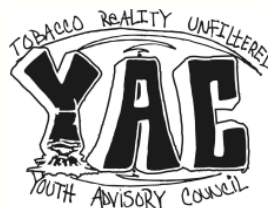
Cigarette Butt Clean-Up

*“I will NEVER smoke! TRU taught me to be a good leader, and how to speak to my peers. TRU gave me the confidence not to hide my voice”
- Kyndal, 8th Grade*

Community Education: In an effort to raise awareness about the dangers of second-hand smoke, TRU held a “Keep Childhood Smoke-Free” media campaign. The message was shared county-wide on bus ads, billboards, cinema ads, mall posters, and mobile billboards. TRU youth also promoted this message at all community events, and asked parents to sign a “smoke-free home” pledge.

“Second-hand smoke is deadly, and causes people to lose loved ones.” - Darrius, 12th Grade

“Being a member of TRU is good for the community. It can save lives!” - Marisol, 10th Grade



Become a TRU follower:
Facebook: FCTRUYAC
Twitter: @ FCTRUYAC
www.smokefreeforsyth.org



Behealthy Coalition: Nutrition and Physical Activity Action Plan Updates

Behealthy serves as the coalition that coordinates nutrition and physical activity efforts across community-based organizations that work together to improve the health and wellness of Forsyth County residents. The mission of the Behealthy Coalition is to provide a place through regular meetings for people with an interest in health and wellness to come together for on-going education on local health and wellness issues, network, share ideas, and foster collaborative relationships.

Nutrition

Community Gardens continue to grow and thrive under the leadership of Forsyth County Cooperative Extension Service. Since 2010, there has been a 116% increase in community gardens. In 2010, the Wake Forest Baptist Health Translational Sciences Institute report on *Community Gardens and Farmers Markets in Forsyth County* found 42 active gardens – in 2012, according to Mary Jac Brennan, Extension Agent for Community Gardens, there were 91 active gardens. Community gardens increased by 64% in 2011 and grew another 39% in 2012.

Based on reports from the 91 community gardens, the total harvest for 2012 was 104,000 pounds of produce. Of this total, approximately 20,000 pounds of produce was donated to local non-profit organizations. The Jim & Betty Holmes Food Bank garden, located at the Children’s Home, is the largest community garden and produced almost a tenth of the produce total.

Two additional strategies were added to the Nutrition Action Plan in 2012, the first is to **increase the number of Farmers’ Markets in low wealth communities in Winston-Salem**. This goal will be addressed with the assistance of staff funded by North Carolina’s Community Transformation Project, a multi-year federal grant that strives to transform communities through policy and environmental level strategies. Lastly, a strategy to **increase community collaboration and cross-promotion of programs related to nutrition, food access, local foods and food security** was added to the action plan. We anticipate this strategy being addressed as a result of recommendations of a local food environment study funded by the Forsyth County Commission and the Winston-Salem Foundation and administered by Forsyth Futures, a local non-profit organization.

Physical Activity

The Behealthy Coalition works with partner organizations to promote new and ongoing initiatives that support physical activity and alternative modes of transportation. This year Behealthy supported Safe Routes to School, Bike to Work Week, Sunday Fun Days on the Greenway and Cycling Sunday.



Step Up Forsyth, an eight-week community-wide physical activity promotion program just completed it’s ninth year! This year, over 1,000 participants committed to live a more physically active lifestyle as an individual or as a member of one over 100 *Step Up Forsyth* teams. This year’s program focused on all things local with the weekly e-newsletter featuring stories on local Farmers Markets, park and recreational facilities, exercise tips from the YMCA, local farmer spotlights, veggie of the week and weekly recipes from Cancer Services.



Forsyth County Chronic Disease Coalition

The Forsyth County Chronic Disease Coalition was formed in the Fall of 2012. As a new action team, the last few months have been dedicated to planning for and launching this coalition. In October, the co-chairs from both hospitals and the FCDPH staff met to outline the role of the coalition, specifically discussing the need to choose one focus area to ensure community-wide impact. Since this initial meeting, a survey was posted for the general public (on both the FCDPH and Forsyth Futures website), as well as distributed electronically to all of the County coalitions and assessment teams. The purpose of this survey was to gauge the communities perspective on which chronic disease should be addressed first. Upon obtaining the results from the survey, the coalition will begin its work. This will include itemizing county assets and developing a vision and strategy for community engagement. The first full meeting for this team will be held on December 5th.

Local Events that address Domestic Violence



Accomplishments made possible collaborative partnerships including the Domestic Violence Community Council.

- Family Services, Inc., the City of Winston-Salem Human Relations Department and Legal Aid of NC collaborated on a statewide training on the topic of Domestic Violence and Fair Housing.
- A panel discussion was held during October including representatives from Kernersville Police Department, Forsyth County District Attorney's Office, Winston-Salem Police Department, Forsyth County Sheriff's Office and Forsyth County District Court.
- More than 3000 community members and professionals received training on topics related to domestic violence during the last year.
- The Vantage Point Child Advocacy Center has been attained accreditation. The Center provides forensic interviews for children who have been affected by sexual assault and other types of child maltreatment.
- Strong Fathers will be featured in a national publication of *Futures Without Violence* (www.futureswithoutviolence.org) regarding batterer intervention programs.
- Vantage Pointe Child Advocacy Center has received accreditation from the National Children's Alliance Board of Directors.
- Service providers, housing professionals and property managers from across the state received training on Domestic Violence and Fair Housing.
- Shelter residents participated in health assessments, financial empowerment sessions and other self-sufficiency learning opportunities.
- The transitional housing program has been established for the past year to provide supportive services and housing stabilization for survivors of domestic violence.
- Rape prevention education work from this community will be featured in a documentary along with other prevention programs across the state.
- Teens-4-Change social change program for adolescent girls has been featured in a video highlighted by the Women's Fund of Winston-Salem (<https://vimeo.com/53735416>) and viewed by similar programs across the country.
- Multiple counties across the state have consulted with Safe on Seven staff and partners regarding the establishment of co-located services in their communities.
- Based on recent research, the Time Out Abuser Intervention Program has helped to prevent domestic violence recidivism in the majority of individuals who completed the program. In addition, this program is more successful at preventing recidivism to a much larger degree than other domestic violence treatment programs that have been assessed.



Addressing Infant Death in Forsyth County

Pre / Interconception Health Initiative: Forsyth County Infant Mortality Reduction Coalition (housed in the Department of Public Health) and community partners have produced a March of Dimes funded educational video entitled “The Postpartum Visit – It’s About Me!” This video emphasizes the need for women to take time to focus on personal health and wellness before and between pregnancies in order to improve birth outcomes. Physicians and new mothers give their perspectives on the importance of attending the postpartum visit (also called the 6-week checkup) and working with a health care provider to be in the best health possible before and between pregnancies. A Postpartum Visit Toolkit is being created for local physicians, and will include “The Postpartum Visit – It’s About Me!” video and additional educational resources to help women be healthier across their life course.



Breastfeeding Campaign: The Coalition kicked off its Breastfeeding Friendly Community Initiative funded by a Wolfe grant received from NC Public Health Association. Several toolkits are in the process of development. A Breastfeeding Friendly Child Care Center Toolkit has been disseminated to 12 child care centers thus far. Planned activities in partnership with WIC and Novant Health include:



- Breastfeeding in-services for pediatric offices
- Scholarships for pediatric staff to attend the NC Lactation Education program
- Breastfeeding workshops for Child Care Centers
- Breastfeeding workshops for human resource managers
- Breastfeeding Welcome Here sticker campaign (door and window slicks available)

Breastfeeding Welcome Here

2012 Walk A Mile To Save Our Babies –September 18th : Wearing pink or blue and braving inclement weather, Forsyth County Infant Mortality Reduction Coalition and 58 community partners walked a loop around Forsyth County Department of Public Health with 36 empty baby strollers. Each empty stroller publicly commemorated the tragic loss of each infant (under age one) in Forsyth County during 2010. Mayor Allen Joines, Councilman James Taylor, Thomas Arcury, PhD from Wake Forest University, and bereaved parents spoke participants about the importance of continuing efforts to improve the health of women and infants in our community. The event coincided with other national events during September, National Infant Mortality Awareness Month.



Speakers



Shanika Gambrell
Bereaved Parent



Mayor Joines



Molly Smith
Bereaved Parent



Health Equity Action Team

Under the auspices of Mr. Marlon Hunter, Health Director of the Forsyth County Department of Public Health appointed Dr. Sylvia Flack as the Chair of the Health Equity Action Team (HEAT). Additionally, HEAT has been restructured to include an eighteen member steering committee representing business, advocacy, community citizens, education, healthcare, social justice, mental health, social work and faith based organizations. HEAT's community partners consist of more than 50 individuals from every aspect of life in Forsyth County, including individuals from disparities and low income communities.

The mission of the Health Equity Action Team is to engage communities in Forsyth County to reduce health inequities by promoting awareness, organizing, and advocacy to address the social and environmental determinants of health. Two interventions from the Community Health Action Plan will be implemented by the Health Equity Action Team between 2013 and 2016, with the goal in awareness about the social determinants of health and addressing those determinants in a community. The intervention of Goal One is to raise consciousness and awareness of social determinants of health among diverse community leaders and residents, through a media campaign as well as community forums to promote dialogue throughout the community. The implementation of Intervention will occur January 2013-December 2014. The intervention of Goal Two is to implement a Blue Zones Project designed to make Forsyth County the healthiest county in North Carolina by addressing social determinants of health issues where community members live, work, and play. This will be implemented January 2015–December 2016.



Photo Above: Dr. Flack, HEAT Chair

Planning for Intervention Goal One has already begun as the first meeting of the restructured HEAT occurred on Tuesday, December 4, 2012. At this meeting a group of community partners came together to focus on the social determinants of health and develop a strategic plan for implementation. Guided by Dr. Flack and the HEAT Steering Committee, representatives discussed ways to implement Intervention Goal One from the perspective of 7 social determinants of health:

- Economy/Business
- Education
- Healthcare
- Government Engagement
- Environment
- Poverty
- Demographic Changes

This meeting allowed small groups to discuss how social determinants affect health, discuss the intervention and make suggestions for changing or improving the intervention, identify target individuals and organizations to assist with the intervention, and identify resources within the county that may be beneficial to the campaign. Each small social determinant of health discussion group reported back to the meeting. Using the discussion as a guide HEAT, along with community organizations, plans to meet again in February 2013 to begin implementing the intervention.



ABOUT HEAT

Mission

The mission of the Health Equity Action Team is to engage communities in Forsyth County to reduce health inequities by promoting awareness, organizing, and advocacy to address the social and environmental determinants of health.

Vision

Our Vision is for Forsyth County to be a fair, just and healthy community.

Emerging Issues: Pertussis

Pertussis, also known as whooping cough, is an emerging issue in Forsyth County. In 2012, the first infant death caused by pertussis in North Carolina occurred in Forsyth County.² Whooping cough is a highly contagious illness that is spread from person to person usually by coughing or sneezing while in close contact with others. It is life threatening to newborns and infants, although it can be serious at any age. State law requires pertussis vaccinations for pre-school and school-age children, but immunity wanes over the years, and it is recommended that Tdap booster shots are taken.

Pertussis is an endemic disease in the US with peaks in the disease every 3 to 5 years and frequent outbreaks.³ The clinical symptoms of pertussis are similar to other respiratory disease, allowing pertussis to go undiagnosed. Laboratory testing can confirm a case. Pertussis outbreak control efforts primary goal is decrease morbidity and mortality among infants, while the secondary goal is to decrease morbidity among persons of all ages. According to the Centers for Disease Control and Prevention, North Carolina has seen greater than a triple-fold increase in pertussis cases.

In Forsyth County, the number of confirmed pertussis cases has tripled from 6 in 2011 to 22 cases in 2012. However, there has been 31 case investigations with 22 confirmed and 9 probable cases. The Communicable Disease Nursing Team of the Forsyth County Department of Public Health has sent 278 letters out and made 441 telephone calls regarding pertussis. A review of the immunization status of cases revealed that 22 cases were up to date, 5 were not up to date, and 4 cases were unknown regarding their vaccination history. The majority of these cases occurred in November 2012.

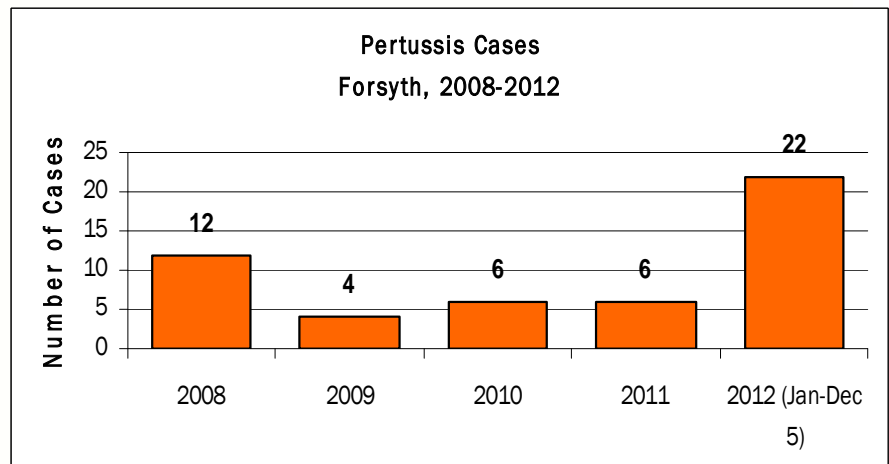
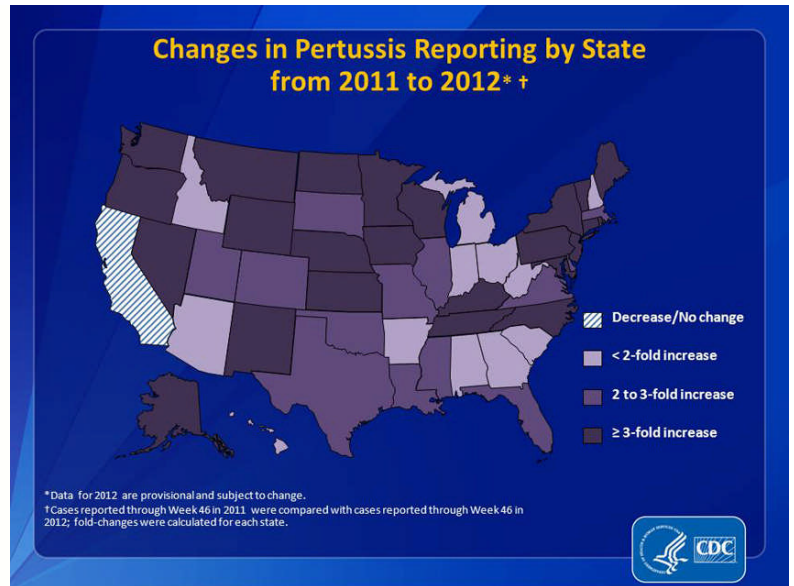
Forsyth County Response:⁵

In response to the rising pertussis numbers and in alignment with the North Carolina Department of Health and Human Services, the North Carolina Immunization Program is providing Tdap vaccine universally to all persons from age 7 years and up for whom pertussis protection is indicated, specifically, 7 through 9 year olds who have not completed their primary Tdap series and all persons age 10 years and up who have not yet had a Tdap vaccine (which was licensed in 2005). This free Tdap vaccine will be available until supplies are depleted.

Although anyone 7 years of age and older who has not had a Tdap may receive it, there is special emphasis on the following groups:

- Those who are, or will be, in contact with infants, including women who may become pregnant, pregnant women past 20 weeks gestation, and all close contacts of infants aged <12 months (parents, siblings, grandparents, household contacts, and childcare providers). This is referred to as "cocooning infants" by surrounding them with vaccinated persons, since young children are not fully protected with their DTaP series until 15-18 months of age.
- Healthcare personnel, who are defined as paid and unpaid persons working in healthcare settings who have the potential for exposure to patients and/or to infectious materials.
- Anyone with a pre-existing, chronic, respiratory disease and their close contacts.
- Any child 18 years of age and under with no documented Tdap.

Tdap vaccine is available at the Forsyth County Department of Public Health (Clinic 3) during regular clinic hours and is also available through all private providers in North Carolina who utilize state-supplied vaccines (most pediatricians and many family practice offices).





New Initiatives: Nurse-Family Partnership: Helping First-Time Parents Succeed

The Nurse-Family Partnership is a national nonprofit organization that provides first-time, low-income expectant mothers with a committed nurse who makes regular home visits over 30 months from before birth until the baby is two years old. More than 30 years of research has shown that families that participate in the Nurse-Family Partnership model fare better with less substance abuse, better employment for the mom and better performance in school for the children.

The Nurse-Family Partnership's program goals are:

1. Improve Pregnancy Outcomes
2. Improve Child Health and Development
3. Improve the Economic Self-Sufficiency of the Family

The program is funded by a five-year, \$2.5 million grant from the Kate B. Reynolds Charitable Trust in collaboration with the Forsyth County Department of Public Health. Mothers volunteer for the free program. Nurse-Family Partnership advocates hope that the program will help reduce infant mortality rates, which has been a continuous issue in Forsyth County. The intervention focuses not only on child health, but also coaching young mothers how to care for children better, plan for decisions on birth control, education and work, in an effort to change lives and reduce the continuation of elevated risk factors.

For more information :
 Nurse-Family Partnership of Forsyth County
 799 N. Highland Ave.
 Winston-Salem, NC 27101
 Phone: 336-703-3185 or 336-703-3190
 Fax: 336-748-3292



New Initiatives: Community Transformation Project (CTP)

In 2011, the State of North Carolina was awarded a \$7.4 million Community Transformation Grant from the US Department of Health and Human Services to reduce chronic diseases, promote healthier lifestyles, reduce health disparities, and control health care spending. The project is being implemented regionally across the State and Forsyth County is in Region 3 along with Ashe, Alleghany, Watauga, Wilkes, Stokes, Yadkin, Surry, Davie and Davidson Counties.

The Community Transformation Project will focus on three priority areas: tobacco-free living; active living and healthy eating; and evidence-based quality clinical and other preventive services, specifically prevention and control of high blood pressure and high cholesterol. At the FCDPH, the action plan includes increasing the number of smoke-free multifamily housing units and smoke-free public places, increasing access to healthy foods through corner stores and farmers markets, increasing the number of farmers markets that accept SNAP/EBT.



**Communities
Transforming**
To make healthy living easier



2012 County Health Rankings & Roadmaps

The County Health Rankings & Roadmaps compiles information on measures or factors that influences our health, not limited to clinical practices, but also other environments that influence our health such as schools, workplaces, and neighborhoods.¹ The County Health Rankings and Roadmaps is a collaboration between the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute.

The **2012** County Health Rankings and Roadmaps placed Forsyth County **25th in Health Outcomes** and **21st in Health Factors** out of North Carolina's 100 Counties. This was a decline from the **2011** ranking of **22nd in Health Outcomes** and **13th in Health Factors**.

Forsyth's County Health Rankings and Roadmaps Comparison 2011 and 2012

	Definition	2011	2012
HEALTH OUTCOMES	Ranking out of 100 NC Counties	22	25
Mortality	Ranking out of 100 NC Counties	23	30
Premature Death	Years of potential life lost before age 75 per 100,000 population (age-adjusted)	7,957	7,938
Morbidity	Ranking out of 100 NC Counties	29	28
Poor or Fair Health	Percent of adults reporting fair or poor health (age-adjusted)	14%	14%
Poor Physical Health Days	Average number of physically unhealthy days reported in past 30 days (age-adjusted)	3.2	3.1
Poor Mental Health Days	Average number of mentally unhealthy days reported in past 30 days (age-adjusted)	3	3.2
Low Birthweight	Percent of live births with low birthweight (< 2500 grams)	10.1%	10.2%
HEALTH FACTORS	Ranking out of 100 NC Counties	13	21
Health Behaviors	Ranking out of 100 NC Counties	16	22
Adult Smoking	Percent of adults that report smoking >= 100 cigarettes and currently smoking	22%	21%
Adult Obesity	Percent of adults that report a BMI >= 30	25%	26%
Physical Inactivity	Percent of adults aged 20 and over reporting no leisure time physical activity	NA	21%
Excessive Drinking	Percent of adults who binge plus heavy drinking	12%	13%
Motor Vehicle Crash Death Rate	Motor vehicle crash deaths per 100,000 population	13	13
Sexually Transmitted Infections	Chlamydia rate per 100,000 population	644	884
Teen Birth Rate	Teen birth rate per 1,000 female population, ages 15-19	50	50
Clinical Care	Ranking out of 100 NC Counties	13	7
Uninsured	Percent of population under age 65 without health insurance	20%	17%
Primary Care Physicians	Primary care physicians. The measure represents the population per one provider.	624:1	624:1
Preventable hospital stays	Hospitalization rate for ambulatory-care sensitive conditions per 1,000 Medicare enrollees	65	61
Diabetic Screening	Percent of diabetic Medicare enrollees that receive HbA1c screening	83%	88%
Mammography Screening	Percent of female Medicare enrollees that receive mammography screening	66%	67%
Social and Economic Factors	Ranking out of 100 NC Counties	28	33
High School Graduation	Percent of ninth grade cohort that graduates in 4 years	77%	82%
Some College	Percent of adults aged 25-44 years with some post-secondary education	62%	62%
Unemployment	Percent of population age 16+ unemployed but seeking work	9.7%	9.9%
Children in Poverty	Percent of children under age 18 in poverty	21%	24%
Inadequate Social Support	Percent of adults without social/emotional support	18%	18%
Children in Single Parent Households	Percent of children that live in household headed by single parent	36%	37%
Violent Crime Rate	Violent crime rate per 100,000 population	NA	661
Physical Environment	Ranking out of 100 NC Counties	58	75
Air Pollution-Particulate Matter Days	Annual number of unhealthy for sensitive populations due to fine particulate matter	1	1
Air Pollution-Ozone Days	Annual number of days of unhealthy for sensitive populations due to ozone levels	10	10
Access to Recreational Facilities	Rate of recreational facilities per 100,000 population	16	15
Limited Access to Healthy Foods	Percent of population who are low-income and do not live close to a grocery store	NA	11%
Fast Food Restaurants	Percent of all restaurants that are fast-food establishments	NA	47%

Please note that there were changes in the measures that were used to rank counties between 2011 and 2012 which may account for some difference in ranking. Also, the rates and percentages used in County Health Rankings and Roadmaps Annual Ranking are an average from a range of years, or a particular point in time year so they may differ from rates presented in this report, which are based on the most recent year available data.



Current Summary Data Tables

Forsyth County Summary Health Indicators

Selected Health Indicators	Forsyth	Year of Data	Source	Healthy People 2020 Objective
Maternal, Infant and Child Health				
Infant Mortality (<1 year) (Rate per 1,000 Live Births)	10	2011	NC State Center for Health Statistics	6
Low Birth Weight (<=2500g) (% of All Live Births)	8.6	2011	NC State Center for Health Statistics	7.8
No First Trimester Prenatal Care (PNC)	23	2011	NC State Center for Health Statistics	22.1
Teen Pregnancy Rate	43.9	2011	NC State Center for Health Statistics	36.2
Chronic Conditions Mortality (Rate per 100,000 population)				
All Cancers	193.9	2010	NC State Center for Health Statistics	160.6
Lung Cancer	51.6	2010	NC State Center for Health Statistics	45.5
Breast Cancer (Rate per 100,000 females)	32.6	2010	NC State Center for Health Statistics	20.6
Prostate Cancer (Rate per 100,000 males)	26.4	2010	NC State Center for Health Statistics	21.2
Colorectal Cancer	15.4	2010	NC State Center for Health Statistics	38.6
Heart Disease	146	2010	NC State Center for Health Statistics	100.8
Stroke	45.1	2010	NC State Center for Health Statistics	33.8
Diabetes	23.1	2010	NC State Center for Health Statistics	65.8
Chronic Lower Respiratory Disease	50.8	2010	NC State Center for Health Statistics	98.5
Injury Mortality (Rate per 100,000 population)				
Motor Vehicle Deaths	9.4	2010	NC State Center for Health Statistics	12.4
All Other Unintentional Injuries	22	2010	NC State Center for Health Statistics	36
Intentional Injury-Homicide	4	2010	NC State Center for Health Statistics	5.5
Intentional Injury-Suicide	11.7	2010	NC State Center for Health Statistics	10.2
Communicable Disease (Rate per 100,000 population)				
Chlamydia	766.5	2011	FCDPH STI/HIV Surveillance Report	
Gonorrhea	243.5	2011	FCDPH STI/HIV Surveillance Report	Female-257 Male-198
Primary/Secondary Syphilis	13.4	2011	FCDPH STI/HIV Surveillance Report	Female-1.4 Male-6.8
HIV Disease	24	2011	FCDPH STI/HIV Surveillance Report	22.2*
AIDS	11.7	2011	FCDPH STI/HIV Surveillance Report	13
Environmental Health				
Total Children 6 years and under screened	6,687	2010	DHHS Lead Surveillance	NA
Number of confirmed cases >=10ug/dL	9	2010	DHHS Lead Surveillance	NA
Number of confirmed cases >=20ug/dL	1	2010	DHHS Lead Surveillance	NA
Behavioral Risk Factors for Premature Deaths (Percent of Adults 18 years and older)				
Smoking	25.5	2011	2011 BRFSS	12
Overweight/Obesity (BMI>25.0)	57.8	2011	2011 BRFSS	30.5
No Physical Activity /Physical Inactivity	20.2	2011	2011 BRFSS	32.6
Fruit and Vegetable Intake	82.6	2011	2011 BRFSS	70.7*
High Blood Pressure	31.2	2011	2011 BRFSS	26.9
High Cholesterol	41.6	2011	2011 BRFSS	13.5

* Indicates a Healthy North Carolinians 2020 Goal



Comparison CHA Summary Data Tables

	Selected Health Indicators	Forsyth County Community Health Assessment Year			National Healthy People 2020 Benchmark
		2007	2011	From 2007-2011 CHA	
Maternal and Child Health	Selected Health Indicators	2005	2009	CHA Comparison	Benchmark
	Infant Mortality (Rate per 1,000 Live Births)	8.9	9.9	Increase ↑	6
	Teen Pregnancy (Rate per 1,000 Females ages 15-17)	38.1	38.6	↔ No Change	36.2
Leading Causes of Death (Age-Adjusted Rate per 100,000 Population)	Selected Health Indicators	2001-5	2005-9	CHA Comparison	Benchmark
	All Cancers	199.3	183.5	↔ No Change	160.6
	Heart Disease	193.0	150.5	Decrease ↓	100.8
	Chronic Lower Respiratory Disease	65.0	49.6	Decrease ↓	98.5
	Stroke	47.3	49.5	↔ No Change	33.8
	Alzheimer's	36.7	27.9	Decrease ↓	**
Injury (Age-Adjusted Rate per 100,000 Population)	Selected Health Indicators	2001-5	2005-9	CHA Comparison	Benchmark
	Unintentional	23.3	25.6	↔ No Change	36
	Motor Vehicle	12.4	12.0	↔ No Change	12.4
	Suicide	10.4	10.8	↔ No Change	10.2
	Homicide	7.1	6.6	↔ No Change	5.5
Communicable Disease (Rate per 100,000 Population)	Selected Health Indicators	2001-5	2005-9	CHA Comparison	Benchmark
	Primary/Secondary Syphilis	1.8	10.5	Increase ↑	Females-1.4; Males-6.8
	Gonorrhea	237.7	230.4	↔ No Change	Females-257; Males-198
	Tuberculosis	4.0	2.3	Decrease ↓	1.0
Behavioral/ Environmental Health Risks (% of Adults Over 18 Years of Age)	Selected Health Indicators	2005	2009	CHA Comparison	Benchmark
	Smoking	18.5	21.2	↔ No Change	12
	Obesity	21.5	27.6	Increase ↑	30.6
	No Physical Activity	17.3	12.8	Decrease ↓	32.6

Demographics

Population Trends¹

The 2010 Census revealed Forsyth County population to be 350,670 persons. This was approximately a 14.6% increase from the 2000 Census population count of 306,067.

During this time, the Hispanic population went from 19,577 or 6.4% of the population in 2000 to 41,775, or 11.9% of the population in 2010.

Other population trends from the 2010 Census:

- Median Age: 37.2 years
- Males were 47.5% of the population
- Females were 52.5% of the population
- Hispanic Population increased 46.9% between 2000 and 2010

2011 American Community Survey (ACS)²

The ACS is an ongoing survey from the U.S. Census Bureau that is conducted every year to provide up-to-date information about the social and economic needs of a community.

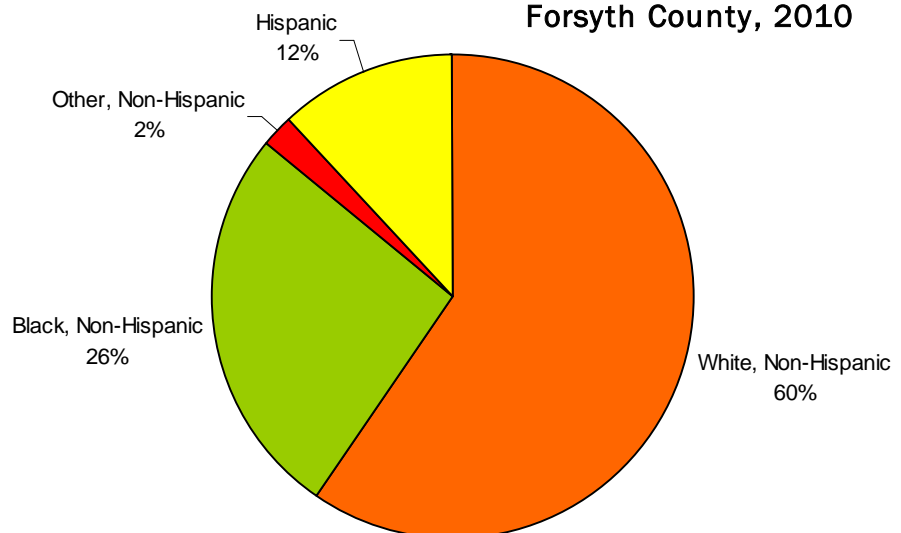
Population trends from the 2011 ACS:

- Population estimate of 354,952
- Average household has 2.5 persons
- 9% of residents were foreign born

Forsyth County Census Population by Race, 2000 & 2010			
Race	2000 Census	2010 Census	Percent Increase in Population
White	209,552	218,517	4.28%
Black or African American	78,388	91,227	16.38%
American Indian and Alaska Native	923	1,457	57.9%
Asian	3,172	6,495	104.80%
Native Hawaiian and Other Pacific Islander	96	223	133.00%
Some other race	9,962	25,167	152.60%
Two or more races	3,974	7,584	90.80%
Total population	306,067	350,670	14.57%
Data Source: U.S. Census Bureau			

COUNTY STATS

Population by Race and Ethnicity
Forsyth County, 2010



Between 2000 and 2010 in Forsyth County:

The Hispanic population almost doubled

Data Source: US Census Bureau. 2011 American Community Survey, 1 Year Estimates.



Social Determinants of Health

Education

- Winston-Salem/Forsyth County Schools 2010-2011 graduation rate was 78.8%, a 5.2 percentage point increase from the prior year and above the state rate³
- College and graduate school enrollment was 27,000 students²
- 86.9% of the adult population 25 years or older had a high school diploma or higher while 30.9% had a bachelor's degree or higher²

Access to Care²

The US Census' 2011 American Community Survey revealed that approximately:

- 64.8% of residents had private insurance
- 29.5% had public insurance and
- 16.8% had no insurance coverage.

Health Professionals and Hospital Data⁴

In 2011, Forsyth County had:

- 47.0 physicians per 10,000 population
- 12.7 primary care physicians per 10,000 population.

2011-2012 Winston-Salem/Forsyth County School Enrollment	
Elementary School	24,995
Middle School	12,184
High Schools	15,427
Total	52,606
Data Source: Winston-Salem/Forsyth County School Schools	

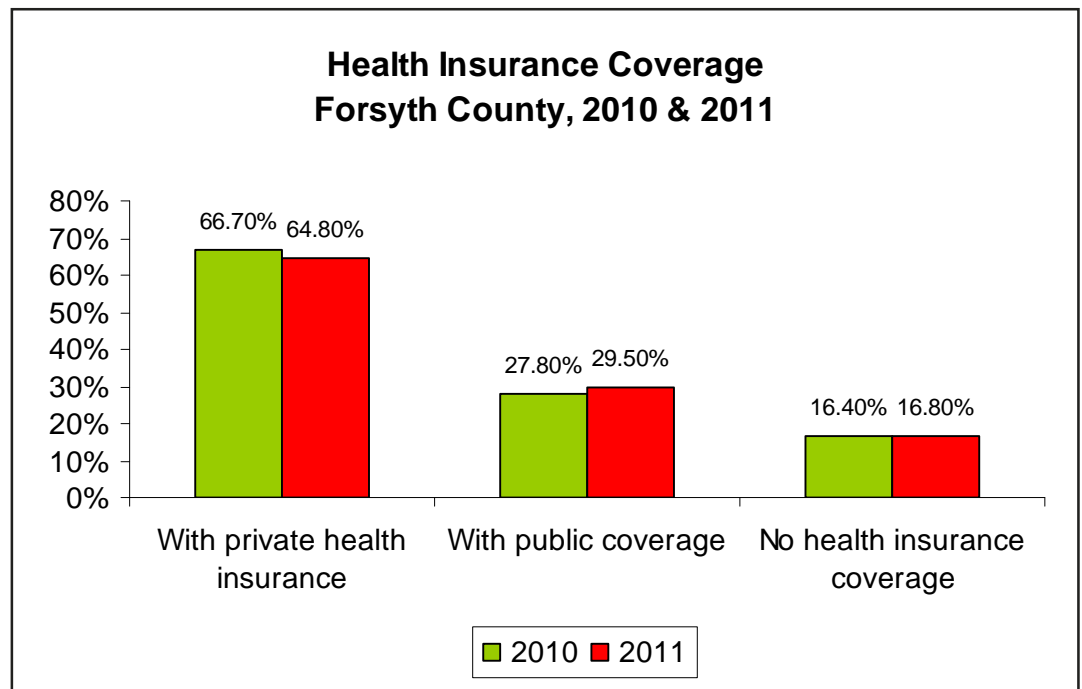
Health Professionals Forsyth County, 2011	
Health Professional	Number Active
Physicians	3,824
Dentists and Dental Hygienists	397
Nurses	7,819
Other Health Professionals	1,913
Source: Cecil G. Sheps Center for Health Services Research, Health Professionals and Hospital Data.	



COUNTY STATS

Between 2010 and 2011 in Forsyth County:

- Overall, the number of residents with and without health insurance coverage remained steady
- There was a 2.9% decrease in private health insurance coverage and a 5.7% increase of public coverage



Data sources: US Census 2011 American Community Survey, 1 Year Estimate.

Social Determinants of Health

Social Determinants of Health²

Poverty

In 2011, over 18.9% of the population lived below the poverty level. Blacks, Others, and Hispanics had higher percentages of their populations living above the poverty level in comparison to Whites and Asians.

Median Household Income

In 2011, the median household income was \$42,911 in Forsyth County. Blacks, Others, and Hispanics had lower median household incomes. Whites and Asians had median household incomes approximately \$8,500 and \$41,000 higher than the median for the County respectively.

Unemployment Rate

In 2011, 11.3% of the population was unemployed for the county. Unemployment among blacks was more than 2 times higher than the county percentage at 24.6%. Unemployment among whites and Hispanics were lower than the county, while the percentage Asian and Others were too small for accurate estimates.

Social Determinants of Health, 2011 /Selected Socio-economic Factors, Forsyth County 2011						
	Total	White	Black	Asian	Other	Hispanic
Poverty	18.90%	13.80%	31.10%	5.20%	28.50%	38.50%
Median Household Income	\$42,911	\$51,421	\$25,884	\$84,236	\$32,198	\$30,230
Unemployment	11.30%	6.80%	24.60%	N/A	N/A	5.90%
Uninsured	16.80%	15.70%	18.70%	16.60%	35.50%	53.30%

Data Source: US Census, 2011 American Community Survey, 1 Year Estimates.

Uninsured

In 2011, 16.8% of Forsyth County's population was uninsured. More than 50% of Hispanics were uninsured, while 35.5% of Others were uninsured.

Vulnerable Populations

- 15% of the population older than five years spoke a language other than English at home
- 46% of them reported they did not speak English very well
- 10% of the population reported a disability
- 29% of related children under 18 were below the poverty level
- 12% of all families and 38% of families with a single female head of household had incomes below the



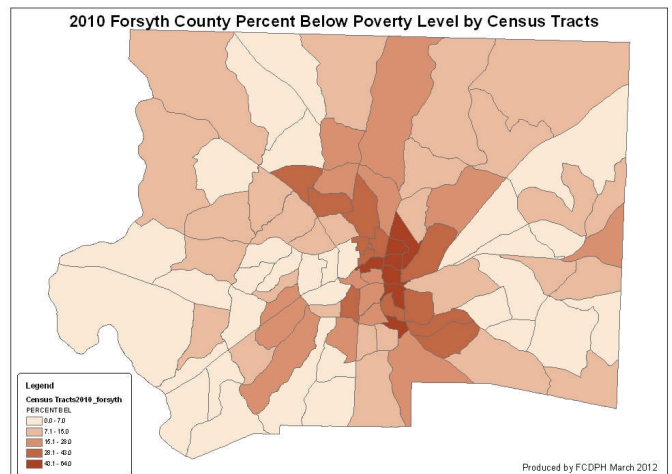
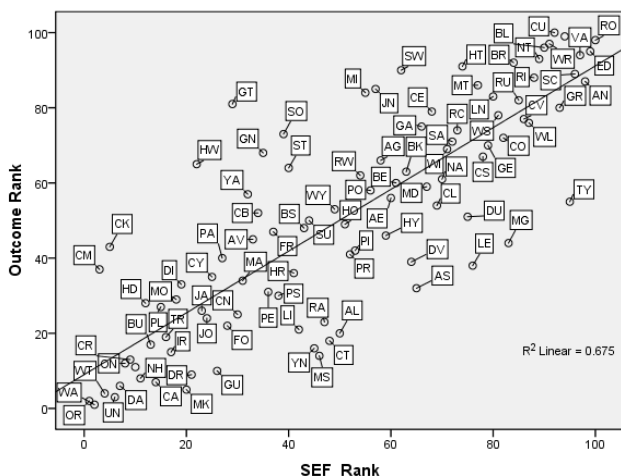
In 2011 in Forsyth County:

- In January 2011, 527 individuals were homeless. There were approximately 12,908 homeless people in all of North Carolina as of January 2011.
- The ratio of housing cost to income is increasing. About 23% of renters in the county reported housing costs equal 35% of more of their household income.

Data source: North Carolina Coalition to End Homelessness. <http://www.ncceh.org>. U.S. Census Fact Finder.

According to the 2010-12 Forsyth County Health Rankings, the strongest predictors of better or poorer health status are better or poorer socioeconomic conditions respectively.

NC County Health Outcomes vs Social & Economic Factors Rankings





Maternal & Child Health Highlights

Live Births⁶

There were 4,581 live births in 2011, a decrease from 4,693 live births in 2010. This is continuing a downward trend in live births in Forsyth County.

	2007	2008	2009	2010	2011
Live Births	5,134	5,096	4,834	4,693	4,581

- Teens under the age of 20 years old were only 10% of live births in 2011.
- 10.9% of live births resulted in very low or low birth weights
- The majority of women began prenatal care in the first trimester of their pregnancy.
- Less than 10% of mothers smoked during pregnancy.

Live Birth Snapshot, Forsyth County 2011

	Number	Percent
Total Live Births	4,581	100.0%
By Race		
White	2,145	46.8%
Black	1,292	28.2%
Other	127	2.8%
Hispanic/Latino	1,017	22.2%
Age of Mother		
40 plus	115	2.5%
30-39 years	1,590	34.7%
20-29 years	2,416	52.7%
Teens under 20	459	10.0%
10-14 years	8	1.7%
15-17 years	133	29.0%
18-19 years	318	69.3%
Outcomes and Prenatal Care		
Low Birth Weight (<=2500g)	396	8.6%
Very Low Birth Weight (<=1500g)	107	2.3%
Prenatal Care in First Trimester	3,527	77.0%
Primary C-Section	830	18.1%
Mother Smoked During Pregnancy	407	8.9%
Repeat C-Section	328	7.2%

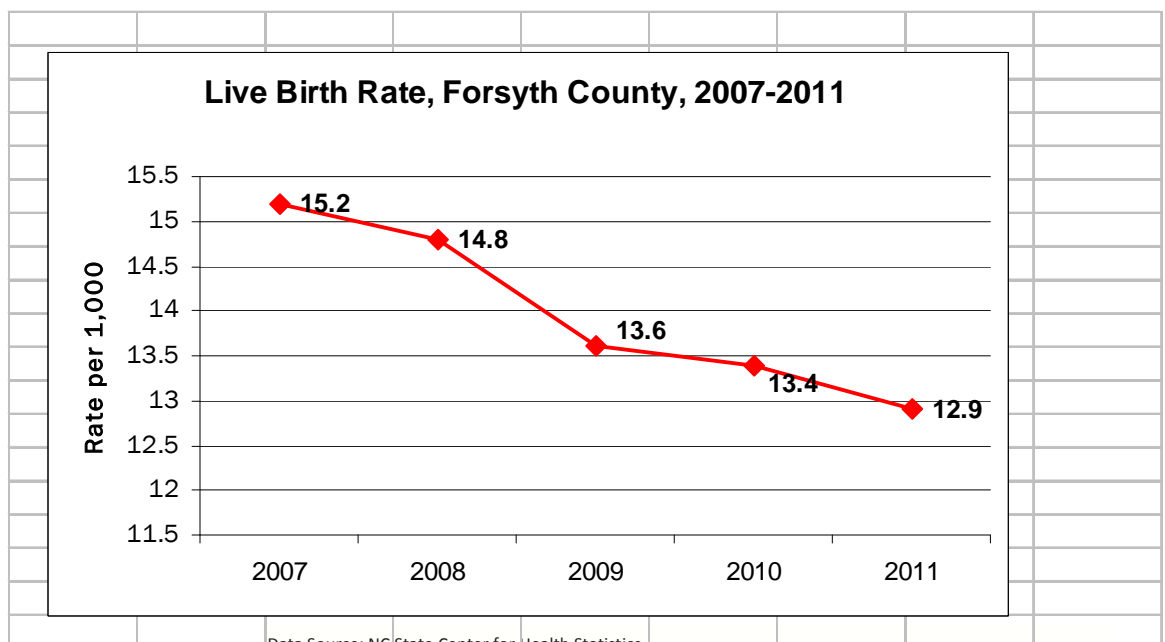
Source: NC State Center for Health Statistics.



COUNTY STATS

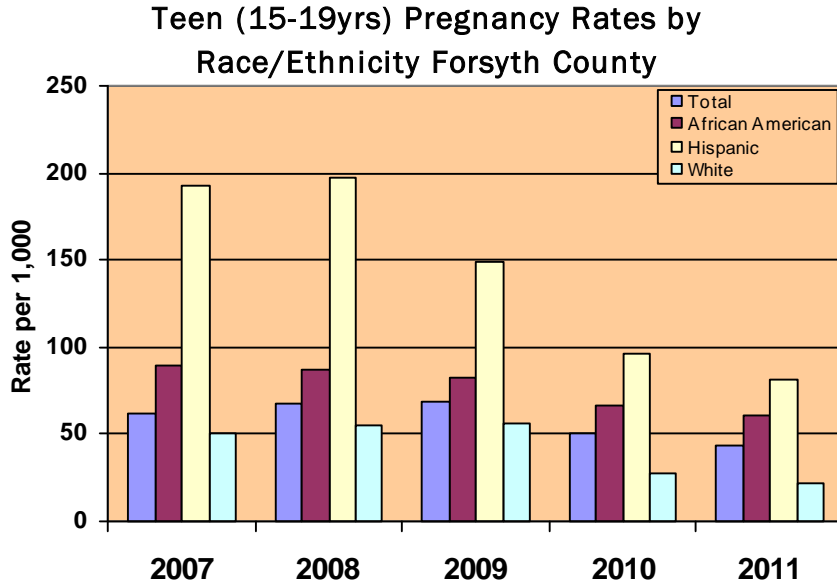
Between 2007 and 2010 in Forsyth County:

- Had a decline in live birth rates





Maternal & Child Health Highlights



Data source: NC State Center for Health Statistics & the Adolescent Pregnancy Prevention Campaign of NC.

Teen Pregnancy^{6,7}

In 2011, teen pregnancy among 15 to 19 year olds in Forsyth County:

- Ranked 55 out of 100 counties in North Carolina in the teen pregnancy rate, in 2009 Forsyth was ranked 6th.
- There was a 13% decrease in the teen pregnancy rate since 2010
- 27% were repeat pregnancies
- The White rate decreased from 55.7 per 1,000 population in 2009 to 21.5 per 1,000 population in 2011
- The African American rate decreased from 82.2 per 1,000 population in 2009 to 60.5 per 1,000 population in 2011
- The Hispanic rate decreased from 149.5 per 1,000 population in 2009 to 81.7 per 1,000 population in 2011



COUNTY STATS

In 2011 Forsyth County:⁶

- Teen Pregnancy Rate for Hispanics was higher than State's rate; Twice higher that total rate and four times that of White rate.
- Teen Abortion Rate was slightly lower than State's rate

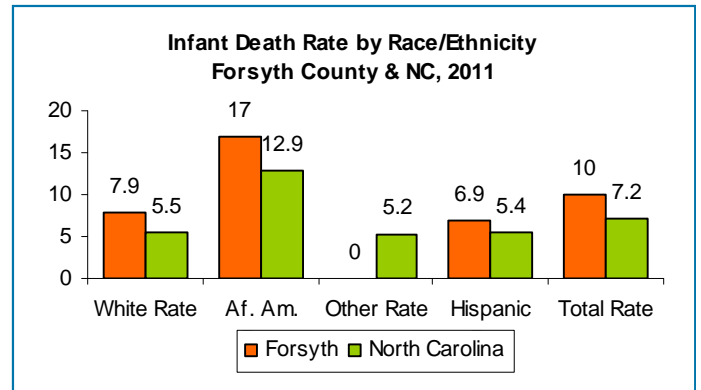
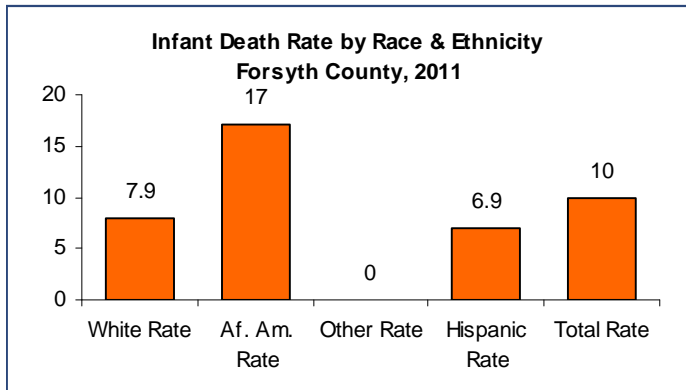
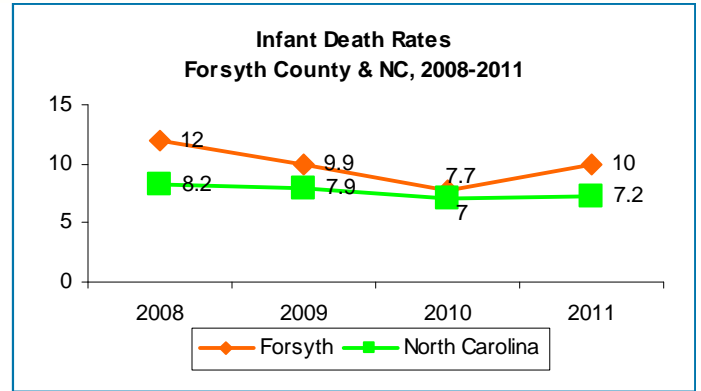
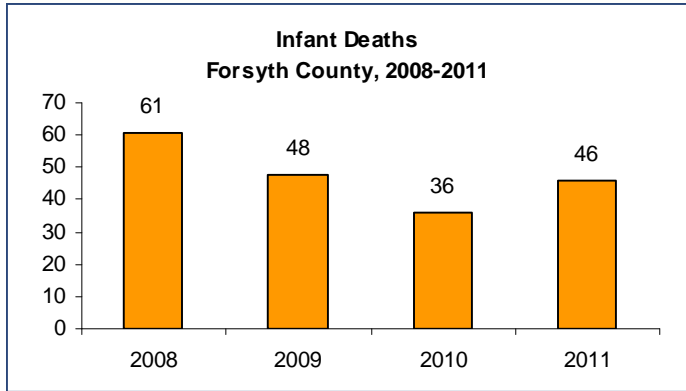
Teens Aged 15 to 19 Years of Age Pregnancy & Abortion Rates (Per 1,000 Live Births) by Race, Forsyth County 2011					
	Total	White	African American	Other	Hispanic
Pregnancy Rates					
Forsyth County	43.9	21.5	60.5	*	81.7
North Carolina	43.8	30.8	61.6	39.4	71.1
Teen Abortion Rates					
Forsyth County	7.8	4.4	12.5	*	*
North Carolina	8.7	5.5	15.6	6.4	8.2
*Not Calculated due to <20 Cases					
Data Sources: NC State Center for Health Statistics; Adolescent Pregnancy Prevention Campaign of NC.					



Maternal & Child Health Highlights

Infant & Child Deaths⁶

In 2011, there were a total of 59 infant (under the age of 1 year) and child deaths. There were 46 infant deaths, accounting for 78% of the total. Forsyth County has the highest overall infant mortality rate of the five (5) urban North Carolina counties and the state. African American babies die at a rate twice that of white babies in Forsyth County.

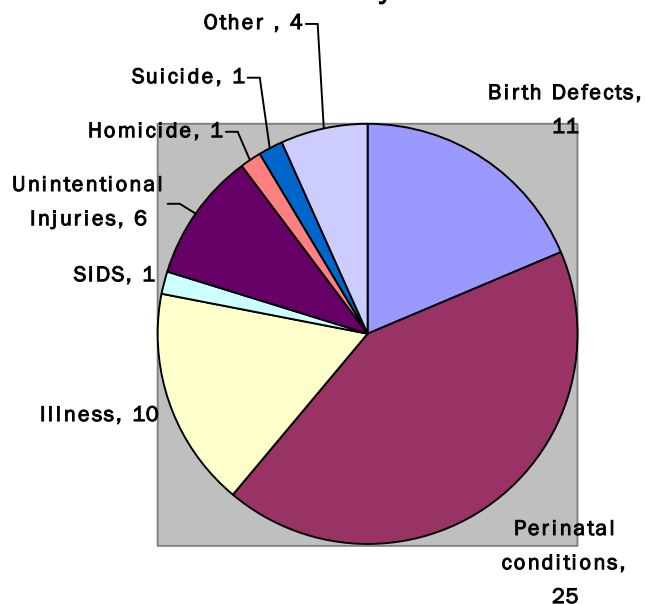


COUNTY STATS

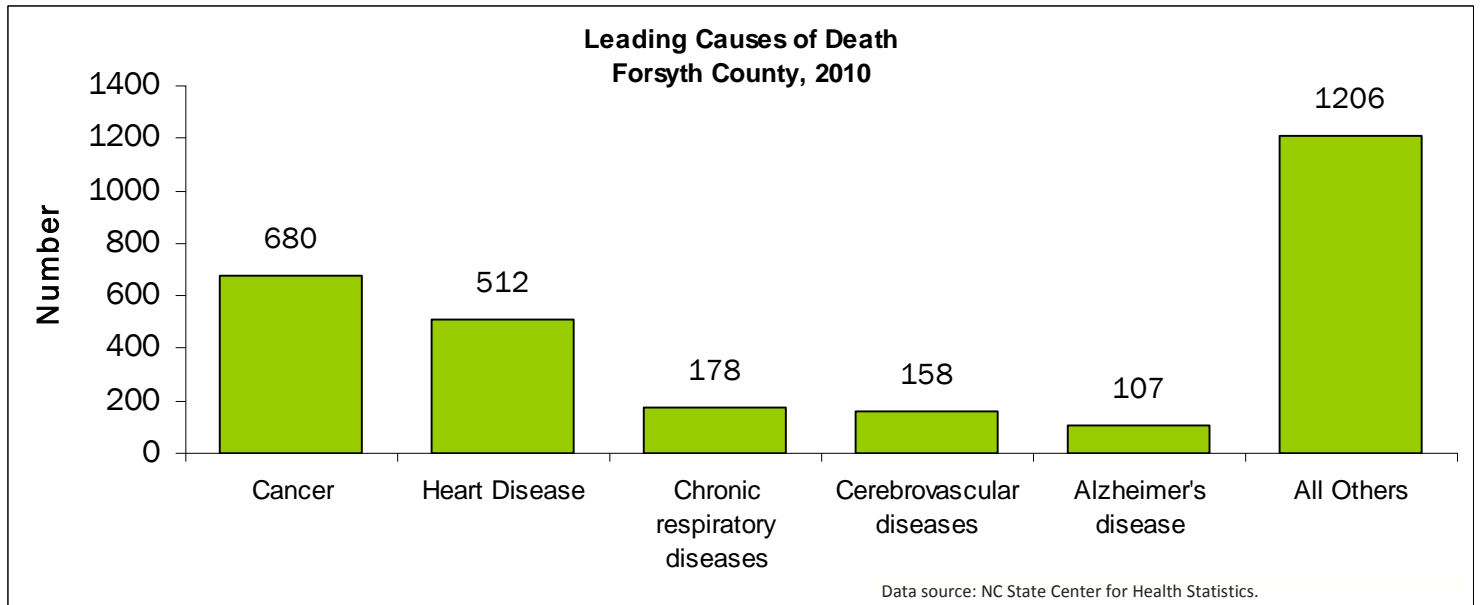
In 2011 in Forsyth County:

- 25 infant and child deaths, or 42%, were due to perinatal conditions
- SIDS accounted for 2.2% of infant deaths

2011 Child Deaths by Cause of Deaths



Leading Causes of Death



Leading Causes of Death⁸

The top 5 leading causes of death continue to be chronic diseases. Nationally in 2011, the age-adjusted death rates decreased significantly for 5 of the 15 leading causes of death: Heart Disease, Malignant neoplasms, Cerebrovascular diseases, Alzheimer's Disease and Nephritis. The rate increased for 6 leading causes of death: Chronic lower respiratory diseases, Diabetes mellitus, Influenza and pneumonia, Chronic liver disease and cirrhosis, Parkinson's Disease, and Pneumonitis due to solids and liquids. Life expectancy remained the same in 2011 as it had been in 2010 at 78.7 years.

Nationally the top five leading causes of death were:

1. Heart Disease
2. Malignant neoplasms
3. Chronic lower respiratory diseases
4. Cerebrovascular diseases
5. Accidents (unintentional injuries)

North Carolina's top ten leading causes of death were:⁶

1. Cancer (22.9%)
2. Heart Disease (21.7%)
3. Chronic Lower respiratory disease (5.7%)
4. Cerebrovascular diseases (5.4%)
5. Alzheimer's disease (3.6%)

Leading Causes of Death by Gender Forsyth County, 2010

Male			Female		
Rank	Cause	%	Rank	Cause	%
1	Cancer	25.8	1	Cancer	22.3
2	Heart Disease	20.4	2	Heart Disease	15.9
3	Chronic lower respiratory diseases	5.3	3	Chronic lower respiratory diseases	7.1
4	Cerebrovascular diseases	5	4	Cerebrovascular diseases	6.1
5	Diabetes mellitus	3.9	5	Alzheimer's disease	5.8
6	All other unintentional injuries	3.2	6	Influenza and pneumonia	3.3
7	Intentional self-harm (suicide)	2.2	7	All other unintentional injuries	2.3
8	Septicemia	2.2	8	Nephritis	2.2
9	Motor vehicle injuries	1.9	9	Diabetes mellitus	1.9
10	Parkinson's disease	1.9	10	Septicemia	1.9
	All other causes (Residual)	28.2		All other causes (Residual)	31.2

Source: NC State Center for Health Statistics



Leading Causes of Death

Leading Causes of Death by Race
Forsyth County, 2010

Whites			Minorities		
Rank	Cause	%	Rank	Cause	%
1	Cancer	24.1	1	Cancer	23.5
2	Heart Disease	17.4	2	Heart Disease	20
3	Chronic lower respiratory diseases	7.1	3	Diabetes mellitus	7.2
4	Cerebrovascular diseases	5.7	4	Cerebrovascular diseases	5
5	Alzheimer's disease	4	5	Chronic lower respiratory diseases	3.5
6	All other unintentional injuries	3.1	6	Alzheimer's disease	3.1
7	Influenza and pneumonia	2.6	7	Nephritis	2.9
8	Intentional self-harm (suicide)	1.8	8	Septicemia	2.8
9	Septicemia	1.8	9	Primary hypertension diseases	2.2
10	Parkinson's disease	1.7	10	Conditions originating in perinatal period	2
	All other causes (Residual)	30.7		HIV disease	2
				All other causes (Residual)	25.8
Total Deaths – All Causes		100	Total Deaths – All Causes		100

Source: NC State Center for Health Statistics

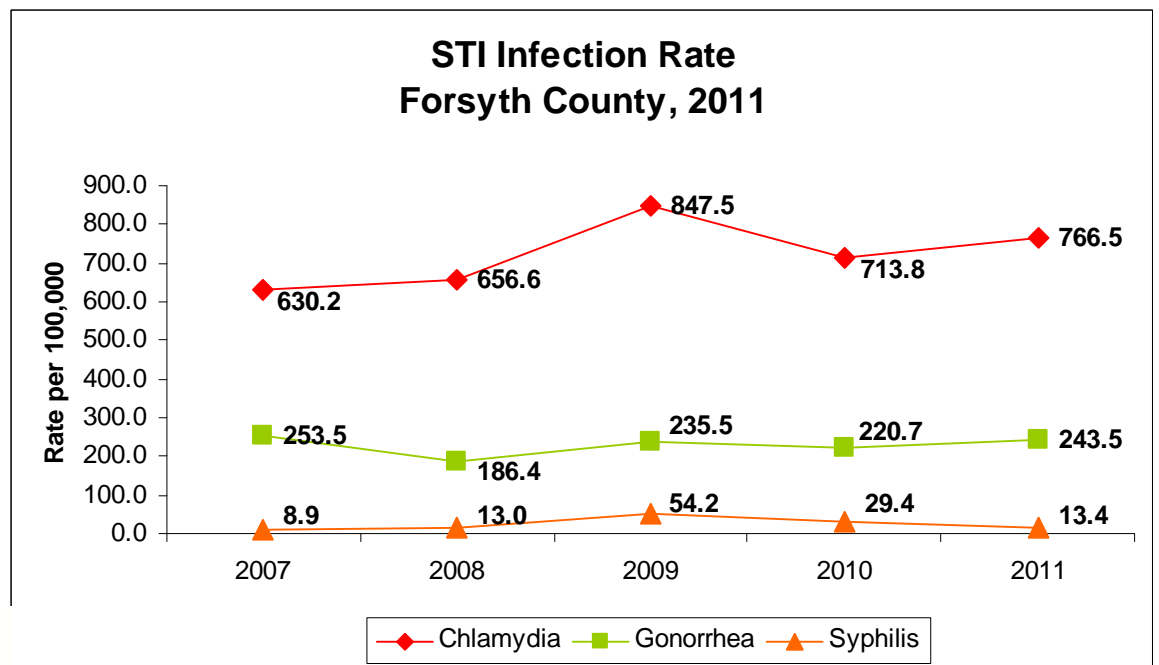


Sexually Transmitted Diseases and Infections

COUNTY STATS

In Forsyth County:

- The infection rate for Chlamydia continues to increase
- The infection rate for Gonorrhea remains about the same
- The infection rate for Syphilis saw a small increase



Data Source: NC DHHS, Division of Public Health, Communicable Disease Branch, Surveillance Unit



Sexually Transmitted Diseases and Infections

Sexually Transmitted Diseases (STD) & Infections (STI)⁹

The Surveillance Unit of the Communicable Disease Branch of the NC Division of Public Health collects, qualifies and analyzes reportable disease surveillance data to determine the health status and trends of the people of North Carolina. All individually identifying information reported to the Division of Public Health is confidential and protected by law.

- Chlamydia is the most commonly reported bacterial STD. Approximately 50% of men and 75% of women who have Chlamydia experience no symptoms. Untreated infections can lead to serious consequences for reproductive and overall health.
- Gonorrhea is a STD caused by *Neisseria gonorrhoeae*. It is the second most common bacterial STD in the US, after Chlamydia. About 30% to 60% of people who have gonorrhea do not experience symptoms. If left untreated, gonorrhea can cause of pelvic inflammatory disease, tubal infertility, ectopic pregnancy, and chronic pelvic pain.
- Syphilis is a bacterial STD caused by *Treponema pallidum*. It has often been called the great imitator because many symptoms are indistinguishable from those of other diseases. Depending on the stage of the infection, many people experience no symptoms at all. Untreated syphilis that progresses to later stages can lead to organ damage and death.

Chlamydia, Gonorrhea, & Early Syphilis Forsyth County, 2011								
	Chlamydia		Gonorrhea		Primary, Secondary, & Early Latent Syphilis		Total	
	Cases	%	Cases	%	Cases	%	Cases	%
Sex								
Male	846	31.5	417	48.8	37	78.7	1300	36.2
Female	1,836	68.3	436	51.1	10	21.3	2282	63.6
Unknown	6	0.2	1	0.1	0	0	7	0.2
Total	2,668	100	854	100	47	100	3589	100
Age Group								
0-12 yr	1	0.1	0	0	0	0	1	0
13-19 yr	964	35.9	218	25.5	2	4.3	1184	33
20-29 yr	1,400	52.1	482	56.4	24	51.1	1906	53.1
30-39 yr	224	8.3	97	11.4	8	17	329	9.2
40-49 yr	76	2.8	40	4.7	8	17	124	3.5
50+ yr	22	0.8	17	2	5	10.6	44	1.2
Unknown	1	0.1	0	0	0	0	1	0
Total	2,668	100	854	100	47	100	3589	100
Race/ Ethnicity								
White*	156	5.8	58	6.8	10	21.3	224	6.2
Black*	974	36.2	439	51.4	37	78.7	1450	40.4
Hispanic	220	8.2	32	3.7	0	0	252	7
Other/ Unknown	1,338	49.8	325	38.1	0	0	1663	46.3
Total	2,668	100	854	100	47	100	3589	100
Data Source: NC DHHS, Division of Public Health, Communicable Disease Branch, Surveillance Unit								



Sexually Transmitted Diseases and Infections

HIV & AIDS Diagnosis Forsyth County, 2011

	HIV Diagnosis		AIDS Diagnosis	
	Cases	%	Cases	%
Sex				
Male	66	78.6	33	80.5
Female	18	21.4	8	19.5
Total	84	100	41	100
Age Group				
0-12yr	1	1.2	0	0
13-19 yr	7	8.3	1	2.4
20-29 yr	20	23.8	3	7.3
30-39 yr	13	15.5	10	24.4
40-49 yr	23	27.4	13	31.7
50+yr	20	23.8	14	34.1
Total	84	100	41	100
Race/Ethnicity				
White*	14	16.7	6	14.6
Black*	61	72.6	27	65.9
Hispanic	3	3.6	3	7.3
Other/Unknown	6	7.1	5	12.2
Total	84	100	41	100
Mode of Exposure				
Men who had sex with men (MSM)	41	48.8	17	41.5
Intravenous Drug Use (IDU)	2	2.4	2	4.9
Heterosexual (all)	23	27.4	11	26.8
NIR	17	20.2	11	26.8
Pediatric	1	1.2	0	0
Total	84	100	41	100

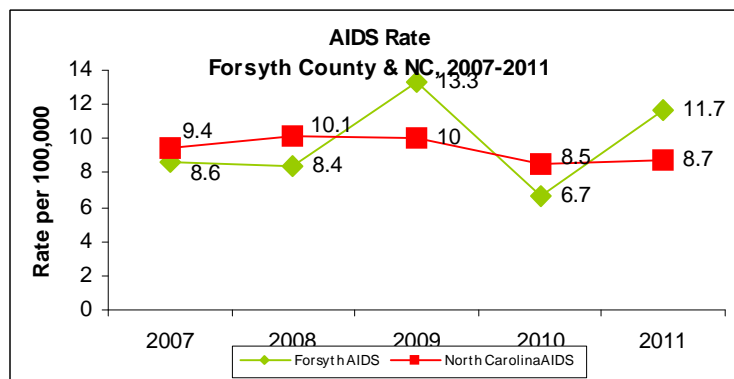
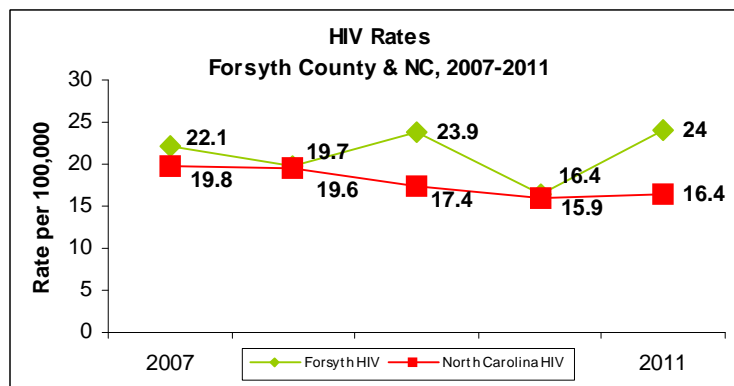
HIV and AIDS⁹

Infection with human immunodeficiency virus (HIV) generally causes progressive damage to the immune and organ systems, including the central nervous system, and leads to a more severe life-threatening clinical condition called acquired immunodeficiency syndrome (AIDS). AIDS is a life-threatening clinical condition caused by the progression of HIV disease. In recent years, the number of AIDS cases has decreased.

Data Source: NC DHHS, Division of Public Health, Communicable Disease Branch, Surveillance Unit



COUNTY STATS



Data Source: NC DHHS, Division of Public Health, Communicable Disease Branch, Surveillance Unit



Behavior Risk Factor Surveillance System (BRFSS)

About BRFSS⁶

The Behavioral Risk Factor Surveillance System (BRFSS) is a random telephone survey of state residents aged 18 and older in households with telephones. BRFSS was initially developed in the early 1980s by the Centers for Disease Control and Prevention (CDC) in collaboration with state health departments and is currently conducted in all 50 states, the District of Columbia, and three United States territories. The North Carolina Division of Public Health has participated in the BRFSS since 1987. Through BRFSS, information is collected in a routine, standardized manner at the state level on a variety of health behaviors and preventive health practices related to the leading causes of death and disability such as cardiovascular disease, cancer, diabetes, and injuries. BRFSS interviews are conducted monthly and data are analyzed annually (on a calendar-year basis).

Behavioral Risk Factor Surveillance System (BRFSS) Selected Indicators Forsyth County, North Carolina and United State, 2007, 2009, & 2011									
	2007			2009			2011		
	Forsyth	NC	US	Forsyth	NC	US	Forsyth	NC	US
Health Care Access									
Health Insurance of Any Kind	82.7%	81.3%	85.8%	85.9%	81.9%	85.6%	83.2%	79.3%	82.1%
Personal Doctor	85.3%	78.0%	N/A	79.8%	77.7%	N/A	80.6%	75.7%	N/A
Fair or Poor Health Status	12.7%	18.7%	14.9%	16.8%	18.1%	14.5%	16.8%	19.6%	16.9%
Health Behaviors									
Smoking *(Current Smoker)	19.7%	22.9%	19.8%	21.2%	20.3%	17.9%	25.5%	21.8%	21.2%
Overweight/Obese	64.8%	64.6%	62.9%	65.4%	65.4%	63.1%	57.8%	65.1%	63.5%
No Physical Activity	24.8%	24.3%	22.6%	20.4%	26.4%	23.8%	20.2%	26.7%	48.3%
Consume less than 5 Servings of Fruit or Vegetable a day	79.7%	78.4%	75.6%	75.3%	79.4%	76.6%	82.6%	86.3%	N/a
Chronic Disease Burden									
Arthritis	25.7%	29.1%	27.5%	24.8%	27.6%	26.0%	26.9%	25.1%	24.4%
Diabetes	5.6%	9.1%	8.0%	8.7%	9.6%	8.3%	11.7%	10.9%	9.5%
Asthma (Every Had)	9.5%	12.1%	13.1%	11.5%	12.9%	13.5%	13.6%	13.2%	13.6%
Cardiovascular Disease	7.8%	9.1%	N/A	5.9%	8.7%	N/A	10.9%	9.2%	N/A
High Blood Pressure	28.2%	28.8%	27.8%	33.1%	31.5%	28.7%	31.2%	32.4%	30.8%
High Cholesterol	40.4%	39.6%	37.6%	44.6%	40.0%	37.5%	41.6%	38.5%	38.4%
Data Source: NC State Center for Health Statistics; Centers for Disease Control and Prevention									



Youth Risk and Behavior Survey

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. ¹⁰The 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.

YRBS Middle School Summary 2009 and 2011 Comparison, Forsyth County & NC				
	2009		2011	
	WSFC	NC	WSFC	NC
Alcohol, Tobacco, & Other Drugs	%	%	%	%
Smoked a cigarette on one or more days in the past 30 days	7	8	7	8
Ever had a drink of alcohol, other than a few sips	29	30	28	29
Ever used marijuana	13	10	13	11
Offered, sold, or given an illegal drug on school property in past 12 months	12	9	12	10
Automobile & Bicycle Safety				
Among students who rode a bicycle, never or rarely wore a bicycle helmet	55	76	58	77
Never or rarely wore a seat belt as a passenger	7	7	7	7
Rode in a car driven by someone who had been recklessly speeding	33	38	29	34
Rode in a car driven by someone who had been drinking alcohol	24	27	19	23
Violence-Related Behavior				
Ever carried a weapon such as a gun, knife, or club	32	39	26	35
Ever in a physical fight	53	53	50	55
Someone stole or damaged student's property while at school	28	28	24	27
Bullied on school property in past 12 months	34	42	31	42
Electronically bullied in past 12 months	19	21	16	21
Sex Education				
Taught about abstaining from sexual activity	72	66	75	62
Taught about AIDS or HIV infection	83	69	82	62
Taught about Chlamydia, Gonorrhea, Syphilis, etc	55	49	59	41
Suicide-Related Attitudes & Behavior				
Felt so sad or hopeless almost day for two weeks or more in a row	26	23	21	24
Seriously considered attempting suicide	20	19	19	21
Made a suicide plan	15	13	13	13
Body Weight & Dieting				
Described themselves as slightly or very overweight	26	26	26	25
Are trying to lose weight	47	46	46	43
Ever exercised to lose weight or to keep from gaining weight	70	71	71	68
Eaten less food, fewer calories, or foods low in fat to lose weight or to keep from gaining weight	43	46	49	46
Fasted for 24 hours or more to lose weight or to keep from gaining weight	15	15	14	15
Physical Activity & Health				
Physically active for a total of 60 minutes or more per day on five or more of the past 7 days	55	60	57	59
Played on one or more sports teams during the past 12 months	57	62	59	59
Watched three or more hours per day of TV on an average school day	41	38	40	39
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	28	26	33	30
Usually walked or rode their bike to school on one or more days per week	20	19	20	19
Selected Health Issues				
Ever been told by a doctor or nurse that they had asthma	20	19	21	22
Get eight or more hours of sleep on an average school night	51	58	49	59
Seen a doctor or nurse for a check-up or physical exam in the past 12 months	58	58	58	55
Seen a dentist in the past 12 months	61	63	64	63
Consider themselves to have a disability	11	12	11	10

Data Sources: Centers for Disease Control and Prevention, Youth Risk and Behavior Survey; N.C. Healthy Schools.



Youth Risk and Behavior Survey

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 2,184 middle school students and 1,532 high school students for a total of 3,716 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.

YRBS High School Summary 2009 and 2011 Comparison, Forsyth County, NC and US						
	2009			2011		
	WSFC	NC	US	WSFC	NC	US
Alcohol, Tobacco & Other Drugs	%	%	%	%	%	%
Smoked a cigarette on one or more days in the past 30 days	19	18	20	19	18	18
Had at least one drink of alcohol on one or more days in the past 30 days	37	35	42	36	34	39
Had 5 or more drinks of alcohol in a row, on at least 1 day during the past 30 days (binge)	20	19	24	19	34	40
Used marijuana one or more times in the past 30 days	22	20	21	26	24	23
Offered, sold, or given an illegal drug on school property in past 12 months	30	30	23	28	30	26
Automobile & Bicycle Safety						
Among students who rode a bicycle, never or rarely wore a bicycle helmet	44	84	85	48	87	88
Rarely or never wore a seat belt when when riding as a passenger	8	7	10	8	8	8
Rode with a driver in a car or other vehicle who had been drinking alcohol in the past 30 days	21	21	28	21	21	24
Drove a car or other vehicle when they had been drinking alcohol in the past 30 days	8	8	10	9	6	8
Violence-Related Behavior						
Carried a weapon such as a gun, knife, or club in past 30 days	17	20	18	17	6	5
Ever in a physical fight	29	29	32	27	28	33
Bullied on school property in past 12 months	14	17	20	17	21	20
Gang activity is a problem in their school	32	36	na	36	40	na
Boyfriend or girlfriend hit, slapped, or physically hurt student	12	13	10	11	14	9
Forced to have sexual intercourse	8	9	7	9	10	8
Sex Behavior						
Ever had sexual intercourse	50	51	46	48	49	47
Had sexual intercourse for the first time before age 13 years	10	8	6	11	9	6
Had sexual intercourse with four or more people during their lifetime	16	16	14	18	17	15
Among sexually active students, used a condom during last sexual intercourse	63	62	61	59	54	60
Suicide-Related Attitudes & Behavior						
Felt so sad or hopeless almost day for two weeks or more in a row	25	27	26	26	28	29
Seriously considered attempting suicide in the past year	14	13	14	14	14	16
Made a suicide plan	11	10	11	12	14	13
Attempted suicide one or more times in the past year	12	10	6	18	na	8
Body Weight & Dieting						
Described themselves as slightly or very overweight	25	28	28	27	27	29
Are trying to lose weight	43	46	45	45	44	46
Vomited or took laxatives to lose weight or to keep from gaining weight in the past 30 days	5	5	4	5	6	4
Had drunk a can, bottle, or glass of soda or pop at least once per day during past 7 days	36	33	29	23	30	28
Ate breakfast on seven of the past seven days	38	34	na	41	37	38
Physical Activity & Health						
Physically active for a total of 60 minutes or more per day on five or more of the past 7 days	46	46	37	50	58	50
Watched three or more hours per day of TV on an average school day	35	36	33	35	35	32
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	23	24	25	28	35	32
Selected Health Issues						
Ever been told by a doctor or nurse that they had asthma	22	22	22	23	23	23
Get eight or more hours of sleep on an average school night	34	29	31	35	27	31
Consider themselves to have a disability	12	11	na	10	13	na

Data Sources: Centers for Disease Control and Prevention, Youth Risk and Behavior Survey; N.C. Healthy Schools.



Environmental Health

Air¹¹

Air quality standards are set by the Environmental Protection Agency (EPA). The air quality is monitored for certain pollutants that are harmful to both humans and the environment. The goal is to protect both public health and public welfare. The EPA's Air Quality Index (AQI) is used for public dissemination on local air quality information on if air pollution reaches levels that are a public health concern. In 2011, there were 7 days in which the AQI reached a Code Orange, a level that is unhealthy for sensitive groups. Forsyth County had no days in which the AQI reached Code Red or higher, a level unhealthy for all groups.

The Forsyth County Office of Environmental Assistance and Protection, has noted that between 2001-2011 individual particle pollution (nitrate, sulfate, ammonium, organic carbon, and elemental carbon) annual concentration has decreased significantly. The majority of particulate pollution comes from the burning of fossil fuels. Stricter power plant emission controls and cleaner burning technology in both industry and transportation have contributed to this decrease. The decrease translates into fewer respiratory and cardiovascular health problems for the population. ¹²

Air Quality Index Description of Values and Color Code		
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

Data Source: CDC ATSDR. Air.

Air Quality Index Yearly Summary Forsyth County, 2007-2011						
Year	Green	Yellow	Orange	Red	Purple/ Maroon	Total Days
2011	274	84	7	0	0	365
2010	229	125	11	0	0	365
2009	274	88	2	1	0	365
2008	222	134	10	0	0	366
2007	195	140	28	2	0	365

Data Source: US EPA, Air Data.

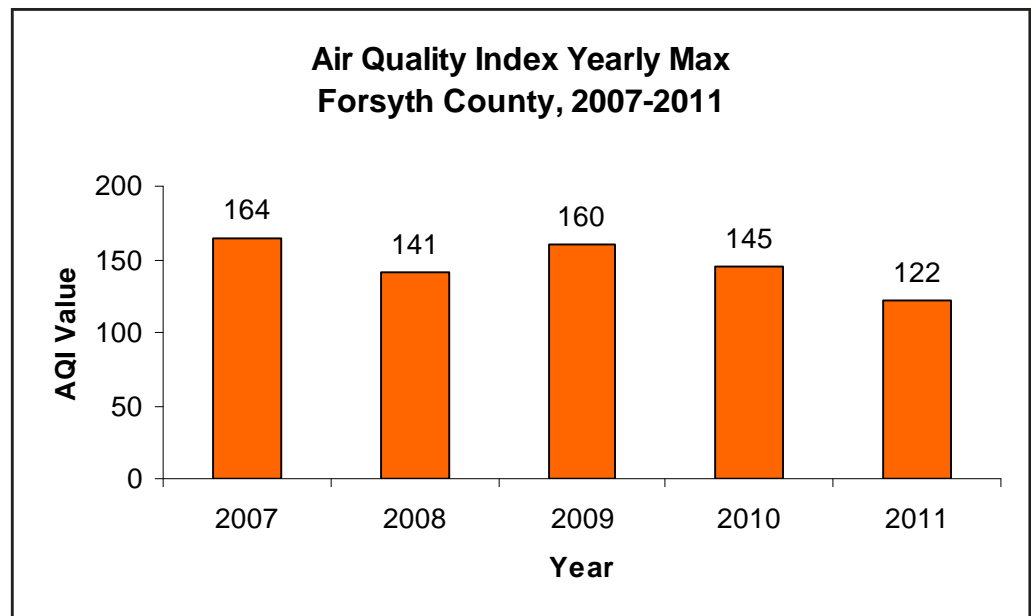


COUNTY STATS

Between 2007 and 2011 in Forsyth County:

Had a continued decline in AQI Maximum

There were 10 days in 2011 in which air pollution was due to ozone.



Data sources: U.S. Environmental Protection Agency.



Environmental Health

Air Quality Initiatives¹³

The Triad Commute Challenge, hosted by the Piedmont Authority for Regional Transportation and Triad Air Awareness, is a three-month targeted effort to improve air quality by challenging people to try an alternative commute option at least one time instead of driving alone. In 2011, 4,675 people pledged to try alternative transportation which reduced emissions by 2,030 tons (carbon dioxide, nitrogen oxides, sulfur oxides, carbon, volatile organic compounds, and coarse particulate matter). The Triad Commute Challenge had the following impact in the Triad area:

- 3.1 Million Vehicle Miles Traveled Reduction
- \$572,360 Fuel Savings
- 93% of Challengers will continue to use alternative forms of transportation

Water¹⁴

The three water treatment plants operated by the Winston-Salem/Forsyth County Utility Commission met or surpassed all state and federal standards for drinking water quality in 2011.

Lead ¹⁵

Lead is used in the manufacturing of products which can contaminate the environment. When small particles of lead are swallowed or inhaled health problems can occur. Children under 6 years old are susceptible to lead poisoning which can impair development. In January of 2009, the Forsyth County Board of Health recommended that children in Forsyth County under physicians providing well child care have their blood lead screening at 1 year of age and again at 2 years of age. If a child is not tested at 1 or 2 years of age, it is recommended they are tested at least once before the age of 6. This local rule provides that a blood lead level of 5µg/dL requires public health that includes education and environmental investigation.

Child Lead Investigations, Forsyth County 2009-2011				
Level of Concern 5-7µg/dL (Investigations Not Required)				
	2009	2010	2011	
Investigation	6	9	21	
Confirmed lead levels	17	37	38	
Elevated Blood Lead Level 8-19µg/dL (Investigation Required)				
	2009	2010	2011	
Investigation	6	17	16	
Confirmed lead levels	13	16	18	
Poison ≥20µg/dL (Investigation Required)				
	2009	2010	2011	
Investigation	2	1	1	
Confirmed lead levels	2	1	1	

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

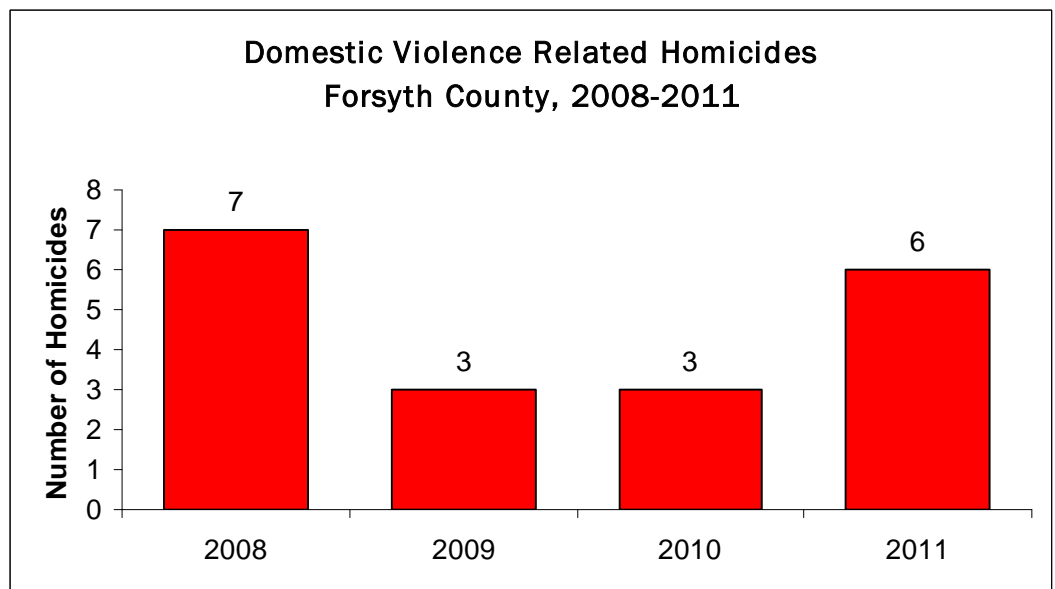


Violence & Crime

COUNTY STATS

Between September 2010 and August 2011 in Forsyth County:

- 173 children between 0 and 17 years, and 205 adults over the age of 18 received shelter services¹⁶



Data Source: NC Department of Justice; 2010 Family Services, Inc data.

Violence & Crime

Violence and Public Health¹⁷

Violence became a public health concern with success in the prevention and treatment of infectious disease. This led to homicide and suicide in the top 15 causes of death. This disparity of homicide and suicide among specific populations such as youth and minority groups that lead to a public health focus on violence. Behavioral factors are accepted as influential in the etiology and prevention of disease, such as chronic diseases of heart disease, cancer, and stroke, which can be prevented with behavioral modifications.

Substance Use & Abuse^{6,10}

The BRFSS revealed that 12.5% of Forsyth County adults engage in binge drinking. Binge drinking for males is defined as having five or more drinks on one occasion and for females is defined as having four or more drinks on one occasion.

The YRBS revealed that among high school students:

- 19.3% reported binge drinking on one or more days in the past 30 days
- 42.6% have used marijuana
- 7.5% have used any form of cocaine
- 11.5% have used inhalants
- 17.7% have used prescription drugs without a prescription

Ten Year Crime Trends Forsyth County, 2002-2011

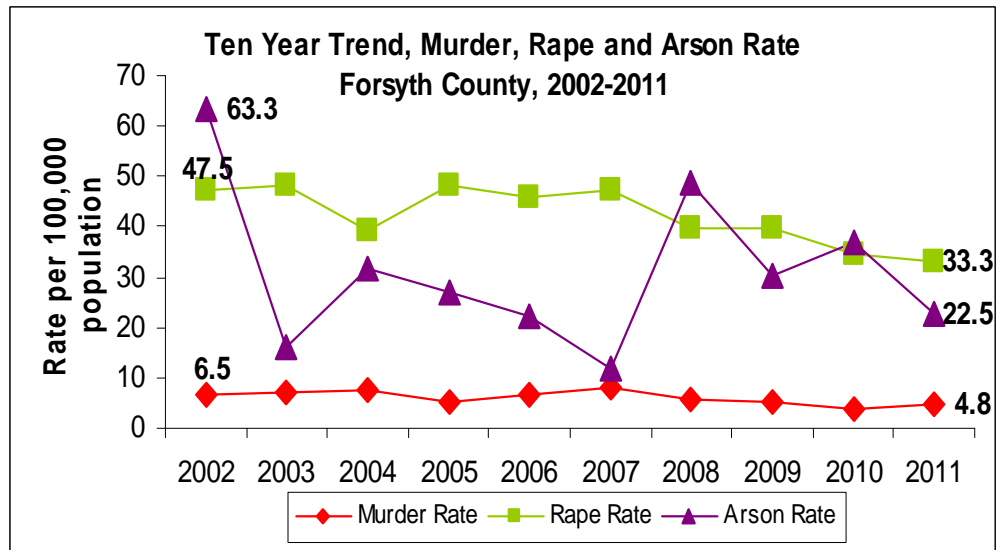
Offense Category	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Murder	20	22	24	17	22	27	20	17	13	17
Rape	147	151	124	155	150	157	135	136	123	117
Robbery	592	606	590	656	747	771	801	635	489	484
Aggravated Assault	1,133	1,204	1,277	1,233	1,204	1,280	1,579	1,318	1,266	1,325
Burglary	4,467	5,310	4,617	5,087	5,325	5,395	5,652	5,510	5,459	5,869
Larceny	12,315	12,649	10,999	10,123	11,064	10,880	12,540	11,427	11,256	11,335
MV Theft	1,186	1,409	1,308	1,181	1,269	1,283	1,296	1,011	780	813
Total	19,860	21,351	18,939	18,452	19,781	19,793	22,023	20,054	19,386	19,960

Data Source: NC Department of Justice.

COUNTY STATS

Between September 2009 and August 2010 in Forsyth County:

- Murder, rape and arson rates all saw a decline
- Arson rate saw the largest decline from 63.3 offenses per 100,000 in 2002 to 22.5 offenses per 100,000 population



Data source: NC Department of Justice.



2012 State of the County Health Report



Thank You

The Forsyth County Department of Public Health would like to express our thanks to the Forsyth County Healthy Community Coalition, its action teams, and its collaborating community members, leaders, agencies, and volunteers. It is because of their excellent work that we are able to complete this report. We also thank the Board of Health, the Board of Commissioners, and county taxpayers for their ongoing support as we all work towards a healthier Forsyth County.



Forsyth County Department of Public Health

799 N. Highland Avenue
PO Box 686
Winston-Salem, NC 27102

References

1. County Health Rankings & Roadmaps.
2. NC Department of Health and Human Services (DHHS), Pertussis Press Releases.
3. Centers for Disease Control and Prevention, Pertussis.
4. N.C. Electronic Disease Surveillance System.
5. Forsyth County Department of Public Health (FCDPH), Epidemiology & Health Surveillance Division.
6. U.S. Census Bureau, 2010 Census.
7. U.S. Census Bureau, American Community Survey.
8. Winston-Salem/Forsyth County Schools.
9. Cecil G. Sheps Center for Health Services Research, Health Professionals and Hospital Data.
10. North Carolina Coalition to End Homelessness.
11. N.C. State Center for Health Statistics.
12. Adolescent Pregnancy Prevention Campaign of N.C.
13. Centers for Disease Control and Prevention, FastStats, Leading Causes of Death.
14. NC DHHS, Division of Public Health, Communicable Disease Branch, Surveillance Unit.
15. Centers for Disease Control and Prevention, Youth Risk and Behavior Survey; N.C. Healthy Schools.
16. Environmental Protection Agency, Air Quality Planning and Standards.
17. Forsyth County Office of Environmental Assistance & Protection.
18. Piedmont Authority for Regional Transportation, Triad Air Awareness.
19. Winston-Salem/Forsyth County Utility Commission, Annual Report .
20. Forsyth County Department of Public Health, Environmental Health Division.
21. NC Department of Administration, Council for Women.
22. Center's For Disease Control and Prevention, The History of Violence as a Public Health Issue.