



Catawba County Community Health Assessment 2007



"Keeping the Spirit Alive Since 1842!"



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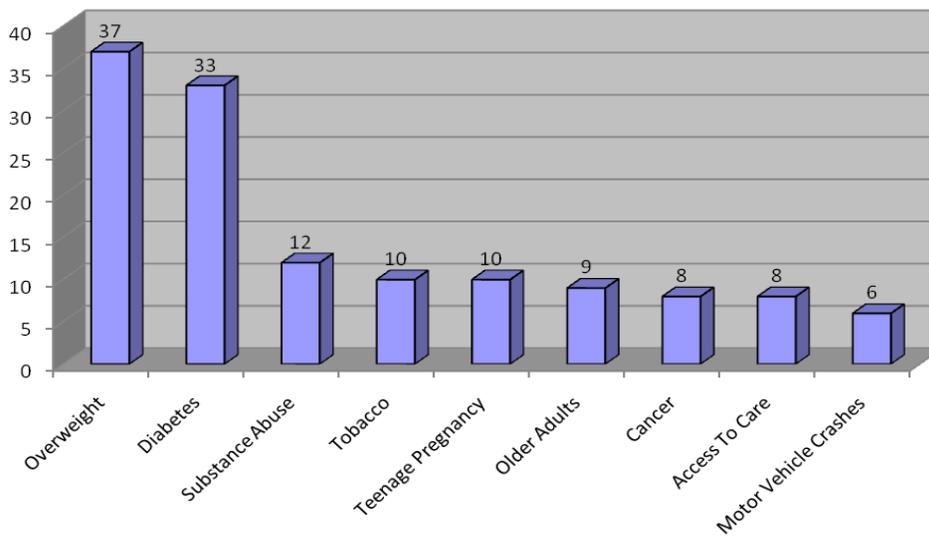
EXECUTIVE SUMMARY

Executive Summary

The 2007 Catawba County Community Health Assessment (CHA) is the culmination of a community-wide collaboration to re-evaluate the health status of Catawba County residents. Undertaken every four years by Catawba County Public Health (CCPH) and Catawba County Health Partners (CCHP), the CHA aims to identify pressing health concerns and select those that will benefit most from a concerted community effort to address them.

As a result of the extensive 18-month CHA process (see pages 10-13 for a detailed description of the methodology), the following health concerns emerged:

Results From First Priority Meeting October 31, 2007



After presentations and data were provided, participants were given circles to place on their top 3 priorities. Blue circle – 1st choice was worth 3 points. Orange circle – 2nd choice was worth 2 points and yellow circle – 3rd choice was worth 1 point. The results are shown above.

The above issues were then re-evaluated at a second meeting on November 7, 2007 to determine the priorities that will become the focus for CCHP action from 2008 to 2012. Given the resources available, it was agreed that CCHP would address four priorities. Since **Overweight** and **Access to Health Care** were identified in the 2004 CHA and are designated priorities through 2011, work in those areas must continue. Based on careful examination of the data and extensive discussion, it was voted that the remaining focus areas would be **Substance Abuse** and **Cancer**.

CATAWBA COUNTY HEALTH PRIORITIES, 2008-2012

1. Access to Health Care

More than 17,000 Catawba County adults lack health insurance, without which the ability to access health care is fundamentally jeopardized. Identified in 2004 as a community health priority, substantial progress has been made toward increasing the number of primary care visits for adults at free/reduced fee clinics.

CCHP accomplishments to date include:

- Expanding hours of operation for Greater Hickory Cooperative Christian Ministry Health Care Center, which provides medical, dental and pharmaceutical care to County residents that do not have access to those services;
- Implementing Medical Access to Catawba County (MACC), a commitment by area doctors to volunteer as primary physicians to members of the underserved community;
- Developing and disseminating a brochure of free or reduced-cost primary care services;
- And offering a medical interpreter class to improve communication and enhance cultural competence of service providers that work with populations with limited English-language skills.

Potential areas for future action:

Based on results from the 2007 CHA, the community identified Diabetes treatment and Mental Health as areas for possible future development. In addition, continued efforts will be directed at improving transportation services to and from medical appointments throughout the County. The committee will continue to address communication among minority populations and medical providers. Discussion also occurred on the possibility of creating a lay health worker program to help serve the County's rural and underserved populations.

2. Overweight

Because overweight and obesity are primary risk factors for the leading causes of death and disability, the topic continues to be a priority health concern in Catawba County. In Catawba County, the number of children with a Body Mass Index considered "overweight" exceeds both the North Carolina measures and NC 2010 targets. Since the 2004 CHA, the Eat Smart, Move More (ESMM) Subcommittee has focused on decreasing the number of overweight and obese children in Catawba County.

Accomplishments to date include:

- Developing and adopting wellness policies in all three school systems;
- Developing and disseminating an ESMM resource guide for children ages 2-18 throughout the community;
- Participating in several local health fairs to disseminate ESMM information;
- Organizing and taking part in Family Day, an annual event to raise awareness of the benefits of eating together as a family;
- Implementing Take 10 in 15 elementary schools. Take 10 is a curriculum based program for classroom teachers to address overweight;
- Implementing Generation Fit programs at two high schools. Generation Fit is an innovative curriculum designed by the American Cancer Society to infuse physical activity into the school day;
- And providing a childhood obesity workshop for over 60 healthcare providers.

Potential areas for future action:

The ESMM committee is currently working on an afterschool grant to adopt a policy that will address healthy snacks, increased physical activity, nutrition education, and less TV time. A Families Fit For Life project is also underway to enroll 50 families in an ESMM weigh less contest with cash rewards. An area of concern for the future is to work with African American churches to train ambassadors and adopt policies for healthy behavior.

3. Substance Abuse

Like Access to Health Care and Overweight, in 2004 Substance Abuse (SA) was designated a priority health concern. At that time, the SA Subcommittee set an objective for 2008. A decision, therefore, had to be made at this time regarding the continuation of Substance Abuse as a designated priority. With nearly 8% of the population having addiction issues, and another 39% affected by them, the community agreed

that SA continues to present a challenge to Catawba County and therefore will remain a priority for further action.

Based on the limited data available in 2004, the Subcommittee set an objective to decrease the number of substance-related emergency room and inpatient visits at the two area hospitals. Since the 2004 CHA, infrastructure to treat substance abuse fell into flux while North Carolina undertook statewide mental health reform. Within those limitations, accomplishments of the SA Subcommittee to date include:

- Developing a guide to SA-related services in Catawba County;
- Creating and distributing a Substance abuse self-assessment tool with references for where to seek help;
- Providing information and resources about substance abuse at Family Day;
- Implementing a SA workshop for over 90 service providers focused on navigating the system;
- And planning a workshop for the business community to increase awareness of the impact of substance abuse in the workplace and how to deal with it.

Potential areas for future action:

During priority setting for the 2007 CHA, the community suggested a possible shift from treatment to prevention, with a particular emphasis on middle-school age children and their parents. There was a lot of discussion on providing parent education and engaging parents in their children's lives. Possible partners in such an effort are the Mental Health Collaborative, Council on Adolescents, school nurses, counselors, resource officers, and the Parenting Network.

4. Cancer

Data gathered for the 2007 CHA show that cancer is a critical issue in Catawba County. Minority deaths from prostate cancer, white female deaths from lung cancer and white male deaths from colorectal cancer all exceed the State measures. For that reason, the community selected cancer as a new priority area, ensuring that community resources would be brought to bear in a comprehensive and focused manner.

While further assessment must be undertaken to establish precise goals and objectives, preliminary discussion pinpointed early detection for the most prevalent cancers (prostate, colorectal, lung and breast), targeting populations at greatest risk. Strategies of interest include education, prevention efforts and enhanced screenings. Potential partners include Greater Hickory Christian Cooperative Ministry, Frye Regional Medical Center, Catawba Valley Medical Center, American Cancer Society, and The Susan G. Komen Foundation.

For complete details about the four CCHP health priorities, as well as the 17 other topics used to gauge the health of Catawba County residents see Health Sections, pages 19 -117.

ACKNOWLEDGEMENT OF COMMUNITY PARTNERS

Special acknowledgment to these people for their time, data collection, leadership, participation, and expertise in compiling this Community Health Assessment (CHA).

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INTRODUCTION

Introduction

Assessing the health of populations is a core function of Public Health. To fulfill that mandate, every four years local health departments and Healthy Carolinians groups throughout North Carolina conduct a Community Health Assessment (CHA) in their respective communities. The purpose of the CHA is to:

- Evaluate the health status of each county in relation to the State's health objectives;
- Identify and prioritize health issues within individual counties that do not meet state objectives and/or pose a threat to the health of the community;
- And develop strategies to address priority community health concerns.

In addition, the CHA is one of several documents submitted for accreditation by local health departments and is utilized by agencies and organizations to educate the public about the health of the community, obtain grant funding, and form partnerships.

Catawba County Health Partners (CCHP) was formed in Fall of 2004 and received its state Healthy Carolinians certification in October of 2005. CCHP later received its nonprofit 501 (c) (3) status in August of 2006. The three health priorities have been: *Access to Care, Substance Abuse, and Childhood Obesity*. Through the leadership of the board of directors and the working committees these issues continue to be successfully addressed.

The 2007 Catawba County CHA represents collaboration between Catawba County Public Health (CCPH), Catawba County Health Partners (CCHP), community institutions, organizations, agencies and individuals with an interest in improving the health status of Catawba County residents (See page 9 for a list of community partners).

METHODOLOGY

Efforts to complete the 2007 Catawba County CHA began in July 2006 with the formation of a 10-person steering committee, comprised of representatives from CCPH and CCHP. The group continued to meet monthly until April of 2007 to discuss the strategies, methods, and timeline for the CHA. Under the leadership of the Healthy Carolinians Coordinator the steering committee established the framework and timeline for collecting and analyzing data, prioritizing health concerns, and developing action steps.

Data Collection & Analysis

Recognizing that assessing the health of a community is an ongoing process, the steering committee decided to build on the foundation of the 2004 CHA. In 2003, a community wide opinion survey was utilized to determine the most serious health issues affecting our community and how adequately health issues were being addressed. After examining the most current and significant secondary data, the 2007 CHA steering committee decided to supplement the 2003 survey information with more detailed health information from county residents from the *Behavioral Risk Factor Surveillance System 2006, Developmental Assets: A Profile of Your Youth, Prepared by the Search Institute*, and a series of *Listening Sessions* with minority residents.

Secondary data used in the 2007 CHA were as follows:

Behavioral Risk Factor Surveillance System (BRFSS) 2005 & 2006. BRFSS is a state-based system of random, monthly telephone surveys to adults conducted by the Centers for Disease Control and Prevention. Standardized questions assess health behaviors and preventive health practices related to

the leading causes of death and disability. State and county level BRFSS results for the 2007 CHA were gathered and analyzed from the North Carolina State Center for Health Statistics. Graphs were developed based on the survey results and inserted throughout this document.

2007 State of the County Health Report (SOTCH). The SOTCH Report is a compilation of important health indicators related to illness, death and high-risk behaviors. Under the guidance of CCPH, the data is compiled annually from various sources within the County. The report card data is used throughout this document in the form of mostly charts and some graphs. The areas highlighted in red need to improve when compared to the state or Healthy Carolinians (HC) 2010 objective. The areas highlighted in green are doing better than the state or HC 2010 objective. The areas highlighted in blue have already met or exceeded the HC 2010 objective. (Appendix A)

To supplement the secondary data, the following primary data was collected from middle and high school youth and members of some minority populations respectively:

Developmental Assets: A Profile of Your Youth, Prepared by Search Institute. In April, May, and June 2007, a random sample of 8th, 10th and 12th grade students (N = 942) from Newton-Conover, Catawba County and Hickory City Schools completed a quantitative survey to assess developmental assets, thriving indicators, deficits and risk behaviors. For the purpose of this report we will reference the document as Youth Search Institute Survey (Appendix B).

Listening Sessions. Because minority respondents to BRFSS may have been limited, it was important that the opinions of the minority populations be captured. Therefore, in April and May 2007 six listening sessions were held with members of the Hmong, Latino, and African-American communities at locations where they were already meeting. The purpose of the sessions was to identify key health concerns as perceived by the participants. Volunteers from each race/ethnicity participated in two groups—one comprised of adult males and the other comprised of adult females. Groups ranged in size from 6 to 14. (See full focus group report for more information - Appendix C.)

Data collection and analysis took place from January through October 2007. In January a CHA Action Team was formed to analyze the data and take part in the priority-setting process. The Action Team was comprised of key informants (community members with expertise in CHA-related health areas) and other stakeholders with an interest in Catawba County health.

In February, Action Team members were invited to a meeting at which the CHA process was explained and assignments were given: Each Action Team member was provided a packet of topic-specific BRFSS and SOTCH data. They were asked to review the information for their topic area, add to if necessary based on their expertise and further research, and analyze it. A template was provided with specific guidelines and additional resources to utilize. Their findings were reported six weeks later in a three- to five-page formatted document.

From June to October, select members of the steering committee edited the topic area documents for format and style. In addition, they incorporated results from the Search Institute Survey and the Listening Sessions into topic areas where relevant.

Priority Setting

On October 31, 2007 the first priority setting meeting with the CHA Action Team took place with 27 people in attendance. The purpose of that meeting was to begin the process of prioritizing the County health issues with the goal of selecting areas for future action.

Approximately three-quarters of the three-hour meeting were used to review the data. For 21 topic areas, the Action Team expert that prepared the document presented the following information:

- Topic overview
- County-specific data

Status compared to State objectives
Trends
Disparities
Assets currently used to address problems
Summary conclusions

Subsequent to topic-area presentations, the Healthy Carolinians Coordinator gave an overview of the 2007 SOTCH data, highlighting the topic areas where Catawba County met, surpassed, or fell short of Healthy Carolinian State objectives. This was followed by summary results of the Youth Search Institute Survey and the minority populations Listening Sessions.

Based on all data available, each attendee was asked to prioritize his/her first (3 points), second (2 points), and third (1 point) choices for most pressing health topics facing Catawba County. Points were tallied for all topics, and the top nine were selected for further consideration.

A group of 30 participants reconvened the following week to determine the four health areas that are the priorities for CCHP action, 2008-2012. For each topic area, the Healthy Carolinians Coordinator reviewed the data and the community assets currently in place to address health concerns. As each topic was discussed, attendees were asked to articulate why they initially selected that particular topic. At the conclusion of this exercise, participants were asked to select their first (2 points) and second (1 point) choices for priority consideration based the following guidelines:

- Is any agency or group already addressing the concern adequately?
- Is it a real or a perceived problem?
- Could a modest effort yield a significant result?
- Are you committed?

Selections were tallied, and for the four priority areas that emerged, a brief discussion was held regarding a potential primary objective, target population, focus for action, and suggested community partners. (See Executive Summary, pages 4-7 for results of the CHA process.)

**Catawba County
2006-2007 CHA Time Table**

	2006	Aug	Sep	Oct	Nov	Dec	2007	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	July						Jan											
Planning																		
Data Collection																		
Data Analysis																		
Priority Setting																		
Prepare Report																		

The table above shows the 2006-2007 CHA time table. It highlights the length of time spent on planning, data collection, data analysis, priority setting, and preparing the document.

COMMUNITY PROFILE

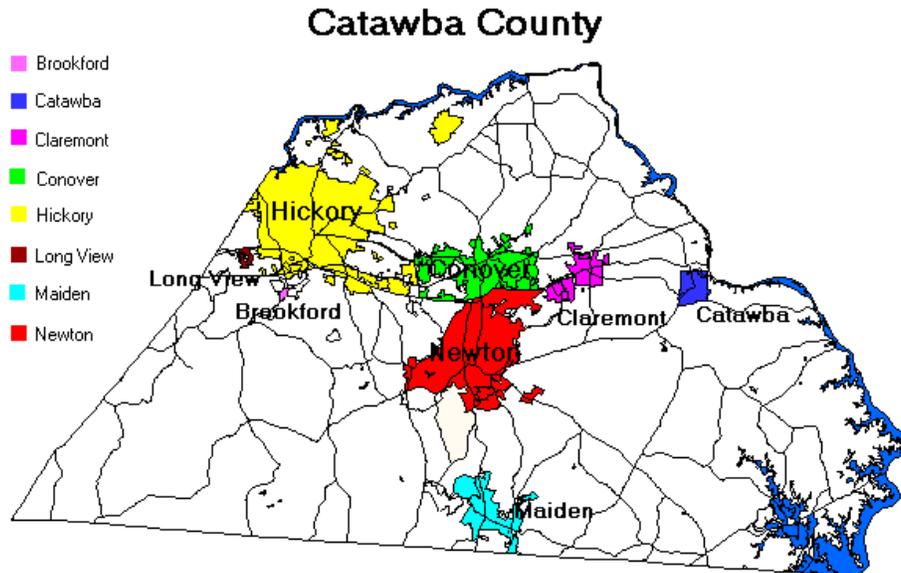
Catawba County



Catawba County Community Profile

Description

Catawba County—comprised of Brookford, Catawba, Claremont, Conover, Hickory, Long View, Maiden, and Newton—was established December 12, 1842. Located in the foothills of the Blue Ridge Mountains, this western North Carolina enclave encompasses 405 square miles and, according to U.S. Census Bureau 2006 estimates, is home to 153,784 residents.



Cities and Towns

The County's three lakes and its location at the foot of the Blue Ridge Mountains exert a strong influence on the County's climate and ambience. The average year round temperature is 68.8 Fahrenheit. Lake Hickory covers 4,100 acres and 272.1 miles of shoreline; Lake Lookout Shoals covers 1,270 acres and 39.1 miles of shoreline; and Lake Norman, the largest North Carolina manmade lake, covers 32,510 acres and 520 miles of shoreline. Catawba County's elevation ranges from 705 to 1,780 feet, averaging 995 feet.

Education

There are 40 public schools in the County as well as two colleges: Lenoir-Rhyne College is a 106-year-old private, liberal arts institution, and Catawba Valley Community College is a member of the NC Community College System. The County is also home to the Hickory Metro Higher Education Center, which offers undergraduate and graduate degree programs from over a dozen colleges and universities in North Carolina.

Arts and Leisure

Catawba County boasts seven golf courses, playable year-round due to the temperate climate. The Hickory Motor Speedway offers Motor Car Racing and has been in continuous operation for more than four decades. Bass fishing tournaments are held from March through October on Lake Hickory and Lake Norman. The Hickory Crawdads minor league baseball team has been playing in Catawba County since 1993. The arts are also well represented in Catawba County with symphony, theatre, choral and much more locally available. The Hickory Museum of Art is the second oldest museum in North Carolina and is known for its concentration of 19th and 20th Century American art. The Catawba Science Center recently added a planetarium and aquarium to its already existing science and exploration center. Catawba County also offers a variety of recreation facilities, parks, and pools across the county.

Economy

The Hickory Metropolitan Statistical Area (MSA), composed of Catawba, Alexander, Burke and Caldwell counties, is corporate headquarters for more than 40 businesses with at least \$500 million in sales as reported by Catawba County Government's website.

Recognized worldwide as the furniture manufacturing center of North America, Catawba County remains an industrial and retail center for the region. The traditional industries of furniture, hosiery and textiles, however, are being replaced by new technologically advanced industries such as fiber optics and plastics. At the same time, Catawba County is transitioning from a manufacturing-based economy to a service-based economy, driven in part by the growth of medical services. The County is a major medical center, with two hospitals (one county-owned, one private), a large and growing medical community, and several nursing and retirement homes. In addition, the area is attracting increasing tourism, some of which is attributable to the Hickory Motor Speedway, which brings in millions of dollars annually to the local economy.

Despite these positive trends, since the first quarter of 2000, the Hickory MSA has lost 25,000 jobs, mostly in manufacturing. In the past six years, Catawba County has lost a net of 10,000-plus jobs, primarily in apparel, furniture, hosiery, and fiber optics. In the past year, however, Catawba County's economy has improved slightly as more than 1,700 jobs, mostly in the service sector, have been added. As of July 2007 the unemployment rate was 6.0%; the North Carolina unemployment rate was 5.2%. This is a significant improvement from 2002 when Catawba County's unemployment rate was 40% higher than the state average.

Population

The Hickory-Morganton-Lenoir MSA is the seventh largest in the state with a population of approximately 352,000.

From 2000 to 2005 Catawba County's population increased from 141,685 to 149,032, an increase of 5.2%. While all ethnic groups grew between 2000 and 2005, Hispanic and Asian-Pacific Islander (mostly Hispanics) populations grew at the fastest rates. All age groups in Catawba County have grown in the past 25 years, with the elderly (65+) increasing most rapidly. High immigration rates and an aging population will continue to put stress on government services and health care providers.

The following tables show demographic details and recent population changes in Catawba County.

Table 1: Population demographics, 2005

	North Carolina	Catawba County
Population	8,411,041	149,032
Percent of Females	51.1	50.1
Percent of Males	48.9	49.9
Percent Under 5 Years Old	7.1	6.8
Percent Under 18 Years Old	25.3	24.7
Percent 65 Years Old and Over	11.7	12.5
Percent of Whites	71.4	83.2
Percent of African Americans	21.0	7.9
Percent of Asian/Pacific Islanders	1.8	3.0
Percent of Hispanics/Latinos*	6.3	8.2
Population per Square Mile	172.6	368.0

* Included in various other races

Table 2: Catawba County population changes, 2000 to 2005

	2000		2005	
	Number of People	Population %	Number of People	Population %
Hispanic Population	7,886	5.6	12,177	8.2
Asian/Pacific Islander Population	4,221	3.0	4,435	3.0
All Other Populations	129,578	91.4	132,420	88.8
Overall Population	141,685	100.0	149,032	100.0

Table 3: Catawba County Educational Attainment Levels, 2006

Group	Population	Percentage
Population 25 Years and Older	104,565	100%
Less than 9th grade	7,262	6.9%
9th to 12th grade, no diploma	13,807	13.2%
High school graduate (includes equivalency)	34,458	33.0%
Some college, no degree	19,929	19.1%
Associate's degree	9,295	8.9%
Bachelor's degree	13,138	12.6%
Graduate or professional degree	6,676	6.4%
Percent High School Graduate or Higher		79.9%
Percent Bachelor's Degree or Higher		18.9%

Table 4: Catawba County Income Levels, 2006

Income Level	Households	% of Households
Less than \$25,000	15,571	27%
\$25,000 to \$50,000	18,323	32%
\$50,000 to \$74,999	12,057	21%
\$75,000 to \$99,999	5,080	9%
\$100,000 to \$200,000	5,671	10%
\$200,000 or More	1,280	2%
Median Household Income (Dollars)	\$42,349	

Table 5: Catawba County Poverty Rates, 2006

Group	Percent Living Below Poverty Level
All Individuals	10.7
Under 18 Years	15.4
Related Children Under 5 Years	21.2
Related Children 5 to 17 Years	12.6
18 to 64 Years	9.3
65 Years and Over	7.4

Poverty: A Key Determinant of Health

Access to and quality of healthcare is related to insurance status, which commonly is a function of socio-economic status. In Catawba County 17.2% of the population is uninsured, many of them living at the lower rungs of the socio-economic ladder.

Although only 1% Catawba County families receive Work First (previously Aid to Families of Dependent Children), there is a growing “working poor” population: 11.4% of citizens live in poverty; since 2000, Catawba County has experienced a 61% increase in persons receiving Medicaid, and 202% increase in food-stamp recipients.

Forty-six percent of Catawba County’s workforce are women, many of whom are single parents. Many of these women work in service industries that require that they work different shifts, hours, and weekends. Such scheduling impacts childcare: No licensed daycare centers in Catawba County provide second- or third-shift daycare; 10 licensed homes provide second-shift childcare and 12 provide third-shift childcare.

Children’s Services: Abuse and Neglect

In 2006, 1,966 investigations/assessments of child maltreatment were completed in Catawba County; these investigations involved 3,955 children. Ongoing in-home child protective services (CPS) were offered to 630 families in order to strengthen those families so that children could remain safely at home. On a monthly average, 171 families received CPS in-home services in 2006.

As of March 30, 2007, the Department of Social Services had 230 children in agency custody because their parents were unable or unwilling to assure the safety and well being of their children or as a result of juvenile court judge action. Fifty-one percent of those children were 5 years of age or younger; the FY 05-06 total was 158.

References

- Catawba County Government Website (www.catawbacountync.gov)
- 2000 Census and 2005 and 2006 American Community Survey
- North Carolina Employment Security Commission
- Cecil G. Sheps Center UNC-CH
- Western Piedmont Council of Governments
- NC Medicaid and NC Data Center/US Census
- NC Dept. of HHS, Division of Social Services

HEALTH SECTIONS

Infant Mortality

Overview

Infant mortality is defined as the death of a baby within its first year of life. Infant mortality rates are the number of infant deaths for every 1,000 live births, normally within a one-year timeframe. Data indicates that the top 3 causes of infant mortality among all racial and ethnic groups in North Carolina are: prematurity and low birth weight (31%), birth defects (17%), and SIDS (Sudden Infant Death Syndrome) (less than 1%).

The US infant mortality rate is 6.6 deaths per 1,000 live births for 2006. Although the infant mortality rate for North Carolina in 2006 was 8.1 and the lowest ever recorded, it still ranks 45th highest in the nation. In 1988, North Carolina had the highest infant mortality rate in the nation. Since that time, North Carolina's infant mortality rate has decreased by more than 30%. A positive step is that North Carolina recently became one of the first states to make 17P (17 alpha hydroxyprogesterone caproate) available at no charge to low-income pregnant women at high risk for preterm birth, as recommended by the American College of Obstetrics and Gynecology. Weekly injections of 17P have been shown to reduce the risk of preterm birth by over 1/3. Not only does 17P improve birth outcomes, but it saves money – the cost of 17P for one woman is less than 1/10 that of a preterm birth in NC.

Catawba County Data

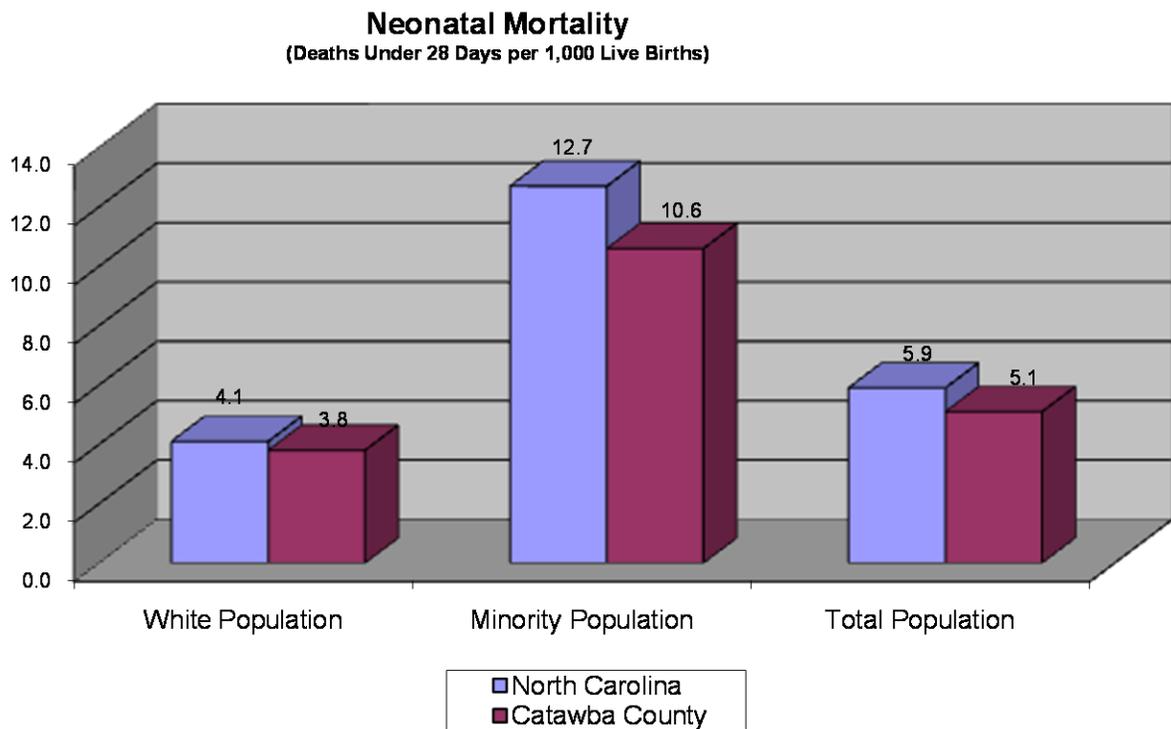
The table compares 2001-2005 statistical data for Catawba County, North Carolina and Healthy Carolinians 2010 objectives.

INFANT MORTALITY			
	North Carolina	Catawba County	NC 2010 Target
Neonatal Mortality (Deaths under 28 days per 1,000 live births)			
White Population	4.1	3.8	
Minority Population	12.7	10.6	
Total Population	5.9	5.1	5.9
Infant Mortality (Deaths under 1 year per 1,000 live births)			
White Population	6.1	6.2	
Minority Population	14.7	12.7	
Total Population	8.5	7.1	7.4
Infant Mortality (Deaths under 1 year per 1,000 live births)			
African American	16.0	17.3	
Percent Low Birth Weight (% of live births weighing less than 5lbs 8oz)			
White Population	7.4%	7.8%	
Minority Population	13.4%	12.0%	
Total Population	9.0%	8.4%	7.0%
Percent Very Low Birth Weight (% of live births weighing less than 3lbs 3oz)			
African American	3.6%	4.8%	
Percent Prenatal Care Initiated in 1st Trimester			
African American	75.0%	68.4%	
Total Population	83.5%	80.6%	90.0%
Percent Pregnant Women Who Smoke	12.9%	15.3%	7.0%

State Center for Health Statistics 2001- 2005

National or State data

- More babies were born in 2006 in North Carolina than ever before – 127,646 births. The state’s infant mortality rate remained unchanged from 2004.
- Data indicates that the top 3 causes of infant mortality among all racial and ethnic groups in North Carolina are: prematurity and low birth weight (31%), birth defects (17%), and SIDS (Sudden Infant Death Syndrome) (less than 1%).
- The number of deaths in North Carolina due to SIDS decreased for the second year in a row accounting for 94 deaths of babies under one year old.



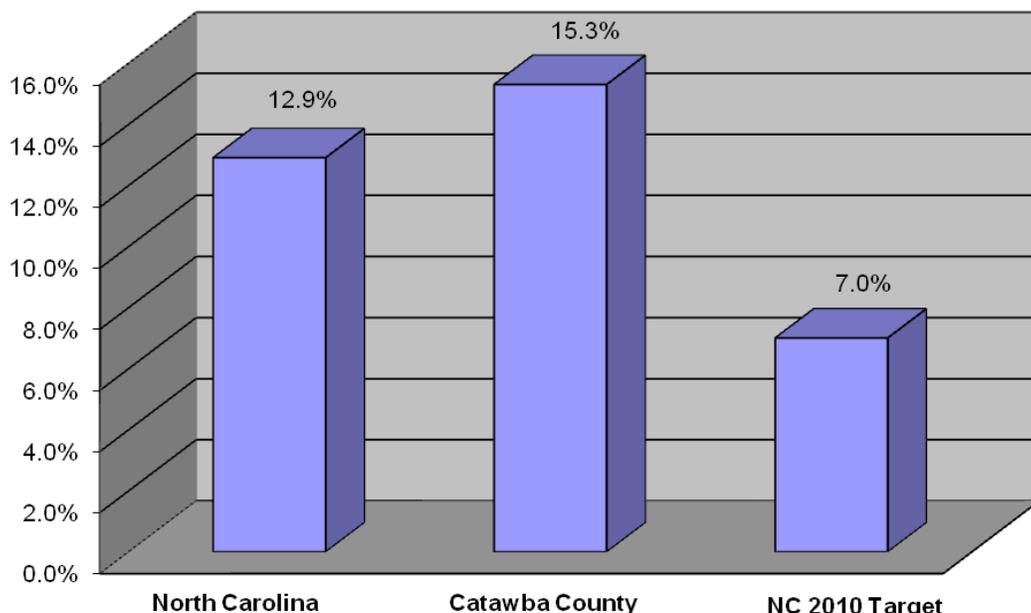
State Center for Health Statistics 2001 – 2005

The above graph demonstrates the assets in Catawba County in regard to neonatal deaths. Catawba County is consistently lower than the North Carolina rates of neonatal deaths and has exceeded the 2010 Healthy Carolinians Objective.

Trends

Overall Catawba County has continued to do better than the North Carolina averages when comparing infant mortality over the past 8 years. The numbers of infant and neonatal deaths have continued a downward climb since 1999.

Percent Pregnant Women Who Smoke



State Center for Health Statistics 2001 – 2005

This graph shows that Catawba County is doing very poorly in the percent of pregnant women who smoke. Catawba County is nearly 3% higher than the North Carolina average and more than doubles the 2010 Healthy Carolinians objective.

Disparities

The African American population continues to report a higher average of very low birth weight babies compared to white babies. African American Mothers also receive a much lower than state average of prenatal care in the first trimester. This could suggest a direct correlation between mothers not receiving prenatal care in the first trimester and low birth weight babies.

Assets

- The Catawba County Public Health’s Prenatal Program provides comprehensive prenatal care to low-income women in Catawba County and surrounding counties.
- The Catawba County Public Health’s Prenatal Program provides 17P (17 alpha hydroxyprogesterone caproate) at no charge to low-income pregnant women at high risk for preterm birth, as recommended by the American College of Obstetrics and Gynecology
- The Prenatal Program offers smoking cessation counseling, encouraging pregnant women to quit smoking.
- Public Health employs Maternity Care Coordinators who provide case management services to prenatal patients during their pregnancy and up to eight weeks after delivery. Their purpose is to increase the chances for a healthy baby and mother by resolving issues or concerns that could adversely affect the unborn or newborn baby.
- Catawba County Public Health’s Postpartum/Newborn Home Visitation Program provides a home visit to postpartum mothers and their babies within 10 days after delivery. The purpose of this visit is to ensure both mother and baby are safe at home without medical complications and to ensure continuation of health services for mother and baby. During this home visit, the babies sleeping arrangements are assessed and information is given to the family about SIDS and the dangers of co-sleeping.

National Data

North Carolina is ranked 45th highest in the nation for in infant mortality.

In 1988, North Carolina had the highest infant mortality rate in the nation. Since that time, North Carolina’s infant mortality rate has decreased by 30%.

Economic Impact

According to the March of Dimes, a healthy infant costs around \$2,600 in the first year of its life, while a premature birth costs around **\$41,600.**

- Public Health offers the Women, Infant, and Children Program (WIC) to ensure the mother and infant receive proper nutrients and vitamins during critical periods of growth and development before and after delivery.
- Many local agencies and organizations serving Catawba County’s residents work closely with the March of Dimes in an effort to prevent low birth weight infants.
- Public Health provides SIDS counselors who provide information to parents and families after a SIDS death. They are also able to refer the parents and their families to other agencies as necessary and provide prevention education to the general public on a regular basis.
- Catawba County Public Health leads the Child Fatality Prevention Team. The purpose of this team is to: identify deficiencies in the delivery of services to children and families by public agencies, make and carry out recommendations for changes that will prevent future child deaths, and promote understanding of the causes of child deaths.

Opportunities

- There is limited education specifically targeting black and minority populations about causative factors and prevention measures.
- In addition, there needs to be more targeted education to the black community regarding the importance of seeking prenatal care within the first trimester.
- Lastly, there is a lack of information in the community about risk factors for SIDS deaths.
- More community education is needed during prenatal, postpartum, and well-child visits to better inform parents about measures to take to prevent SIDS.

Conclusions

- A disparity exists between white, black, and minority populations in terms of neonatal infant mortality rates, with whites having the lowest neonatal and infant mortality rates and blacks having the highest.
- Minority populations have a higher percentage of having low birth weight babies (weighing less than 5lbs, 8oz).
- The black population is more likely to have a very low birth weight baby (weighing less than 3lbs, 3oz).
- The black population is less likely to initiate prenatal care in the first trimester.
- Both Catawba County and North Carolina have currently achieved the Healthy Carolinians 2010 objective for neonatal mortality per 1,000 live births for the total population
- Catawba County has currently achieved the Healthy Carolinians 2010 objective for infant mortality per 1,000 births for the total population.

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 NC Child Fatality Task Force press release 9/18/06 - http://www.ncchild.org/images/stories/2005_Child_Death_Data_press_release.pdf
 NC DHHS press release – 8/30/06 <http://www.dhhs.state.nc.us/pressrel/8-30-06.htm>
 March of Dimes

Sexually Transmissible Diseases and HIV

Overview

Sexually transmissible diseases are infections that are acquired and transmitted by intimate sexual contact. However, some of these infections (such as human immunodeficiency virus infection, viral hepatitis, and cytomegalovirus infection) while transmitted primarily by sexual contact can be spread by nonsexual means. Sexually transmitted diseases (STDs) remain a major public health challenge in the United States. Up to 75 percent of sexually active women and men will get an STD of some kind. While substantial progress has been made in preventing, diagnosing, and treating certain STDs in recent years, Centers for Disease Control and Prevention (CDC) estimates that 19 million new infections occur each year, almost half of them among young people ages 15 to 24.

Many sexually transmitted diseases (STDs), including HIV, are disproportionately represented among different racial and ethnic groups. In other words, the numbers of cases of illness are high compared to the size of those groups in the population. In North Carolina, there is ongoing concern about the disproportionately high rates of STDs among racial and ethnic minorities including African Americans or blacks, American Indians, and Hispanics. The reasons for these disparities are unclear, but may be “due, in part, to the fact African Americans are more likely to seek care in public clinics that report STDs more completely than private providers” and also to “the distribution of poverty, access to health care, health-seeking behaviors, the level of illicit drug use, and social networks with high STD prevalence” (*Tracking the Hidden Epidemics*, U.S. Centers for Disease Control & Prevention, 2000).

Catawba County Data

The North Carolina Epidemiology and Special Studies Unit, HIV/STD Prevention and Care Branch details reported cases of Chlamydia, Gonorrhea, and HIV. Although there are many types and subtypes of STDs these four are the most well documented, and, therefore, provide an indicator as to the pervasiveness of the infections. Herpes and Human Papillomaviruses, infections that are especially common among young adults are not reported to the state. Moreover, patients often present with multiple infections.

In Catawba County between 2002 and 2006, the instances of Chlamydia and Gonorrhea showed a dramatic increase in numbers of reported cases in all populations but especially from among young adults 13-29. The rates of infections remained approximately the same due to the increase in population of our county. Rates of infection followed the national trend with higher percentages among minorities, although 44.8 % of reported cases of Chlamydia in 2006 were white females.

SEXUALLY TRANSMITTED DISEASES (STD'S)			
New Cases per 100,000 population			
	North Carolina	Catawba County	NC 2010 Target
Gonorrhea			
Minority Population	600.1	402.3	
Total Population	183.5	82.6	191.0
Syphilis (Primary and Secondary)			
Minority Population	9.3	0.0	
Total Population	3.2	0.4	0.25
AIDS	12.2	6.7	14.7

State Center for Health Statistics 2001- 2005

Trends

Trend data since 1999 shows that Catawba County has increased slightly in rates of Gonorrhea and AIDS, but is still low enough to meet the Healthy Carolinians 2010 target rates.

Disparities

The State Center for Health Statistics continues to report that minority populations in North Carolina are disproportionately affected with STD's. Catawba had a disproportionate rate of Gonorrhea among minorities from years 1999-2005.

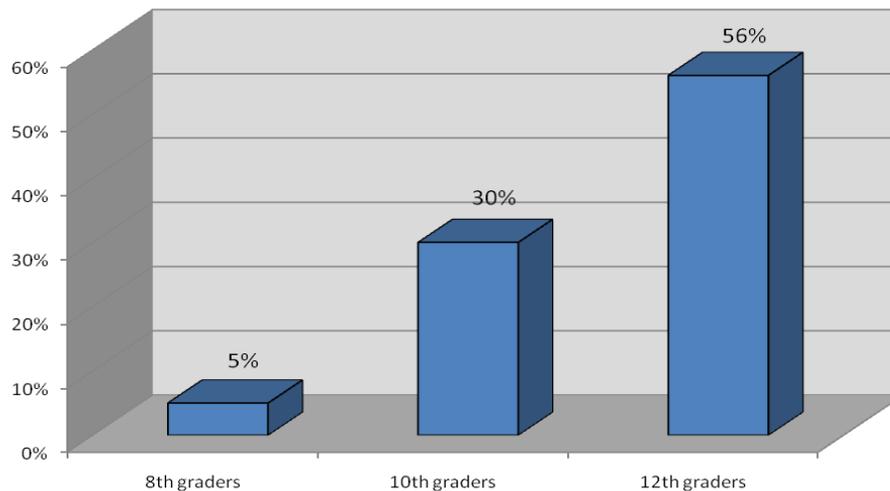
In Catawba, from years 2001-2005 there showed little to no rates of minorities with Syphilis which contradicts some of the state trends. This could be due to decreased numbers of infections or to lack of testing and reporting.

Community Voices

"We as parents need to be taught how to talk to our kids about sex."

Latino Male

Have You Had Sexual Intercourse 3 or More Times?



Youth Search Institute Survey data 2007

The above graph demonstrates a direct correlation between age and sexual activity. As youth age, they have an increased chance of engaging in sexual activity, thereby reinforcing the importance of early intervention with prevention education.

National or State Data

- Each year, there are approximately 19 million new STD infections, and almost half of them are among youth aged 15 to 24.
- North Carolina ranked 15th among the 50 states with 2.3 cases of Primary and secondary Syphilis per 100,000 persons. (CDC report 2005).
- North Carolina ranks 15th among the 50 states in chlamydial infections (344.5 per 100,000 persons) and the 6th among the 50 states in gonorrhea infections (180.7 per 100,000 persons). (CDC report 2005)
- The rate of chlamydia among North Carolina women (559.2 cases per 100,000 females) was 4.6 times greater than the rate among North Carolina men (122.3 cases per 100,000 males). (CDC report 2005).

Assets

- ALFA (AIDS Leadership Foothills Alliance) provides free HIV screening and client counseling for those who have been identified as HIV positive. Educational outreach is a primary focus of the agency.
- Programs presented by ALFA (AIDS Leadership Foothills Alliance), Catawba County Public Health, the Red Cross, and the Council on Adolescents of Catawba County are available upon request by community groups.
- Participants in prevention programs through the Department of Social Services receive information about STDs.
- Physicians provide testing and treatment for patients presenting with symptoms.

Community Voices cont...

We don't hear about STD's. It used to be big time in the 70's & 80's, but you don't hear that no more. Even when AIDS first came out, it was a big scare. It does not hit home until you put it here in Catawba County, then people can say - it is a problem here."
African American Male

National Data

CDC estimates that 19 million new infections occur each year, almost half of them among young people ages 15 to 24.

One third of people living with HIV/AIDS do not know they are infected, because they have never been tested.

Economic Impact

In addition to the physical and psychological consequences of STDs, these diseases also exact a tremendous economic toll. Direct medical costs associated with STDs in the United States are estimated at up to **\$14.1 billion annually.**

Opportunities

- Uniform, medically accurate information must be available to all age groups.
- Information about testing and treatment must become more accessible.
- Individual and group interventions are needed.
- Street and community outreach is needed.
- Information about risks to all age groups, racial, and ethnic groups.
- Language differences should be considered when developing and teaching prevention programs.
- Work with media to ensure proper representation of the severity of sexually transmissible diseases.
- HIV/STD prevention education should be developed with the active involvement of parents, be locally determined, and consistent with community values. It should address the needs of youth who are not engaging in sexual intercourse and youth who are currently sexually active, while ensuring that all youth are provided with effective education to protect themselves and others from HIV/STD infection now and lifelong.
- There is a need for factual information about sexually transmissible infections for persons beyond high school age that can be disseminated in locations where young adults congregate.

Conclusions

- In 2007, 41% of all middle and high school students in Catawba County had sexual intercourse, up from 26% in 2000.
- According the youth survey, more teens are engaging in sexual activity, thus putting them at risk for contracting HIV/STDs.
- In 2007, 30% of middle and high school students in Catawba County had sex more than three times.
- Trend data since 1999 shows that Catawba County has increased slightly in rates of Gonorrhea and AIDS, but is still low enough to meet the Healthy Carolinians 2010 target rates.
- Catawba had a disproportionate rate of Gonorrhea among minorities from years 1999- 2005 (SCHS).
- Many cases of STDs go undiagnosed, and some highly prevalent viral infections such as HPV and genital herpes, are not reported.

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Epidemiology Section - Division of Public Health - NC Department of Health and Human Services
Planned Parenthood Federation of America, 2006
State Center for Health Statistics

Teen Pregnancy

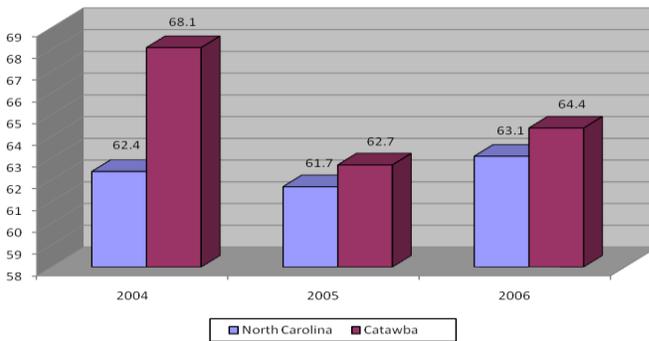
Overview

Teen Pregnancy has decreased by more than 30% in Catawba County and in the state of NC since 1990. Three hundred and twenty one teens between the ages of 15 and 19 became pregnant in 2006 (a rate of 64.4 pregnancies per 1000 teen women) resulting in 272 live births. Nearly one-quarter of the pregnancies were repeat pregnancies. Minority teenage pregnancies represented a significantly higher rate of births than the white population. The documented age of the fathers is of concern with 30.6% of Hispanic fathers being between the ages of 25-34. Fathers in that same age range of 25-34 were considerably lower in other races: 10.5% of fathers identified as “other” non-Hispanic, 11.9% of Caucasian, and 2.9% of African American. Meanwhile, age and other information about 27.5% of all fathers were not available. Based on a formula developed by the National Campaign to Prevent Teen Pregnancy the estimated cost for each child born to a teen mother in Catawba County is \$22,996/year. The estimated cost for the 272 live births for 2006 cost Catawba over \$6 million.

TEEN PREGNANCY RATES		
<i>Per 1,000 population (15-17 years old)</i>	<i>North Carolina</i>	<i>Catawba County</i>
White Pregnancy Rate	29.2	29.0
Minority Pregnancy Rate	53.6	53.3
Total Pregnancy Rate	37.2	33.8

State Center for Health Statistics 2001- 2005

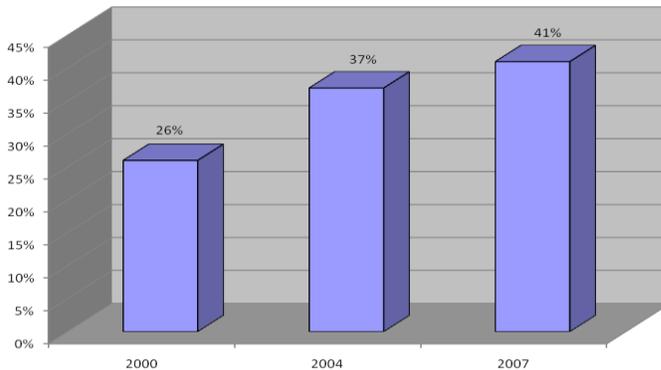
**Adolescent Pregnancies Among 15-19 Year Olds
Rate per 1,000 Girls**



This data shows that while the rate of teen pregnancies has come down since 2004 in Catawba County, Catawba is still consistently higher than the North Carolina average.

State Center for Health Statistics 2004, 2005, 2006

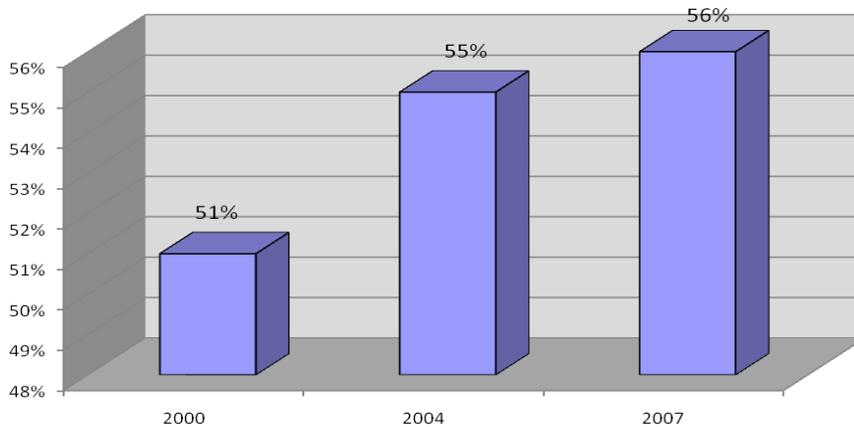
Have You Had Intercourse One or More Times?



This graph shows that youth today are engaging in more sexual activity than they did seven years ago. This helps explain the steady rate of teen pregnancies in Catawba County.

Youth Search Institute data 2000, 2004, 2007

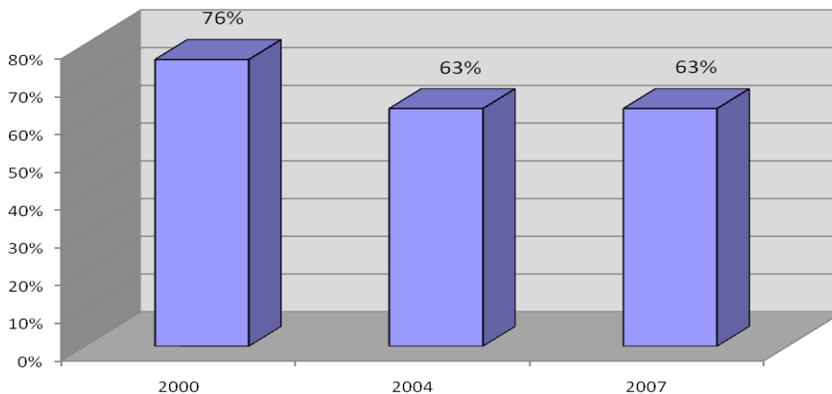
**Have You Had Sexual Intercourse 4 or More Times?
12th Graders Say**



This graph demonstrates that there has been an increase in the percentage of 12th graders that have had intercourse 4 or more times from year 2000 to 2007.

Youth Search Institute data 2000, 2004, 2007

**Do You and Your Partner Always Use Birth Control?
12th Graders Say**



This graph suggests that youth are not being as cautious about sexual activity now as they have been in the past. There has been a 17% decrease in use of birth control since year 2000.

Youth Search Institute data 2000, 2004, 2007

Trends

There continues to be a rise among our youth having intercourse and a decrease among youth using birth control. Teen pregnancy rates increased for 15-19 year olds with 62.7 in 2005, and 64.4 in 2006. Catawba County was ranked 56th highest in the state in 2006.

Disparities

Teen age pregnancy rates are 82% higher among Minority populations when compared to Caucasians in Catawba County.

Community Voices

"I don't have the proper words to relate to my child what is right and what is wrong. I need to be properly equipped to be able to approach the topic of sex with my kids."

Latino Male

"Sex ed in our schools need to be more open to discussions without having to worry about keeping the discussions G-rated."

Latino Male

National or State Data

- Despite a one third decline since the early 90's, the United States still has the highest rates of teen pregnancy and birth among comparable countries.
- Only one-third of teen mothers receive a high school diploma. Teens say that parents most influence their decisions about sex.
- Children of teen mothers are more likely to be born prematurely and at low birth weight, which raises the chances of blindness, deafness, mental retardation, cerebral palsy, and other disabilities.
- Children of teen mothers are 50 percent more likely to repeat a grade. They also perform much worse on standardized tests and ultimately they are less likely to complete high school than children of mothers who waited to have a baby.
- The daughters of teen mothers are 22 percent more likely to become teen mothers themselves.
- The sons of teen mothers are 13 percent more likely to end up in prison.

What are the chances of a child growing up in poverty if:

- 1.) The mother gave birth as a teen,
- 2.) The parents were unmarried when the child was born, or
- 3.) The mother did not receive a high school diploma or a GED.
 - 27% if one of these things happens.
 - 42% if two of these things happen
 - 64% if three of these things happen
 - Only 7% if none of these things happen

Put another way, if these three things happen, a child's chance of growing up in poverty is **9 times greater** than if none of these things happen. (National Campaign to Prevent Teen Pregnancy)

Assets

- All schools are required by law to teach sexuality education that promotes abstinence until marriage to students through 9th grade.
- The Council on Adolescents teaches these programs in grades 5-9 in Hickory and Newton-Conover School systems. The programs provide uniform, medically accurate, age appropriate information to help teens avoid early sexual involvement following state guidelines and competencies. According to pre and posttests, teens show an average of 25% increase in knowledge during the programs and approximately a 65% carryover of information from the previous years' course.
- The Department of Social Services offers a therapeutic program, Teen Up for middle school students and Upward Connection for high school students for both female and male.
- The groups typically meet once a week throughout the academic year. In addition to sexuality education, the groups include self-awareness/self-esteem activities, substance abuse education, career exploration and decision-making skills. During the summer, staff provides programming to expose youth to positive activities like arts/crafts, outdoor adventures, African drumming, etc.
- The Catawba County Public Health's Totally Teen Health Center and mobile unit at Hickory High provides health screenings and can do pregnancy tests at the discretion of the medical provider. Referrals and resources are offered to teens that have a positive pregnancy test. Birth control is not available through the clinic.

Community Voices Cont...

“The Community is not doing okay educating youth about sexuality issues. Young people feel like if you don’t bring it up they won’t get caught. They don’t want to say they’re sexually active so they say, hey this won’t happen to me.”

African American Female

National Data

The United States still has the highest rates of teen pregnancy and birth among comparable countries.

While teen sexual activity is down among most teens in the US, it has risen among girls younger than 15.

North Carolina has the 9th highest teen pregnancy rate in the United States.

Economic Impact

Based on a formula developed by the National Campaign to Prevent Teen Pregnancy the estimated cost for each child born to a teen mother in Catawba County is **\$22,996/year.**

The estimated cost for the 272 live births for 2004 cost Catawba over **\$6 million.**

- The Catawba County Public Health’s Adult Preventive Health Clinic provides physical exams, lab tests, birth control and education related to women and men’s health. The clinic also provides testing and treatment for sexually transmitted diseases, including HIV testing and counseling.
- The Council on Adolescents also offers a comprehensive, lifeskills and best practice model program for teen pregnancy prevention, **Wise Guys** (for middle school boys) and its locally developed companion **Images** (for girls). **SilkWood/Mentalk** for graduates of the former program and their same gender parent or mentor provides a second tier of prevention through building on family strengths. **Making Proud Choices**, another best practice model reinforces information about STDs, HIV, refusal skills to further teen pregnancy prevention.
- GEARUP is a program in Grandview Middle School which helps students get ready for college. It works with the Teen Up program to reach kids at risk.
- **Girls on the Run** sponsored by the YMCA is an athletic program that has been shown to guide teens into healthful choices that prevent teen pregnancy.

Opportunities

- Uniform, medically accurate, comprehensive information for youth beyond the 9th grade.
- Programming specifically sensitive to the ethnic diversity among the Hispanic and Hmong communities.
- Comprehensive interventions for teens that have had one or more pregnancies.
- Information about the consequences of relationships between older partners and youthful girls must be increased.
- Efforts to educate and involve parents and mentors in the sexuality education of their children are imperative.
- Although there has been a steady decrease in the number and rate of teen pregnancies in Catawba County, there remains a need to continue the efforts in place through financial support.
- New efforts must also be sought that involve young males in pregnancy prevention.

Conclusions

- Teenage pregnancy rates among 15-19 year olds in Catawba County are on the rise from 2005, but not as high as rates in 2004.
- There were 326 live births for teens ages 15-19 in year 2006.
- The youth survey reported that teens currently are more sexually active and using less birth control then they were in year 2000.
- There has been a slight increase in pregnancies among 10-14 year olds in Catawba County over the past year.
- Repeat pregnancies in Catawba County account for 27% of the teen pregnancies among 15-19 years old in year 2006.
- The marital status of the 326 teenage mothers ages 15-19 in Catawba County in year 2006 was unmarried for 79% of the teens.
- Minority females are disproportionately affected by teen pregnancy.

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Overweight (Adults and Children)

Overview

Overweight is becoming a growing concern in the United States and in North Carolina. The percentage of people who are overweight or obese has double over the last twenty years. Overweight has been attributed in part to an energy imbalance of consuming too many calories and not getting enough physical activity. The fast food industry has also impacted the increase of adults and children becoming overweight and/or obese. Overweight health costs for North Carolina affects at least 6% of the total population every year. Being overweight can directly or indirectly lead to diseases such as heart disease, stroke, asthma, and many other health problems can result such as sleep apnea, high blood pressure, type-2 diabetes, respiratory problems, and joint problems. According to the Centers for Disease Control and Prevention report in 2005, North Carolina is one of 14 states that have obesity prevalence rates between 25% and 29%.

Catawba County Data

CHILDHOOD OVERWEIGHT*			
2006 total data 2-20 year olds			
	North Carolina	Catawba County	NC 2010 Target
Age Group			
2-4 year olds	15.20%	17.70%	11.80%
5-11 year olds	25.20%	27.40%	16.70%
12- 18 year olds	29.50%	32.50%	20.30%
Total for 2-20 year olds	17.40%	23.80%	

*2006 NC Nutrition & Physical Activity Surveillance System, NC

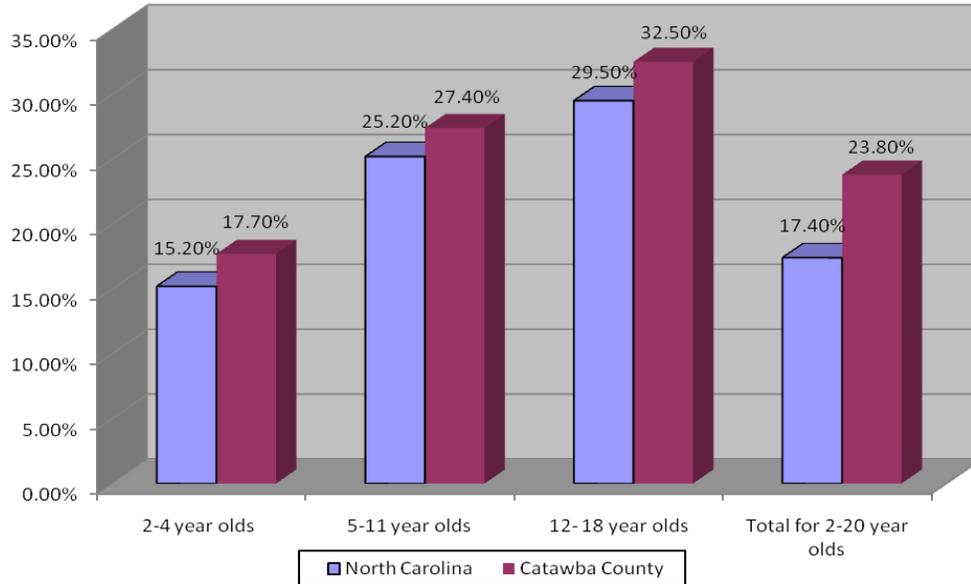
Department of Health and Human Services, Division of Public Health

* Overweight for teens and children is defined as a Body Mass Index (BMI) \geq 95th percentile.

National or State Data

- 61% of North Carolina adults are overweight or obese.
- 27% of North Carolina High School students are overweight or at risk of becoming overweight.
- North Carolina is 5th in the nation for overweight adolescents and 17th in the United States for rate of overweight and obesity among adults.
- The percentage of children and adults who are overweight or obese rises each year and despite advances in medicine; the current generation of children may be the first to live shorter lives than their parents
- A recent report called “Overweight and Obesity in the South” reported that populations most at risk for obesity were blacks, low income, and low education.
- With obesity rates doubling over the past twenty years, a growing number of schools in the United States are fighting back with exergaming – a new way to utilize technology to get kids moving in through video games. Games such as Dance Dance Revolution are being utilized as a fun way to get kids heart rates up and increase calorie loss.
- In 2005, Be Active North Carolina cited 4 important risk factors among adults that contribute to the annual loss of \$24.1 billion in public and private funds. They include lack of physical activity, excess weight, type-2 diabetes, and inadequate consumption of fruits and vegetables.

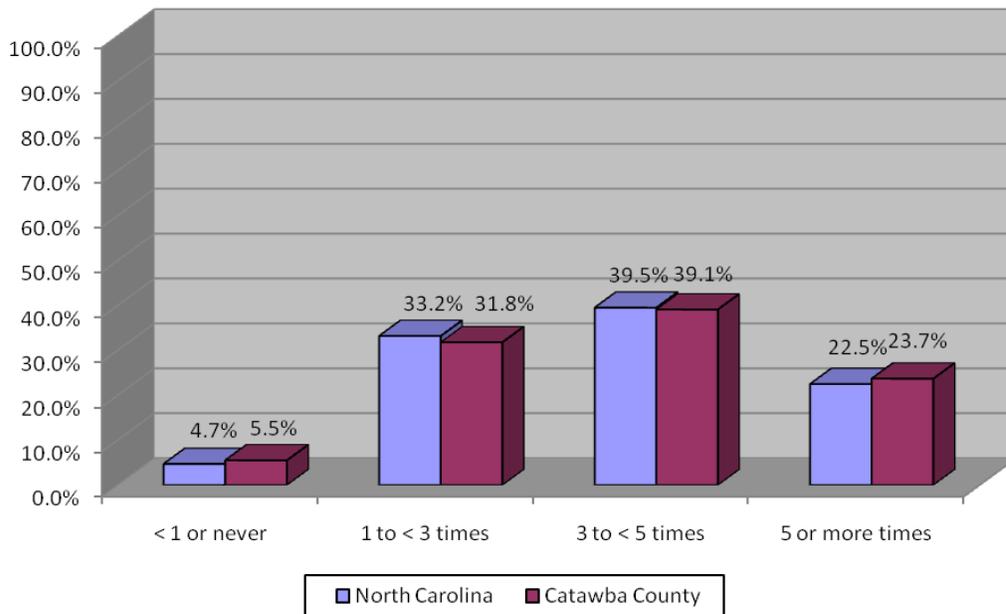
Childhood Obesity



State Center for Health Statistics 2001 – 2005
**Overweight for teens and children is defined as a Body Mass Index (BMI) ≥ 95th percentile.*

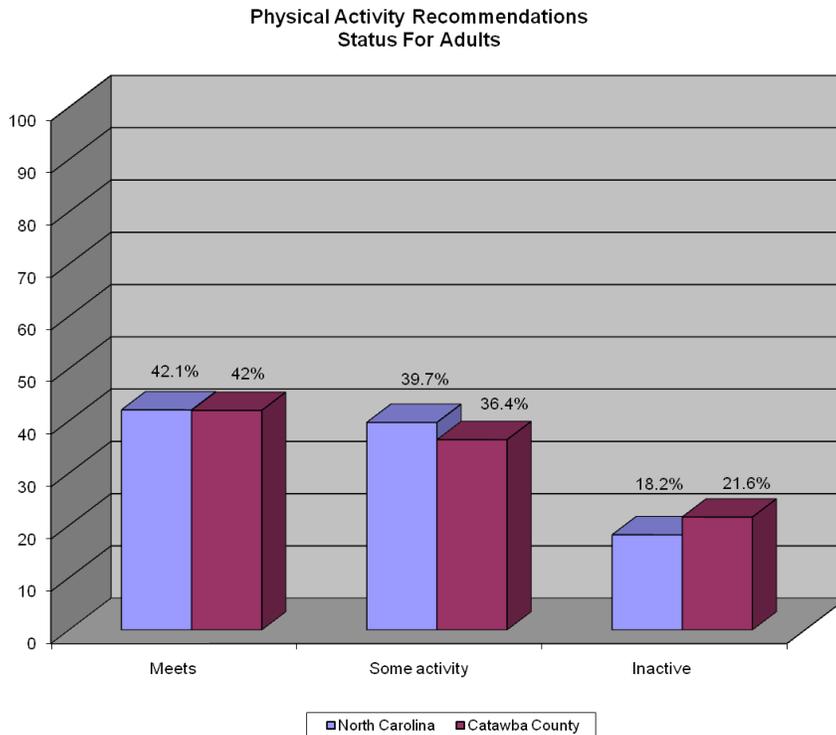
The above graph shows that Catawba County is consistently higher in childhood obesity rates in all age categories when compared to NC averages.

Fruits & Vegetables Consumption Per Day for Adults



BRFSS 2005 (Behavior Risk Factor Surveillance System)

This graph shows that nearly 63% of the adults surveyed in Catawba County said they consume 3 or more fruits and vegetables per day. However approximately 75% of the adults are not meeting the recommended 5 a day of fruits and vegetables.



This graph shows that Catawba County percentages of adults that perform some physical activity are lower than the state average (21% compared to 18%) and the inactivity status is higher than NC averages. These results suggest a need to get Catawba County residents moving more.

BRFSS 2005 (Behavior Risk Factor Surveillance System)

Assets

- Catawba County Public Health offers a range of services to both adults and children that address overweight such as a child health clinic, Totally Teens Health Center, Women Infant and Children (WIC), and Adult Health. Totally Teens, WIC, and Adult Health offers nutritional counseling along with preventive measures.
- Catawba County Public Health’s School Nurse program sends out nurses to every school in all three school systems to promote physical, social, emotional, and educational growth to the students.
- The Eat Smart Move More of Catawba County committee has worked through several grants to implement Energizers, Take 10, wellness policies, nutrition education, Winner’s Circle in the schools, and Sports Play Active Recreation for Kids (SPARK) in the schools across Catawba County. A new program called Families Fit For Life will launch in 2008 to promote healthy behaviors and weight loss for cash incentives.
- The Health First Center, located in Valley Hills Mall, is a community health education center run by Catawba Valley Medical Center. They offer routine blood pressure checks and occasionally offer health fairs where they offer other health services. They also offer healthy cooking classes once a month to help those that are diabetic or those wanting to cook healthier.
- YMCA of Catawba Valley is a physical activity resource for all ages. They offer programs for adults to help them get into shape and eating right. For kids, they offer after school programs with physical activity and various sports leagues.
- Frye Regional Medical Center and Catawba Valley Medical Center both offer Bariatric Surgery. They have bariatric surgery case managers who lead monthly support groups for those postoperatively.

Trends

According to the NC NPASS data Catawba County is experiencing a rise in childhood obesity rates from year 2004 to 2006. In these two years children ages 5-11 increased 7.4% and children ages 12-18 increased 6% for being overweight.

Disparities

A recent report called “Overweight and Obesity in the South” reported that populations most at risk for obesity were blacks, low income, and low education.

Community Voices

“We need workshops to teach us about nutrition and other health related topics.”

Latino Male

“In this area we need easy access to recreation facilities. You get off work, and you don’t have a lot of time left. You want to go somewhere to work out at certain times and get home at certain times.”

African American Male

“We have a community center but it’s for playing baseball and basketball. There is no other type of recreational facility.”

African American Female

- In Catawba County, there are several fitness centers that offer various services. They all are reasonably priced and allow teenagers to join with adult supervision.
- Catawba Valley Medical Center Weight Management Center offers services for individuals who are significantly overweight. They offer comprehensive program tailored just for that individual. It is a physician-led program that specializes in bariatric medicine with support of multidisciplinary team of medical professionals, registered dieticians, behavioral specialist, exercise trainers and weight management consultants.
- Catawba Valley Medical Center and Frye Regional Medical Center both offer diabetes education classes that are held monthly. They also offer day and evening comprehensive education classes, which include a one-year follow-up as well as Group and Individual sessions.
- Catawba Valley Medical Center provides a workout facility called Fitness Plus and nutrition counseling to members.

Opportunities

- Work places need to involve their employees in a wellness program. Incentives could be offered for employees trying to get fit or offer some classes or information for them on healthy eating habits and getting physically active. Companies could encourage their employees to get outside and walk during their lunch break.
- In today’s world, children follow their parent’s examples on how they eat and obtain their physical activity levels. There is a need for a program that would involve the whole family and is family oriented to help families get more physical activity and eating healthier. There is also a need for a program that offers healthy cooking classes where the whole family could get involved.
- Minority groups in Catawba County are underserved. There are several minority groups that need low-cost fitness centers and/or education classes in their language. Hispanic and Hmong groups have a growing population of overweight adults and children. Health education classes to these two minority groups should be in their language and teach about physical activity and eating right.
- There appears to be also be a need for affordable secondary prevention and treatment for children that are have already been identified as being at risk or obese.
- Encourage families to eat together. Research shows that families that eat together for dinner at least five times a week are more likely to eat healthy and not have overweight children.

National Data

Recent estimates indicate that 66 % of Americans are classified as overweight or obese.

North Carolina is 5th in the nation in overweight and obese adolescents and 17th in the United States for overweight and obese adults.

Economic Impact

The economic cost of unhealthy lifestyles in North Carolina is contributing to **\$24.1 billion** in lost public and private money.

Conclusions

- Catawba County is much higher in obesity rates among 2-20 year olds than North Carolina rates.
- The Latino communities reported about 80% of Spanish-speaking Hispanics are not getting the recommended amount of physical activity outside of work.
- Nearly 57% of the adults surveyed in Catawba County are not meeting the physical activity recommendations, which include mild to vigorous physical activity 30 minutes every day.
- Lower income families are about 65% less likely to participate in leisure time physical activity and/or the recommended daily amount of physical activity.
- Approximately 75% of the adults surveyed in Catawba County are not meeting the recommended 5 a day servings of fruits and vegetables.

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Heart Disease and Stroke

Overview

Heart disease and stroke fall under the umbrella of cardiovascular disease (CVD). Once considered a disease primarily of aging males, we now know that CVD frequently strikes in the prime of life, and is an equal killer of men and women.

Heart disease is a term that includes several heart conditions, the most common of which is coronary heart disease, which can lead to heart attack. Heart disease is the leading cause of death in North Carolina, accounting for 18,524 deaths or approximately 26% of the state's deaths. According to the State Center for Health Statistics (SCHS), the death rate for heart disease is 233.9 per 100,000 in NC and 221.2 per 100,000 in Catawba County.

Stroke is the third leading cause of death in North Carolina, accounting for 5,259 deaths or approximately 7% of the state's deaths in 2002. Stroke is the leading cause of disability in North Carolina. North Carolina is part of the stroke belt (South Carolina, Arkansas, Tennessee, North Carolina and Georgia). North Carolina has the fourth highest stroke rate in the US. And unfortunately, stroke death rates (67.8 per 100,000) are higher in Catawba County than the state average of 62.8. The minority population has higher death rates for both stroke and heart disease.

Risk factors for cardiovascular disease include tobacco use, poor nutrition, inactivity, obesity, diabetes, high blood pressure, and high cholesterol. Prevention and control of these risk factors may help reduce the chances for developing heart disease and stroke. Changes in lifestyle and/or the use of prescription medication are frequently recommended for those at risk. Those who have already experienced an episode should work closely with a health-care professional to minimize the chances for further problems.

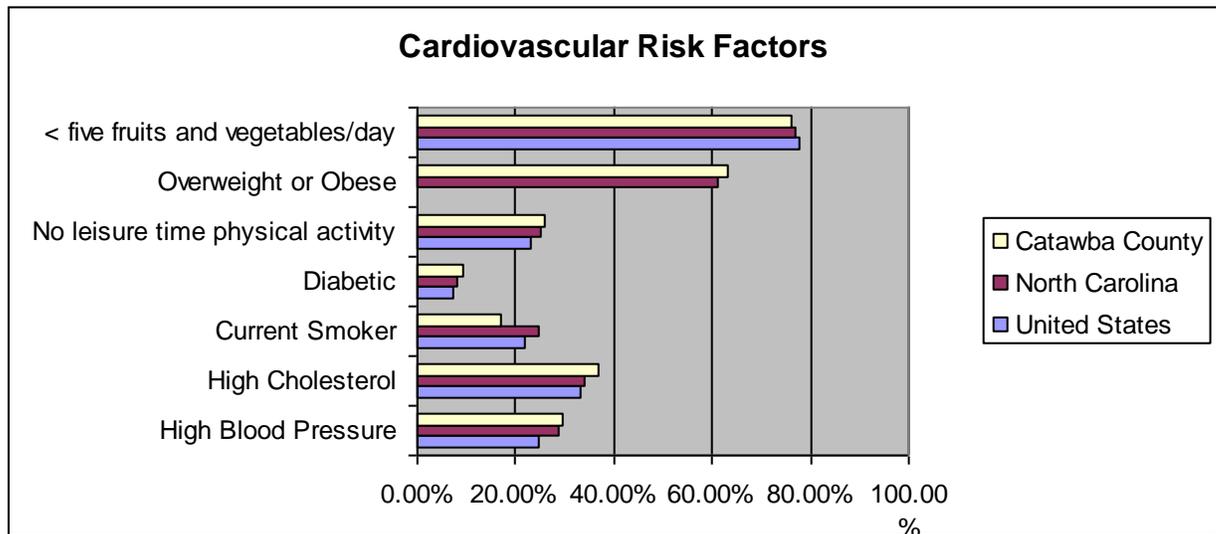
Catawba County Data

HEART DISEASE/STROKE			
Deaths per 100,000 population (age adjusted)			
	North Carolina	Catawba County	NC 2010 Target
Heart Disease			
White	218.5	204.8	
Females	174.4	167.2	
Males	276.5	256.8	
Minority Population	259.4	252.3	
Females	215.0	199.0	
Males	323.7	323.4	
Total Population	226.8	209.0	219.8
Stroke			
White Population	59.8	65.1	
Females	58.6	61.3	
Males	60.2	72.0	
Minority Population	85.2	76.8	
Females	79.8	79.4	
Males	92.0	73.8	
Total Population	64.7	66.2	61.0

State Center for Health Statistics 2001- 2005

Catawba County Heart Disease & Stroke Death Rates (previous page): Although the Catawba County overall death rate for heart disease is lower than both the NC rate and the Healthy People 2010 target, there are segments of the county population for which that is not true: The rates for white and minority males are well above the state average and the 2010 goal. With regard to stroke all segments of the Catawba County population exceed the 2010 target, but the rates are particularly high for white males as well as minority males and females.

Catawba County risk factor comparison (below): Of the seven risk factors for stroke and heart disease, Catawba County fares worse than the state and nation in five of these categories. Although not indicated in this chart Catawba County’s white males and minority women have the greatest increase over the state values.



Center for Disease Control www.cdc.gov/nccdphp/publications/factsheets/ChronicDisease/north_carolina.htm
http://www.cdc.gov/nccdphp/publications/factsheets/ChronicDisease/north_carolina.htm
 North Carolina State Center for Health Statistics [2005 BRFSS Survey Results: Catawba County](http://www.schs.state.nc.us/SCHS/brfss/2005/cata/nc.html)
www.schs.state.nc.us/SCHS/brfss/2005/cata/nc.html

	< 5 fruits/ vegetables daily	Overweight or Obese	No leisure time physical activity	Diabetic	Current Smoker	High Cholesterol	High Blood Pressure
Catawba	76.3%	63.1%	26.0%	9.2%	17.2%	36.8%	29.4%
NC	76.9%	61.0%	25.0%	8.10%	24.8%	34.0%	28.6%
US	77.6%	Not available	23.1%	7.1%	22.0%	33.1%	24.8%

Center for Disease Control www.cdc.gov/nccdphp/publications/factsheets/ChronicDisease/north_carolina.htm
http://www.cdc.gov/nccdphp/publications/factsheets/ChronicDisease/north_carolina.htm
 North Carolina State Center for Health Statistics [2005 BRFSS Survey Results: Catawba County](http://www.schs.state.nc.us/SCHS/brfss/2005/cata/nc.html)
www.schs.state.nc.us/SCHS/brfss/2005/cata/nc.html

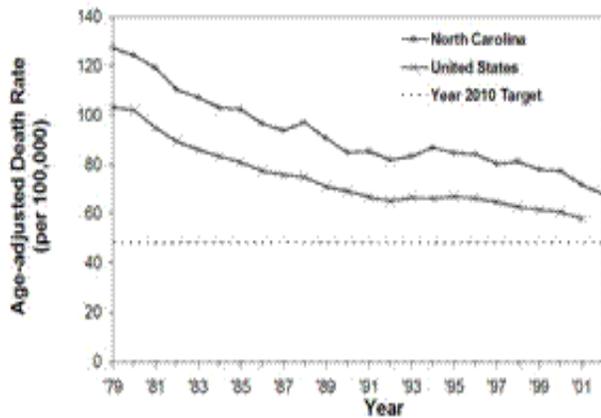
National or State Data

- One in four North Carolinians has some form of cardiovascular disease.
- Forty-seven percent of heart attack victims and about the same percentage of stroke victims die before emergency medical personnel arrive.
- In the US, someone dies of a stroke every three minutes.
- The burden from CVD is projected to rise as the population ages.

Trends

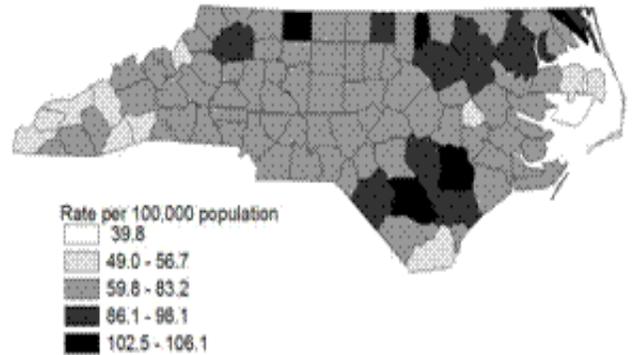
North Carolina death rates for stroke (Fig. 1) and heart disease (Fig. 3) have steadily declined. Catawba County death rates for heart disease (Fig. 3) have followed the declining state pattern over the past two decades:

**Figure 1. Stroke Death Rates
NC and US, 1979-2002**



1999-2002: ICD-10 codes I60-I69; 1979-1998: ICD-9 codes 430-434, 436-438 multiplied by comparability ratio of 1.0588. Rates per 100,000 population, age-adjusted to the 2000 U.S. standard population.

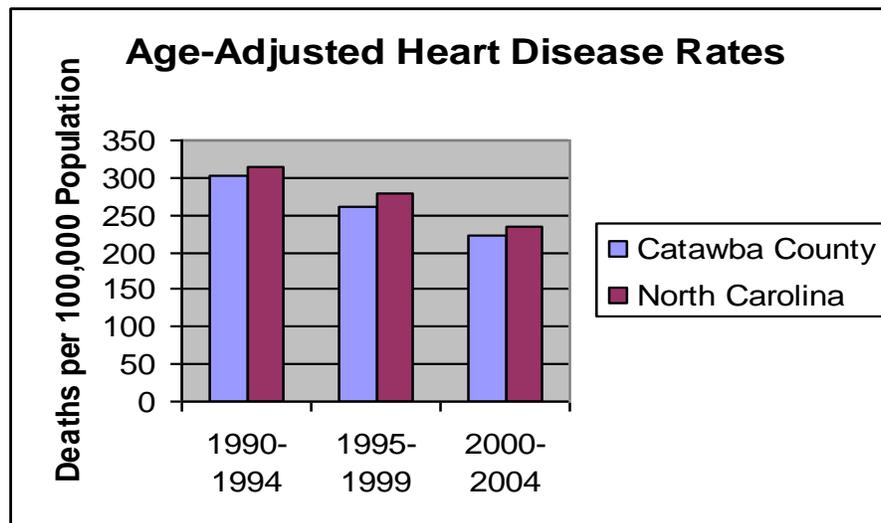
**Figure 2. Stroke Death Rates by County
North Carolina, 1999-2002**



Source: North Carolina Center for Health Statistics (2003) ICD-10 codes I60-I69. Death rates per 100,000 population, age-adjusted to the 2000 U.S. standard population.

NC Stroke Registry

Figure 3: Heart Disease Death Rates



Division of Public Health, State Center for Health Statistic

Trends

According to data from the State Center for Health Statistics Catawba County heart disease deaths have declined since the 1990-2003 reporting period for all groups except minority females.

In contrast to heart disease, substantial decreases in stroke deaths for male and female minorities lead overall declines in Catawba County.

Disparities

In Catawba County minorities experience disproportionately high rates of cardiovascular disease: in particular the death rate for minority males from heart disease is nearly one-third higher than the general population and there are nearly 20 more deaths per 100,000 population from stroke for minority females than for white females.

Assets

- Catawba Valley Medical Center (CVMC) and Frye Regional Medical Center (FRMC) offer the following services to address cardiovascular disease and associated risk factors:
- Comprehensive cardiac rehabilitation programs;
- Bariatric surgery and case management;
- Cholesterol and blood pressure screenings for businesses;
- Free smoking cessation classes in conjunction with Catawba County Public Health;
- FRMC Heart Helpers support group for patients and their families;
- CVMC LEARN to help individuals make healthy lifestyle changes;
- CVMC Weight Management Center;
- CVMC free walking program;
- FRMC and the American Heart Association sponsor an annual fundraising event to raise research funds and encourage cardiovascular disease awareness and education;
- CVMC Heart Healthy Nutrition classes;
- Pat Benfield, Director of Cardiac Rehab, offers a Heart to Heart Class every other month at the Health First Center. Additional classes on cardiovascular disease and risk factors are offered 4-6 times a year. These classes are also available on site for groups;
- CVMC has added Stroke and Cardiovascular Case Manager positions. They also have a Stroke Team that does stroke risk analyses at health fairs and yearly at The Health First Center;
- And CVMC's Health First Center at Valley Hills Mall performs routine blood pressure checks.

Opportunities

- Many Catawba County residents need more knowledge about CVD risk factors, signs and symptoms, and the importance of rapid treatment.
- Although the healthcare practitioners in Catawba County have worked to decrease language barriers and cultural insensitivity, particularly for the Latino and Hmong populations, the barriers still exist in all arenas from acute care, to long-term care, to prevention and early detection education.
- Most businesses do not reward heart healthy behaviors and/or penalize unhealthy ones.
- Access to nutritional snacks in vending machines in public places and businesses are rare. Too many families are eating out and purchasing pre-packaged, pre-processed, convenient foods.
- Access to health care is limited by lack of insurance or underinsurance among segments of the population.

Community Voices

“We do worry about gout, diabetes and high blood pressure, but not as much as we worry about having no money to pay our medical bills.”

Hmong male

“Not all doctors have interpreters that can help us when we go to the clinics, and it’s hard to communicate and get the message across.”

Latina female

“In [Maiden] we need easy access to recreation facilities You get off work...you want to go somewhere to work out and get home at a certain time.

African American male

National Data

Heart disease is the leading cause of death in the U.S. accounting for approximately 700,000 deaths annually, 51% of which are females.

Stroke is the third leading cause of death accounting 160,000 deaths annually. It is leading cause of long-term disability

- If individuals find money to pay for healthcare visits, they often do not have funds to pay for medication. Physicians often prescribe new and expensive medications without finding out if patients have a means to pay for them.
- Dental insurance is not available to even all the individuals who work regularly. Poor oral health has been associated with increased risk of heart disease.
- Illiteracy, lack of education and general health knowledge make it difficult for some people to follow medication and treatment instructions. Noncompliance can lead to less than optimal management of the controllable risk factors for stroke and hypertension.

Conclusions

- Citizens of Catawba County need more education about heart disease and stroke, in particular. Programs need to be tailored to participant’s education level, preferred language and cultural differences. Programs should be offered on site to church, businesses and civic groups.
- Workplace programs should be initiated or enhanced to include screenings, education, health incentives and access to nutritional foods.
- Work with unemployment office or downsizing businesses to educate unemployed or underemployed individuals about support services for healthcare needs, the 211 Resource Number and the Access to Care program through Catawba County Health Partners.
- Continue cultural sensitivity training in all healthcare venues.
- Encourage all healthcare providers to assess education level and educate accordingly.

References

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Diabetes

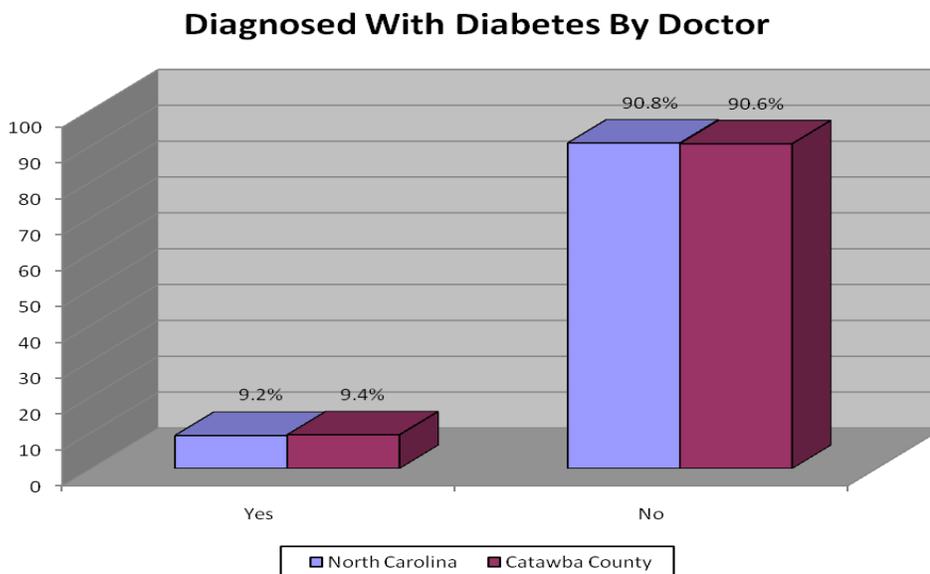
Overview

Diabetes refers to a group of chronic diseases that occur when the body is unable to produce enough insulin (Type 1 diabetes) or use the insulin it produces effectively (Type 2 diabetes). Type 1 diabetes accounts for 5% to 10% of all cases and requires that patients take insulin in order to survive. Type 2 diabetes accounts for up to 95% of cases and is the fastest growing chronic disease in America. While the causes of diabetes remain a mystery, both genetics and environmental factors are thought to be contributing factors. Specific risk factors include obesity, physical inactivity, family history of diabetes or gestational diabetes (a form of the disease that may develop during pregnancy). African Americans, Hispanic/Latino Americans, American Indians, and some Asian American and Pacific Islanders are at particularly high risk for Type 2 diabetes, though it's on the rise in all populations.

Diabetes is the sixth leading cause of death and disability in the United States. People with the disease are at a risk for heart disease, blindness, kidney failure, extremity amputations, and other chronic conditions. Based on death certificate data, diabetes contributed to 224,092 deaths in 2002. Studies indicate that diabetes is generally underreported on death certificates, particularly in the cases of older persons with multiple chronic conditions such as heart disease and hypertension. Because of this, the toll of diabetes is believed to be much higher than officially reported.

Catawba County Data

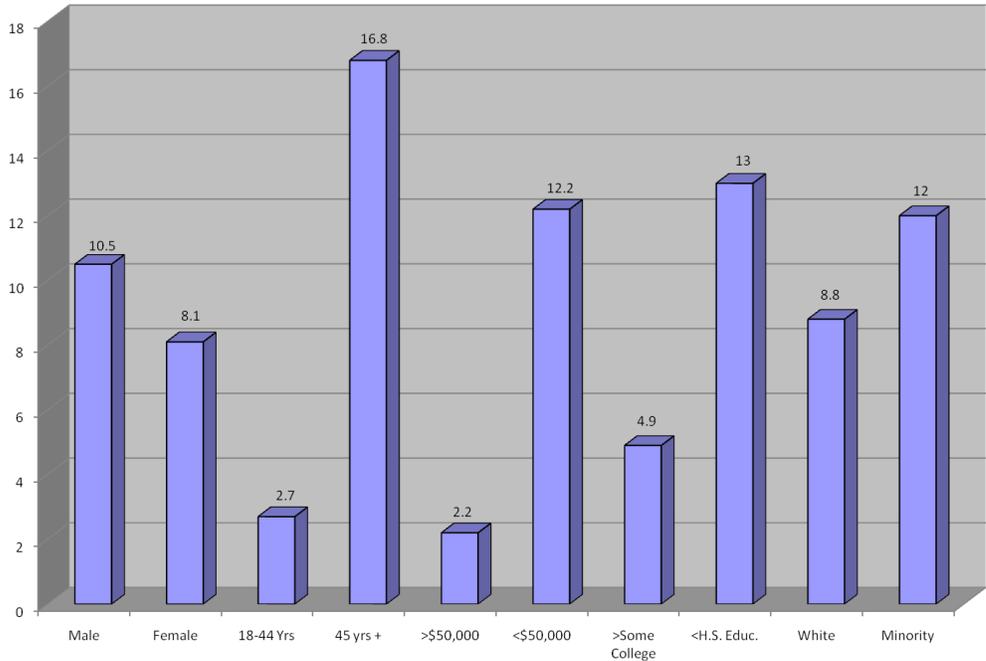
Results of the 2005 Behavioral Risk Factor Surveillance Survey (below) found that 9.4% of Catawba County adult respondents had diabetes, a percentage approximately equal to that of North Carolina. Nationally 7% of the total population—adults and children—have diabetes.



Under-diagnosed Disease (left): If Catawba County follows the national pattern, 9.4% is a conservative figure. Experts suggest that 33% of those with the disease do not know they have it. If left untreated diabetes may result in serious complications or death.

Behavior Risk Factor Surveillance System (BRFSS), 2005

Catawba County Adults Diagnosed With Diabetes



County Diabetes Profile (left):
 In Catawba County diabetes is most prevalent among males, minorities and those at the lower end of the social gradient (less house hold income and less education). The prevalence of Type 2 diabetes increases with age, a fact also supported by the county data.

Behavior Risk Factor Surveillance System (BRFFS), 2005

Diabetes (primary) death rates (below) are higher in Catawba County than they are in North Carolina. Most notably, the death rates for Catawba County minorities are substantially higher than the rates for the rest of the county and for both the general and minority populations of North Carolina as a whole.

DIABETES			
Deaths per 100,000 population (age adjusted)			
	<i>North Carolina</i>	<i>Catawba County</i>	<i>NC 2010 Target</i>
Diabetes (Primary & Sec.) 2001- 2005	Data	Not Available	67.4
Diabetes (Primary Only)			
White Population	21.8	26.6	
Females	19.8	21.2	
Males	25.3	33.8	
Minority Population	53.8	82.5	
Females	51.9	81.0	
Males	55.3	88.5	
Total Population	27.6	30.6	

State Center for Health Statistics 2001- 2005

Trends

Type 1 diabetes death rates in Catawba County have increased in all categories by approximately 15-20% since the 1999-2003 reporting period (Public Health Report Card for Catawba County)

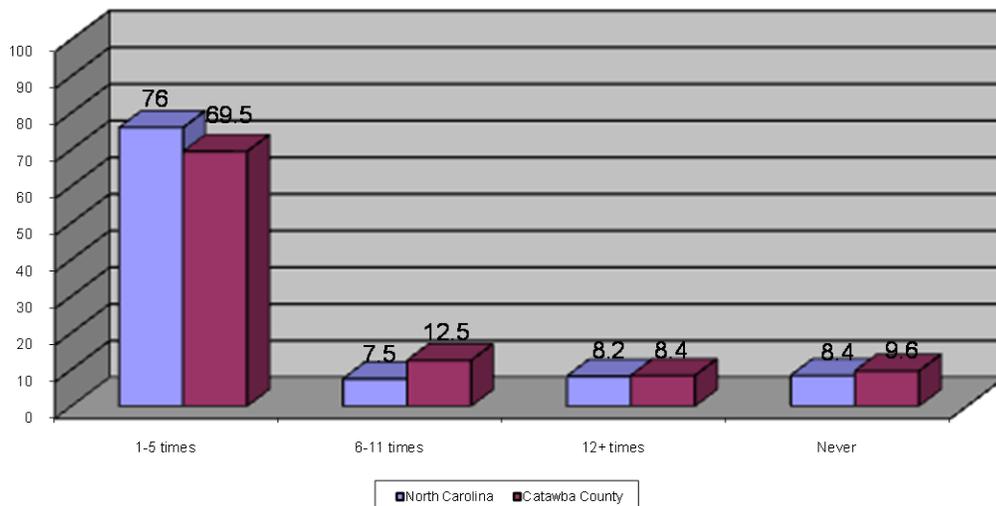
Disparities

In Catawba County, diabetes disproportionately impacts those in the lower socio-economic strata. In addition, the number of diabetes-related deaths in the minority community are nearly triple those in the general population.

Community Voices

In focus groups with Hmong, Latino and African-American participants, diabetes was perceived to be a primary health concern in their respective communities.

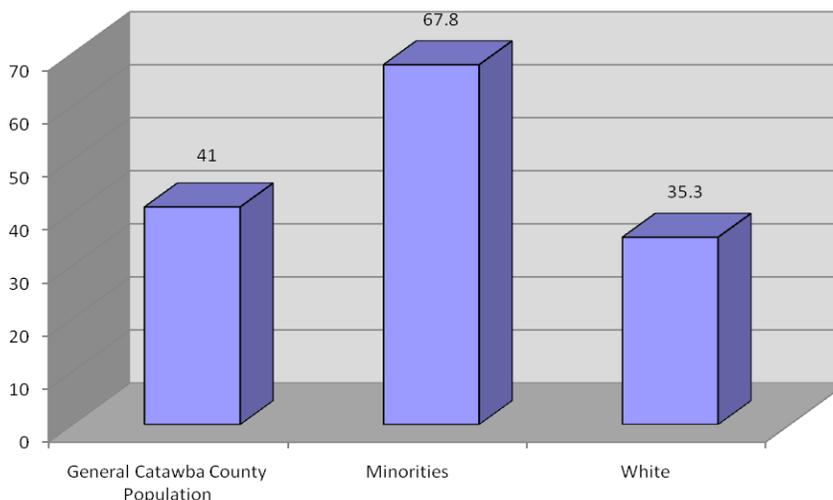
How Often Have You Seen Doctor for Diabetes in Past Year



Behavior Risk Factor Surveillance System (BRFFS), 2005

Diabetes Management: Diabetes is a serious disease, but it is controllable. Seeing a health-care provider regularly coupled with appropriate self-care are the fundamentals of successful diabetes management. According to BRFFS 2005 data (above), in Catawba County, 90% of respondents with diabetes saw their doctors multiple times in the past year.

Catawba County Adults Never Taken a Diabetes Self-Management Course



Behavior Risk Factor Surveillance System (BRFFS), 2005

Self-care: (left) Diabetes education— learning about the disease and how to control it— is crucial to managing the disease. In Catawba County two-thirds of minority diabetes patients responded that they had never taken a diabetes self-management course.

National Data

20.8 Million

Americans—7% of the population—have Diabetes.

From 1980-2002, the number of people with diabetes in the U.S. more than doubled.

Economic Impact

Those with diabetes incur health care costs 2.4 times higher than those without the disease. According to American Diabetes Association, direct medical and indirect expenditures attributable to Diabetes in 2002 were estimated at **\$132 billion** or one out of every 10 health care dollars spent in the U.S. For those with diabetes the per capita medical expenditures totaled **\$13,243**. The majority of costs were incurred by people ages 65 and older.

National or State Data

In the U.S 14.6 million people have been diagnosed with diabetes, however scientists estimate that another 6.2 million (nearly one-third) have the disease, but have not been diagnosed, putting them at risk for serious complications. One in three Americans born in the year 2000 will develop diabetes in their lifetime.

The prevalence of diabetes in children and adolescents (20 years and younger) is 176,500, or .22 percent of people in the age group. About 1 in 400 to 600 children and adolescents has Type 1 diabetes. The prevalence of Type 2 diabetes—formerly referred to as adult-onset diabetes—is increasing in this population driven in part by increases in overweight and obesity in the age group.

Assets

- Catawba Valley Medical Center (CVMC) and Frye Regional Medical Center (FRMC) are recognized by the American Diabetes Association for meeting National Standards of Medical Care for Diabetes Self-Management Education. Both facilities have certified diabetes educators on staff and offer comprehensive diabetes education and support services for adults and children.
- CVMC offers the following free services on a quarterly basis:
- Diabetes education classes in English and Spanish to the Good Samaritan Clinic patients.
- Blood Sugar Screenings at the Center for Diabetes Control.
- Free continuing education is provided on a quarterly basis by Frye Wellness and Education Center for the adult, pediatric and insulin pump support groups. Wellness Health Fairs are offered periodically by FRMC.
- CVMC's Health First Center at Valley Hills Mall provides free healthy cooking demonstrations and continuing education to adults and children with diabetes.
- FRMC and The Hickory Foundation YMCA partner to provide a free, annual cardiac risk assessment, including blood sugar screening for diabetes and pre-diabetes.
- During National Diabetes Month (November) CVMC offers free blood sugar screenings, along with presentations throughout the month on diabetes related topics at the Health First Center in Valley Hills Mall and other community locations.
- Greater Hickory Cooperative Christian Ministry has a medical access for Catawba County (MACC) program for eligible uninsured adults with diabetes.

Opportunities

- Catawba County residents that are uninsured, underinsured or whose benefits do not specify comprehensive diabetes care lack: adequate diabetes education, access to testing supplies medications and insulin syringes, and access to eye exams, foot care and foot screenings.
- Large segments of the Hmong and Latino communities are not being reached with diabetes messages due to language differences and lack of insurance.
- Education and early diagnosis are imperative.
 - Health care providers must take a leading role in referring patients to diabetes educators.
 - Employers need education to emphasize the importance of including provisions in employee insurance plans for diabetes education, treatment and supplies.
 - Patients need comprehensive education to prevent long-term and often irreversible complications.
 - Diabetes education needs to be taught in all schools due to the seriousness of the disease and epidemic proportions.

Conclusions

- Diabetes is the fastest growing chronic disease in America. If not controlled, it has the potential to break the “health-care bank.” Epidemic diabetes will result in increases in heart disease, strokes, kidney disease, blindness, amputations and other serious, costly, life-long complications.
- Diabetes death rates for the minority population in Catawba County are well above the general population in the county and both the general and minority populations in the state.

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Cancer

Overview

Cancer is a group of diseases characterized by the uncontrolled growth and spread of abnormal cells. Nationally it is the second leading cause of death, surpassed only by heart disease. In North Carolina it the leading cause of death for people under the age of 85. In both the U.S. and the state, the most frequently diagnosed cancers are prostate cancer for males, breast cancer for females, followed by lung and colorectal cancer for both sexes.

The causes of cancer vary, with certain types having more known risk factors than others. In general, both internal (heredity, hormones, immune disorders) and external (tobacco, chemicals, radiation, infectious organisms) factors play a role.

Some cancers can be prevented through behavior change. For example cancers caused by smoking and alcohol use can be prevented by avoiding those behaviors. Likewise, cancers related to obesity and overweight, lack of exercise and nutrition are also preventable as are skin cancers caused by exposure to the sun. Certain cancers that are caused by infectious organisms can be prevented through a combination of behavior change and medical interventions. Regular screenings may also be preventive, and can detect cancers at an early stage when they are most treatable.

Depending on the cancer diagnosis, treatment may include surgery, radiation, chemotherapy, hormone therapy, and/or targeted therapy. In the past 25 years, progress in treatment options coupled with better early detection have resulted in improvements in the 5-year survival rates for all cancers.

Catawba County Data

The North Carolina Central Cancer Registry projected that in 2007 there would be 725 new cancer cases in Catawba County and 290 deaths. Following national patterns, in Catawba County prostate cancer is the leading diagnosis for males, breast cancer the leading diagnosis for females, and lung cancer the leading cause of death for both sexes.

2007	New Cases	Deaths
Prostate	115	15
Breast	110	20
Lung	100	85
Colorectal	80	30

North Carolina Central Cancer Registry

The following table compares 2001-2005 cancer deaths for Catawba County to North Carolina and the Healthy Carolinians 2010 objectives.

CANCER			
<i>Deaths per 100,000 population (age adjusted)</i>			
	<i>North Carolina</i>	<i>Catawba County</i>	<i>NC 2010 Target</i>
Total Cancer Deaths	197.7	196.6	166.2
Prostate Cancer (Male)			
White Population	23.7	23.6	
Minority Population	62.7	81.4	
Total Population	29.9	27.0	
Breast Cancer (Female)			
White Population	24.0	25.9	
Minority Population	32.6	21.7	
Total Population	26.0	25.7	22.6
Trachea, Bronchus, & Lung			
White Population	60.4	61.3	
Females	43.6	47.8	
Males	83.6	83.5	
Minority population	57.0	43.1	
Females	33.3	30.0	
Males	94.1	61.6	
Total Population	59.9	60.3	
Colon, Rectum, & Anus			
White Population	17.4	20.1	
Females	14.7	15.7	
Males	21.0	27.2	
Minority Population	23.6	19.4	
Females	20.8	21.3	
Males	28.4	15.2	
Total Population	18.6	20.2	16.4

State Center for Health Statistics 2001- 2005

Prostate Cancer: A significant finding in the State Center report is that minority prostate cancer deaths in Catawba County are disproportionately high in both the state and the county: Catawba County minority prostate cancer deaths outnumber those in North Carolina by 23%. A comparison of minority and white prostate cancer deaths in Catawba County shows the death rate to be more than 70% higher among minorities. While a number of factors may contribute to the disparities, results of the 2005 BRFSS for Catawba County (on the next page) show that a large segment of the minority population is not being screened for prostate cancer, putting them at greater risk for not detecting the disease at an early stage when it is most treatable.

Trends

Overall, cancer deaths in Catawba County are down slightly compared to the 1999-2003 reporting period. Driving the trend is a decrease in total prostate cancer deaths, male lung cancer deaths, and female minority colorectal cancer deaths.

Disparities

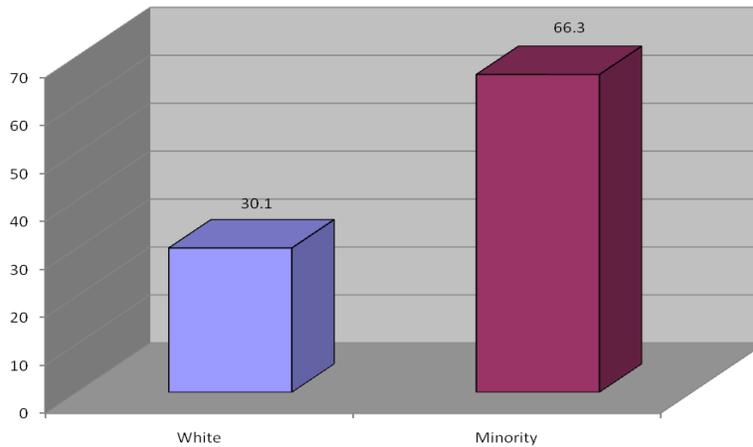
Although minority cancer deaths for breast and male colorectal cancers remain below the Healthy Carolinians target, they represent substantial increases since the 1999-2003 reporting period, suggesting an unfavorable trend when coupled with the high rate of minority Prostate Cancer deaths.

Community Voices

"I'm concerned about the safety of the water. We have a lot of plants here. There's been a lot of cancer in this small community, a lot of it....Your hear there's a lot of people dying of cancer....You can smell that water."

African-American Female

Never Had PSA Test



Behavior Risk Factor Surveillance System (BRFSS), 2005

PSA Test (left):

The number of minority males in Catawba County who have never had a PSA screening test for prostate cancer is more than 50% higher the number of white males who have never been screened.

Other Cancers: With the exception of colorectal cancer, Catawba County's overall death rates for other cancers are generally on par or better than those for North Carolina, though still above the Healthy Carolinians 2010 targets. For colorectal cancer, the white male death rate is well above the rate for other segments of the population, contributing to the county's higher death rate.

The lung cancer death rate for white females in Catawba County is higher than the comparable population in the state. It also represents a slight increase compared to the 1999-2003 data (45.4 deaths per 100,000). Since that reporting period, the lung cancer death rate among white males decreased by 7.5 deaths per 100,000, suggesting a potentially positive trend. This is the prevailing pattern throughout the country.

Breast cancer death rates for the total Catawba County population are approximately the same as they are in North Carolina, and have not improved since the 1999-2003 reporting period. Within those numbers, however, there has been a 28% increase in minority breast cancer deaths since the earlier reporting period, suggesting a potentially negative trend.

National or State Data

- Breast Cancer is the most frequently diagnosed cancer among women with there being an estimated 178,480 new cases to occur in 2007. Breast cancer ranks second for cancer deaths in women. Lung cancer ranks first (ACS Facts and Figures, 2007).
- Lung cancer accounts for about 15% of all cancer diagnosis. The incidence rate in men has shown a decline but not in women. It is estimated there will be 312,380 new cases in 2007 (ACS, Facts and Figures, 2007).
- Prostate cancer is the most frequently diagnosed cancer in men. It is estimated 218,890 new cases will be diagnosed in 2007. The incidence rates are significantly higher in African American men than in white men. Rates have increased over the years. This trend is in a large part due to increased prostate cancer screening with the prostate specific antigen (PSA) blood test. There will

Economic Impact

The National Institutes of Health estimate the 2006 direct medical costs for Cancer to be **\$78.2 billion dollars**. The figure does not include indirect costs associated with lost productivity due to illness and premature deaths from the disease.

be an estimated 27,050 deaths. Death rates among African American men remain more than twice as high as those in white men (ACS, Facts and Figures, 2007).

- Colorectal cancer is the third most common cancer in both men and women. There will be an estimated 112,340 new cases of colon cancer and 41,420 new cases of rectal cancer diagnosed in 2007. Incidence rates have decreased and this can be partly attributed to early detection. Early treatment has also led to the decrease in deaths. There will be an estimated 52,180 deaths in 2007 (ACS, Facts and Figures, 2007).

Assets

Catawba County Public Health provides the following Cancer-related services:

- The Breast and Cervical Cancer Control Program (BCCCP) for low-income women 40 years and older aims to ensure early detection.
- The Women's Preventative Health Clinic provides pap smears and clinical breast exams, as well as, colposcopy exams for women with abnormal pap smears.
- Low-cost mammograms through a partnership with Catawba Valley Medical Center
- Breast cancer tests and treatment at lower costs through grant funding from the Susan G. Komen for the Cure, NC Foothills Affiliate.
- Catawba Valley Medical Center (CVMC) and Frye Regional Medical Center (FRMC) are approved Comprehensive Community Cancer Centers by the American College of Surgeons. The facilities offer a range of services aimed at prevention, early detection, and treatment.
- Mobile Mammography Center (CVMC)
- Digital Mammography (CVMC, FRMC)
- Enterostomal Therapy (CVMC, FRMC)
- Lymphedema Therapy (CVMC, FRMC)
- Inpatient/outpatient chemotherapy (CVMC, FRMC)
- Radiation therapy (CVMC)
- Specialized surgical care (CVMC, FRMC)
- CT/PET (Computerized Axial and Positron Emission Tomography). Patient navigation services for Breast and Larynx Cancer patients (FRMC)
- Cancer Resource Centers (CVMC, FRMC)
- Tobacco Educators (FRMC, CVMC and Catawba County Public Health)
- Cancer Survivor Groups
- Provides Prostate screenings (CVMC, FRMC)

Working with the American Cancer Society the following services are provided:

- Look Good Feel Better (CVMC, FRMC)
- I Can Cope (CVMC, FRMC)
- FreshStart (CVMC, FRMC)
- Annual, free Prostate Screening
- The Palliative Care Center and Hospice of Catawba Valley provides specialized care and volunteer services to patients and families who are facing end of life care.

- The Catawba County Breast Cancer Coalition provides breast health education to women and teens.
- The NC Foothills Affiliate of the Susan G. Komen for the Cure provides breast health literature and educational programs to women of Catawba County and grant funding to Catawba County Public Health, CVMC, FRMC, the Catawba County Breast Cancer Coalition, and the County Extension Homemakers.

Opportunities

- Although there are many prevention and early detection programs available in Catawba County, racial disparities continue to exist in Cancer deaths. Improved outreach to minority communities will lessen those disparities. Specific concerns include minority males at risk for Prostate Cancer and Colorectal Cancers and minority females at risk for Lung and Breast Cancers.
- Despite widespread progress in tobacco control throughout the county, lung cancer deaths remain high particularly among Catawba County's white population, with the rate steadily rising among females. Most of the county's tobacco control resources are directed at youth, which should have a positive impact on lung cancer rates in the future. In the meantime, however, efforts must also focus on encouraging smoking prevention, reduction, and cessation in the county's adult population.

Conclusions

- Catawba county residents have access to state-of-the-art Cancer diagnosis and treatment.
- The Prostate Cancer death rate for Catawba County males is substantially higher than the rates in NC and the white population of Catawba County.
- Prostate screening and education should be addressed in the minority population.
- Colorectal cancer deaths in Catawba County are higher than in NC.
- Colorectal cancer awareness and the benefits of early detection should be promoted.
- Tobacco education should be continued in the schools, along with efforts to increase the number of non-smoking environments and encourage smoking cessation.
- Breast health education should continue to be a priority.

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Oral Health

Overview

Poor oral health is a significant health problem experienced by many people in our county and across the United States. Adults and children needlessly endure pain with oral diseases and disorders, tooth loss, and develop oral infections that then lead to more serious diseases, thus compromising their overall health and well-being.

The baby boomer generation has greatly benefited from water fluoridation and fluoride toothpaste. They are the first generation when the majority will maintain their natural teeth over their entire lifetime. However, nearly 43% of all adults in the United States have untreated decay while 1 in 7 adults aged 35 – 44 have gum disease as do 1 in 4 adults aged 65 and over. Oral pharyngeal cancers, primarily in elderly, are diagnosed in 30,000 Americans and 8,000 die from this disease annually.

Oral health is the single most common health problem among children and an important factor in the normal growth and development of children. Lack of adequate health care can result in pain, inability to eat, retarded growth, missed school days, difficulty learning, speech problems, poor nutrition, and loss of self esteem. Tooth decay is an infectious disease that starts as a reversible white spot that, without preventive intervention, progresses to visible irreversible tooth decay. The last 40 years have seen dramatic reductions in the prevalence of tooth decay in our state, thanks in part to the efforts of public health programs. These efforts include community water fluoridation, dental sealants and education.

North Carolina has the most comprehensive oral health surveillance system in the nation. The results of the 2003-04 North Carolina Statewide Children's Dental Survey show that, after years of decline, improvements in tooth decay in permanent teeth are leveling off, while the amount of tooth decay in baby teeth may be increasing. The NC Oral Health Section's annual kindergarten and fifth grade surveillance data report only indicated obvious tooth decay; the 2003-2004 statewide children's dental survey data reported both obvious tooth decay and early tooth decay. Results show that the actual amount of decay is underestimated by 35-40 percent when early cavities are not included. These early cavities are the ones that can repair (remineralize) in response to fluoride therapy and other preventive oral health interventions. The presence of so much early decay reinforces the need to enhance the preventive strategies the state has in place so these early cavities do not progress to the point that they need to be filled.

Catawba County Data

- According to the North Carolina Assessment Data for 2005/06 school year, approximately 19% of Catawba County children entered kindergarten with untreated dental decay compared to 21% in North Carolina.
- In Catawba County, 6 general dentist practices actively participate in the Medicaid Dental program on a routine basis. Of this 6, none are pedodontists, 2 see children starting at age 4 and the other 4 see children beginning at age eight.
- Three general dental practices in Catawba County accept adult Medicaid patients.
- Limited dental services are available at a volunteer dental clinic called Greater Hickory Cooperative Christian Ministry in Catawba County for income eligible adults without insurance or Medicaid. Patients can be non-US citizens.

- In 2002, the percent of county public water populations receiving fluoridated water for Catawba County was 89% as compared to 84.6% in North Carolina and 87.7% in the United States. The Catawba County rate exceeds the 2010 goal of 75%.

ORAL HEALTH		
<i>Per 10,000 Population</i>		
	<i>North Carolina</i>	<i>Catawba County</i>
Dentist (2005)	4.4	4.4

Cecil G. Sheps Center (UNC-CH)

The chart to the left shows that North Carolina and Catawba County have the same rates of dentists per 10,000 people.

National or State Data

Children

- According to the 2003-04 Statewide Dental Survey of North Carolina School Children, 13% of school-aged children continue to have untreated tooth decay in their permanent teeth. A small group of children (10%) have 90% of untreated decay in their permanent teeth.
- According to the 2003-04 Statewide Dental Survey of North Carolina School Children, 31% of elementary schoolchildren have untreated decay in primary teeth. A small group (20%) of elementary schoolchildren has 90% of the untreated decay in primary teeth.
- According to the 2003-04 Statewide Dental Survey of North Carolina School Children, many parents report that their children need dental treatment such as fillings, teeth pulled, or cleanings. Depending on race and ethnicity, 21-36% of parents wanted dental care for their children but were unable to get it.
- According to the 2003-04 Statewide Dental Survey of North Carolina School Children, only one in four children in NC visit a dental office regularly.

2005 - 2006 data for Catawba County, North Carolina and Healthy Carolinians 2010 objectives.

ORAL HEALTH			
	<i>North Carolina</i>	<i>Catawba County</i>	<i>NC 2010 Target</i>
Average Number of Decayed, Missing and Filled Primary Teeth in Kindergarten	1.7	1.6	1.3*
Percent of 5th Graders With Permanent Teeth Free of Decay	76%	77%	87%
Percent of 5th Graders With Sealants	44%	54%	

NC State Center for Health Statistics – Oral Health Section

**Objective is measured for preschool; reported results are for kindergartners*

The table above shows Catawba County’s average number of decayed, missing and filled primary teeth in kindergarten-aged children and percent of 5th graders free of decay is slightly lower than North Carolina’s average, but is higher than the Healthy Carolinians 2010 objective. However, Catawba County is higher than the state average for percent of 5th graders with sealants.

Trends

Over the past 5 years, 5 additional dental providers now accept and provide services to Medicaid eligible children in Catawba County. Over the past 10 years in the United States, the number of adults missing all their natural teeth has declined from 31% to 25% for those aged 60 and older and from 9% to 5% for those adults between 40 and 59 years. Surprisingly, 1 out of 20 adults are missing all their teeth.

Disparities

Medicaid eligible children and adults are less likely to receive dental care because dental providers are reluctant to accept Medicaid as a payment source and these clients experience other socioeconomic issues that lessens their consistency in keeping appointments.

Percentage of Medicaid Eligible Receiving Dental Services 2006

ORAL HEALTH		
Percent of Medicaid Eligible Receiving Dental Services		
	North Carolina	Catawba County
Ages 1-5 yrs	24.0%	17.0%
Ages 6-14 yrs	48.0%	44.0%
Ages 15-20 yrs	33.0%	32.0%
Overall (ages 1-20 yrs)	34.0%	29.0%

Division of Medical Assistance Calendar Year 2006

Red indicates high health risk in Catawba County as compared to NC. Catawba County’s percent of Medicaid Eligible children at ages 1-5, 6-14, 15-20 receiving dental services are all considerably lower than the state averages.

Adults

- Over 40% of poor adults (20 years and older) have at least one untreated decayed tooth compared to 16% of non-poor adults.
- Toothaches are the most common pain of the mouth or face reported by adults. Almost 1 of every 4 adults reports some form of facial pain in the past 6 months.
- Most adults show signs of gum disease. Severe gum disease affects about 14% of adults aged 45 to 54 years.
- For every adult 19 years or older without medical insurance, there are 3 without dental insurance.
- Oral cancers are most common in older adults, particularly those over 55 years who smoke and are heavy drinkers.

Assets

- Catawba County Public Health offers a free preschool dental health education program, Tooth Time that is funded by Smart Start. With the help of Smart Start Nurses, dental screening, referral and follow-up services are provided to preschool children through this program.
- The NC Oral Health Section provides a Public Health Dental Hygienist to serve Catawba County. Catawba County Public Health assists this state position by providing administrative and operational support.
- Catawba County Public Health has an on-sight dental clinic which serves children ages 4 – 17 accepting Medicaid, NC Health Choice, Smart Start dental funds for qualifying children and self-pay clients. The site is used as a training facility for new dentists, assistants, and hygienists entering the dental profession.
- The North Carolina Oral Health Program coordinated *Give Kids A Smile 07* for the fourth consecutive year. This project provides free oral health care restorative and preventive services to low-income children. In addition, this program highlights for policymakers the ongoing challenges that disadvantage children face in accessing dental care. This successful sealant promotion provides a partnership with 26 schools from the three-school systems, Catawba County School Health Nurses, the CVCC dental hygiene program, Western Piedmont Dental Assisting Program, 22 dentists, and their staff and community volunteers. Through this program,

National Data

Children lose more than 51 million school hours and adults lose more than 164 million work hours each year due to dental disease or dental visits.

Economic Impact

The total bill for dental services in the United States was estimated to be **\$70.1 billion** in 2002.

dental health education is offered to over 3000 students; and approximately 300 children receive free dental care.

- Greater Hickory Cooperative Christian Ministry has a healthcare center that offers free dental services to low-income and eligible adults without insurance or Medicaid. The clinic is staffed part-time with volunteer dentists from the community. Non-US citizens can be seen. All patients must be Catawba County residents.

Opportunities

- Access to dental care is an ongoing problem, especially for children under the age of eight in Catawba County. Additional pediatric dentists are needed as well as dentists who will accept Medicaid for all ages.
- Although a greater percent of the population in Catawba County is receiving fluoridation through public water systems than the state or US, not all people can access or receive fluoridated water.
- Greater access and capacity to dental providers and services is needed for low income and Medicaid eligible adults who have untreated dental needs.

Conclusions

- Catawba County’s average number of decayed, missing and filled primary teeth in kindergarten-aged children is lower than North Carolina’s average, but is higher than the Healthy Carolinians 2010 objective.
- Catawba County’s percent of 5th graders with permanent teeth free of decay is higher than North Carolina’s average and well below the Healthy Carolinians 2010 objective.
- Catawba County’s percent of 5th graders with sealants is much higher than North Carolina’s percentage.
- Catawba County’s percent of Medicaid Eligible children at ages 1-5, 6-14, 15-20 receiving dental services are all considerably lower than the state averages.
- The 2004 Community Health Assessment Survey results revealed that the lack of dental services for children and is a high-ranking concern in the community.
- The early stages of tooth decay respond well to fluoride treatments, dental sealants and good oral hygiene practices, preventing the need for dental fillings or eventual tooth loss. To prevent early tooth decay from progressing to the stage where treatment is necessary, it is critical to continue programs that emphasize dental prevention.

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Influenza and Pneumonia

Overview

Influenza (also referred to as the flu) is a highly contagious viral infection of the respiratory system (nose, throat and lungs). It is one of the most severe illnesses of the winter season, affecting 5-20% of the U.S. population and causing 36,000 deaths annually. Those most at risk for flu and its complications are adults ages 50 and over, children under 5 years old, people living in long-term care facilities and those with certain chronic conditions. The best way to prevent the flu is to get a flu vaccination each year. The majority of flu cases can be treated successfully with bed rest and plenty of fluids. In more severe cases antiviral medication may be prescribed.

Pneumonia is an inflammation of the lungs most often caused by a bacterial or viral infection. It can also be caused by a fungal infection of some other organism. Each year it is responsible for more than 60,000 deaths in America. Like influenza, in the U.S. those most at risk are the elderly, the very young and people with chronic conditions or impaired immune systems. Worldwide it is the leading cause of death among children. Unlike influenza, pneumonia is rarely contagious. Instead it is contracted when the immune system is temporarily weakened. For example, pneumonia is often a complication that arises from the flu. Getting an annual flu shot can help prevent both illnesses. A vaccine is also available for bacterial pneumonia. Antibiotics may be an effective treatment for some forms of bacterial pneumonia, but drug-resistant bacterial pneumonia is a growing concern. Antiviral and antifungal medications may be prescribed for other forms of pneumonia. In less serious cases, bed rest and fluids are commonly recommended.

Catawba County Data

PNEUMONIA/FLU DEATHS		
Deaths per 100,000 population		
	North Carolina	Catawba County
65-84 years of age	87.2	110.7
Over the age of 85	704.9	975.2
Total Population	21.7	27.3

State Center for Health Statistics 2001- 2005

Death rates for pneumonia/flu in Catawba County are substantially higher than they are in North Carolina as a whole. Those over the age of 85 are at greatest risk for death from the diseases.

Trends

Although the death rate in Catawba County for pneumonia/flu consistently exceeds the rate for North Carolina, the gap is narrowing. While both rates have decreased since the 1999-2003 reporting period, the decrease in Catawba was more than twice that of the state.

Disparities

Mirroring the rest of the nation, in Catawba County, age is the primary risk factor for pneumonia and flu. They are most prevalent among persons age 65 and older.

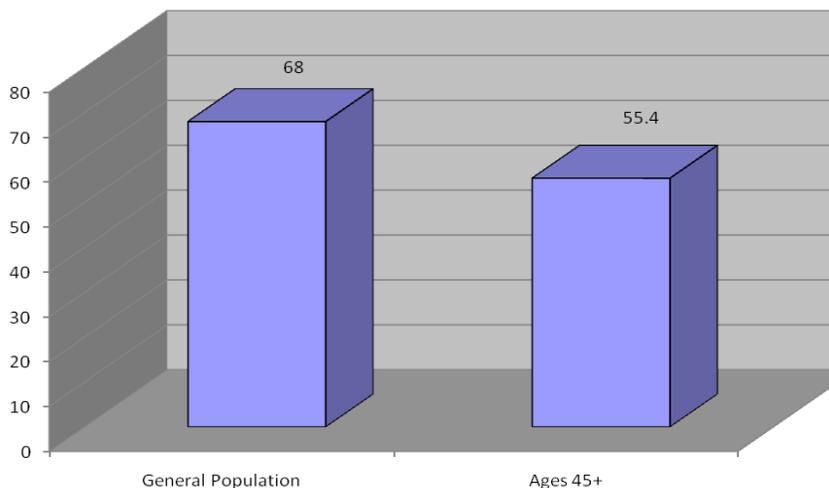
Community Voices

"I'm concerned about when sickness arises and no one is there to help. I'm afraid that I might not reach the medical facility in time."

Elderly Hmong Female

Results from the 2006 Behavioral Risk Factor Surveillance Survey (below) indicate that the majority of Catawba County adults do not get an annual flu vaccine, which is the most effective means of preventing the diseases.

**Catawba County Adults
Did Not Get a Flu Shot in the Past 12 Months**



Behind the numbers (left): More males than females did not get a flu shot; minority residents were less likely than white residents to be inoculated; and those whose household income was less than \$50,000/year were more likely to forego the shot than those whose annual income was \$50,000 and up.

National or State Data

Together, influenza and pneumonia are the 7th leading cause of death in the United States, and the 5th leading cause of death among persons 65 years of age or older. Of the two, pneumonia is responsible for the majority of deaths, accounting for 60,000 annually compared to 36,000 annually for flu.

Assets

- Catawba County Public Health’s Immunization Clinic provides influenza and pneumonia immunizations to the general public for a small fee along with educational material.
- Catawba County’s Seniors Morning Out program offers on-site flu vaccinations for their participants.
- Frye Regional Medical Center and Catawba Valley Medical Center offer flu and pneumonia vaccines to the community, as do many healthcare providers in the county.
- Some churches in Catawba County offer a Parish Nurse program to provide services and resources that assist in health preservation of the elderly.
- Frye Regional Medical Center’s pharmacists review the immunization status of all community-acquired pneumonia patients and recommend the vaccine for patients who have not received it.

National Data

Flu is the leading cause of death for any vaccine-preventable disease in the U.S.

Economic Impact

In 2004, pneumonia and influenza together represented a cost to the U.S. economy of **\$37.5 billion**.

Opportunities

- Many people feel immunizations are just for kids; however, adults as well as children need them for diseases including influenza and pneumonia. Adults over age 50 and those who fall into high-risk categories should get specific immunizations each year, as should young children in the high-risk group.
- A commonly cited reason for not getting flu and pneumonia vaccinations is the mistaken belief that the vaccines will cause the disease. Health educators must do a better job of dispelling that myth while providing correct information about the risks and benefits of the vaccines to the general population and particularly to those in the high-risk groups.
- The Centers for Disease control and Prevention recommends that all health-care providers have annual flu vaccinations, however, during the 2004-2005 season, just 43 % of health-care workers were vaccinated.

Conclusions

- Catawba County’s pneumonia/flu deaths per 100,000 population consistently exceed North Carolina’s deaths per 100,000 population.
- Populations most at risk for both diseases are the elderly, the very young and those with chronic conditions and compromised immune systems
- Flu is a highly preventable disease. The majority of adults in Catawba County do not get a flu shot; misinformation contributes to the vaccine low rate.

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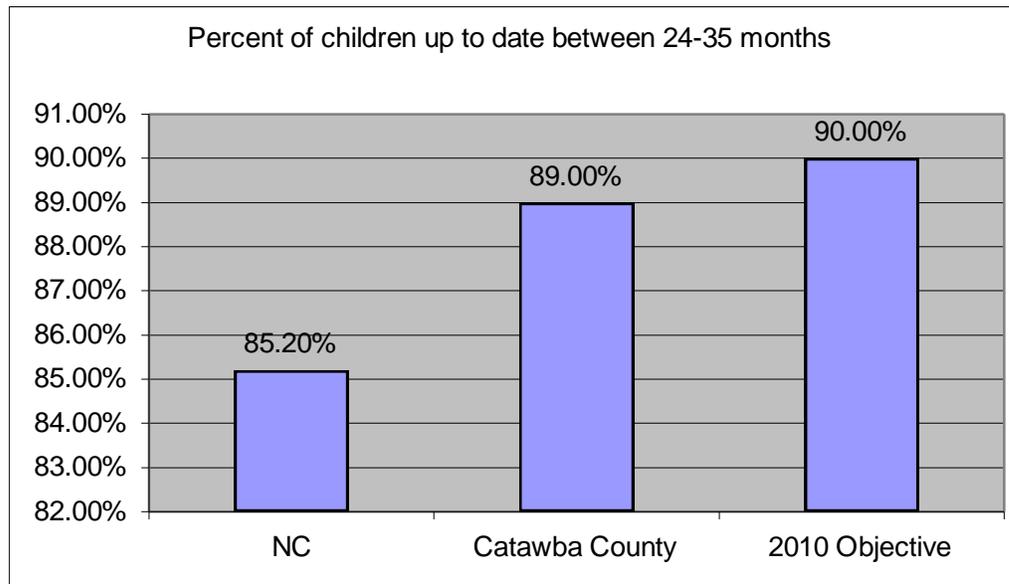
Immunizations

Overview

Controlling the spread of infectious diseases through immunizations is one of public health's most remarkable accomplishments. Vaccines are among the most successful and cost-effective tools available for preventing disease and death. They help protect individuals from developing serious diseases, and also protect entire communities by preventing and decreasing the spread of infections. We now have resources available to protect our children and adults against thirteen diseases, which in the past have caused disability, suffering, and premature death. North Carolina is part of the Universal Childhood Vaccine Distribution Program (UCVDP), and all children, birth through 18 years of age are eligible for required state-supplied vaccines, regardless of their insurance status. Vaccines for adults are also provided for those in high-risk groups, and those traveling to other countries. North Carolina is committed to protecting and promoting public health by eliminating the spread of vaccine-preventable diseases. According to the 2005 National Immunization Survey, North Carolina had 85.2% of children immunized with 4 DtaP, 3 Polio, 1 MMR, 3 Hepatitis B, and 3 HIB, by 35 months of age. The National average was 81%.

Catawba County Data

The following graphs compare 2005 statistical data for immunizations for Catawba County, North Carolina and the Healthy Carolinians 2010 objective:



State Center for Health Statistics, 2005

Catawba County appears to be on track for meeting the Healthy Carolinians 2010 Objective for early-childhood immunizations.

Trends

For the past five years, Catawba County's childhood immunization rates have remained steady.

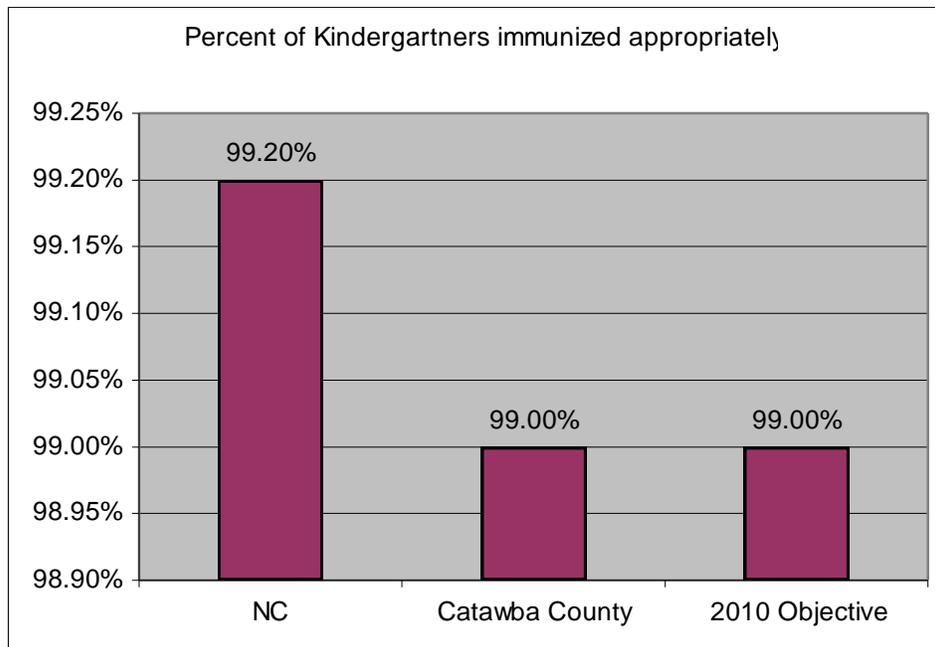
Community Voices

"I have taken my children to the Health Department to get shots. I felt really welcome and was treated very nicely"

Latino Male

National Data

Record high coverage rates have been achieved, and the national goal of 89% has been met.



State Center for Health Statistics, 2005

Although Catawba County has already met the Healthy Carolinians 2010 Objective for immunized Kindergartner children, the county lags the state as a whole, which has surpassed the objective. The closer the county comes to immunizing 100% of children, the healthier our youth will be.

National Data

The Centers for Disease Control and Prevention (CDC) reports the following statistics for Immunizations in the United States. This information is for children 19-35 months of age for selected diseases during 2004.

- Percent vaccinated against Diphtheria, Tetanus, Whooping cough: 86 %
- Percent vaccinated against Polio: 92 %
- Percent vaccinated against Measles, Mumps, and Rubella: 93 %
- Percent vaccinated against Haemophilus (HIB): 94 %
- Percent vaccinated against Hepatitis B: 93 %
- Percent vaccinated against Varicella: 88 %

North Carolina Data

North Carolina's immunization rate for children at age 2, during 2005, was among the best in the nation. This is due to the availability of low cost or free vaccine provided to private physician's offices and to public health departments in the state. Also a factor is the statewide immunization registry, which began in June of 2005 that links public and private providers with immunization information to ensure correct and timely vaccinations for our children.

Economic Impact

A recent study by the CDC found that the use of the seven standard childhood vaccines will prevent more than 14 million cases of disease and more than 35,500 death of the lifetime of children born this year. The associated savings are nearly **\$10 billion per year.**

Add the cost savings associated with patients not having to seek care and parents not having to take time off work to be care for sick children and the savings to society increases to more **than \$40 billion annually.**

Assets

- Private physicians offer childhood vaccines to children.

Catawba County Public Health offers the following services to ensure maximum immunizations to the community.

- Childhood vaccinations, free of charge, for all children (birth through 18 years of age), as well as adult immunizations for a fee.
- Child Health Clinic and Totally Teens provide checkups and immunizations for children and teens.
- School nurses work closely with the school systems and routinely review and audit student records to ensure that immunizations are up to date.
- A web based statewide registry, called the North Carolina Immunization Registry (NCIR), which assists in the evaluation of a child's immunization status, and identifies children who need or are past due for immunizations. NCIR also assists with accessing recorded childhood immunizations administered in North Carolina, regardless of where the immunizations were given.
- Assistance to private providers in the use of NCIR is available so that immunization records are assessable to all involved.

Opportunities

- Although the North Carolina Immunization Registry is a great resource, Catawba County needs to work with the state to train all private providers that use state vaccine.
- One-on-one training from the state in using the NCIR is needed, so providers will be able to appropriately and successfully use all of the NCIR functions.
- The North Carolina Immunization Registry is unable to run specific reports for a county, such as demographic information.

Conclusion

- Catawba County's 2-year-old rate assessment is just slightly below the North Carolina age appropriate level of 90% or more.
- The percentage of kindergartener's appropriately immunized for school in Catawba County has met the 2010 goal.
- Due to the new North Carolina Immunization Registry (NCIR), Catawba County has greater access to complete, accurate, and relevant immunization data.

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www.ncchild.org

www.immunize.com

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Asthma

Overview

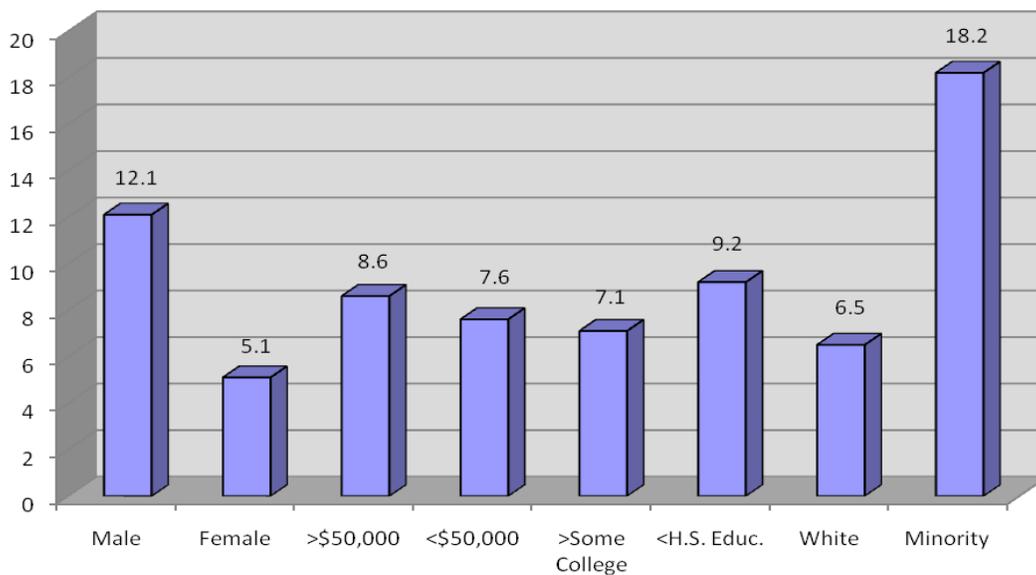
Asthma is a chronic inflammatory lung disease that causes recurrent episodes of coughing, wheezing, and breathing difficulty. It is primarily an allergic disease that affects 20 million Americans, 9 million of whom are under age 18. During an acute asthma episode, the airway lining becomes inflamed and swollen along with mucus production and muscle spasms that block airflow. Unless treated, this process results in tissue damage and chronic airway inflammation.

Asthma symptoms tend to vary from day to day and season to season. Triggers include exposure to tree or weed pollens, animal fur or dander, household dust, cigarette smoke, cockroaches, and mold. Exercise and cold weather can also trigger episodes. While asthma cannot be cured, it can be controlled so that sufferers experience minimal and infrequent symptoms and can live an active life. Asthma control is based on avoidance of irritants, use of maintenance medications to prevent flare-ups, regular doctor's office visits for routine medical care, and patient / parent education.

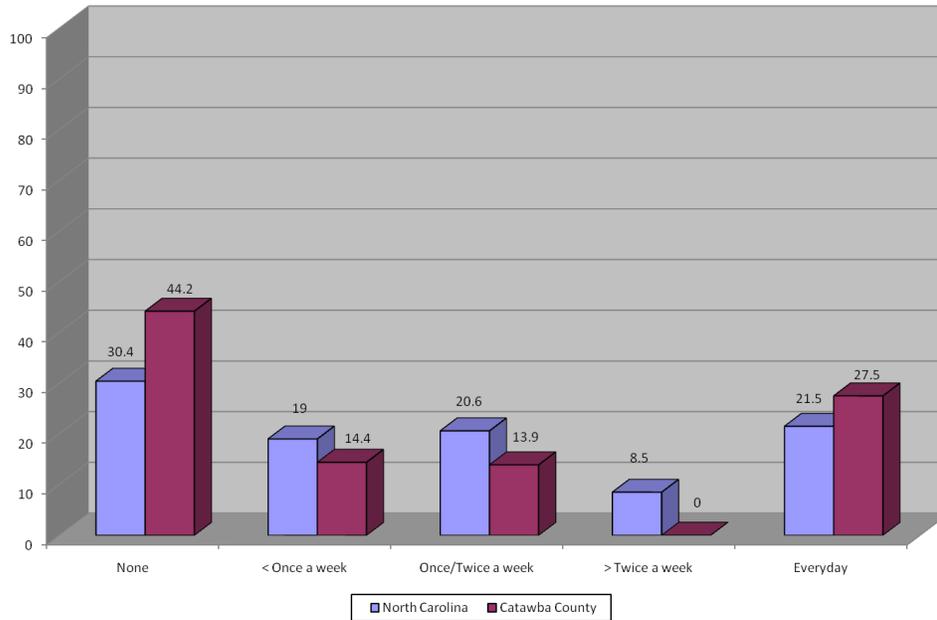
Catawba County Data

According to the 2006 Behavioral Risk Factor Surveillance Survey (BRFSS), 8% of Catawba County respondents said that they had been diagnosed with asthma. Below is a snapshot of their socioeconomic status. In general asthma is more prevalent among males and minorities as well as those with less education.

Catawba County Adults Diagnosed With Asthma



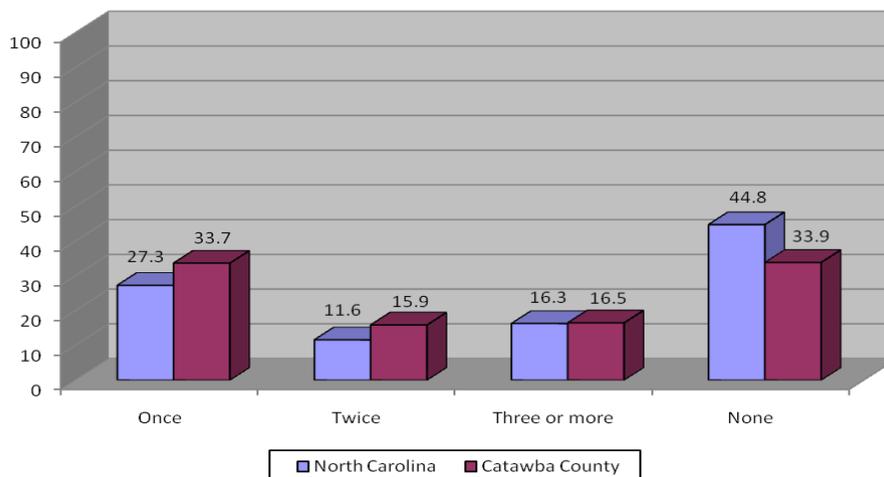
Past Month, How Often Did You Have Symptoms of Asthma



Behavior Risk Factor Surveillance System (BRFFS), 2005

Frequency (above): When asked how often 2005 BRFFS survey participants had experienced symptoms of asthma, 56% of the Catawba County respondents said that they experienced symptoms at least once a week, with half experiencing symptoms daily.

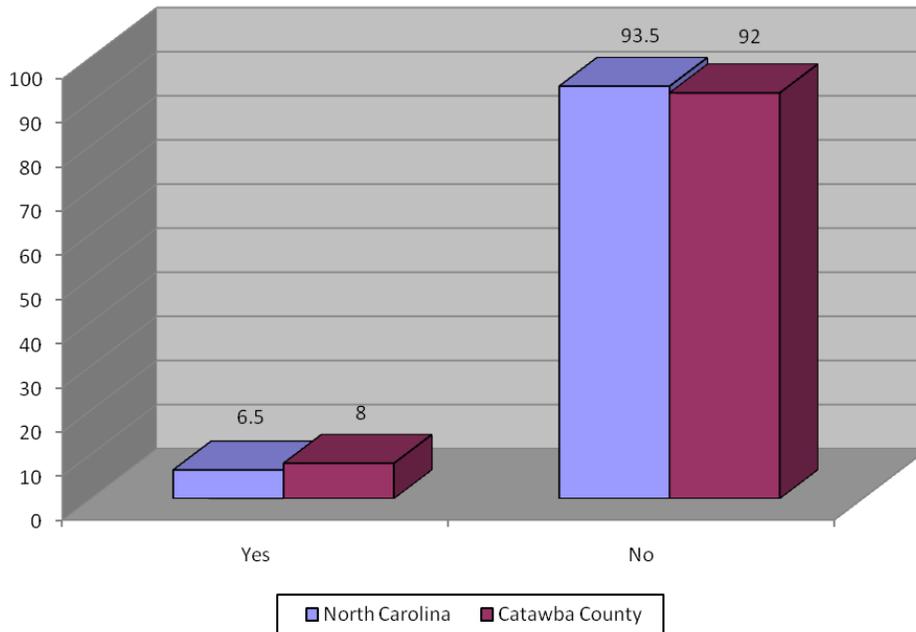
Past Year, How Many Times Did You See A Doctor For A Routine Asthma Checkup



Behavior Risk Factor Surveillance System (BRFFS), 2005

Controlling asthma (left): Consistent and regular medical care is an important part of asthma control. Among Catawba County respondents with asthma, 65% stated that they had been to a doctor for routine care in the past year. 33% had been seen once with the rest having been seen two or more times within the year. However, 34% of respondents have not seen a doctor for routine asthma checkups in the past year, leaving them at risk for complications of asthma.

Still Have Asthma



Misinformation (left): Despite the fact that asthma is not a curable disease, an alarming number of respondents who have been diagnosed with asthma believe they no longer have the disease.

Behavior Risk Factor Surveillance System (BRFFS), 2005

ASTHMA			
<i>Hospitalizations per 100,000 population</i>			
	<i>North Carolina</i>	<i>Catawba County</i>	<i>NC 2010 Target</i>
Asthma Hospitalizations			
0 to 14 years of age	164.6	56.2	
Total Population	128.5	60.4	118.0

State Center for Health Statistics 2001- 2005

Hospitalizations (below): Data from the 2007 Public Health Report Card for Catawba County indicates that the County has exceeded by having over 50% less the state’s 2010 objective for asthma-related hospitalizations.

National and State Data

- From 1996 to 2006 the number of students in North Carolina public schools that have asthma rose from 1.5% to 5.9%.
- African American/Black and Hispanic/Latino children more frequently use emergency departments for medical care of their asthma, are more likely to be hospitalized, and are more likely to die from asthma than Caucasian/White children.
- Research reveals a strong relationship between poverty and asthma.
- Asthma incidence increases by 50% in overweight/obese individuals.
- Children with asthma exposed to the secondhand smoke had 70% more asthma attacks than those with little or no exposure.

Trends

In Catawba County asthma-related hospitalizations for the general population and for children under age 14 were substantially lower in 2004 than they were in 2003 (SCHS, 2003 & 2004).

Disparities

In Catawba County adult asthma prevalence is three times greater among the minority population than among the white population (BRFSS, 2005).

Community Voices

“Why should we take our children to the doctor here, when we have noticed that everything is viruses; that is all the doctors tell you. You wait longer for the doctor to come see you than the time he takes to examine the patient or write a prescription.”

Latina Female

Assets

- There are two Asthma and Allergy specialists in Hickory who provide comprehensive screening and management for children and adults with asthma.
- Catawba County Public health offers “Project ON TRAC” (Taking Responsibility for Asthma Control), a free treatment and education program.
- Camp Air Adventure is administered by Frye Regional Medical Center in collaboration with the American Lung Association of North Carolina for children ages 8-12 years old. Financial assistance is available.
- Frye Regional Medical Center offers a support group, the Better Breather’s Club, for people who suffer from respiratory illness or lung disease.
- School nurses utilize “Open Airway’s Program” to develop individualized care plans for children with asthma.
- Children in congregate care from birth to age 18 are protected during daytime ozone season while in childcare centers or public schools in Catawba County.
- Smoke Free Catawba is an initiative coordinated by Catawba County Public Health, in partnership with the NC Health and Wellness Trust Fund and the American Cancer Society, to raise awareness of health risks associated with secondhand smoke, including asthma.

Opportunities

- Primary care providers need to be more diligent in screening for asthma during routine adult and child preventive care visits. If asthma is suspected, the patient should be referred to an asthma/allergy specialist for evaluation.
- The impoverished, uninsured, and underinsured of all ages have higher morbidity and mortality from asthma than those living above the poverty level.
- The ability to obtain asthma medications at reasonable costs is an unmet need for the insured as well as the uninsured. Out-of-pocket medication expenses are unaffordable for many families who are uninsured but do not qualify for Medicaid assistance. For those with adequate medical insurance, lack of generic options results in unaffordable monthly medication costs due to high co-payments. Both situations influence the parent’s or patient’s ability to comply with an asthma treatment plan.
- Educational programs by healthcare providers regarding the need for ongoing medical management, as well as the chronic nature of asthma are also needed. Parental education and ongoing involvement in asthma care is crucial in the management of the disease process. Involvement of social workers would be useful in this area for Medicaid recipients.
- On a national level, healthcare providers and patients often have restricted access to newer, more effective asthma medications. These therapies are often discouraged by excessive preauthorization processes or completely denied by insurance carriers. Although these practices are designed to decrease healthcare and pharmaceutical costs, they actually

National Data

Children 5-17 years of age missed 14.7 million school days due to asthma.

Adults 18 years of age and over who were currently employed missed 11.8 million work days due to asthma (National Health Interview Survey, 2002).

Economic Impact

Annual direct health cares costs associated with asthma are **\$11.5 billion**. Indirect costs (e.g. lost productivity) bring the total to **\$16.1 billion**. Of that total \$5 billion is prescription drug costs.

increase the cost of long-term healthcare expenditures for asthma patients and their families. Asthma treatment plans should include the most effective therapeutic options that are determined by providers and patients—not the insurance industry.

Conclusions

- Although Catawba County is below the North Carolina rate as well as the NC Healthy Carolinians 2010 objective for asthma related hospitalizations, there is area for improvement in the diagnosis, treatment, and management of asthma.
- Minorities have a 2.5 times higher mortality rate than Caucasian/Whites due to asthma.²
- A number of community services are available for asthmatics through Catawba County Public Health, area hospitals, and non-profit organizations.
- Catawba County school nurses track the number of asthma related school absences, in order to implement measures to decrease morbidity and improve school attendance due to exacerbation of asthma attacks.
- Health-care costs of asthma management will ultimately be controlled by early diagnosis, education measures, and effective preventive treatment plans at reasonable costs.

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Asthma Panel: Candace Harrington, MS, APRN, BC, NP-C; Joseph T. Inglefield, III, MD

Communicable Disease

Overview

The four main objectives for Catawba County Public Health Communicable Disease under the direction and collaboration with the NC General Communicable disease control Branch are:

- To promptly investigate disease outbreaks and unusual situation and to implement control measures to minimize further transmission of disease
- To monitor disease-reporting by physicians and laboratories in order to detect trends
- To provide a channel of communication between Catawba County Public Health, private physicians, and hospital and occupational infection control personnel, as an essential part of disease control efforts
- To explain public health interventions and disseminate health education messages to the community in order to enhance disease control efforts.
- There are 70 different diseases mandated by law as reportable to the State of NC Communicable Branch. These range from food borne, airborne, blood borne, water borne or vector borne. The following table represents five of the diseases followed by Communicable Disease.

Catawba County Data

COMMUNICABLE DISEASES		
New Cases per 100,000	North Carolina	Catawba County
Hepatitis A	1.1	0.5
Hepatitis B	1.5	1.8
Salmonellosis	14	7.8
Tuberculosis	3.3	0.7
Whooping Cough	.9	1.1

State Center for Health Statistics 2001- 2005

Between 2001-2005, Catawba County had fewer new cases than North Carolina of Hepatitis A, salmonellosis, and tuberculosis while new cases of Hepatitis B and whooping cough were slightly more.

National or State Data

Table 1: N.C. and U.S. TB Case Rate and N.C. Ranking in U.S. by TB Case Rate 2002-2006

Year	Rates		NC Rank
	US	NC	
2002	5.2	5.2	14
2003	5.1	4.4	21
2004	4.9	4.5	19
2005	4.8	3.8	25
2006	4.6	4.2	18

Annual surveillance reports published by CDC.

Trends

Most of the communicable diseases in Catawba County are lower than NC rates and have remained level. According to trend data, new cases of Hepatitis B per 100,000 population has increased from 1.5 to 1.8 and is marginally higher than the NC rate.

Disparities

In Catawba County, Hepatitis B disproportionately affects the Asian community.

Although Tuberculosis has decreased in Catawba County, it is a disease often diagnosed in the foreign born population.

Community Voices

"We will also like to have help of some kind for illegal people, because we get sick as well."

Latina Female

This chart above shows that North Carolina has remained lower than the United States rates of Tuberculosis from year 2002-2006.

- According to the 2002-2006 rates of Tuberculosis in North Carolina, the rate for males is over twice the rate for females, the rates for Asians is very high (38.8 per 100,000), the rate for Blacks/African Americans is over three times that for whites, and the rate for Hispanics is almost four times that for non-Hispanics.
- National studies have shown that about 12.5 million Americans have been infected with Hepatitis B at some point in their lifetime. One and one quarter million Americans are estimated to have chronic Hepatitis B, of whom 20 to 30 percent acquired their infection in childhood. Chronic Hepatitis B increases a person's risk for chronic liver disease, cirrhosis, and liver cancer.
- About 5,000 persons will die each year in the United States from Hepatitis B-related liver disease resulting in over \$700 million in medical and work loss costs.
- The number of new Hepatitis B cases per year has declined from an average of 450,000 in the 1980s to about 80,000 in 1999. The greatest decline has occurred among children and adolescents due to routine Hepatitis B vaccination.
- Infants and children who become infected with Hepatitis B virus are at highest risk of developing lifelong infection, which often leads to death from liver disease (cirrhosis) and liver cancer. Approximately 25 percent of children who become infected with life-long Hepatitis B are expected to die of related liver disease as adults.

Assets

The Catawba County Public Health Communicable Disease program:

- Works to prevent and control the spread of communicable diseases by investigation, implementation of preventive and control measures, education of the public, and the medical community.
- Monitors and controls tuberculosis through x-ray, preventative drug treatment, and surveillance.
- Monitors disease incidence and ensures treatment of all NC reportable communicable diseases.
- Catawba County Environmental Health program provides education and enforcement of State and Local regulations regarding food sanitation, sub-surface sewage disposal, and other environmental concerns to individuals and businesses in Catawba County.
- Catawba County Animal Control and Care works with Public Health and other partners to prevent and reduce the incidence of zoonotic diseases.
- Has access to epidemiologists, infectious disease physicians, and other communicable disease experts through contract with the NC General Communicable Disease Branch in Raleigh.
- Catawba County Public Health conducts an annual Hepatitis B vaccination program for all children in 6th grade.

National Data

Since 1993, the United States has experienced a steady decline in Tuberculosis rates.

Economic Impact

About 5,000 persons will die each year in the US from hepatitis B-related liver disease resulting in over **\$700 million** in medical and work loss costs.

Opportunities

- Educate foreign born people about signs, symptoms, and where to receive preventative treatment for tuberculosis.
- Develop and disseminate prevention education about Hepatitis B to the community. Education directed specifically to the Asian community should be considered.
- Disseminate information to kids in the schools, possibly through the school nurse program. Utilize the school nurse program to disseminate the free vaccine, T-dap, to school age children to decrease the incidence of whooping cough.
- Distribute immunization information to Catawba County Home School Association.
- Implement a campaign about communicable disease prevention in partnership with the United Hmong Association, Centro Latino, and physician offices.

Conclusions

- Catawba County is much lower than North Carolina rates for new communicable diseases such as Hepatitis A, Salmonellosis, and Tuberculosis.
- Catawba County is higher than North Carolina State rates for Hepatitis B, and whooping cough.
- The rate of tuberculosis in North Carolina has been lower than the United States (2002-2006) and Catawba County has been lower than North Carolina (2001-2005).
- In North Carolina, tuberculosis rates for blacks are 3 times greater than whites and the rate for Hispanics is almost 4 times greater than non-Hispanics.

References

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Mental Health

Overview

Mental health can be described as a continuum of how individuals think, feel and cope with life. At one end of the spectrum are those who are in control of their thoughts, feelings, and behaviors, feel good about themselves, have healthy relationships, and are able to function appropriately at work, at home and in social situations. On the other end of the spectrum are those with mental illness, a term that refers to various mental disorders, including disorders of thought, mood and behavior. Dr. Daniel Hall-Flavin, a psychiatrist at the Mayo Clinic notes that, "To be classified as a mental illness the condition must cause distress and result in a reduced ability to function psychologically, socially, occupationally or interpersonally." In the U.S., mental disorders are diagnosed based on the Diagnostic and Statistical Manual of Mental Disorders, fourth edition (DSM-IV).

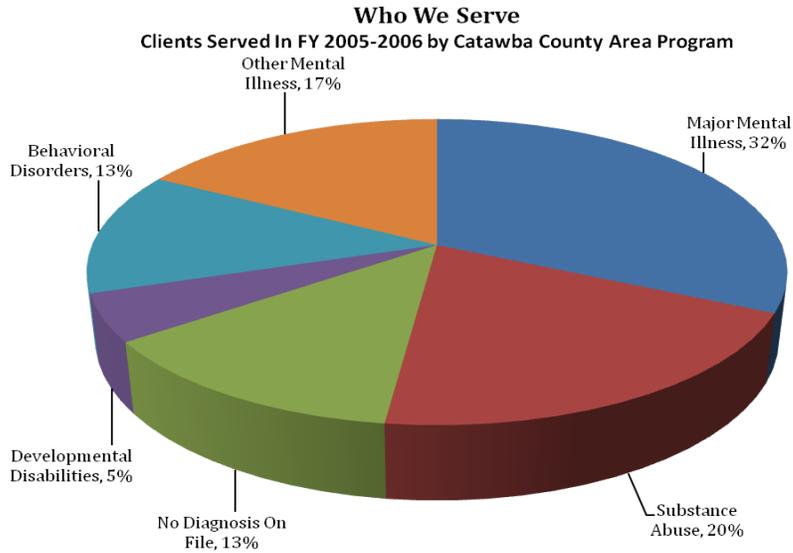
According to estimates by the Federal Center for Mental Health Services, approximately 5.4% of adults have a serious mental illness, which translates into approximately 322,000 adults in North Carolina. North Carolina conservatively estimates that 10-12% of the state's children (196,000 to 235,000) experience serious emotional disturbances.

Catawba County Data

The North Carolina Division of Mental Health, Substance Abuse and Developmental Disabilities Community Systems Progress Indicators 3rd quarter report for 2006-2007 provides a breakdown of individuals in need of mental health services in Catawba County.

- An estimated 6,164 adults are in need of service and approximately 41% are served by the public system as compared to the state average of 38%.
- An estimated 3,727 children and adolescents are in need of services and approximately 45% are served by the public system as compared to the state average of 36%.
- Catawba County is able to ensure timely initiation and engagement into services 39% of the time compared to the state average of 36%.
- 40% of Catawba County hospitalized consumers spend 1-7 days in the State hospital compared to the state average of 55%.

Following is a profile of the clients served by Mental Health Services of Catawba County, 2005-2006. The majority of services provided were to those with diagnosed mental disorders, while 20% were to those with substance abuse issues. Only 5% were seen for developmental disabilities. Approximately 75% of the clientele served were Caucasian and 70% were adults, ages 18-65. There was an almost equal divide between the sexes.



Mental Health Services of Catawba County Annual Report 2005-2006

Clients Served by DISABILITY:		
Mental Health	3,680	62%
Substance Abuse	1,143	20%
Developmental Disabilities	263	5%
No Diagnosis On File	741	13%
	<u>5,827</u>	<u>100%</u>

Number of Service Events by DISABILITY:		
Mental Health	99,149	61%
Substance Abuse	11,326	7%
Developmental Disabilities	51,772	32%
	<u>162,247</u>	<u>100%</u>

Clients Served by RACE:	
African-American	957
Asian	50
Hispanic	201
Native American	13
White	4,485
Other or Unknown	121
**Total	<u>5,827</u>

Clients Served by AGE GROUP:	
Children 0-17	1,665
Adults 18-64	4,036
Adults 65+	125
Unknown	1
**Total	<u>5,827</u>

Clients Served By SEX:	
Female	2976
Male	2851
**Total	<u>5827</u>

Mental Health Services of Catawba County Annual Report 2005-2006

Trends

Youth Search Institute data from 2000 to 2007 shows that the number of teens in Catawba County who reported depression and/or suicide attempts have decreased.

Disparities

County-level data is not available but nationally the prevalence of mental disorders is similar in populations, regardless of race or ethnicity. Wide disparities however, do exist in minority access to and use of mental health services, the quality of those services, and minority representation in mental health research.

Community Voices

"[We need] counseling services —not just for teens. Sometimes you just need someone to talk to...some things are too personal to talk to friends about."

African-American Female

Catawba County Youth Mental Health:

The 2007 Youth Search Institute Survey, given to Catawba County public school students, measured several mental health high-risk behaviors, including depression, suicide attempts and eating disorders. The findings, below, show that approximately one-quarter of those sampled consider themselves to be depressed and/or have attempted suicide, with girls responding affirmatively nearly twice as often as boys. Engaging in bulimic or anorexic behavior, once thought to be primarily associated with females, was behavior experienced by a percentage of males as well.

Percent of Catawba County Youth Reporting Depression and/or Suicide Attempt						
Mental-Health Behavior	Total %	Gender		Grade		
		Male	Female	8th	10th	12th
Is frequently depressed and/or has attempted suicide	24	17	31	21	25	25
Felt sad or depressed most or all of the time in the last month	16	11	22	17	15	16
Has attempted suicide one or more times	14	10	17	11	15	15
Has engaged in bulimic or anorexic behavior	15	13	17	11	19	16

Youth Search Institute Survey, 2007

National or State Data

- Mental disorders are not uncommon. An estimated 26.2% of Americans ages 18 and older — about one in four adults — suffer from a diagnosable mental disorder in a given year. When applied to the 2004 U.S. Census, that figure translates to 57.7 million people.
- Mental disorders are the leading cause of disability in the U.S. and Canada for ages 15-44. Nearly half of those with any mental disorder meet criteria for 2 or more disorders, with severity strongly related to co morbidity.
- In many cases mental disorders begin in youth and become chronic diseases. Half of all lifetime cases begin by age 14 and three quarters are present by age 24.

Assets

- As part of statewide mental health reform, Mental Health Services of Catawba County (MHSCC) has become the centralized link for services for individuals and families dealing with mental health, developmental disabilities and/or substance abuse. MHSCC oversees a network of service providers, identifies service gaps and develops resources and programs to fill the gaps. Below are programs that MHSCC has developed

National Data

In Sept. 2007, the U.S. Senate unanimously passed the Mental Health Parity Bill requiring insurance policies that cover mental illness, do so at levels equal to the coverage the provide for physical illnesses. The change is expected to allow millions of Americans to access mental health, which have previously been unavailable.

Economic Impact

In 1996—the last year for which figures are available—direct and indirect costs associated with mental illness in the U.S. were estimated to be **\$146.6 billion**.

- Catawba County is a pilot site for Mobile Crisis Services, which sends services to individuals in crisis and links them with community services.
- Closer to Home is a collaborative between MHSCC, Pathways and New River Local Managing Entities covering 9 counties. The partnership between these programs and Catawba Valley Medical Center and Catawba Valley Behavioral Healthcare helps consumers facing hospitalization receive services closer to their community. This partnership ensures consumers are linked to community resources and less likely to be placed at Broughton.
- ACT Expansion extends specialized services for children struggling with behavior issues in their regular school through the summer months.
- Catawba County benefits from the presence of two local hospitals that offer psychiatric beds.
- Consumers needing to access mental health services in Catawba County can call the MHSCC Access Number: 877-327-2593 or they may contact a treatment provider directly.
- Information on treatment providers under contract with MHSSS is available at www.catawbacountync.gov/mentalhealth/

Opportunities

- The greatest unmet need in Catawba County is for services and programs for young adults, ages 18-25. The transition from children's services to adult services limits the resources available at a particularly vulnerable time in their lives.
- Psychiatric services continue to be a struggle to provide due to the limited number of psychiatrists that work in the public sector.
- Mental illness consumers are frequently uninsured or underinsured increasing the likelihood that they cannot access treatment and medication.
- Housing is a critical component to assure that individuals with mental illness are able to maintain access to care. Consumers are frequently unable to obtain safe and affordable housing due to hospitalizations or involvement with the criminal justice system.
- The unique needs of individuals with a traumatic brain injury whether received from an accident or war injury is just coming to light. The struggle is to determine if this is a mental illness or a developmental disability as they do not fit in the current definitions.
- Catawba County has limited resources for families and individuals to receive peer support; however one benefit from mental health reform is that consumers and families are developing more natural supports.
- Employment opportunities for those with severe and persistent mental illness are difficult to find, especially as unemployment rises; additionally consumers earning an income may no longer qualify for Medicaid, jeopardizing their access to medicine and services.

Conclusions

- Of the 5,827 adults and children that accessed mental health services, 62% were for mental health, 20% for substance abuse, 5% for disabilities, and 13% were unknown.
- The majority of these individuals were white adults and about equal for male and females.
- Catawba County benefits from two local hospitals that offer psychiatric services as well as strong collaborative relationships between Mental Health Services of Catawba County, law enforcement, county management and the provider network.
- While Catawba County has more resources than many communities there are still unmet needs. In cooperation with the community MHSCC will work to close gaps in services and meet the needs of mentally ill residents.

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Substance Abuse

Overview

Substance abuse is a complex and costly disease. The prevention, diagnosis, and treatment of substance abuse is difficult for several reasons. Many individuals with substance abuse problems either do not recognize they have a problem or do not seek treatment due to access barriers. Nearly 90% of people that abuse or depend on alcohol or illicit drugs never seek treatment. The few who do seek treatment may encounter problems accessing it due to service availability or cost. Approximately 2.6% of North Carolinians needed but did not receive treatment for alcohol disorders in 2004. The percentage of the population with unmet drug treatment needs is even higher (5.1%).

Alcohol and drug abuse cost the North Carolina economy over \$12.4 billion in direct and indirect costs in 2004. Overall, North Carolina spent less than \$140 million to fund substance abuse services in the state, a sum that left North Carolina substance abuse services under-funded in relation to other states. A report presented to the NC General Assembly in 2007 estimated it would take an additional \$35 million in appropriations to achieve parity with national per capita funding for substance abuse services. In addition to the direct costs of prevention, treatment, and rehabilitation, substance abuse accrues additional indirect costs associated with motor vehicles accidents, premature death, co morbid conditions, loss of productivity, and unemployment.

Substance abuse and addiction is a widespread problem that cuts across all ages, ethnicities, geographic areas, and socio-economic groups. In 2004 an estimated 839,528 people in North Carolina abused drugs and/or alcohol, and over 4 million others were affected by another person's substance abuse problems making it one of North Carolina's most expensive health problems. In addition, youth are experiencing pressure to use alcohol, tobacco, and illegal drugs at increasingly earlier ages. In one survey adolescents ages 12 to 17 named drugs, along with social and academic pressures, as the most important problem they face.

Catawba County Data

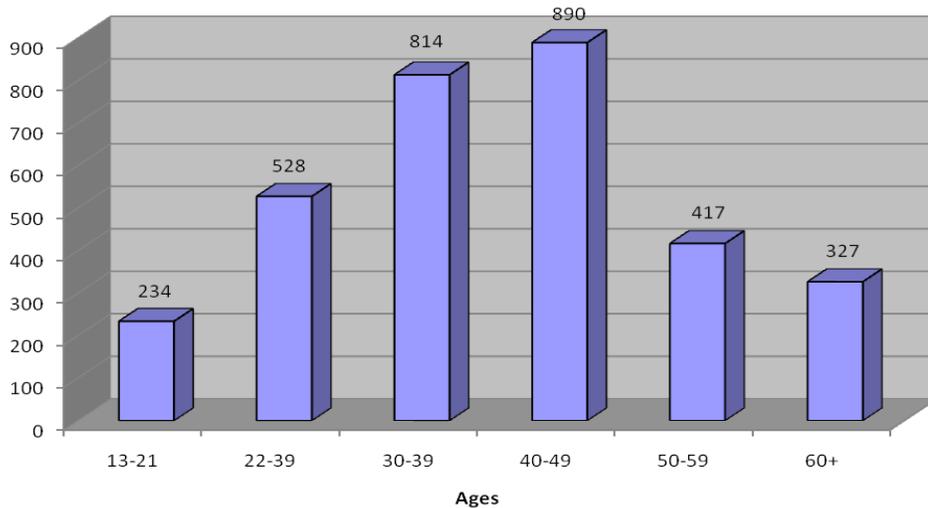
Results of the 2006 Behavior Risk Factor Surveillance Survey show that most adults in Catawba County do not abuse alcohol: 56% of county respondents did not have a single drink in the 30 days preceding the survey; among those that did drink, 75% said on no occasion did they have 5 or more drinks; in fact, when they drank, nearly three-quarters did so in moderation, imbibing one or two drinks.

However, for the segment of the population for which alcohol and addiction is a problem, it is a significant problem. The 2004 North Carolina Epidemiologic Data released by the Alcohol/Drug Council of North Carolina shows the following statistics for Catawba County.

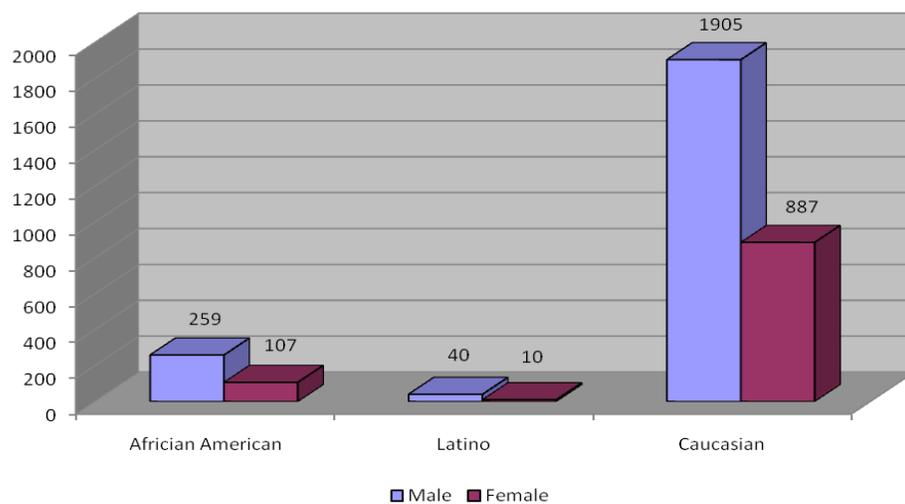
- An estimated 7.8% (11,644 people) in Catawba County have addiction issues.
- An estimated 38.9% (58,220 people) in Catawba County are affected by someone who is addicted to drugs and/or alcohol.
- In 2004 in Catawba County there were 565 DWI arrests and 534 drug arrests. (These numbers do not include arrests for other crimes such as assault, breaking & entering or larceny that are committed because of an addiction to drugs and/or alcohol.)

Catawba Valley Medical Center (CVMC) and Frye Regional Medical Center (FRMC), provided admissions data for 2003-04 (below) shows that a substantial number of patients that presented at the emergency rooms with substance-related problems were Caucasian males, ages 30-49.

**Catawba County Substance Related ER Visits
2003-2004**



**Catawba County Substance Related ER Visits
2003-2004**



Catawba County Youth Data

Results of the 2007 Youth Search Institute Survey (below) show that substantial percentages of Catawba County students partake in risky alcohol or drug related behaviors. With regard to alcohol:

- Alcohol is the substance of choice, with one-third of the 942 students surveyed saying that they used alcohol in the past 30 days;
- Nearly one-quarter of them acknowledged that they had been drunk at least once in the 2-week period preceding the survey;
- Half of all seniors used alcohol in the 30 days prior to filling out the survey, and one-third of them had been drunk;
- Males were more likely to engage in alcohol use and abuse than females;
- Females were more likely than males to get in a car with someone that had been drinking;
- And nearly one-third of 8th graders rode in a car with someone who had been drinking at least once in the past year.

Percent of Catawba County Youth Reporting Alcohol-Related Behaviors						
Alcohol-Related Behavior	Total %	Gender		Grade		
		Males	Female	8th	10th	12th
Used alcohol once or more in the last 30 days	34	38	28	17	39	50
Got drunk once or more in the last 2 weeks	23	26	19	12	27	33
Drove after drinking once or more in last 12 months	13	15	10	7	12	11
Rode (once or more in last 12 months) with driver who had been drinking	34	32	35	31	33	37

Youth Search Institute Survey, 2007

With regard to drugs:

- Following alcohol, marijuana is the drug of choice, with one-fifth of the total sample and one-third of seniors reporting marijuana use in the past year;
- Use of inhalants becomes less prevalent as students go up in grade;
- And females are more likely than males to engage in inhalant use and as likely as males to engage in the use of other illicit drugs.

Percent of Catawba County Youth Reporting Drug-Related Behaviors						
Drug-Related Behavior	Total%	Gender		Grade		
		Males	Female	8th	10th	12th
Sniffed or inhaled substances to get high once or more in last 12 months	9	8	10	12	10	3
Used marijuana once or more in last 12 months	20	24	16	11	22	31
Used other illicit drugs once or more in last 12 months*	10	10	10	7	12	11

Youth Search Institute Survey, 2007

*Includes cocaine, LSD, PCP or angel dust, heroin, and amphetamine

Trends

Youth Institute
Survey data from
2000 to 2007
shows:

- An increase in teens abstaining from alcohol use
- A decline in teens experimenting with small to moderate amounts of alcohol.
- An increase in teens that consume larger quantities of alcohol in one occasion
- Increase in lifetime marijuana use for 10th graders; a decrease for 8th graders
- Increase in teens using cocaine, heroin, and inhalants

Disparities

In Catawba County the majority of people who present at hospital emergency rooms with substance-related problems are Caucasian males, ages 30-49.

National or State Data

The *2004-2005 National Survey on Drug Use and Health (NSDUH)* reports the following statistics for North Carolina:

- Among youth surveyed ages 12 to 17, 10.87% reported current use of illegal drugs in the 30 days before the study.
- Among young adults surveyed ages 18-25, 17.39% reported current use of illegal drugs in the 30 days before the study.
- Among adults 26 years of age or older, 5.16% reported current use of illegal drugs in the 30 days before the study.
- And the rate of past month alcohol use in North Carolina among all persons aged 12 or older was 43.62%.

Assets

- During the past fiscal year (2005-06) Mental Health Services of Catawba County (MHSCC) completed the transition from a provider of services to a manager of services. They now serve as a centralized link to community services for individuals and families dealing with mental health, developmental disability or substance abuse issues.
- A multi-purpose resource center, built in collaboration with MHSCC and the Salvation Army, is a one-stop shop for services in the community. Services include substance abuse counseling and assistance in housing.
- The Jail Diversion Task Force, comprised of representatives from law enforcement, county management, the judicial system and treatment providers is developing recommendations to deal with the issue of inappropriate placements in jail rather than in treatment facilities.
- Substance abuse is a priority issue for Catawba County Health Partners (CCHP). Through CCHP, a community coalition is focusing on reducing the number of substance-related emergency-room visits by 2008. The committee is working through Family Day to make substance abuse resources known and available. It is also increasing awareness of the pervasive issues for substance abuse for Providers and local businesses by implementing workshops.
- Consumers needing access to substance abuse treatment services in Catawba County can call the Mental Health Services of Catawba County or they may contact a treatment provider directly.

Substance Abuse Outpatient Counseling/Treatment Services

- The Cognitive Connection provides assessment, treatment (individual, group and family) prevention, DWI and other court services.
- Family N.E.T. delivers psychiatric and substance abuse services; individual, group, and family therapy, assessment, day treatment and case management.
- McLeod Addictive Disease Center is a methadone clinic that also provides individual outpatient and day treatment.
- Oakwood Place offers intensive outpatient treatment services.

National Data

56% of 12th graders and 20% of 8th graders in 2006 report having been drunk at least once in their life.

Only four drugs showed increased use among teens in 2006: ecstasy, OxyContin, Vicodin and inhalants.

Economic Impact

An estimated 8% of American workers are heavy drinkers, costing the nation **\$200 billion** in lost productivity

The estimated cost of drug and/or alcohol abuse and dependency in Catawba County in 2004 was more than **\$2 billion dollars**.

Medical Center-Based Services

- Catawba Valley Medical Center (CVMC) provides inpatient multi-disciplinary short-term treatment, crisis intervention chemical detox.
- Frye Regional Medical Center (FRMC) provides medical detox, assessment, individual group and family therapy, prevention and 12-step meetings.
- Foothills Area Mental Health Detox provides non-medical detox & crisis stabilization.

Residential & Other Services

- Exodus Homes offers faith-based supportive housing for recovering addicts and ex-offenders.
- Flynn Christian Fellowship Home is a halfway house rehabilitation program based on 12-steps.
- Catawba County residents can access help through the Alcoholics Anonymous Hotline (433-4440 or 866-671-1262) and the Narcotics Anonymous hotline (866-419-9326).

Opportunities

- A substantial number of adult addicts in Catawba County are not able to access detox services when needed. Inpatient beds for medical Detox in Catawba County hospitals or at a non-medical detox center in the local area are limited and insufficient to meet the needs. Chronic substance abusers may be turned away from the emergency room if their physical withdrawal is not deemed serious enough for medical intervention, or they may be refused authorization for non-medical detox if their drug of choice does not meet the established criteria for needing detox services.
- Many addicts live in environments where it is almost impossible for them to get clean because of the drug use around them, other negative influences that do not support recovery, or they are homeless. These individuals cannot enter transitional housing recovery programs because they require the individual to have been in a detox or residential treatment facility for 5 – 7 days or to have been incarcerated prior to entering their programs. Many cannot even gain access to the Salvation Army Shelter because they cannot stay off drugs long enough to pass a drug test.
- There are no non-medical local detox centers that accept youth under age 18; the only way youth can get medical detox at one of the hospitals is if their drug of choice meets the established criteria. The other unmet need for adolescents is residential treatment. Just as with adults, many adolescent addicts live in environments where it is almost impossible for them to get clean.
- For segments of the Catawba County population that are not being treated for substance-related issues or involved with the criminal justice system, data is limited: Quantitative data has not been gathered for local college populations, (a notoriously high-risk group for drug and alcohol abuse problems) or teens using substances such as ecstasy, OxyContin, and over-the-counter medications, all of which are of increased concern nationally.

Conclusions

- For the segment of the Catawba County population that has substance abuse and/or addiction problems, addressing their issues continues to present significant challenges.
- Despite a number of agencies and organizations that focus on substance-related issues, many individuals who need assistance are unable to access it.
- Despite a downward trend among Catawba County teens experimenting with alcohol, it remains the drug of choice, followed by marijuana—the use of which has not changed since 2000.
- Greater surveillance is needed to better determine the nature and scope of risky substance-related behaviors in order to identify opportunities for prevention.

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North Carolina Percentages, Annual Averages Based on 2004-2005 *National Survey on Drug Use and Health (NSDUH)* – Table 68
- Johnston, L. D., O'Malley, P. M., Bachman, J. G., & Schulenberg, J. E. (2007). *Monitoring the Future national results on adolescent drug use: Overview of key findings, 2006*. (NIH Publication No. 07-6202)
Bethesda, MD: National Institute on Drug Abuse
- Mental Health Services of Catawba County Annual Report 2005-2006
2006 Behavior Risk Factor Surveillance System
Youth Search Institute Survey
North Carolina Institute of Medicine Task Force on Substance Abuse

Tobacco Use

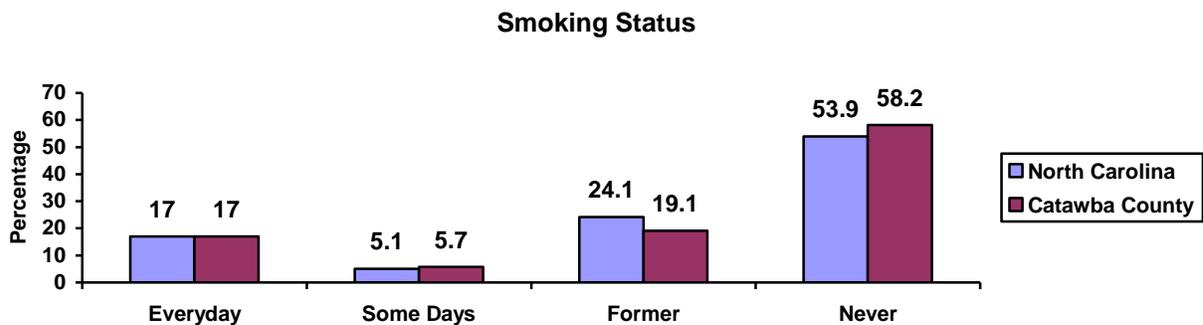
Overview

Tobacco use continues to be the leading cause of death and disease in the United States. Each year, approximately 440,000 Americans die prematurely due to tobacco-related diseases—more than the number of deaths attributed to alcohol, car accidents, suicide, AIDS, homicide, and illegal drugs combined. Tobacco use is a primary risk factor for heart disease and stroke and has been linked to numerous types of cancer. Tobacco use by teens is of increasing concern as 80% of current smokers started before the age of 18. The earlier a person engages in tobacco use, the more likely he or she is to carry this habit into adulthood. Research shows that 70% of all smokers wish they could quit.

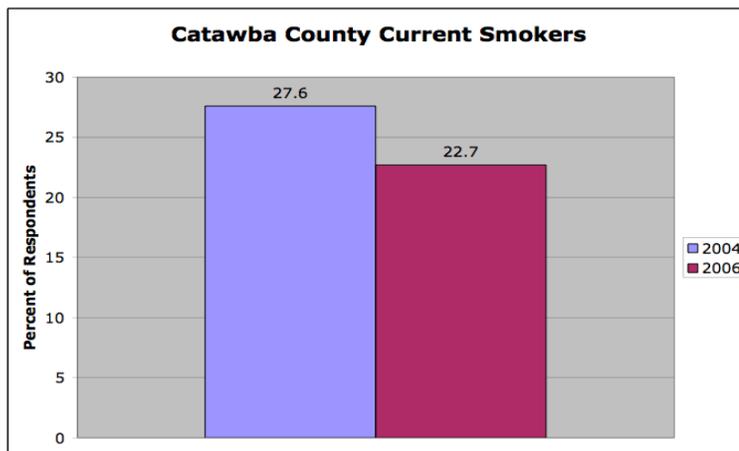
Exposure to secondhand smoke (also known as environmental tobacco smoke or ETS) is also harmful to health, increasing the risk for heart disease, lung cancer, and respiratory system problems. ETS is particularly harmful to children, causing or contributing to sudden infant death syndrome (SIDS), respiratory infections, slowed lung growth, and severe asthma attacks. Just as there is no risk-free level for primary tobacco use, there is no-risk free level for secondhand smoke. Even a small amount is dangerous.

Catawba County Data

Participants in the 2006 Behavior Risk Factor Surveillance System Survey were asked to classify their smoking habits. Given the margin for error, the findings indicate that for smokers the rates are comparable between Catawba County and North Carolina.



Behavior Risk Factor Surveillance System (BRFFS), 2006



Current Smokers: The number of people in Catawba County who identified themselves as “current smokers” on the Behavior Risk Factor Surveillance System Survey decreased in the past two years.

Behavior Risk Factor Surveillance System (BRFSS), 2004 & 2006

Youth Tobacco Use: Percent of Catawba County youth reporting tobacco use in 2007:

Tobacco Use	Total %	Gender		Grade		
		Male	Female	8th	10th	12th
Smoked cigarettes once or more in last 30 days	17	20	13	8	17	29
Use smokeless tobacco once or more in last 12 months	9	15	2	4	11	14
Total tobacco use	26	35	15	12	28	43

Results of the 2007 Youth Search Institute Survey of Catawba County students in grades 8, 10 and 12 (above), show that approximately 26% smoke cigarettes or have used smokeless tobacco. Prevalence increases as students go up in grade, reaching 43% by the time students are high-school seniors, with majority of those being cigarettes smokers. With regard to cigarette smoking, Catawba County 8th graders are on par with the rest of the country, but 10th and 12th graders fare unfavorably: Nationally, 8.7% of 8th graders, 14.5% of 10th graders, and 20% of 12th graders are smokers.

The following chart was generated from the 2005 Youth Tobacco Survey. In all 3,265 middle school students and 3,140 high school students from 89 school districts in North Carolina were surveyed.

	Currently Use a Tobacco Product	Currently Smoke Cigarettes	Currently Use Spit Tobacco
Middle School Students	10.5%	5.8%	2.7%
High School Students	28.5%	20.3%	9.2%

Trends

Since the North Carolina Health and Wellness Trust Fund began funding tobacco prevention efforts in 2003, the rate of decline in high school smoking has nearly tripled. Middle school rates have also declined. The data translates into 27,000 fewer teen smokers since 2003.

Disparities

In Catawba County, Household Income (HHI) is a key predictor of tobacco use: 75% of current smokers have a HHI less than \$50,000 while 25% of current smokers earn \$50,000 or more (BRFSS, 2006).

National Data

Cigarette smoking among adults aged 18 and older declined 48% between 1965 and 2005 from 42% to 21%; nevertheless, an estimated 45 million Americans are current smokers.

Smoking prevalence is highest at high schools that do not have a 100% Tobacco-Free School policy. At schools with established policies, students are 40% less likely to be smokers.

National or State Data

- In the U.S. approximately 25% of adults and 33% of youth continue to smoke.
- Nationally, tobacco use is responsible for one in every five deaths.
- 2.7 million children under age 18 are current smokers. Unless current rates are reversed, more than 6.3 million children under age 18 alive today will eventually die from smoking-related disease, unless current rates are reversed.
- More than one-third of kids who try smoking cigarettes become regular, daily smokers before leaving high school.

Assets

- Catawba County schools have a 100% Tobacco Free School policy prohibiting the use of tobacco by everyone.
- Catawba County Public Health provides youth programs to prevent initiation of tobacco use, eliminate exposure to secondhand smoke, provide cessation options, and reduce health disparities attributable to youth tobacco use.
- Catawba Valley Medical Center, Frye Regional Medical Center, and Catawba County Public Health partner with the American Cancer Society to offer free smoking cessation classes.
- Over 53% of the restaurants in Catawba County have adopted smoke free policies and the majority of others offer non-smoking sections.
- The Totally Teens Health Center offers tobacco prevention and cessation information to youth who identify themselves as tobacco users.
- The DARE program is offered at six middle schools in Catawba.
- All school nurses are certified in the American Lung Association's Not On Tobacco (NOT) smoking cessation program for youth and trained in the Project Towards No Tobacco (TNT) prevention program for youth, the NC Spit Tobacco Education Program's (NCSTEP) prevention and cessation modules and the 5 A's tobacco cessation counseling technique.
- The Department of Social Services' TEEN UP program offers a tobacco component that encourages teens to stay tobacco free.
- Cognitive Connections of Catawba County offers a tobacco prevention program services.
- Fred Haywood, a cancer survivor, is a tobacco educator employed by Frye Regional Medical Center to speak with young people about the dangers of tobacco use.
- North Carolina has its own Quitline to assist residents in quitting tobacco use. The Quitline number is 1-800-QUIT-NOW, and it is available seven days a week from 8:00am to Midnight.
- The Prenatal Clinic at Catawba County Public Health offers a smoking cessation program to patients.

Economic Impact

Smoking is responsible for more than **\$167 billion** in annual health-related costs, including adult mortality-related productivity costs, adult medical expenditures, and medical expenditures for newborns.

Opportunities

- Research shows that 70% of smokers would like to quit. Catawba County has numerous services available to assist both youth and adults in achieving their goal of cessation; however, these services are not readily marketed in the schools or in the community.
- While Catawba County has made great strides in the number of restaurants that are smoke-free, there is room for continued improvement with 47% still permitting smoking. Having nonsmoking sections does not necessarily cut the risks associated with secondhand smoke.
- Comprehensive tobacco control includes increasing the cost of cigarettes, counteradvertising, and promoting smoke-free environments, all of which are potential areas for greater advocacy.

Conclusions

- Data from the 2006 BRFSS Report shows that the smoking rate in Catawba County is approximately equal to the smoking rate in the State as a whole. The rate in North Carolina exceeds the rate for the nation as a whole.
- Smoking in Catawba County continues to trend downward among adults and youth.
- Despite steady declines in smoking prevalence, rates for both the county and the state remain well above the Healthy People 2010 target suggesting the need for increased efforts to prevent youth initiation, increase cessation among established smokers, and reduce consumption in continuing smokers.

References

- 2006 BRFSS Report for Catawba
<http://www.schs.state.nc.us/SCHS/brfss/2006/cata/topics.html>
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 University of Michigan, Monitoring the Future Study (2006)
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Air Quality

Overview

There are several health implications of poor ozone and fine particulate matter. Fine particulate matter, which is composed of microscopic solids or liquid droplets can be breathed deeply and cause serious health problems including increased respiratory systems such as coughing or breathing difficulties; aggravated asthma; development of chronic bronchitis; irregular heartbeat; nonfatal heart attacks and even premature death in people with heart or lung disease. High levels of ozone can impact the lungs in several ways including irritation of the respiratory system, reduced lung function, aggravation of asthma, inflammation and damage to the lining of the lungs. It may also weaken the immune system against disease. Children, the elderly, adults who are active outdoors and people with respiratory disease are most at risk from high levels of fine particulates and ozone.

As part of the Clean Air Act, the Environmental Protection Agency (EPA) sets standards every five years for ozone and PM 2.5 to protect public health. States with non-attainment areas are required to come up with State Implementation Plans (SIP) to reduce pollution levels in the non-attainment areas.

Catawba County Data

Fine Particulate (PM2.5) Monitor Readings:

The only official EPA sanctioned PM 2.5 monitor is located at the Hickory Water Tower between 1st and 2nd Avenue Southwest. The monitor is located only a few hundred yards from US Highway 321 and is about one mile north of Interstate 40. The table shows the annual and three-year average PM 2.5 monitor readings from 2000 to 2006.

Year	Yearly Average (Micrograms per Cubic Meter)
1999	17.42
2000	17.93
2001	15.98
2002	15.36
2003	15.04
2004	15.00
2005	15.95
2006	15.20
Three-Year Average	(Micrograms per Cubic Meter)
1999 to 2001	17.11
2000 to 2002	16.42
2001 to 2003	15.46
2002 to 2004	15.13
2003 to 2005	15.33
2004 to 2006	15.38

Environmental Protection Agency (EPA) and North Carolina Division of Air Quality (NCDAQ), 2007.

EPA declares an area non-attainment for PM 2.5 if the three-year average at the monitor is higher than 15 micrograms per cubic meter. As seen in the previous table, the monitor is currently reading slightly over the annual standard. Catawba County has therefore been declared as a non-attainment area for PM 2.5.

Ozone Monitor Readings:

Catawba County attainment status for ozone is affected by two monitors. One is located in Lenoir and the other is in Taylorsville. The table below shows ozone level trends at the Lenoir and Taylorsville locations since 1999.

Year	Lenoir Monitor Parts Per Million	Taylorsville Monitor Parts Per Million
1999	0.094	0.082
2000	0.085	0.091
2001	0.082	0.088
2002	0.092	0.095
2003	0.079	0.081
2004	0.070	0.071
2005	0.075	0.080
2006	0.076	0.076
Three-Year Average	Lenoir Monitor Parts Per Million	Taylorsville Monitor Parts Per Million
1999 to 2001	0.087	0.087
2000 to 2002	0.086	0.091
2001 to 2003	0.084	0.088
2002 to 2004	0.080	0.082
2003 to 2005	0.075	0.077
2004 to 2006	0.074	0.076

EPA and NCDAQ, 2007

EPA declares an area non-attainment for ozone if the monitor has a three year average of more 0.084 parts per million. The Table shows that both monitors were above the standard in 2000, 2001, and 2002. Since Hickory Metro is in an Early Action Compact (EAC) area, however, the penalties associated with non-attainment status for ozone are suspended as long as the area works toward having both monitors below the 0.084 parts per million federal standard by the end of 2007. The Table clearly shows the success that the EAC has had in the region as both monitors have been below the standard since 2003

Trends

Although since 1999, the PM2.5 readings have decreased steadily, it is currently still above the annual standard and therefore places Catawba County at non-attainment status.

Ozone readings that affect Catawba County have been on the decrease since 1999 and since 2003 the levels have been lower than the federal standard.

Economic Impact

The impact of poor air quality can contribute to **health costs, loss of work days, and can negatively affect quality of life.** Companies look at these factors when deciding to relocate. Ozone pollution can also contribute haze and air that is hard to breathe. This can impact tourism which is a large part of revenue that many communities have come to depend on.

Assets

Several actions have been taken to reduce Ozone and PM2.5 levels in Catawba County. Catawba County and its Catawba County Public Health are active members of the Early Action Compact. This agreement to reduce ozone between local governments, the North Carolina Division of Air Quality and EPA has been a great success in Catawba County and has been recognized nationally. Several actions are being taken by various Governmental agencies such as:

- Use of cleaner fuel
- Installing smokestack controls
- Tighter inspections of cars and trucks
- Improving traffic operational planning, engineering and maintenance, pushing for stronger out of state controls
- Limiting engine use during hot, summer months when ozone tends to be more of a problem
- Open burning bans
- City and County energy plans

Catawba County Public Health staff provides air quality programs:

- Catawba County employees and City of Hickory employees compete in a friendly ozone reducing contest. Employees logged activities during ozone season that helped reduce pollution. Monthly and grand prize awards are given. The county grand winner was recognized at the annual county banquet.
- Notice of any orange or red air quality day warnings are sent to all county employees and signs were posted at Public Health and other government buildings. Employees are also encouraged to wear their air quality buttons on those warning days.
- Air quality press releases are sent to the local newspapers, radio, and television as well as the county newsletter called the Spirit to educate people on air quality and how to reduce ozone and PM2.5 pollution. Public Health staff members also record TV spots on WHKY that talk about air quality.
- Ozone and PM2.5 information is posted on the county web site.
- Educational activities are provided to county employees and the community at large:
 - Air quality education and a presentation are provided at every county orientation.
 - Air quality presentations are given as a workforce development topic for public health employees.
 - Air quality presentations at schools, civic groups and other community venues.

Opportunities:

- Promote and encourage local businesses to “go green” ie.: procure environmentally friendly products, use “green” vendors, and encourage employees to practice good air quality behaviors.
- Promote and encourage local businesses to appoint an air quality contact person.
- The communication notice for poor Air Quality days could be expanded by including, day cares, schools, information officers, and businesses.
- Other ways to improve the air quality in Catawba County is through individual behavior change such as: use electric powered lawn care equipment, purchase new or cleaner lawn equipment, carpool to work, eat in for lunch, avoid drive thrus, avoid using a wood fireplace, don’t top off the car with gas, and avoid refueling from 10 am – 6 pm.

Conclusions

- Overall the PM2.5 and ozone readings are improving in Catawba County.
- The PM2.5 readings are still above the annual standard and therefore have Catawba County listed a non-attainment status.
- The concerted efforts in the county are assisting with better air quality and should be steering the county toward attainment status in 2008.

References

Environmental Protection Agency (EPA) and North Carolina Division of Air Quality (NCDAQ) 2007

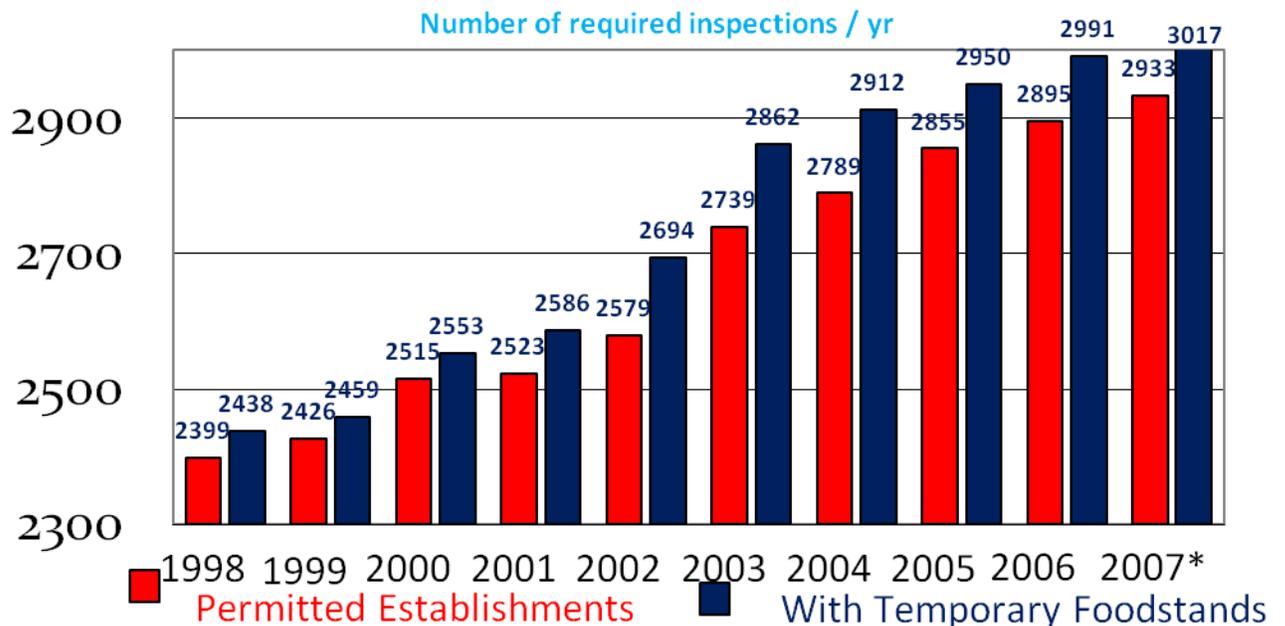
Environmental Health

Overview

The protection of the environment for the citizens of our county is the primary mission of the Catawba County Environmental Health Section. With a 2006 population of over 150,000 citizens and a rapidly expanding urban area, our focus is on providing a safe and sanitary food delivery system, potable water supply from individual wells, approved individual sewage disposal systems for residences not served by a community sewer system, and prevention of lead poisoning in children.

Catawba County Data

Catawba County Foodservice Establishment Growth from 1998-2007



Data above shows a 22.25% increase in required inspections of foodservice establishments over the past 8 years. Passage of more stringent temporary food stand regulations on October 15, 2001 increased the average number of required inspection by 3.78%.

Childhood Blood Lead Surveillance Data

		Ages 1 and 2 Years						Ages 6 Months to 6 Years		
		Target Population*	Number Screened	Percent Screened	Percent Medicaid Screened**	Lead ≥ 10	Percent ≥ 10	Number Screened	Confirmed 10-19	20
2002	Catawba	4,190	1,549	37	54.6	16	1	1,895	2	0
	NC	238,359	86,212	36.2	54.5	1,614	1.9	120,966	461	68
2003	Catawba	4,130	1,668	40.4	60.4	19	1.1	2,088	6	1
	NC	235,419	87,993	37.4	55.9	1,716	2	121,697	467	38
2004	Catawba	4,112	1,790	43.5		12	0.7	2,254	3	0
	NC	235,599	92,057	39.1		1,167	1.3	124,486	349	52
2005	Catawba	3,976	1,699	42.7	56.3	7	0.4	2,187	3	0
	NC	238,065	96,623	40.6	56.1	873	0.9	128,249	299	53
2006	Catawba	3,949	1,953	49.5	61.6	23	1.2	2,413	5	2
	NC	242,813	103,899	42.8	56.8	867	0.8	135,595	255	38

*Target Population is based on the number of live births in previous 2 years

**Includes ages 9-11 months

Children's Environmental Health Branch, North Carolina Department of Environment & Natural Resources

The above table shows that the percentage of children ages 1-2 being screened for lead levels in Catawba County has steadily increased since 2002. However the percentage of children with levels higher than 10 ug/dl have also increased slightly since 2002.

Food, Lodging, and Institutional Inspections Per Capita in Catawba County 2005-2006

	Population	Number of Establishments	Number of Inspections	Number of Inspections Per 100,000 Population	Number of Establishments Per 100,000 Population
Catawba	153,784	987	2,934	1,917	645
NC	8,856,505	43,000*	127,800	1,443	485

*Approximate Total

North Carolina Department of Environment and Natural Resources

The above table shows that Catawba County has a higher number of establishments and inspections per 100,000 population as compared to the North Carolina averages.

Trends

One permitted food & lodging facility for every 155 residences in Catawba County in 2005-2006.

From 2002-2006 a total of 10,837 children were screened for elevated blood levels county wide. Only 22 confirmed elevated blood level cases were reported during this time.

Community Voices

"I'm concerned about the safety of the water. We have lots of plants here. There's been a lot of concern in this small community. And I'm really concerned about the water. I'm concerned about the air."

**African-American
Female**

Food Lodging and Institutional Program

The Food, Lodging, and Institutional half of the Catawba County environmental health section conducts inspections and investigates complaints in a variety of permitted establishments to protect the public health. Currently 4 Environmental Health Specialists staff the Food Lodging and Institutional Section make over 2,900 inspections per year. Catawba County has long been a center of the Unifour area for shopping and entertainment, with people driving long distances to shop and dine in the County. As of 2005-2006, there was approximately 1 permitted establishment under inspection for every 155 residents as compared with the state average of 1 establishment for every 206 residents. The Catawba County Environmental Health Section compares favorably with the state average on inspection coverage, with a Catawba County inspection rate of 100% in FY 2005-2006 versus 81% statewide for the same time period.

Childhood Lead Poisoning Prevention Program

From 2002-2006 a total of 10,837 children were screened for elevated lead blood levels in Catawba County. During that time period, the childhood lead poisoning prevention staff has investigated 22 identified cases of children under the age of six that have confirmed elevated blood lead levels. Each case requires a home visit and investigation of the home to determine if lead poisoning hazards exist that are available to the affected child. Additional education of parents on the dangers of lead exposure to small children is needed to decrease the number of confirmed lead cases.

On-Site Wastewater and Wells Program

The On-Site Wastewater and Wells Program (OSWW) is responsible for the evaluation, permitting, inspection, and approval, of all sites not served by a public sewer and/or water supply, and to install or repair these systems on site in accordance with applicable laws, regulations, and environmental standards. In addition, the OSWW section is responsible for promoting public health through complaint investigations and other varying public service requests. Improperly treated sewage has the potential for contaminating our water supply systems and closing of lakes and streams to swimming. North Carolina has approximately 48% of the states residences using on-site waste disposal systems.

This is one of the highest rates in the nation with only eight other states having over 40% of their population using on-site sewage disposal systems, with Vermont leading the way with approximately 55% usage. Large states such as Texas and California have less than 25% of their population connected to individual disposal systems.

In July 2005 the process of performing preliminary evaluations was discontinued, and by early 2006 all of the requested program changes from a 2005 Quality Improvement Audit had been implemented and were in use by program staff. The results of these efforts have dramatically improved the

National Data

Of all homes in North Carolina, 48% use an on-site sewage disposal system.

Vermont leads the country with over 55% of all residences using an individual septic system.

During a 3 month period in 1997, 400,000 homes in the United States experienced an on-site failure.

Economic Impact

On-site system failures can cost home owners from **\$2,000** to well over **\$10,000** per failure.

quality of field work, routine documentation, and the permit quality delivered to the public.

The challenges facing on-site sewage disposal systems in Catawba County are small lot sizes and the functional capacity of lots to accommodate wells and wastewater systems, along with increased demand for larger homes along the lake has contributed to the need for increased water and sewer service. Demands for the water resources of the Catawba River basin will increase with the expanding population density and the need for increased water usage in our fast growing urban areas.

Failure of on-site systems can have a large economic impact on a community or individual home property owner. Contaminated drinking water supplies or failure of a large number of on-site systems may result in large expenditures from a county or city to run public utilities to a home or group of residences. A study conducted by the U.S. Census Bureau in 1997 stated that an estimated 400,000 homes experienced an on-site system failure during a three month period in 1997. With an on-site system in our area costing well over \$2,000 and many systems going over \$10,000, a septic system failure can be very costly to an individual home owner.

Opportunities

- With a rapidly growing Hispanic and Hmong population in Catawba County, a partnership between the local community organizations and Public Health in raising awareness of the dangers of lead to small children would be very helpful in lowering the number of confirmed cases of lead poisoning in the county.
- To service the needs of the Southeastern section of the county, a branch office could be located along the Highway 150 corridor and consist of Environmental Health staff, home health, and school nurses. This would give increased access to health care and provide environmental services with less wait time to the residents of this region.
- As the drought affecting the Southeastern United States continues to intensify, the Environmental Health Section has an opportunity to take a lead role in working with local utilities and community organizations to encourage homeowners and businesses to conserve water, not only to help in protecting our local lakes and rivers but to preserve our underground water storage aquifers.

Conclusions

Catawba County is undergoing a dramatic change from a largely rural farming area to a densely populated urban environment. These changes present Environmental Health with both challenges and opportunities in the community well into the future. The need to partner and work with both private and government agencies for the benefit of the citizens of Catawba County will be necessary to maximum the use of limited resources and staffing.

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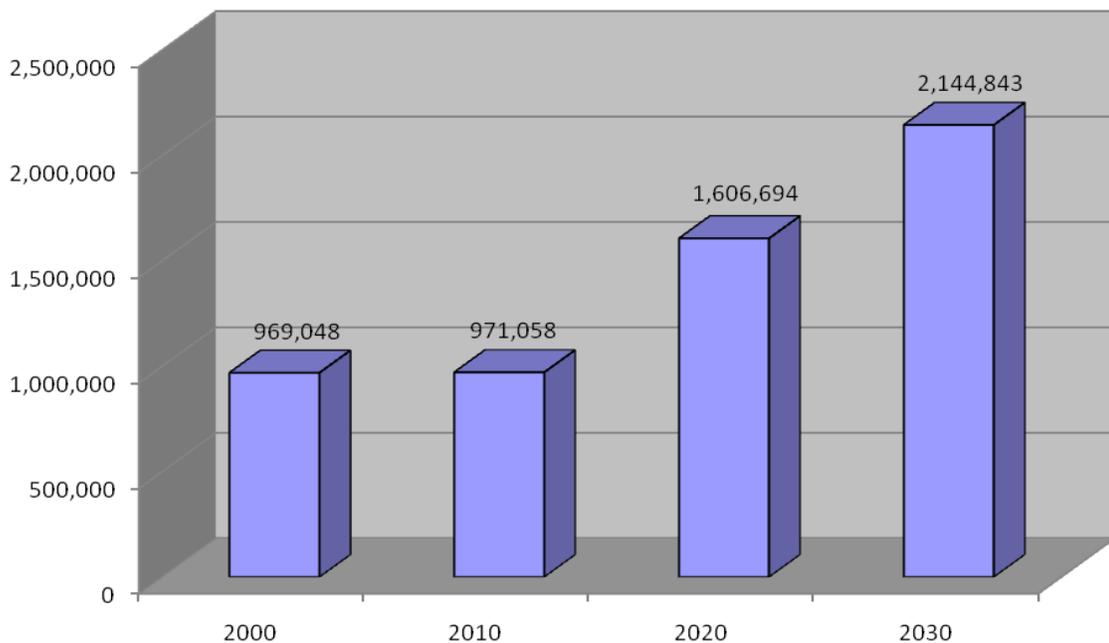
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Older Adult Health

Overview

National data and trends about the aging population indicate that the percentage of people age 65+ and older is growing significantly. Over 2.0 million persons celebrated their 65th birthday in 2005. In the same year, about 1.8 million persons 65 or older died. Census estimates showed an annual net increase of almost 500,000 in the number of persons 65 and over. North Carolina is experiencing the same demographic shift as 2.3 million baby boomers (born between 1946 and 1964) enter retirement age. Currently, people living in North Carolina age 65 and older is about 12%. By 2030, the youngest baby boomers will reach retirement age and the percentage is expected to increase to 17.7%.

**Growth of Older North Carolinians
Age 65+ (2000-2030)**



The impact of the aging baby boomers is clearly indicated in the projected growth of North Carolinians age 65+ between 2010 and 2030 as shown above.

The dramatic increase in the older population will place new demands on our resources to ensure the health needs of people 65+ and older are met. Treatment of primary older adult diseases such as heart disease, cancer, stroke, diabetes and other cardiovascular diseases will continue to burden the health care system. In addition, two areas of particular concern for adults with longer lifespan are Alzheimer's Disease and Arthritis.

Increasing age is the greatest risk factor for Alzheimer's Disease. One in 10 individuals over 65 and half over 85 are affected. There will be a significant increase in demand for patient and family services that include information and referral, education, advocacy, caregiver training and support.

Almost 50% of older adults suffer from Arthritis and /or joint pain. Patients will need to become well informed about their condition and should partner with health care professionals in designing a plan to effectively manage the disease.

As demands for services and resources increase, more funding will be required for community based services to assist older adults in managing health issues, remaining in their homes, and avoiding premature placement in long term care facilities.

Catawba County Data

Catawba County Older Adult Population Estimates

	Number, 65+	Percent, 65+
2005	18,544	12.3%
2015	24,788	14.1%
2025	33,137	16.5%

(North Carolina Division of Aging and Adult Services web site:
<http://www.ncdohhs.gov/aging/services/colist1.htm>)

This chart shows the estimated increase in adults age 65 and over between 2005 and 2023 in Catawba County.

Estimated Numbers of Moderate to Severe Cases of Alzheimer’s in Catawba County

1998	2000	2010	2020
528	557	739	949

(North Carolina Division of Aging and Adult Services web site:
<http://www.dhhs.state.nc.us/aging/alzprev.htm#3>)

Based on estimates, the number of people with Alzheimer’s Disease will continue to increase.

PNEUMONIA/FLU DEATHS		
Deaths per 100,000 population		
	North Carolina	Catawba County
65-84 years of age	87.2	110.7
Over the age of 85	704.9	975.2
Total Population	21.7	27.3

State Center for Health Statistics 2001- 2005

Catawba County’s death rate for Flu and Pneumonia is significantly higher than North Carolina

National or State Data

- North Carolina’s older population is projected to more than double from 2000 to 2030. The very old population (85+) is projected to more than double, increasing 150%.

Trends

It is estimated that the percent of persons age 65+ will increase from 12.3% in 2005 to 16.5% in 2025.

Disparities

Diabetes is the 6th leading cause of death for older North Carolina residents but the 4th highest cause of death in African Americans of all ages in our state.

Community

Voices

“We want a senior center for us to gather and chat...the younger generation doesn’t understand us elders and just keep telling us to stay at home. It makes us old people frustrated and get sick a lot.”

Hmong Female

National Data

About 1 in every 8, or 12.4 %, of the population is an older American.

Economic Impact

In North Carolina, between 1999-2001, the cost of hospitalization for Alzheimer’s Disease as primary diagnosis was **\$32 million** and for Arthritis as primary Diagnosis was **\$856 million**.

- North Carolina data indicates that because men have shorter life expectancy, and because they tend to marry younger women, at ages 65 and older, women are more than twice as likely to be unmarried as men in their age group. Data show that being unmarried (widowed, divorced, separated, or never married) increases a woman’s vulnerability to poverty.
- In North Carolina, 43.0 percent of the non-institutionalized civilian population ages 65 and older reported having one or more disabilities by the US Census definition—44.4 percent of women and 41.0 percent of men, according to the 2005 American Community Survey.
- Nationally, About 30% (10.6 million) of non-institutionalized older persons live alone (7.7 million women, 2.9 million men).
- 18.7 percent of persons age 65+ are members of ethnic minority groups in North Carolina. Compared to the nation as a whole, North Carolina’s population age 65+ includes a larger proportion who are African American (15.7 percent in NC compared to 8.3 percent nationally) and a smaller proportion of Latinos (1.1 percent in NC compared to 6.2 percent nationally).

Five Leading Causes of Death among North Carolinians Age 65+

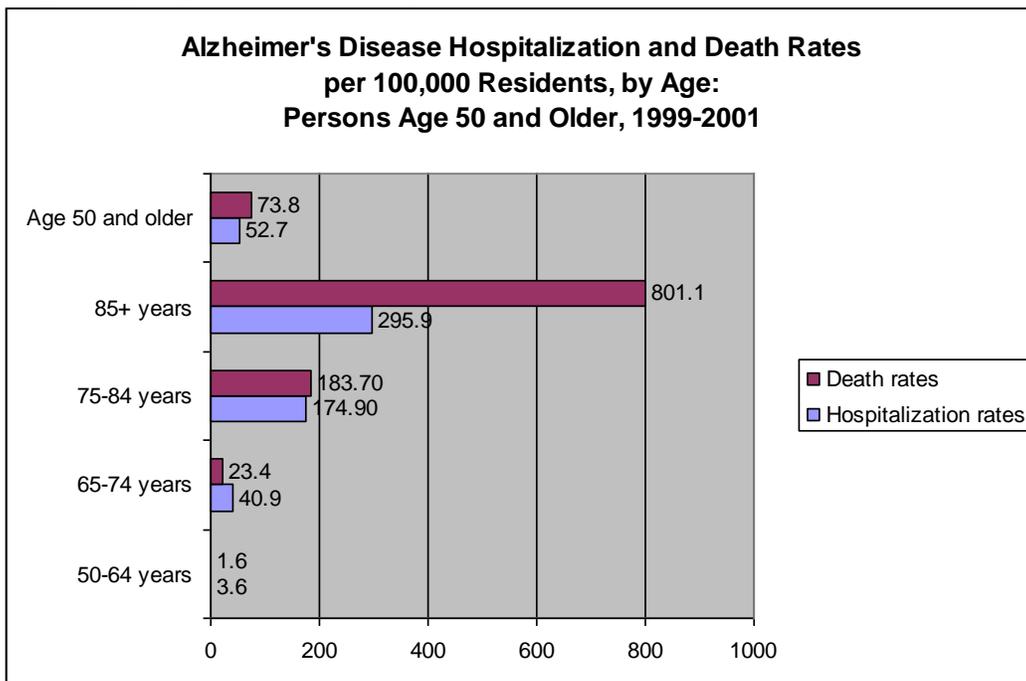
Rank	Cause
1	Heart diseases
2	Cancer
3	Cerebrovascular diseases including stroke
4	Chronic lower respiratory diseases
5	Alzheimer’s disease

Source: NC Center for Health Statistics (2006). *Leading Causes of Death – 2005*.

- Heart disease is the leading cause of death among older adults both nationwide and in North Carolina with cancer and stroke, second and third on the list.
- Diabetes mellitus is the sixth leading cause of death for the older North Carolina population in general; it is a more serious threat to the African American community, being the fourth highest cause of death in African Americans of all ages in our state.
- African Americans and other racial minorities are at substantially higher risk for certain chronic conditions such as heart disease, stroke, and diabetes (a major contributor to heart disease, stroke, and other conditions).

Alzheimer’s Disease

For the period 1999-2001, 4,966 deaths resulting from Alzheimer’s Disease occurred among person North Carolina residents age 50 and older. Alzheimer’s death rates increase with age, are higher among females as compared to males, and higher among whites as compared to persons of a minority race. During this same time period, the cost for hospitalization where Alzheimer’s was the primary diagnosis totaled nearly \$32 million.



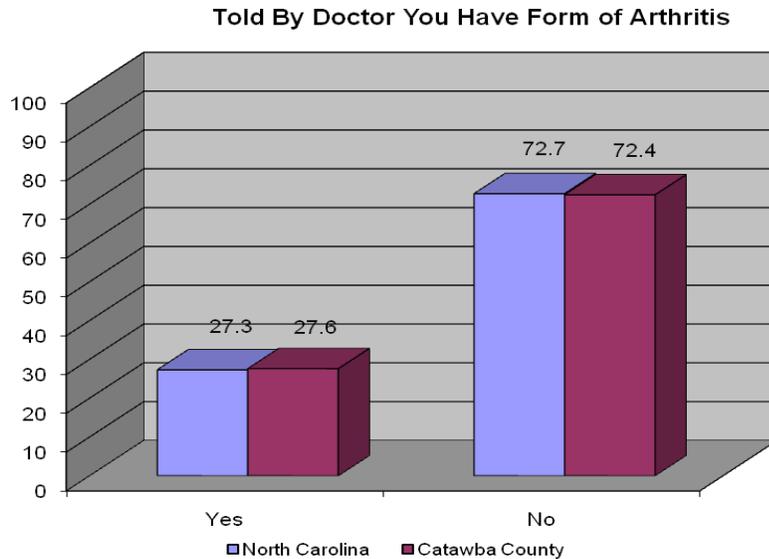
(A Health Profile of Older North Carolinians <http://www.schs.state.nc.us/SCHS/pdf/Elderly.pdf>)

People age 85 and older have higher death and hospitalization rates due to Alzheimer’s Disease.

Arthritis

Arthritis is rarely listed as the primary cause of death. However, the impact on the individual’s quality of life and on the health care system can be significant. For the period, 1999-2001, 49,685 North Carolina residents age 50 and older were hospitalized with arthritis as the primary diagnosis with a cost of more than \$856 million.

North Carolina BRFSS (2000-2001) showed that 44% of persons age 50 and older reported that they had been diagnosed by their doctor with some form of arthritis. Other data reflects that the percentage of persons diagnosed with arthritis was higher among persons 65 and older; higher for females compared to males; and similar between whites and minorities.



Behavior Risk Factor Surveillance System (BRFSS), 2005

The graph above shows that 27.6 % of Catawba County residents reported their doctor said they had a form of Arthritis as compared to 27.3% for North Carolina.

Assets

- Foothills Office of the Western Carolina Chapter of the Alzheimer’s Association located in Hickory. Offers many patient and family services including support groups.
- Western Piedmont Council on Governments’ Area Agency on Aging located in Hickory. Operates the Family Caregiver Support Program.
- Western Piedmont Council on Governments’ Area Agency on Aging works closely with service providers in Catawba County to ensure that older adult needs are being met. The organization studies the needs of older adults and helps plan services to meet those needs. The service goal is to enable older adults to live independently in their own homes.
- Alzheimer’s Support Group meets on the third Tuesday each month at 7:00 PM at Lutheran Home in Hickory (Catawba County).
- Arthritis Foundation is a national organization that provides information and support to those affected by Arthritis.
- The North Carolina Senior Tar Heel Legislature, a group of senior representatives from each county in the State, advocates on behalf of older adults to elected officials. Increased funding for services is always submitted to the NC General Assembly as a top priority each year.
- Nutrition Program for older adults—Nutrition sites and in home meals provided.
- Adult Day Care Programs in Catawba County are operated by Adult Life Programs. There are facilities in Conover, Hickory, and Maiden.
- Catawba County Home Health Agency is ACHC accredited and recognized as in the top 25% of home health providers in the US for performance measures in quality improvement and financial performance.
- There are over 25 home health care agencies that serve the Catawba County area.
- There are 7 nursing homes with 897 beds and 15 adult care homes with 631 beds in Catawba County.

Opportunities

- Educate the community about the change in our aging population and the resources required to support the impact to our infrastructure and encourage a call to action to prepare for this impact.
- Engage all community organizations that interact with the baby boomer population to encourage disease preventing and health promoting behaviors and other strategies to prepare for the increase in older population.
- Determine the greatest needs facing our community related to aging older population and advocate with elected officials for the appropriate resources to preparing to meet those needs.
- Explore the disparities between races and gender with respect to older adult and aging issues such as health care, long term housing, skilled care, etc. and develop strategies to target at risk populations.
- Alzheimer's Disease and Arthritis are specific area that are of greater concern because of longer lifespan and increase number of aging older adults. Examining the increase need of available resources, medical providers with expertise in Alzheimer's and Arthritis, and family support services is an important step to ensuring our community is prepared for greater numbers of these diseases.

Conclusions

A longer lifespan and increase in the number of older adults is a tribute to our advances in medicine and knowledge of and practice of healthy behaviors. As we age, however, we are more at risk for illness and disability with fewer support systems in place. With the baby boomers nearing retirement age, the volume of older adults with a greater propensity for disease and disability could easily over burden our health infrastructure. As a community, we must aggressively address the gap in resources, health care, and support services that will be required within the next 10-20 years.

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researched by Donald G. Fowles, AoA. Saadia Greenberg, AoA, developed the 2006 edition. Jennifer Klocinski, AoA contributed the section on health literacy.

Within this report, the following data and information sources were listed:

Internet releases of the U.S. Bureau of the Census and the National Center for Health Statistics

Primary sources of data included the U.S. Bureau of the Census; the National Center on Health Statistics; and the Bureau of Labor Statistics

Institute on Aging/Quick Facts About Aging <http://www.aging.unc.edu/infocenter/data/quickfacts.html>

North Carolina Division of Aging and Adult Services web site

<http://www.ncdhhs.gov/aging/services/colist.htm>

<http://ncdhhs.state.nc.us/aging/alzprev.htm#3>

A Health Profile of Older North Carolinians

<http://www.schs.state.us/SCHS/pdf/Elderly.pdf>

Behavior Risk Factor Surveillance System (BRFSS) for North Carolina 2000-2001

Behavior Risk Factor Surveillance System (BRFSS) for North Carolina and Catawba County 2005

Access To Healthcare

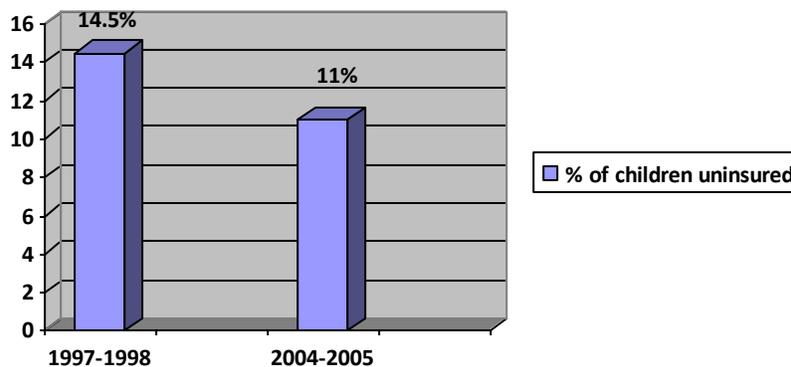
Overview

Having access to healthcare is an important component in eliminating many health disparities. It also plays an important role in prevention and early detection of disease. North Carolinians who are poverty stricken and those who lack health insurance experience greater difficulty in gaining access to effective healthcare. This forces them to seek treatment as a last resort or only when the condition becomes so debilitating that it interferes with their everyday tasks. Unfortunately, this means the condition has usually progressed to an advanced stage making it more difficult to treat and more threatening to the individual. “It is no surprise that the most serious levels of chronic disease are most often found among North Carolina residents who lack health insurance.

The uninsured generally use fewer health services than the insured population, and some suffer physical, financial, and emotional consequences from the relative lack of care. We know the uninsured make fewer visits to a doctor, are more likely to use expensive emergency room care, are more likely to be hospitalized for preventable illnesses, and suffer increased risk of mortality (Blumberg and Liska 1996). In addition to the private gains the uninsured would get if they became insured, society benefits from improving the health of the entire population through productivity improvements and reduced transmission of communicable diseases.

In addition, many uninsured people are children, who have no voice in the insurance decisions and who will be healthier and more productive throughout their lives if they receive proper medical care when they are young. The State Children’s Health Insurance Program (SHIP) provides public health care coverage availability to more than six million children in low income families annually.

SHIP has effectively reduced the percentage of Uninsured Children across the Country

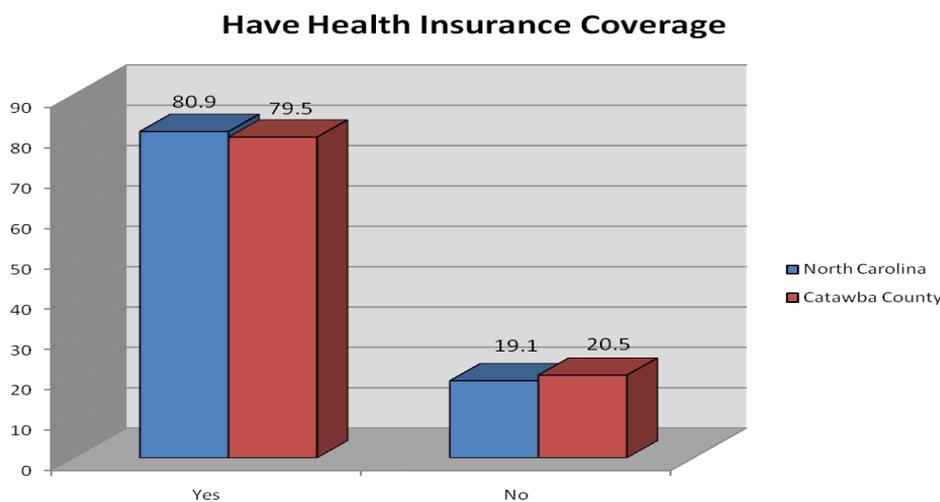


The above graph shows that since the development of SHIP in 1997, the percent of uninsured children in the United States has decreased 24 %.

Catawba County Data

According to the 2005 Sheps Center for Health Services Research (SCHSR) at UNC-Chapel Hill, Catawba County ranks 11th lowest out of 100 counties for people between ages 0-64 that are living without health insurance. This equates to approximately 21,112 people or 16% of Catawba County residents. Catawba County 2006 SCHSR data does show higher rates of Physicians and Primary Care Physicians per 100,000 population when compared to North Carolina. This is most likely due to having two quality hospitals in Catawba County.

HEALTH CARE ACCESS		
	North Carolina	Catawba County
Dentist (2006) per 10,000 population Cecil G. Sheps Center (UNC-CH)	4.4	4.4
Physician (2006) per 10,000 population Cecil G. Sheps Center (UNC-CH)	20.8	23.5
Primary Care Physician (2006) per 10,000 population Cecil G. Sheps Center (UNC-CH)	9.0	9.1
*Uninsured Estimates for 0-17 yr. olds (2005) Cecil G. Sheps Center (UNC-CH)	11.3%	11.2%
*Uninsured Estimates for 18-64 yr. olds (2005) Cecil G. Sheps Center (UNC-CH)	19.5%	17.8%
*Uninsured Estimates for 0-64 yr. olds (2005) Cecil G. Sheps Center (UNC-CH)	17.2%	16.0%
Percent of Medicaid eligible children ages 0-21 who received Health Check Preventative Services -Age Specific (SFY 2004-2005) Division of Medical Assistance	72.6%	71.8%
Kindergartner Health Assessment - (SY 2006-2007) NCDHHS-DPH**	97.6%	99.2%



Behavior Risk Factor Surveillance System (BRFFS), 2005

In a BRFSS report, nearly 21% of Catawba County employees said they had no health insurance. Other survey results showed that female employees were more likely to have coverage than men and white employees were also more likely than minority workers to have health insurance.

Trends

North Carolina and Catawba County percentages for uninsured residents have both decreased slightly from 2003 to 2005.

The most notable decrease was among the age group 18-64 in Catawba County where rates decreased from 19.4% in 2003 to 17.8 % in 2005.

Disparities

The working poor, people aged 18-64, and minorities are the largest groups for being uninsured. There are a variety of factors and influences that attribute to this.

Community Voices

“Because of the lack of money, we don’t go to the doctor right away, therefore we wait and we believe we get sicker during that waiting time.”

Latina Female

“One of the things that keeps us from being healthy is not only not going to the doctor regularly, but having a doctor that we can trust and relate to.”

African American Male

National or State Data

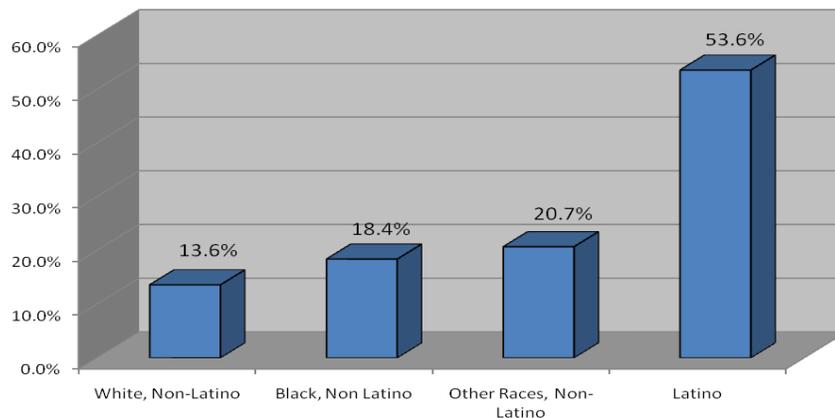
According to the United States Bureau of the census, in 2005, 44.8 million US residents lacked health insurance for the entire year. Approximately, 1.3 million of those are North Carolina residents. From year 2000 to 2005, there was a 27% increase in uninsured people ages 18-64 in North Carolina, from 15.3% to 19.5% respectively. Blue Cross Blue Shield (BC/BS) reported that the uninsured population has a 25 percent greater chance of premature death. The low income and uninsured are: 4.5 times more likely to have diabetes, 30 percent more likely to have high blood pressure, and 50% more likely to high cholesterol.

The general community believes that people without health insurance do not work. However, according to BC/BS NC about half (55.3%) of the uninsured work for small businesses. The NC Medical Journal reports that 78% of the uninsured work full time or live in a family where at least one person has a fulltime job. The problem is that these jobs are often with small employers who can’t afford the high cost of employee health insurance.

According to BC/BS, the largest portion of the uninsured is the 18 – 34 year olds which represents 57.8% of all uninsured. The reasons for this could be their young and just starting out, they work lower paying jobs that do not offer insurance, or a general misconception that they are healthy and do not need insurance. 58% of all uninsured workers in the State work for small employers. According to the Small Business Association, this is a particular problem since 98% of NC businesses are small business.

For minorities, BC/BS reports that 93% of uninsured Latinos are in working families. For African Americans, 86% are in working families. Therefore, minorities are at a greater risk of being uninsured and therefore, in poorer health.

Percent of Individuals, By Race and Ethnicity, Who Are Uninsured (North Carolina, 2003-2004)



This above graph clearly demonstrates the disproportionate impact of minority populations in North Carolina without health insurance.

**Community
Voices Continued**

“If we could make any change, we would love to have a Hmong medical clinic with a Hmong doctor that we can visit anytime; this would help us a lot.”

Hmong Male

“A health priority is being able to go to a doctor without having to worry about money. A lot of doctors won’t accept you unless you have health insurance.”

**African American
Female**

“The cost of medicine has skyrocketed so. I think that’s the biggest thing in our community, having the funds to get the medicines that you need. The cost outweighs the need.”

**African American
Male**

“Not all doctors have interpreters that can help us when we go to the clinics and its hard to communicate and get the message across.”

Latina Female

Assets

- The Greater Hickory Cooperative Christian Ministry’s (GHCCM) Healthcare Center provides medical care and medications at no charge to adults who are within 200% of FPL.
- In Newton, the Clinic for People Without Health Insurance is operated by Dr. Wofford and a fee is charged depending on the patient’s ability to pay.
- St. Joseph’s Hispanic Clinic in Newton serves mainly Spanish speaking clients.
- Catawba County Health Partners, the Medical Society Foundation, and GHCCM have developed and are implementing a program to expand the safety net of providers willing to see people without insurance. The program is called Medical Access of Catawba County (MACC). Clients enrolled in MACC will receive medical care for Diabetes, Hypertension, heart disease or COPD.
- Catawba Valley Community College has offered a medical interpreter class for the past two years and is now transitioning the module into a “Health and Human Services Interpreter Class.”
- The United Hmong Association offers interpreting services to assist with medical appointments.
- Centro Latino offers interpreter services to assist with medical appointments
- Catawba County Social Services coordinates a medication discount program that offers cards for discounted medications to anyone that does not have a prescription card.
- Catawba County Public Health offers an array of medical and preventive health services. Some services have eligibility requirements while others are available to the general public. Public Health helps enroll children in the State Health Insurance Plan. SHIP is for families who make too much money to qualify for Medicaid but too little to afford rising health insurance premiums are able to get free or reduced price comprehensive health care for their children.
- Public Health provides a child health clinic for well child care twice a month to offer physical exams, lab tests, vision and hearing screenings, developmental tests, and immunizations.
- The Totally Teens Health Center, located at the Public Health offers a wide range of comprehensive health services including physical exams, nutrition counseling, immunizations, behavior services, sick and injury care, health information, and education to adolescents aged 13 – 21 years of age.
- Catawba County’s two hospitals, Catawba Valley Medical Center and Frye Regional Medical Center, provide residents a variety of medical and education services. Both hospitals maintain and staff primary care practices in Catawba County.

National Data

44.8 million U.S. residents lacked health insurance for the entire year.

State Data

From year 2000 to 2005, there was a 12% increase in uninsured people in North Carolina, from 15.3% to 17.2% respectively.

Economic Impact

In 2005, premium costs for family health insurance coverage provided by private employers will include an extra **\$922** in premiums due to the cost of care for the uninsured; premiums for individual coverage will cost an extra **\$341 million**.

Opportunities

- There is a need to expand free and reduced health care services to the uninsured and underinsured.
- According to the focus groups, most of the minority populations do not feel that they have providers that are culturally diverse and speak their language and on a level that is easy to understand. A health literacy program for providers may be beneficial.
- Effort toward a lay health advisor program would greatly benefit the community.
- There is a need for a coordinated transportation program to provide service to medical appointments.
- While the medication discount program is a benefit, it can be costly. There needs to be effort into securing medications at low to no cost for the uninsured population.
- Having adequate interpretation and meeting all communication needs in the community is a concern as well.

Conclusions

- While, the uninsured rates in Catawba County have decreased slightly, there are still nearly 1 in 4 adults living without health insurance.
- The minority groups that participated in focus groups all reported issues around health care; lack of insurance: lack of transportation to medical appointments, or lack of culturally competent providers.
- Catawba County has made many advances in caring for those who are uninsured. Much progress has been made in reducing deaths due to heart disease.
- However, more progress is needed in diabetes, and stroke particularly in the minority community.
- Providing medically necessary transportation would be one way to make progress toward a healthier community.

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Vehicle Crashes

Overview

In North Carolina and the United States, deaths and injuries resulting from motor vehicle crashes are the leading cause of death for persons 1 to 34 years of age. Traffic fatalities account for more than 90% of all transportation-related deaths. In 2005, North Carolina had a significantly much higher rate of vehicle crash fatalities per 100,000 population than the United States with 17.8 compared to 14.6 respectively. The number of reportable crashes on state maintained roads in 2005 for North Carolina was 248,669, which resulted in the deaths of 1,547 people and caused an additional 145,451 persons to suffer injury due to the crashes. Studies continue to show that speed is a major cause of injury and fatality on North Carolina roadways. In 2005 alone, there were 540 fatalities and more than 32,000 speed-related injuries on our roads. The economic impact of motor vehicle crashes in 2000 was \$8.2 billion for North Carolina and \$230 billion for the United States.

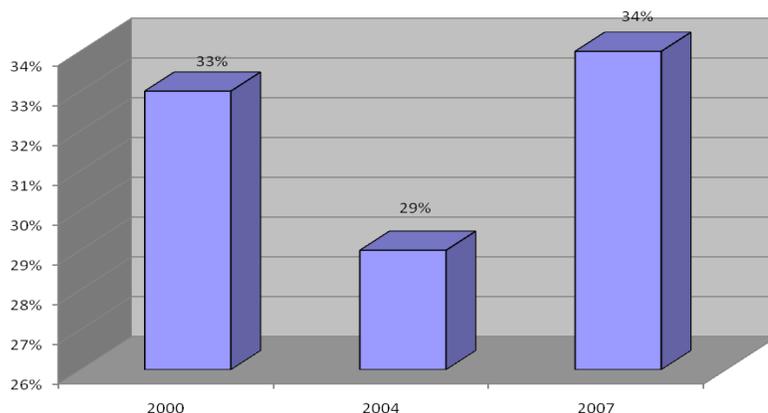
Catawba County Data

The table compares 2001 – 2005 statistical data for Catawba County, North Carolina and the Healthy Carolinians Healthy People 2010 objective. The statistics refer to the number of deaths per 100,000 population from Motor Vehicle Crashes. Catawba County is much higher than North Carolina rates when comparing motor vehicle crashes for people under the age of 20.

MOTOR VEHICLE CRASHES			
	North Carolina	Catawba County	NC 2010 Target
Under 20 years of age	12.2	16.1	
20-39 years of age	24.9	23.0	
Total Population	19.4	18.4	15.8

State Center for Health Statistics 2001- 2005

**Has Rode (Once or More in the Past 12 Months)
With a Driver Who Had Been Drinking**



Youth Search Institute Survey 2000, 2004, 2007

The information in the above graph shows that one third of the youth surveyed have driven with someone who has been drinking and driving in the past 12 months. This could be one factor contributing to the high motor vehicle crash rates for people under 20 years of age in Catawba County.

Trends

Since 1999 motor vehicle crashes for people under age 20 has increased from 14.4 to 16.1 in Catawba County. This is 33% higher than the NC rate.

Disparities

People under from the age of 20 are most at risk for fatalities from vehicle crashes.

An initiative called Nuestra Seguridad, aims to reduce the disproportionate amount of highway safety fatalities and injuries among Hispanic drivers in North Carolina. The focus of the program is to increase awareness of driving laws and safety issues among Hispanics.

National Data

There were 43,510 (14.6 per 100,000 people) vehicle crashes that resulted in fatalities in the United States in 2005. This is a lower rate than NC.

Economic Impact

The economic impact of motor vehicle crashes in 2000 was **\$8.2 billion** for North Carolina and **\$230 billion** for the United States.

National or State Data

- In NC a teenager is involved in a car crash every 23.6 minutes.
- 1558 people died on North Carolina’s roads in 2006.
- 48% of fatalities involved people that did not wear seat belts.
- 88.6% of people in cars and trucks are believed to be in compliance with North Carolina’s seat belt laws.

The James Madison University Web site offers the following United States facts and statistics about seat belt safety:

- Out of every five motor vehicle drivers, one driver will be in a traffic accident this year.
- About 35,000 people die in accidents involving a motor vehicle every year.
- About 50% would not have died if they were wearing seat belts at the time of the fatal crash.
- If just 172 of the 35,000 people did not die, some \$100 million a year in personal injury and wrongful death recovery costs would be saved.
- Children have been known to die or be seriously injured in a motor vehicle crash because they were crushed by adults that were not wearing seatbelts.
- 80 out of every 100 children that die in a motor vehicle collision would have been saved if they had been a safety belt or child safety seat.

Assets

- Catawba County Public Health provides car seats to needy families in an effort to reduce the number of injuries and fatalities for children from motor vehicle crashes. They also provide car seat checks in the community to ensure that they are properly installed.
- Catawba County’s Child Fatality Prevention Team meets on a quarterly basis to review child deaths and to propose recommendations.
- Catawba Valley Medical Center (CVMC) sponsors a Safe Kids Coalition. CVMC participates in routine car seat checks and conducts an annual health fair in an attempt to raise awareness of childhood motor vehicle fatalities.
- Law Enforcement agencies in Catawba County actively promote North Carolina’s “Click It or Ticket” and “Booze It and Lose It” campaigns. They participate in community health fairs and work with the school systems to ensure teens are aware of the dangers associated with driving while intoxicated.
- Following the death of a Bandy’s High School student at the hands of a drunk driver, citizens and students in the community established the ANNA MAC phone line, which stands for Another Night Alive, Make A Call. This line provides students in the Mill Creek Middle and Bandy’s High School communities with a safe, non-judgmental and confidential ride home if they are in an uncomfortable and potentially dangerous situation or if a driver is under the influence and may not be able to drive safely.

Opportunities

- Inform the community about the safety driving courses offered at Catawba Valley Community College.
- Offer incentives to teenagers that complete a safety driving course such as lower insurance rates.
- Secure funding for a driving test track for students to practice driving safely.
- Offer safety driving courses to the Hispanic community through churches and Centro Latino.

Conclusions

- Catawba County has a much higher rate of motor vehicle crash deaths with 16.1 deaths per 100,000 population under the age of 20 compared to North Carolina's rate of 12.2 deaths per 100,000 population in the same age category.
- For persons aged 20 to 39 years of age, Catawba County's rate of 23 deaths per 100,000 population is slightly lower than North Carolina's rate of 24.9 deaths per 100,000 population for motor vehicle crashes.
- Catawba County's rate of 18.4 deaths per 100,000 population in the total population far exceeds the 2010 Healthy Carolinians objective of 15.8 deaths per 100,000 population for motor vehicle crashes.

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North Carolina State Highway Patrol

Violence and Injury

Overview

Injury is a serious public health problem in North Carolina and in the nation because of its impact on health including premature death, disability and the burden on the health care system. Injury is the leading cause of death and disability among children and young adults and the fourth leading cause of death for all ages. Injuries disproportionately affect children, minority populations, and older adults. Leading causes of deaths from injury include motor vehicle crashes, homicide, suicide, falls, fires and burns, poisoning, and drowning.

Like diseases, injuries do not occur at random. They are predicable and, therefore, preventable. Injury prevention strategies focus on environmental design, product design, human behavior, education, and legislative and regulatory requirements that support environmental and behavioral change, for example laws requiring the use of seat belts and motorcycle helmets.

The word violence is used to describe any abusive or aggressive behavior that is either enacted upon another individual or performed on oneself. This category serves as an umbrella for a number of acts including child abuse, rape, assault, suicide, and homicide.

Catawba County Data

According to the Youth Search Institute Survey in 2007, 35% of the kids surveyed had engaged in three or more acts of fighting, hitting, injuring a person, carrying or using a weapon, or threatening physical harm in the last 12 months. There were a total of 11,866 reports made by Catawba County School Resource Officers in school year 2005-2006.

The table below compares 2001-2005 statistical data for Catawba County, North Carolina and the Healthy Carolinians 2010 objective. When compared to North Carolina, Catawba County has a higher suicide rate and lower homicide rate but exceeds, thus fails to meet, the 2010 target in both categories.

VIOLENCE			
2001- 2005 SCHS - Deaths per 100,000 population (age adjusted)			
	North Carolina	Catawba County	NC 2010 Target
Homicide	7.2	5.7	5.0
Suicide	11.6	14.2	8.0

SCHS - State Center for Health Statistics

The data below states that youth report increased participation in activities related to or having the potential to lead to violent acts.

Topic of Youth Behavior	2000	2004	2007
Has attempted suicide one or more times	15%	16%	14%
Physically hurt someone once or more in past 12 months	16%	13%	19%
Got in trouble with the police once or more in past 12 months	18%	20%	23%
Gambled once or more in the past 12 months	28%	26%	35%
Carried a weapon for protection once or more in past 12 months	15%	15%	21%

Youth Search Institute Survey 2000, 2004, 2007

National or North Carolina Data

- In 2004, suicide was the eleventh leading cause of death in the U.S., accounting for 32,439 deaths
- An estimated eight to 25 attempted suicides occur per every suicide death
- Older Americans are disproportionately likely to die by suicide.
- Of every 100,000 people ages 65 and older, 14.3 died by suicide in 2004. This figure is higher than the national average of 10.9 suicides per 100,000 people in the general population.
- Non-Hispanic white men age 85 or older had an even higher rate, with 17.8 suicide deaths per 100,000.
- The violent crime rate in the US increased 1.3% from 2004 to 2005. From 1996 to 2005, the rate fell 26.3%.
- The property crime rate in the US decreased 2.4% from 2004 to 2005. From 1996 to 2005, the rate fell 22.9%.

The North Carolina Violent Death Reporting System (NC-VDRS) began collecting data on 1 January 2004. Data from this system is very useful in comparing violent deaths between males and females and shows the following trends that demonstrate the incidence, circumstances, and methods of fatal violence differ greatly between females and males.

- Several critical factors specific to death from violence differ between females and males.
- Females who committed suicide were more likely than males to have a medical diagnosis of depression.
- Females who committed suicide were also more likely than males to have a history of suicide attempts.
- The dominant cause of female homicide was intimate partner violence whereas a male homicide more often resulted from other types of arguments or conflict.
- The suspect in homicides was more likely to have been a spouse/ex-spouse/intimate partner or former intimate partner of females than males.
- Among African American females, the homicide rate exceeded the suicide rate, whereas the opposite was true for white females.
- Suicide and homicide rates are lower for females than males.
- Firearms are the most common method of death for suicides and homicides in both genders.
- Females who commit suicide are more likely than males who commit suicide to have had mental health problems and previous suicide attempts

Homicide

Data from 2004 shows differences between gender and race. The homicide rate in females was 3.1 per 100,000 population. As with suicide, this is less than one third the homicide rate for males. The homicide rate in African American females, (5.2 per 100,000 population) was over twice that for white females (2.4 per 100,000 population). The homicide rate in African American males (27.7 per 100,000 population) was almost five times the rate in white males (5.6 per 100,000 population).

Suicide

As in homicide, data from 2004 shows differences between gender and race in suicide as well. The NC suicide rate in females (5.4 per 100,000 population) was less than half the suicide rate for

Trends

Suicide deaths per 100,000 population decreased from 15.3 (2000-2004) to 14.2 (2001-2005). When compared to the NC rate of 11.2 (2001-2005), Catawba County was 26% higher.

Violent crimes such as larceny and rape increased while murder and aggravated assault decreased.

Disparities

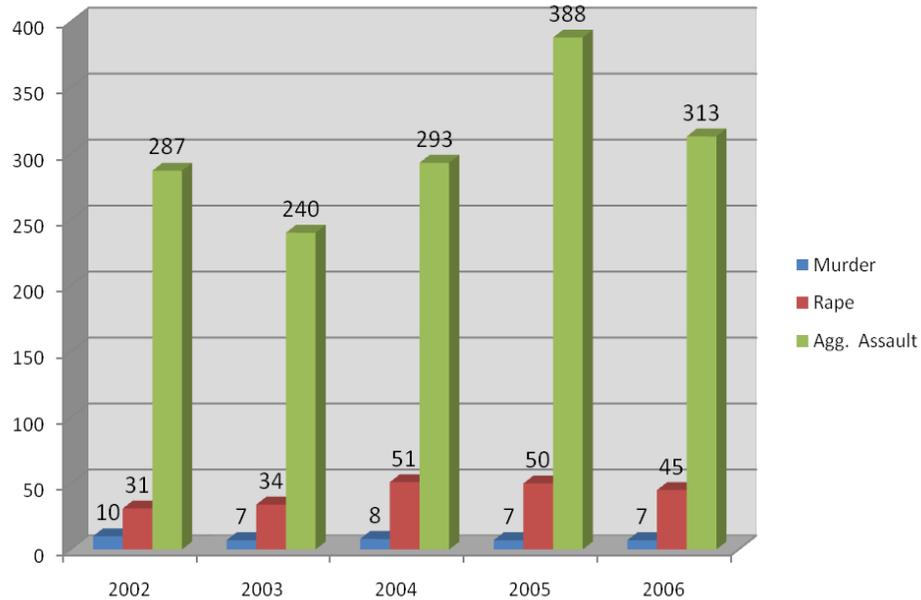
NC 2004 data shows white females committed suicide 3.3 times more than African American females while the suicide rate for white males was 2.4 times higher than African American males.

NC 2004 data shows the homicide rate for African American females was over twice that of white females and African American male deaths due to homicide was 5 times greater than white males.

Since 1994, violent crime rates have declined, reaching the lowest level ever in 2005 as reported by the US Department of Justice.

males (18.6 per 100,000 population). Suicides were largely concentrated in whites. The distribution by race was similar for female and male suicides (approximately 90% white). However, the white to African American suicide rates were 3.3 times as high in females (6.6 per 100 000 population vs. 2.0) and 2.4 times as high in males (21.8 per 100 000 population vs. 8.9). A crisis was reported to have occurred in 22% of females and 29% of males who committed suicide.

Violent Crime



North Carolina State Bureau of Investigation Division of Criminal Information

The above graph shows that aggravated assault is the most commonly reported violent crime in Catawba County. Reports of rape have increased by 45% from 2002 to 2006.

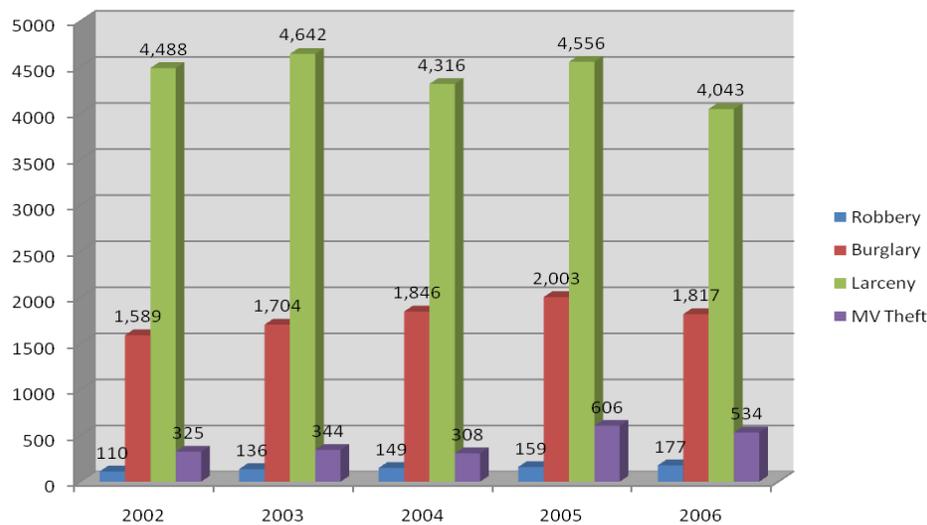
Quote

“The suffering of the suicidal is private and inexpressible, leaving family members, friends, and colleagues to deal with an almost unfathomable kind of loss, as well as guilt. Suicide carries in its aftermath a level of confusion and devastation that is, for the most part, beyond description.”
Kay Redfield Jamison,
Johns Hopkins University
Psychologist

Economic Impact

Hospitalized suicide attempts of North Carolina youth for 2001 costs were **\$31,890,264.**

Robbery & Theft



North Carolina State Bureau of Investigation Division of Criminal Information

According to the above graph, larceny is the most commonly reported crime in Catawba County. Burglary is the second most common and had been on the increase until 2006 when it took a slight decrease.

Assets

- The Catawba County Department of Social Services worked diligently to establish a Community Standard for Child Abuse and Neglect document that can be used to gage both the presence and severity of child abuse and neglect.
- In Catawba County there is a Rape Crisis Center, which is funded through the United Way to assist women who have been sexually assaulted.
- The Totally Teens Health Center (TTHC), which is located at the Health Department, completes Guidelines for Adolescent Preventative Services (GAPS) on every patient in an attempt to identify risk factors that may impact the patient’s health. In the event that a patient identifies that he or she is in a vulnerable situation, whether that be that the patient is being subjected to physical, mental, or sexual abuse or any other compromising situation, the appropriate action is taken and counseling services are provided for that teen.
- TTHC offers counseling services to teens that may be suffering from depression, suicidal thoughts, anxiety, or any other condition that may adversely affect them either physically or emotionally.
- Some Catawba County communities engage in Neighborhood Watch Programs to decrease the incidence of violence, theft, or burglary in their neighborhoods.
- Each school system offers classroom guidance lessons through the Students Trying Out Peace (STOP) program addressing issues such as

conflict resolution, handling bullying or teasing, identifying sexual harassment, and anger management techniques.

- Peer mediation is available to all students as a violence prevention alternative.
- Counselors are available in all schools to address the various needs of the students. They are available during school hours and by appointment as needed. The counselors maintain confidentiality with the students; however, appropriate action is taken and referrals are made in the event that they are necessary.
- The Nurturing Program, led by Catawba County's Department of Social Services, reaches approximately 90 parents annually. Most of the parents have substantiated reports of child abuse or neglect.
- Hispanic Outreach, located in Catawba County and conducted by the Department of Social Services, addresses violence, child abuse, rape and teen pregnancy. Their main goal is prevention of child protective service reports through early involvement in Work First services toward self-sufficiency.
- Catawba County's Mental Health Department offers a treatment program for legally adjudicated adolescent sex offenders entitled the Sexual Abuse Intervention Program (SAIP). The aim of this program is to provide comprehensive evaluation and treatment to this population with the primary goal being to protect both the current and future victims from further sexual victimization and abuse.
- The Family Guidance Center, funded by United Way, offers a First Step program, which is a family violence prevention program. They offer shelter to victims of family violence.
- The Sheriff's Office offers a Conflict Resolution Center that assists individuals in how to handle combative situations and offers anger management techniques.
- Each school in Catawba County employ Resource Officers who are on the campus at all times to minimize and control situations which may arise among the students.
- The Health Department's Women's Preventative Health Clinic screens all patients for emotional, sexual, and physical abuse. A Licensed Certified Social Worker is available to counsel patients as requested. The clinic also provides a medication assistance program for patients requiring anti-depressants.

Opportunities

- Work with businesses to offer mental health services such as employee assistance programs and other resources in order to prevent suicide and other mental health issues.
- Partner with law enforcement to organize neighborhood watch groups in the community and/or neighborhoods.
- Offer self defense classes in the community through workplace, recreation departments, churches, and fitness centers.
- Provide gang prevention programs to youth and parents at schools, churches, businesses, and community centers.

Conclusions

- When compared to North Carolina, Catawba County has a higher suicide rate and lower homicide rate but exceeds, thus fails to meet, the 2010 target in both categories.
- The Youth Search Institute Survey states that youth report increased participation in activities related to or having the potential to lead to violent acts.
- The dominant cause of female homicide was intimate partner violence whereas a male homicide more often resulted from other types of arguments or conflict.
- The suspect in homicides was more likely to have been a spouse/ex-spouse/intimate partner or former intimate partner of females than males.
- Among African American females, the homicide rate exceeded the suicide rate, whereas the opposite was true for white females.
- Suicide and homicide rates are lower for females than males.
- Firearms are the most common method of death for suicides and homicides in both genders.

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 Youth Institute Survey – 2000, 2004, 2007
 State Center for Health Statistics (SCHS)
 NC State Bureau of Investigation – Division of Criminal Information

COMMUNICATION PLAN

COMMUNICATION PLAN

Catawba County Community Health Assessment Communication Plan

Format	Means of Distribution	Time Frame
CHA Presentation	Will present the CHA highlights and summary at the Board of Health Meeting.	December 4, 2007
Final CHA document	Will print 50 full color copies to distribute to public health management team, CHA action team, listening session leaders, county manger, and other necessary key leaders.	January – February 2008
Public Friendly Report	Will compile an 8-12 page color report that summarizes the CHA findings. There will be 300 color copies created and distributed to county commissioners, board of health, school officials, Health Partners members and board of directors, hospital officials, and other community stakeholders. May use at health fairs also.	February – May 2008
CHA PowerPoint and Presentation	A PowerPoint of the CHA highlights and data will be created to present to the community at meetings such as: Board of Commissioners, Rotary clubs, United Way meetings, CCHP annual meeting, etc...	February 2008 – ongoing
Internet	People can visit the Catawba County Health Partners Web Site at: www.catawbacountyhp.org for the public friendly version and full document of the community health assessment.	December 2007-ongoing
Press Release	A press release of the CHA findings will be developed and sent to all of the local media outlets.	January or February 2008

**2007
CATAWBA COUNTY
STATE OF THE
COUNTY HEALTH
REPORT
(SOTCH)**

Appendix A

PUBLIC HEALTH REPORT CARD
FOR CATAWBA COUNTY
2007

HEALTH INDICATOR	NORTH CAROLINA	CATAWBA COUNTY	NC 2010 TARGET
	2007	2007	
DEMOGRAPHICS			
2000 Census			
Population	8,049,313	141,685	
Percent Female	51.0%	50.7%	
Percent Male	49.0%	49.3%	
Percent Under 5 yrs old	6.7%	6.5%	
Percent Under 18 yrs old	24.4%	24.3%	
Percent 65 yrs old and over	12.0%	12.3%	
Percent White	72.1%	85.0%	
Percent Black/African American	21.6%	8.4%	
Percent Asian	1.4%	2.9%	
Percent Hispanic/Latino	4.7%	5.6%	
Population per square miles	165.2	354.2	
INFANT MORTALITY			
SCHS 2001- 2005			
Neonatal Mortality (Deaths under 28 days per 1,000 live births)			
White Population	4.1	3.8	
Minority Population	12.7	10.6	
Total Population	5.9	5.1	5.9
Infant Mortality (Deaths under 1 year per 1,000 live births)			
White Population	6.1	6.2	
Minority Population	14.7	12.7	
Total Population	8.5	7.1	7.4
Infant Mortality (Deaths under 1 year per 1,000 live births)			
Black	16.0	17.3	
Percent Low Birth Weight (% of live births weighing less than 5lbs 8oz)			
White Population	7.4%	7.8%	
Minority Population	13.4%	12.0%	
Total Population	9.0%	8.4%	7.0%
Percent Very Low Birth Weight (% of live births weighing less than 3lbs 3oz)			
Black	3.6%	4.8%	
Percent Prenatal Care Initiated in 1st Trimester			
Black	75.0%	68.4%	
Total Population	83.5%	80.6%	90.0%
Percent Pregnant Women Who Smoke	12.9%	15.3%	7.0%
SEXUALLY TRANSMITTED DISEASES (STD'S)			
SCHS 2001- 2005 - New Cases per 100,000 population			
Gonorrhea			
Minority Population	600.1	402.3	
Total Population	183.5	82.6	191.0
Syphilis (Primary and Secondary)			
Minority Population	9.3	0.0	
Total Population	3.2	0.4	0.25
AIDS	12.2	6.7	14.7
CHILDHOOD OVERWEIGHT*			
2006 NC Nutrition & Physical Activity Surveillance System **			
Age Group			
2-4 year olds	15.20%	17.70%	11.80%
5-11 year olds	25.20%	27.40%	16.70%
12- 18 year olds	29.50%	32.50%	20.30%
Total for 2-20 year olds	17.40%	23.80%	

SCHS- State Center for Health Statistics

* Overweight for teens and children is defined as a Body Mass Index (BMI) \geq 95th percentile.

** NC Department of Health and Human Services, Division of Public Health

PUBLIC HEALTH REPORT CARD
FOR CATAWBA COUNTY

2007

HEALTH INDICATOR	North Carolina	Catawba County	NC 2010 TARGET
	2007	2007	
MOTOR VEHICLE CRASHES			
2001- 2005 SCHS - Deaths per 100,000 population (age specific)			
Under 20 years of age	12.2	16.1	
20-39 years of age	24.9	23.0	
Total Population	19.4	18.4	15.8
VIOLENCE			
2001- 2005 SCHS - Deaths per 100,000 population (age adjusted)			
Homicide	7.2	5.7	5.0
Suicide	11.6	14.2	8.0
ORAL HEALTH			
2005- 2006 NC Division of Public Health, Oral Health Section			
Average Number of Decayed, Missing and Filled Primary Teeth (dmft) in Kindergarten	1.7	1.6	*1.3
Percentage of kindergarten children with untreated teeth decay.	21.0%	19.0%	
Percent of 5th graders with permanent teeth free of decay	76.0%	77.0%	87.0%
Percent of 5th graders with sealants	44.0%	54.0%	
PNEUMONIA/FLU DEATHS			
2001- 2005 SCHS- Deaths per 100,000 population			
65-84 years of age	87.2	110.7	
Over the age of 85	704.9	975.2	
Total Population	21.7	27.3	
HEART DISEASE/STROKE			
2001- 2005 SCHS - Deaths per 100,000 population (age adjusted)			
Heart Disease			
White	218.5	204.8	
Females	174.4	167.2	
Males	276.5	256.8	
Minority Population	259.4	252.3	
Females	215.0	199.0	
Males	323.7	323.4	
Total Population	226.8	209.0	219.8
Stroke			
White Population	59.8	65.1	
Females	58.6	61.3	
Males	60.2	72.0	
Minority Population	85.2	76.8	
Females	79.8	79.4	
Males	92.0	73.8	
Total Population	64.7	66.2	61.0
DIABETES			
2001- 2005 SCHS - Deaths per 100,000 population (age adjusted)			
Diabetes (Primary & Sec.) 2001- 2005	Data	Not Available	67.4
Diabetes (Primary Only)			
White Population	21.8	26.6	
Females	19.8	21.2	
Males	25.3	33.8	
Minority Population	53.8	82.5	
Females	51.9	81.0	
Males	55.3	88.5	
Total Population	27.6	30.6	

SCHS- State Center for Health Statistics

* Goal is measured for Preschool; Reported results are for Kindergartners

PUBLIC HEALTH REPORT CARD
FOR CATAWBA COUNTY
2007

HEALTH INDICATOR	NORTH CAROLINA	CATAWBA COUNTY	NC 2010 Target
	2007	2007	
CANCER			
2001- 2005 SCHS- Deaths per 100,000 population (age adjusted)			
Total Cancer Deaths	197.7	196.6	166.2
Prostate Cancer (Male)			
White Population	23.7	23.6	
Minority Population	62.7	81.4	
Total Population	29.9	27.0	
Breast Cancer (Female)			
White Population	24.0	25.9	
Minority Population	32.6	21.7	
Total Population	26.0	25.7	22.6
Trachea, Bronchus, & Lung			
White Population	60.4	61.3	
Females	43.6	47.8	
Males	83.6	83.5	
Minority population	57.0	43.1	
Females	33.3	30.0	
Males	94.1	61.6	
Total Population	59.9	60.3	
Colon, Rectum, & Anus			
White Population	17.4	20.1	
Females	14.7	15.7	
Males	21.0	27.2	
Minority Population	23.6	19.4	
Females	20.8	21.3	
Males	28.4	15.2	
Total Population	18.6	20.2	16.4
HEALTH CARE ACCESS			
Dentist (2005) per 10,000 population Cecil G. Sheps Center (UNC-CH)	4.4	4.4	
Physician (2005) per 10,000 population Cecil G. Sheps Center (UNC-CH)	20.8	23.5	
Primary Care Physician (2005) per 10,000 population Cecil G. Sheps Center (UNC-CH)	9.0	9.1	
*Uninsured Estimates for 0-17 yr. olds (2005) Cecil G. Sheps Center (UNC-CH)	11.3%	11.2%	
*Uninsured Estimates for 18-64 yr. olds (2005) Cecil G. Sheps Center (UNC-CH)	19.5%	17.8%	
*Uninsured Estimates for 0-64 yr. olds (2005) Cecil G. Sheps Center (UNC-CH)	17.2%	16.0%	
Percent of Medicaid eligible children ages 0-21 who received Health Check Preventative Services -Age Specific (SFY 2004-2005) Division of Medical Assistance	72.6%	71.8%	
Kindergartner Health Assessment - (SY 2006-2007) NCDHHS-DPH**	97.6%	99.2%	
Percentage of Medicaid Eligibles Receiving Dental Services (Divison of Medical Assistance) CY2006.			
Ages 1-5 yrs	24.0%	17.0%	
Ages 6-14 yrs	48.0%	44.0%	
Ages 15-20 yrs	33.0%	32.0%	
Overall (ages 1-20 yrs)	34.0%	29.0%	

SCHS - State Center for Health Stastics

SY- School Year

SFY- State Fiscal Year

CY- Calendar Year

* Uninsured is defined as someone without health insurance for an entire year

** NC Department of Health and Human Services, Division of Public Health

**PUBLIC HEALTH REPORT CARD
FOR CATAWBA COUNTY
2007**

HEALTH INDICATOR	NORTH CAROLINA	CATAWBA COUNTY	NC 2010 Target
	2007	2007	
ASTHMA			
2005 SCHS- Hospitalizations per 100,000 population			
Asthma Hospitalizations			
0 to 14 years of age	164.6	56.2	
Total Population	128.5	60.4	118.0
LEAD SCREENING			
Percent of Children ages 12-36 mths Screened for Lead (1995-2005 *)	42.8	49.5	
Percent of Children w/elevated Blood Lead Levels >10 ug/dl (1995-2005 *)	0.8	1.2	
IMMUNIZATIONS			
Percent of Kindergartners in Compliance (SY 2005-2006)	99.2	99.0	99%**
TEEN PREGNANCY RATES			
2001- 2005 SCHS- per 1,000 population (15-17 years old)			
White Pregnancy Rate	29.2	29.0	
Minority Pregnancy Rate	53.6	53.3	
Total Pregnancy Rate	37.2	33.8	
COMMUNICABLE DISEASES			
SCHS 2002- 2006- New Cases per 100,000 population			
Hepatitis A	1.1	0.5	
Hepatitis B	1.5	1.8	
Salmonellosis	14.0	7.8	
Tuberculosis	3.3	0.7	
Whooping Cough	0.9	1.1	
SUBSTANCE ABUSE			
ADCNC Rate per 100,000 population 			
DUI Arrests	416.0	378.0	
Drug Arrests	452.0	357.0	
Alcohol Traffic Deaths	5.0	3.0	

SCHS - State Center for Health Stastics

SY- School Year

*Children's Environmental Health Branch, Division of Environmental Health, NC Dept. of Environment & Natural Assistance

** Goal is measured for Kindergarten-First Grade; Reported results are for Kindergartners only

ug/dl- microgram per deciliter

ADCNC - Alcohol/Drug Council of North Carolina 2004 North Carolina Epidemiologic Data

**YOUTH SEARCH
INSTITUTE
SURVEY RESULTS**

Appendix B

DEVELOPMENTAL ASSETTS: A Profile of Your Youth prepared by: Search Institute
Catawba County Youth Survey Trends of 8th, 10th and 12th graders

Category for Youth Behavior	2000	2004	2007	Trend
Total average of assets out of 40	20.6	19.5	19.3	
1. Family life provides high levels of love and support			70%	
2. Young person serves in the community one hour or more per week			54%	
3. Both parents and teachers encourage the young person to do well			57%	
4. Young person spends three or more hours per week in sports, clubs, organizations in school or in community.			52%	
5. Young person spends one or more hours per week in activities in a religious institution			68%	
6. Young person is optimistic about his/her personal future			76%	
7. Young person acts on convictions and stands up for his or her beliefs			75%	
8. Parents and other adults model positive and responsible behavior			30%	
9. Young person cares about his or her school			50%	
10. Young person knows how to plan ahead and make choices			30%	
11. Young person can resist negative peer pressure and dangerous situations			40%	
12. Young person reports that "my life has a sense of purpose"			64%	
Violence and / or Crime				
Has attempted suicide one or more times	15%	16%	14%	
Physically hurt someone once or more in past 12 months	16%	13%	19%	
Committed vandalism once or more in the last 12 months	19%	20%	21%	
Got in trouble with the police once or more in past 12 months	18%	20%	23%	
Shoplifted once or more times in last 12 months	24%	20%	23%	
Gambled once or more in the past 12 months	28%	26%	35%	
Carried a weapon for protection once or more in past 12 months	15%	15%	21%	
Alcohol, Drugs and Tobacco				
Used alcohol once or more in past 30 days	33%	38%	34%	
Got drunk once or more in past 2 weeks	20%	25%	23%	
Smoke cigarettes once or more in past 30 days	22%	21%	17%	
Used smokeless tobacco once or more in past 12 months	11%	9%	9%	
Used marijuana once or more in past last 12 months	20%	25%	20%	
Used other illicit drugs once or more in last 12 months (ie. cocaine, LSD, PCP, heroin,)	12%	11%	10%	
Drove after drinking once or more in last 12 months	8%	11%	13%	
Rode (once or more in the last 12 months) with a driver that had been drinking	33%	29%	34%	
Other Risk -Taking Behaviors				
Has had sexual intercourse one or more times	26%	37%	41%	
Skipped school once or more in the last four weeks	23%	27%	25%	
Has engaged in bulimic or anorexic behavior	18%	15%	15%	
Felt sad or depressed most or all of the time in the last month	14%	17%	16%	

Key:  = numbers trend upward and are not improving
 = numbers trend downward and show improvement

LISTENING SESSIONS REPORT

Appendix C

Catawba County Community Health Assessment Listening Sessions

To augment quantitative data gathered for the 2007 Community Health Assessment, a series of listening sessions were conducted with members of Catawba County's minority populations. The purpose of the sessions was to identify key health concerns as perceived by the participants. The qualitative findings were intended to supplement data from the Behavioral Risk Factor Surveillance Survey, the State of the Community Health Report, and the Youth Search Institute Survey.

Methodology

During April and May, 2007 six listening sessions were held with volunteers from the Hmong, Latino and African-American communities. Members from each race/ethnicity participated in two groups—one comprised of adult males and the other comprised of adult females. Groups ranged in size from 6 to 14.

Participants were recruited by leaders from their community and were affiliated with the venue at which the sessions took place: Hmong participants were members of the United Hmong Association, Latino participants were parents of students attending Lyle Creek Elementary School and African-American participants were parishioners at the Maiden Baptist Church. Participants were given a \$5 gift certificate to a local retailer as a token of appreciation for donating their time. Participants were not asked to provide demographic information, but the venues from which they were recruited characterized their life stage: Hmong participants were senior members of UHA; Latinos were parents of elementary age students; African-Americans crossed all age groups from teens to seniors.

To encourage open discussion, sessions were facilitated by persons of the same sex as participants and were conducted in their native language. With one exception facilitators and participants were also of the same race or ethnic group; a Caucasian female facilitated the female African-American group. Sessions spanned two hours, followed a discussion guide (see Attachment I) and were audio taped. Following each session, the facilitator reviewed the tape and provided a summary report of the findings. A consultant then analyzed the findings.

As with all qualitative data, the results are limited by and to those that volunteered to participate—in this case a small number of men and women, all of whom are affiliated with specific community organizations. Their responses should be construed as their opinions only and are not intended for generalization to a wider population. When taken together, however, the findings present insights that may resonate with others and provide a basis for further inquiry or action. In addition, due to language differences in four of the six sessions, the reliability of those findings is limited by the necessity of relying on facilitators/translators whose interpretation of the questions and responses cannot be objectively evaluated.

Key Findings

The discussion guide was designed to follow a progression from simple, warm-up questions to thought-provoking queries into perceptions of the important health issues in each community and the foremost barriers to achieving health for participants and their families. Following the wide-ranging discussion, closing questions asked participants to prioritize their concerns and offer ideal solutions.

1. Where do you go for health services now?

In response, the majority referred to a family physician, local clinics, Catawba Valley Medical Center (CVMC) and/or Frye Regional Medical Center (FRMC). African-American women also mentioned Catawba County Public Health and Latina women mentioned Cooperative Christian Ministry as well as their churches. The notable exception came from Hmong females who failed to reference any place medical and instead said they relied on their own children and the United Hmong Association (UHA).

2. Where do you get most of your health information?

When the question was posed directly, the most common resources mentioned were doctors, friends and relatives. Other resources included ethnic community organizations (UHA for Hmong females, Centro Latino for Latina females); targeted news outlets (Spanish News for Latina females and Black TV networks and Black radio stations for African-American males). The only groups to seek information online were African-American men and women. Latina women pointedly noted that they lacked access to the Internet.

While addressing another question, African-American males made it clear that two other resources provided useful health information: the church and the workplace.

3. What do you think are the most important health concerns in your community?

Among Latino and African-American participants, the question elicited a litany of medical concerns, many of which reflect the leading causes of death and disability in the US: diabetes, cancer, heart disease, HIV/AIDS, asthma and allergies, and substance abuse. Both female and male African-Americans also highlighted high blood pressure as an important concern. Latina and African-American women added “women’s issues.” Focusing on children, the young Latino fathers listed “safety for children playing outside,” drugs, robberies, drunk drivers and video games. Latino women added children’s oral health. African-American women also discussed youth, citing their concern with “sexuality issues.”

Responses from Hmong participants focused not on medical conditions, but on social determinants they perceive to impact their health. Hmong women expressed fear borne of isolation.

Hmong males expressed concern about the language barrier and their financial situation.

4. What’s happening in your neighborhood and community that influences the health of you and your family?

Latinos and African Americans were quick to answer that fast food restaurants were the predominant negative influence impacting health in their communities. When probed, however, the discussion turned to cultural, economic, and environmental issues. Each group noted that lack of money and/or the high cost of services and medication were a deterrent to accessing care in a timely manner.

In addition to cost, Latina females cited hesitance to see a medical professional because of the language barrier and cultural taboos around nudity.

Both African American groups agreed that the lack of affordable neighborhood recreational facilities or safe places to exercise had a negative impact on their health. African American females also expressed health-related concerns about the environment.

They did, however, praise the church, the YMCA wellness programs, and senior groups for making positive contributions to the health of their community.

African American males also enumerated positive and negative influences. They lauded the church for teaching positive health practices, the schools for addressing obesity, and worksite wellness programs for providing health information; they lamented the lack of transportation, acknowledged that their community culture did not prize exercise and worried about the lack of African-American medical practitioners in the community.

5. If you needed help for some reason, who and where would you turn to?

Among all groups, the church was perceived as a place to turn in times of need. Hmong and Latino participants also said they would utilize the UHA and Centro Latino. Hmong women said they would turn to their relatives, especially their children. African-American males named Public Health and the

emergency room as likely alternatives and thought social services might be helpful for the most needy. Latino men voiced positive experiences with Public Health; Latina women noted that they use CCM because it does not require insurance, and they rely on Mexican stores for over-the-counter medications. In general, Latina participants voiced dissatisfaction with the medical community

6. What resources or activities would you like to see in your community that would impact health in a positive way?

Each session yielded unique responses.

Hmong men wanted a Hmong clinic and extended broadcasting hours for Hmong NC Radio.

Latina women spoke passionately about access to care and their perceived right to participate in health benefits afforded other taxpayers.

Latino males voiced the need for improved health education for adults and children, particularly in the areas of nutrition and sex education.

African American females recognized the value of church activities, but perceived the need for activities outside the church that would be accessible to other community members. They also saw the need for counseling services for adults. But their primary focus was on the need for public transportation.

African American males saw the need for a free clinic that would provide needed health information to the community at large and services to those in need.

7. What makes it hard for people to get health information and care?

Among Hmong and Latino participants literacy issues (lack of English language skills and computer literacy) were perceived to be a primary barrier to accessing health services.

African American males perceive that information and services are less available in the rural parts of the county.

8. Of all the health issues we have talked about today, which one is the most important for your community to address?

While the intent of the question was to encourage participants to prioritize the pressing health issues in their communities, Hmong males and Latinos reiterated or referred to the responses they gave to the earlier question regarding what they thought the most important health concerns were in their community (question #3). Participants in the remaining sessions responded as intended.

In addition to transportation, learning the language and some basic functional skills (e.g. dialing the phone), Hmong females were most passionate about the need for culturally competent health care and learning to navigate health care system.

For African-American female participants, improved public transportation and better education came to the fore. With regard to health issues, both males and females talked about the need for better communication about available services and access to affordable health care:

9. If you could wave a magic wand and make any change, what would you do to improve the health of your community?

In the best of all worlds, Hmong females would have access to public transportation, medical interpreters at health-care facilities, and government funding for seniors. They also talked about the desire for a senior center to serve as an antidote to seemingly oppressive isolation.

Hmong males would like their children to serve as interpreters and they would like to have a Hmong clinic.

Latina females would like to see immigration reform.

Latino males would like to have adult education workshops where they could learn more about health, nutrition, and how to talk to their kids about sex. They also want youth prevention programs that address sex and drugs, and they would like to see more affordable exercise opportunities for families (e.g., open gyms, swimming lessons).

African-American females overwhelmingly would like to see improvements in public transportation. Additionally, they voiced the desire for a local health clinic, mental health counselors, free screenings, and a teen center.

African-American males would also opt for a satellite health clinic for information and services to serve their part of the county. In addition they would like to see more practitioners of color.

Conclusions & Opportunities

Because one session was conducted with female and male participants from each race/ethnicity, it would be a mistake to draw conclusions about the communities from which the participants were recruited based on the opinions voiced in these listening sessions. There are, however, several themes that emerged across groups that, if substantiated, indicate potential opportunities for interventions.

Dissatisfaction with the medical community

In all sessions there was a perception that the current medical establishment is not serving people of color: Latina women perceive that they are discriminated against in the hospital waiting rooms. Hmong perceive a lack of cultural competence among practitioners. And African-American males expressed distrust of Caucasian doctors.

Affordability and Access

All groups perceived financial barriers to health care in their communities.

Hmong participants listed money and paying their health-care bills as their primary health concern. As with the general population, navigating health care benefits has proven difficult in this community, a problem most likely compounded by language differences.

For Latino participants, policy changes are at the heart of improving access to health care: Participants believe immigration reform would increase job opportunities, which would result in greater access to health insurance and other benefits. In the meantime, participants resent that despite paying taxes, they are excluded from benefits afforded US citizens.

In the rural community of Maiden, participants spoke of the need for affordable health care, but were equally adamant about the need for services in what they perceive to be an underserved part of the county.

Faith-based and community organizations

In all groups, tight-knit community organizations play an important role. In the African-American community participants (all of whom were members of the Maiden Baptist Church) see the church as a central location for disseminating information. They also recognize the need for other venues for those who are not church members. In the Latino and Hmong communities, the church and the neighborhood ethnic organization serve multiple roles, including helping community member access

health care. Collaboration with these organizations may enhance the success of programs targeting minority populations.

Communication and transportation

Lack of English language skills among Hmong and Latinas contribute to reliance on their respective ethnic communities and prevent assimilation into the wider community.

Among Hmong participants in particular, the sense of isolation is stressful and linked to self-described depression. Moreover, the expectation for children—especially sons—in the Hmong community is to act as intermediaries for their parents. Because language deficits render Hmong elders virtually helpless, the burden on children may be great and have implications for the younger generation's mental health and wellbeing.

The need for medical interpreters is a priority of both Hmong and Latinos. This is supported by research that shows access to interpreters improve patient outcomes, increase patient satisfaction and reduce racial/ethnic disparities.

While language differences are not an issue for African-Americans, participants expressed concern about being isolated and therefore not receiving information. They sense that activities are going on in the county, and if they only knew about them, they would participate.

The lack of public transportation feeds the sense of isolation among African Americans. The issue of transportation was raised in each group and considered by all to be a barrier to health.

Attachment I

Catawba County 2007 Community Health Assessment FOCUS GROUP GUIDE

Opening

Thank you for taking the time to meet with us for this discussion group. We know your time is valuable and we appreciate your participation.

My name is _____ and I am from _____ (*fill in appropriate agency*).

Purpose

Every 4 years Catawba County does a Community Health Assessment in which they try to identify what's working and what needs improving in the area of healthcare. This time, they're interviewing various groups – other people like you--to gain a better understanding of what they think the health issues are in the community. The information you provide will be used by Catawba County Public Health and other community groups to improve current health programs and plan new ones.

The Community Health Assessment team has asked me to help gather that information from you today.

Confidentiality

Here's what will happen today:

During the next hour, I'm going to ask you some questions and you'll each have an opportunity to respond.

Anything you say in this room will remain confidential. The information you provide will be summarized in reports, but your name will not be used, and you will not be identified in any way. We do that so you will feel completely comfortable being open and honest with us. Sharing your opinions truthfully is the most important thing you can do. We will also be audio taping the discussion. Your input is important and we want to make sure that we get it right. After we're finished with the Assessment, the tapes will be stored at Catawba County Public Health, but again there will be no way to identify you. That's why we're going to use only first names today.

Once we've gathered all the information and written our report, a copy will be sent to the NC State Department of Health and Human Services, and various agencies in Catawba County. It will also be available at Catawba County Public Health and on the Catawba County Health Partner's website.

Ground Rules

Before we get started, let's go over a couple ground rules:

1. You are not required to answer any question you may not wish to answer.
2. If at any time while we are talking you do not feel comfortable, you do not need to respond.
3. Please speak clearly, listen to the responses of other participants, and do not interrupt others.
4. There are no 'right' or 'wrong' answers; it's okay to have an opinion that's different from the others.
5. Truthfulness is vital.

6. Understand that I am not part of the department of Public Health; they've hired me to help them: I have no vested interest in what you say, so don't worry about hurting my feelings or criticizing me.
7. If you cannot hear what I am saying or what the other participants are saying, please ask us to speak up.
8. 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.

Self- Introduction (10 minutes)

Let's get started by introducing ourselves. Very briefly, tell us your name, and if you or members of your immediate family have any particular health problems now. For example, "I'm XX, and my son was diagnosed with asthma about 4 years ago, and my husband is being treated for high cholesterol.

Note: Do NOT let this drag on. Remind them that we only have a short time to talk about a lot of important issues so please be brief.

Warm-up questions (5 minutes)

1. Where do you go for health services now?
2. Where do you get most of your health information?

Health (15 minutes)

3. What do you think are the most important health concerns in your community?
4. What's happening in your neighborhood and community that influences the health of you and your family?
 - a. Probe: What keeps you and your family from being healthy?
 - b. Probe: What helps you and your family be healthy

Resources/Activities (15 minutes)

5. If you needed help for some reason who and where would you turn to?
 - a. Probe: Support group, church, mosque, family, health care provider
6. What resources or activities would you like to see in your community that would impact health in a positive way?
 1. Probe: More or other health-care providers, out-patient facilities, housing, recreation activities, transportation, schools health programs, community services, access to resources?
7. What makes it hard for people to get health information and care?

Closing (15 minutes)

8. Of all the health issues we have talked about today, which one is the most important for your community to address?
9. If you could wave a magic wand and make any change, what would you do to improve the health of your community?