



Community Health Assessment 2015



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Executive Summary



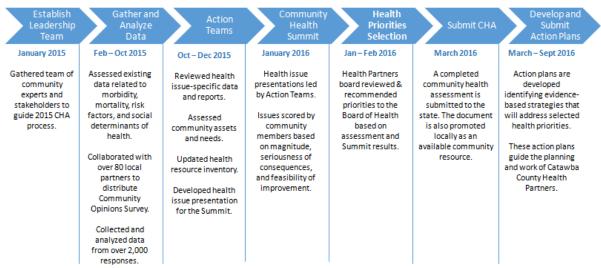
Overview

Every four years, Catawba County Public Health is required to conduct a Community Health Assessment (CHA). Through this assessment process, Catawba County Public Health and a broad collection of partners collaborate on creating a comprehensive review of health status and opinions about health and wellbeing in the community. This report is the result of this shared community-driven process and seeks to serve as an outline of health issues, indicators, behaviors, opinions, assets and needs to provide a full review of wellbeing in Catawba County.

The 2015 Catawba County Community Health Assessment includes the following components:

- A community profile providing overall information on community demographics and socioeconomic factors, including context regarding social determinants of health.
- An analysis of selected health data of importance to Catawba County and its significance to the community.
- An overview of the data collection process and results, including both secondary data from credible sources and primary data collected through the 2015 Community Health Opinion Survey.
- A comprehensive, issue-specific assessment of assets and needs related to health promotion in Catawba County.
- A detailed explanation of the health priority determination process, including a summary of Catawba County's 2016-2019 priority issues.
- A detailed Health Resource Inventory list.
- Appendices providing specific context and information regarding health conditions, issues, and behaviors in the community.

Community Health Assessment Process



This graphic provides a brief overview of the process and timeline related to the 2015 Catawba County Community Health Assessment. This process includes community input at every step, from community-based



Executive Summary



leadership team guidance, to community subject-matter experts serving on action teams, community-wide input through the survey and Community Health Summit.

Health in Catawba County

Results from the assessment process have revealed areas of improvement in Catawba County since the last CHA in 2011, as well as areas in need of community attention.

Positive trends include the following:

- A decrease in the number of uninsured adults, coupled with an increase in Medicaid enrollment.
- A drop in the unemployment rate in the community.
- A drop in overall cancer incidence, as well as a decrease in deaths from lung cancer.
- Increased attention to and improvements in air quality.
- A decrease in the diagnosis of heart disease.
- A drop in tobacco use among county sixth-graders.
- A decrease in the overall teen pregnancy rate.
- A drop in the incidence of HIV and AIDS.
- An overall decrease in infant mortality rates.

Trends to watch include the following:

- An increase in poverty, especially among children.
- A rise in breast cancer mortality overall.
- An increase in cancer mortality among minority populations.
- An increase in suicide rates, resulting in its ranking as the 10th overall leading cause of death. Suicide
 has also become the third-leading cause of death for ages 20 39.
- A rise in the number of emergency room visits related to senior falls.
- An increase in the number of community food deserts.
- A rise in syphilis incidence.

Other trends of note in Catawba County relate to health disparities. Health disparities are defined as inequitable differences in health status, disease and mortality based on geography, socioeconomic status, race, or other social and biological determinants. These disparities can have a disproportionate negative impact on the health of certain populations within the community. Several disparities in Catawba County were noted in the health assessment process, with particular attention to racial and ethnic disparities based on available data:

- The African-American population is more likely to die from heart disease, diabetes, cancer, stroke and kidney disease.
- While overall stroke mortality has decreased since the 2011 CHA, it has increased in the African-American community.
- Survey respondents who had lower income, lower educational attainment or were African-American were more likely to be obese.
- There is a disproportionate impact of poverty on the African-American and Latino communities in Catawba County.

Detailed information on these trends, as well as other health issues and behaviors, can be found in the appendices included with this report.



Executive Summary



Catawba County Health Priorities: 2016-2019

Catawba County's 2016-2019 health priorities are nutrition, physical activity, and chronic disease. Health priorities are defined as issues that:

- Demand action by nature of their magnitude and severity in the community.
- In most cases cannot be remedied by one entity or one change alone.
- Require broad-based community collaboration to change outcomes.

The priorities reflect a trend in community wants and needs identified in the health assessment. More than half of all deaths in Catawba County between 2009 and 2013 were related to chronic diseases, which can be directly related to preventable risk factor behaviors such as physical inactivity and poor nutrition. Prioritizing physical activity, nutrition, and chronic disease creates an inclusive and cross-cutting platform for a diverse set of stakeholders, resources, and target populations with different needs, interests, and perspectives. Focusing on preventable risk factor behaviors, such as promoting healthy eating and active lifestyles, can impact not only morbidity and mortality related to disease, but overall wellbeing and quality of life as well.

Next Steps

So far in the 2015 Community Health Assessment process, health indicator data has been researched, collected and compiled. Community input has been gathered and used to assess and inform health interests and concerns in the county. Health priorities have been recommended and approved based on community need and interest, as well as leadership and guidance from community stakeholders. As this report is now completed, several next steps are needed to move the CHA from compilation to action:

- 1. Results from the 2015 Community Health Assessment will be disseminated to the community via online access, community organizations, media, and promotion through partnerships.
- 2. Action plans outlining evidence-based strategies to address the county's health priorities will be developed and submitted to the state in September 2016.
- 3. Catawba County Health Partners, a nonprofit organization managed by Catawba County Public Health, will foster partnerships aimed at sustainably improving Catawba County's health priorities through collaborative evidence-based strategies and interventions. Efforts to address priorities will also be initiated and/or continued by other community organizations as well.
- 4. An annual State of the County's Health (SOTCH) Report will be compiled and released to provide timely updates on health indicators related to our community and the work surrounding our health priorities.



Introduction



Overview

Every four years, Catawba County Public Health is required to conduct a Community Health Assessment (CHA). The CHA is a comprehensive statistical benchmark intended not only to define a county's health status, but also to inform and guide decisions by a variety of stakeholders regarding the community's core health issues.

The 2015 Catawba County Community Health Assessment:

- Represents the systematic collection, assembly, analysis, and dissemination of information about the health of Catawba County.
- Identifies important health indicators related to illness, death, and high-risk behaviors in Catawba County.
- Defines Catawba County's health assets, needs, and priorities.
- Results from a collaborative effort dependent on community input and participation.
- Is facilitated by Catawba County Public Health.

The 2015 CHA Process

Planning for the 2015 Catawba County Community Health Assessment began in mid-2014. A small team of Catawba County Public Health staff members came together to review new state reporting requirements and determine the accompanying CHA process for Catawba County. In addition to researching secondary data, determining a report format and drafting the report, this process would include the formation of a CHA Leadership Team; the development and distribution of a Catawba County Community Health Opinion Survey; the formation of a CHA Action Team; the hosting of a Community Health Summit; and the recommendation and approval of Catawba County health priorities for 2016-2019.

Leadership Team

Knowing that broad and diverse community participation is critical to the CHA process, Catawba County Public Health added a new component this year: the formation of a multidisciplinary team to provide insight into the community engagement aspects of the CHA. Several Public Health staff members also served on this team to provide coordination and guidance. Community members were asked to participate due to their ability to communicate with and connect CHA efforts to multiple sectors in the community, including education, business, healthcare, the Board of Health, Catawba County Health Partners, and traditionally underrepresented populations and demographic groups (such as low-income, African-American, and Hispanic). Specifically, this group was asked to tap their networks in order to broaden participation in the Community Health Opinion Survey, the Action Team, and the Community Health Summit. They were also asked to assist with planning key CHA activities and events. This group met twice (January 27, 2015 and June 29, 2015) and remained in contact through the duration of CHA activities.



Introduction



Community Health Opinion Survey

The 2015 CHA represented an opportunity to develop a unique partnership with Lenoir-Rhyne University (LRU), which had recently established a Master in Public Health program. Public Health approached LRU staff about collaborating on CHA data gathering and analysis, specifically with regard to the 2015 Catawba County Community Health Opinion Survey and the CHA data appendices. The Community Health Opinion Survey was thus developed in partnership with LRU faculty and students, who assisted with survey creation, testing, distribution, monitoring, data review, and data entry. The survey was distributed to Catawba County residents between May and June 2015 via electronic and paper modes. During this time, the CHA Leadership Team (including participating LRU faculty and students) assisted by distributing surveys to their constituents and within their networks, including employees, customers, students, colleagues, memberships, associations, and a general population e-mail distribution through the local daily paper. More detailed information about the survey can be found in the Catawba County Community Health Opinion Survey section of this report.

Creation of Appendices

Public Health staff spent several months gathering secondary data and reviewing primary data from the Community Healthy Opinion Survey to assemble issue-specific data appendices. Faculty and students from Lenoir-Rhyne University assisted with this process. The decision to utilize appendices for this information was based on past Catawba County CHA reports, which featured health data in an issue-by-issue format. Feedback from community members indicated this format made it easier to reference specific health information and analysis.

Action Team

In October 2015, Catawba County Public Health assembled a CHA Action Team comprised of more than 85 community members with expertise in various health issues. While the formation of a CHA Action Team is not new for Public Health, efforts were made to increase participation in 2015 to gain broader perspectives with an eye toward inclusiveness and diversity. As a result, the 2015 Action Team nearly doubled in size, grew in diversity, and engaged new partners (such as nonprofits and community advocates who had not before participated) as compared to the 2011 group. This team was divided into subject-specific workgroups to provide input on the data and information that would be included in the CHA. This included reviewing and providing feedback on health information highlighted in the appendices, creating lists of issue-specific assets and needs, and updating the Health Resource Inventory. Additionally, these workgroups took responsibility for presenting information about their health issues during the Community Health Summit.

Community Health Summit

On January 12, 2016, Catawba County Public Health hosted a Community Health Summit at Catawba Valley Community College to gather community input toward the determination of county health priorities. Action Team representatives shared information about the county's current health status and needs, and community members completed a rubric to score the issues based on magnitude, severity, and feasibility of improvement. A more detailed explanation of the Community Health Summit is included in the Health Priorities section of this report.



Introduction



Priority Recommendations

Catawba County Health Partners is a 501(c)3 nonprofit organization that exists to address Catawba County's health priorities through coalition-driven community health strategies. Because of this, the information compiled for the CHA and scores from the Community Health Summit were reviewed by the Health Partners board on January 19, 2016. After discussing the community's capacity to improve the top scoring issues, the board prepared a final recommendation for presentation to the Catawba County Board of Health for approval. More information about this process is included in the Health Priorities section of this report.

Priority Approval

On February 1, 2016, an overview of the Community Health Assessment was presented to the Catawba County Board of Health. This included a review of the health issues that were recommended as priorities by the Health Partners board. At that meeting, the Board of Health voted unanimously to support Health Partners' priority recommendations: nutrition, physical activity, and chronic disease.

A Note about Partnerships

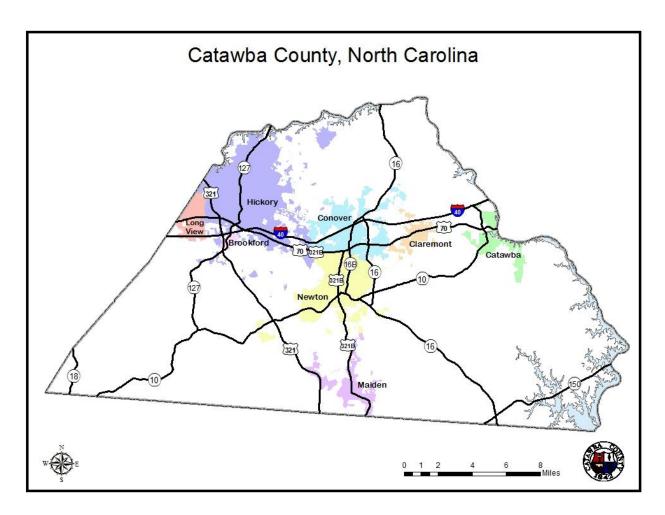
The inclusive nature of the 2015 Catawba County Community Health Assessment process has strengthened many existing partnerships and helped form new relationships, both for Catawba County Public Health and among CHA participants. For example, the CHA Action Team consisted of 86 community members, some of whom had participated in past assessments but many who were new to the process. This combination of experienced and new team members helped broaden perspectives and fostered new connections within the community. The expansion of this team has also generated a more diverse list of contacts for inclusion in Catawba County Public Health's community health improvement processes. It is also important to note that while neither of Catawba County's two local hospitals is required to submit a Community Health Needs Assessment (as most hospitals must do per the Federal Internal Revenue Code), both hospitals are fully engaged in the Community Health Assessment process.





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 county encompasses 405 square miles and, according to US Census Bureau 2010 results, is home to 154,358 residents.



The County's three lakes and its location at the foot of the Blue Ridge Mountains exert a strong influence on the area's climate and ambience. The average year-round temperature is 59°F. Lake Hickory covers 4,100 acres and 272.1 miles of shoreline, while Lake Lookout Shoals covers 1,270 acres and 39.1 miles of shoreline. 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.



Population

The Hickory-Lenoir-Morganton Metropolitan Statistical Area (Hickory MSA) is the eighth largest in North Carolina, with a population of approximately 365,000 in 2010. From 2000 to 2010, Catawba County's population increased by 8.9% from 141,685 to 154,358. The 2014 North Carolina certified population estimate was 155,830, showing a 0.9% estimated annual population growth rate since 2010. An estimated 30.3% of residents live in rural areas of the county outside of municipal urban areas.

While all ethnic groups grew between 2000 and 2010, the Hispanic/Latino population grew at the fastest rate (from 7,886 in 2000 to 13,032 in 2010). Of the more than 10,000 foreign-born residents of Catawba County, 59.6% were born in Latin America. All age groups in Catawba County have grown since 2000, with the elderly (65 years old and older) increasing most rapidly. As of 2014, an estimated 25.1% of the population is under the age of 19 and 22.2% of the population is over the age of 60.

Population Demographics, 2010 Census

	North Carolina	Catawba County
Total Population	9,535,4 ⁸ 3	154,358
Female (%)	51.2	50.6
Male (%)	48.8	49.4
Under 5 Years Old (%)	7.0	6.5
Under 18 Years Old (%)	23.9	23.8
65 Years and Older (%)	12.7	13.9
White (%)	68.5	81.7
White, not Hispanic/Latino	64.4	77.2
African-American (%)	21.5	8.4
Asian/Pacific Islanders (%)	2.2	3.5
Hispanics/Latino (%)	8.4	8.4
Population per Square Mile	195.7	385.9

Source: United States Census Bureau, American FactFinder, 2010





Education

There are 44 public schools representing three school districts in the county, as well as Lenoir-Rhyne University and Catawba Valley Community College. Lenoir-Rhyne, founded in Hickory in 1891, is a private liberal-arts institution serving more than 2,000 graduate and undergraduate students. Catawba Valley Community College was established in 1958 and since then has provided innovative and comprehensive education and services to its students and the community. Catawba County is also home to Appalachian State-Hickory and the NC Center for Engineering Technologies.

Catawba County has a four-year high school graduation rate of 89.97%, higher than the state rate of 83.9%. Over 82% of our population has a high school degree or higher, and 21% has at least a bachelor's degree. There were more than 24,000 students enrolled in kindergarten to 12th grade in the 2013-2014 school year. As of 2014, 49% of Catawba County children under the age of 5 attend a childcare, 75% of which were in a four- or five-star center. The average cost of childcare in 2014 was \$139.47 per week for an infant and \$121.32 per week for a preschooler. Over 1,800 children, parents or families received financial assistance for childcare in 2014.

In the 2014-2015 school year, over 2,700 students among each of the three public school districts in our community were being served by Exceptional Children Programs, which ensures that students with disabilities develop intellectually, physically, emotionally, and vocationally through the provision of an appropriate individualized education program.

Approximately 21.3% of students throughout the county's three school districts speak a language other than English at home. More than 8% of students have limited English proficiency. This can affect classroom achievement, social development, and graduation rates. In Catawba County schools, only 56% of limited English proficiency students graduate, and in Hickory Public Schools only 41.7% graduate.

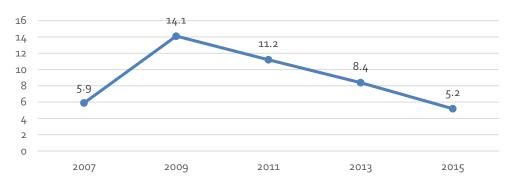
Economy

Once recognized worldwide as the furniture manufacturing center of the United States, Catawba County remains an industrial and retail center for the region. The traditional industries of furniture, hosiery and textiles, however, have been replaced by technologically-advanced industries such as fiber optics and plastics. At the same time, Catawba County continues to transition from a manufacturing-based economy to a service-based economy, driven in part by the growth of medical services. Catawba County is a major medical corridor, with two hospitals (one county-owned, one private), a large and growing medical community, and several nursing and retirement homes. In 2014, there were over 4,100 total private industry establishments in the county, 426 of which were related to manufacturing. Manufacturing remains the leader in county employment, employing over 20,000 people. Healthcare is a growing second, employing approximately 15,000. Retail trade jobs have increased as the area has increased focus on drawing more tourism, employing almost 10,000 people. In 2014, Catawba County brought in over \$2 billion in total retail sales, with an average of over \$1 million per business. In 2013, Catawba County ranked 12th in the state in retail sales per capita.









Source: United States Census Bureau, American FactFinder, 2010

During the economic recession, the Hickory MSA lost tens of thousands of jobs, mostly in manufacturing. From 2000 to 2011, Catawba County lost a net 25,000-plus jobs, primarily in apparel, furniture, hosiery and fiber optics. As of 2015, however, unemployment in Catawba County is at a pre-recession low. The current unemployment rate is 5.3%, much lower than the 14.9% rate in January 2010. This is also lower than the 2007 pre-recession unemployment rate of 5.7%. An estimated \$261.1 million was invested in the local economy in 2014, with 864 jobs created the same year. The 2014 average wage for those working in any industry in Catawba County was \$726 weekly.

Income, Housing, and Poverty

An estimated 54.8% of households in Catawba County had an annual income of \$50,000 or less in 2014. This is an improvement from 56.9% in 2009. There has also been a drop in the number of households reporting incomes less than \$25,000 since 2009, from 27.1% to 25.2% in 2014.

Catawba County Income, 2014

Income Level	% of Households
Less than \$25,000	25.2
\$25,000 to \$50,000	29.6
\$50,000 to \$74,999	19.6
\$75,000 to \$99,999	11.5
\$100,000 to \$200,000	11.6
\$200,000 or More	2.5
Median Household Income (Dollars)	\$45,397





While household incomes overall are rising, according to census data, poverty has grown in our community. In 2009, 12.2% of all individuals in Catawba County were living below the poverty line. In 2014, this number rose to 15.3%, or 23,265 people living in poverty.

Catawba County Poverty, 2014

catamba country reversey, 2011		
Population	% living in poverty	
All individuals	15.3	
Under 18 years old	23.4	
18 – 64 years old	14.0	
65 years and older	8.3	

Source: United States Census Bureau, American FactFinder, 2010

The greatest impact of poverty since 2009 has been on children. In 2009, 17.2% of children under the age of 18 were living in poverty. This rate grew by 36% to 23.4% in 2014. Children account for almost one third of those living under the poverty line. Beyond the individual level, 11.3% of Catawba County families were living in poverty in 2014, compared to 13.4% in North Carolina overall. To provide context, the poverty line for a family of four that includes two minor children is less than \$23,850 per year. Children living in single parent households are disproportionately affected by poverty as well, with 41% living below the income line.

Poverty affects minority communities in Catawba County disproportionately as well. While African-Americans make up only 8.4% of the total population, 17.2% of those living in poverty are African-American. This means that 31.7% of the African-American community in our county lives in poverty. Hispanic/Latinos are also at a disadvantage economically, with 36.5% of this population living in poverty in 2014. That is more than 20% of the poverty-stricken population in the county, despite only 8.4% of the total population being Hispanic/Latino.

Despite improvements in the local economy mentioned previously, Catawba County still has an unmet need among the working poor. Of the population living in poverty aged 16 years and older, 39.4% work at least part time. Of this same working-age population, 8.8% work full-time.

Poverty is important to health and quality of life because poverty and income determine a variety of factors related to wellbeing. In order to provide a safe and adequate place to live, it has to be affordable. In 2013, 40% of Catawba County renters were unable to afford a two bedroom apartment at fair market rent. That same year, 40% of renters and 21% of homeowners with a mortgage had housing costs that exceeded two thirds of their income. Based on information from the United Way 211 referral system, 21.5% of need requests were related to utility costs. Another 33.2% of requests were related to housing and shelter. Of these, 32.6% were related to a need for emergency shelter and 33.7% were related to rent/mortgage assistance.

Access to healthy and nutritious foods is important in preventing obesity and chronic disease. Over 14% of households received food assistance through the SNAP program in 2013. There has been a 432% increase in the





number of individuals receiving food assistance since 2000, and a 20.8% increase since 2010. In spite of this increase, United Way 211 referral data shows that 7.6% of requests are related to food needs. Over 119,726 meals were served to 1,539 at risk seniors in 2013-2014 through Catawba County Social Services' Senior Nutrition programs. Other indicators show how food insecurity affects children specifically. Among all three public school districts, 57.2% of students are enrolled in free and reduced price lunch, a program that provides free of charge or discounted meals to children in need. Catawba County Social Services' Backpack program provides food packs for children who may not have access to food at home over the weekends. This program served 1,200 children with over 273,000 meals in 2013-2014.

Poverty is part of a complex equation that affects quality of life and wellbeing. It can affect where an individual lives, which impacts safety, sanitation, and access to community resources. Personal behaviors like healthy eating, exercise, and receiving preventive care can be impacted by a lack of resources and leisure time as well.

Children's Services

In fiscal year 2013-2014, Catawba County Social Services received 1,793 reports of suspected child abuse and neglect that affected 3,680. This is a large drop from fiscal year 2010-2011, where over 5,000 children were involved in 2,570 reports. Of these reports, there were 266 findings of maltreatment affecting 541 children. Of these, 261 families received Family In-Home treatment services. In the same fiscal year, there was an average of 204 children in foster care. Over 90% of foster children experienced two or fewer placements within the first year of care, this is higher than the state average of 87.61%. Over 55% of children in Social Services custody that were cleared for adoption were adopted within two years. This is much higher than the state rate of 36.54%. In 2013-2014, 58 children in Social Services custody were adopted.

Over 1,400 children and adolescents were treated through Family NET, a program that provides mental health services to students throughout the three school districts in the county. The top three admitting diagnoses were adjustment disorder, disruptive behavior disorder, and attention deficit hyperactivity disorder (ADHD).



Health Data Collection Process



Overview

Community health assessments require using a diverse set of data representing a broad collection of information related to morbidity, mortality, risk factors, and social determinants of health. In order to achieve this, the CHA was compiled using existing secondary data from a variety of sources as well as primary data collected directly from the community.

Assessing Existing Data

Community wellbeing can be affected by and measured by many different constructs. In order to accurately assess and present community health information, it is necessary to use a variety of resources for data collection. Data related to morbidity, mortality, demographics, economic indicators, education, and environmental factors, for instance, can be found through a number of different existing databases and resources.

Catawba County's CHA data collection process began with a thorough evaluation of existing information and statistics available through state and local resources. This evaluation helps gather data necessary to provide insight to the overall status of the county's wellbeing according to a variety of economic, social and health related indicators. Secondary data also provides valuable information for defining the scope and impact different health issues have on the community in terms of morbidity and mortality.

Secondary data sources used for the assessment include, but are not limited to, the following:

- Behavioral Risk Factor Surveillance System (BRFSS)
- Reports provided by the NC Department of Health and Human Services
- Databases maintained by the NC State Center for Health Statistics
- U.S. Census Bureau
- Reports and information provided by Catawba County Government departments
- Data and information provided by local service providers and funding agencies

The listing of secondary data sources used for the assessment process can be found in the Data Appendix. Additional secondary sources are cited throughout the report and included in the References Appendix.

A limitation related to secondary data during this CHA process was the lack of local data available for Catawba County through the Behavioral Risk Factor Surveillance System (BRFSS). County-level data is no longer available through this survey database, which has caused a gap in the availability of valid and reliable information for risk factors and morbidity that was previously accessible. Throughout the CHA, relevant data from the BRFSS has still been included where necessary to provide context. It is important to note, however, that this data is no longer county-specific, but rather reported regionally as the Northwest AHEC, which includes Catawba and several other surrounding counties.

Collecting Primary Data

In order to engage the community in providing input, as well as gain depth in understanding community opinions about health, behaviors, and opportunities for wellbeing in the county, it is necessary to gather



Health Data Collection Process



information directly from residents. The way in which this primary data gathering was conducted for the CHA was through the Community Health Opinion Survey.

The survey was created in partnership with faculty and students associated with the Master of Public Health program at Lenoir-Rhyne University. Suggested questions were gathered from resources provided by the NC Division of Public Health, as well as other vetted, valid and reliable community health surveys. The survey is comprised of questions relevant to demographic information and constructs related to community health. For example:

- BMI and chronic health condition status
- Perception of health status
- Opinions on community services
- Opinions on community health needs
- Health behaviors
- Access to healthcare and environments that promote health

A copy of the survey can be found in Appendix II (2015 Catawba County Community Health Opinion Survey).

Lenoir-Rhyne faculty also consulted with Public Health staff to determine a desired significant sample size to take the survey. They reviewed county demographics related to age, gender and ethnicity to benchmark goals in terms of survey respondent pool representativeness in these areas. The survey draft was approved by the Community Health Assessment Leadership Team. In order to broaden accessibility to the survey, a Spanish translation was also created. The final survey was made available via paper and electronic means in both English and Spanish.

While two-stage cluster sampling would have been an ideal data collection methodology, Public Health staff capacity was better suited to convenience sampling through partnerships with area agencies and county departments. The survey was distributed through more than 80 local partners, such as area faith communities, businesses, nonprofit service agencies, hospitals, libraries, farmers markets, Social Services, and neighborhood associations, communications email listservs, and others. Data was collected from May to June 2015, and then analyzed by Catawba County Public Health staff in partnership with Lenoir-Rhyne faculty. The survey was collected from 2,339 individuals, resulting in 2,072 usable completed surveys for primary data analysis.

There are several noticeable gaps in the chart below between benchmarked goals set for respondent demographics and the actual distribution of survey respondents. While convenience sampling methodology was used, special attention was given to identify gaps in demographic representativeness throughout the data collection process.

Age – While the older adult population is more underrepresented than planned for, Catawba County Public Health staff did focus on extending survey reach more broadly into partnerships that work with this population. The survey was distributed through local Seniors Morning Out groups, the Area Council on Aging, the Program of All-Inclusive Care (PACE), and several senior resident communities.

Gender – There is a significant gap between the proportion of men and women that responded to the survey, which may be correlated to gender response likelihood factors noted in the established literature. In terms of



Health Data Collection Process



survey-taking behavior, older women are most likely to respond and younger men are least likely. Given that the survey was also related to health, it is important to note that men are also generally less likely to talk about health, receive preventive care, and report health problems.

2015 Community Health Opinion Survey Demographics

	Goals Based on Demographics	Survey Respondent Pool
Ages under 65	84%	85.48%
Ages 65 and older	16%	12.78%
Male	50%	20.16%
Female	50%	79.84%
White	85%	83.22%
African-American	9%	10.62%
Asian	4%	2.76%
Hispanic/Latino	9%	5.81%

Source: 2015 Catawba County Community Health Opinions Survey

Race/Ethnicity – The representativeness of the African-American community for the 2015 assessment was a significant improvement since the 2011 CHA. Partnerships with agencies and churches in predominately African-American neighborhoods or that serve a racially-diverse population were key in the data collection process. The information above, however, does show an underrepresentation of both Asian and Hispanic/Latino community members. Out of all foreign-born residents of Catawba County, 28.0% are Asian and 59.6% are from Latin America. This could affect the proportion of these groups taking the survey, since first-generation immigrants are more likely to have cultural and language barriers. Some community partners from the Asian community reported that older Asian residents, specifically Hmong, may have been unable to participate since the survey was not translated into their native language. They did, however, report several older Hmong community members being more comfortable when the survey was verbally translated by a relative or service provider. While the survey was translated in to Spanish, there were still barriers in engaging the Hispanic/Latino population. There is only one Latino-specific service agency in Catawba County, and it reported staff capacity and a lack of time as barriers to participation for their agency and clients. Another partner, a church with a large Spanish-speaking population, reported that stigma associated with a government agency survey could be another reason for low Hispanic/Latino response rates. Public Health staff worked diligently in identifying community organization partners specific to the Hispanic/Latino population to help adjust for this, including Centro Latino and St. Aloysius Church's Hispanic Ministry.





Overview

This section includes a summary analysis of secondary and primary data collected for the health assessment. Issue-specific overviews providing more in-depth context and analysis can be found in the appendices.

Leading Causes of Death

Leading Causes of Death, 2009-2013

Cause of Death	Rate per 100,000
Cancer, all sites	206.9
Heart disease	206.3
Chronic lower respiratory disease	74.8
Cerebrovascular disease	53.7
All other unintentional injuries	35.9
Alzheimer's disease	30.9
Diabetes mellitus	26
Pneumonia & influenza	25.5
Nephritis, nephrotic syndrome & nephrosis	21.2
Suicide	16.4
Total deaths – all causes	996.9

Source: State Center for Health Statistics, 2009-2013, deaths per 100,000 (unadjusted)

Cancer is the leading cause of overall death in Catawba County, a trend consistent with the 2011 Community Health Assessment. In analyzing mortality across race and gender, cancer is also the leading cause of death among females and in the African-American population. Heart disease, while second overall, is the leading cause of mortality among men and in the White population. Despite this ranking, African-Americans in Catawba County have a higher mortality rate related to heart disease than the White population. This is also true of cancer, stroke, and diabetes. A new addition to the leading cause of mortality list since the 2011 assessment is suicide. Suicide has moved into the 10th-leading cause of death spot, but is the ninth-leading cause of death among men and third-leading cause of death in the 20-39 year old age group.





Community Health Trends

There have been several emerging trends in community health since the 2011 CHA. Many of these trends represent areas with a significant positive or negative impact on population wellbeing and are related to increasing or reducing barriers to health for individuals and communities.

As mentioned above, cancer remains the number one cause of death in Catawba County. However, data from the 2015 assessment process shows a drop in overall cancer incidence, from a rate of 469.6 per 100,000 in 2004-2008 to a rate of 460.3 per 100,000 in 2008-2012. This reduction in incidence can also be observed among leading site-specific diagnoses including prostate, breast, lung/bronchus, and colon/rectum cancers. While mortality remains high, this drop in incidence indicates a positive trend in prevention.

Another positive trend related to cancer is the decrease in mortality related to lung cancer. While lung cancer remains the leading cause of cancer mortality, there has been a 19.97% decrease in lung cancer deaths from 72.6 deaths per 100,000 in 2009 to 58.1 deaths per 100,000 in 2013.

With regard to cancer in Catawba County, there are two trends of concern since the 2011 CHA. First, there has been a net increase in breast cancer mortality from 2009 to 2013. Data also shows that 22.43% of all cancer diagnoses in 2014 were made at Stage III or IV, with 63.13% of lung cancer, 46.34% of rectum cancer, and 41.03% of colon cancer diagnoses occurring at a late or advanced stage.

Heart disease is second only to cancer in leading mortality in Catawba County. While it remains a leading cause of death, mortality associated with heart disease has decreased since the 2011 CHA from 187.2 deaths per 100,000 to 181.9 deaths per 100,000. Analysis also shows an 18.7% reduction in morbidity related to heart disease, from 226.8 per 100,000 in 2001-2005 to 184.5 per 100,000 in 2009-2013.

Stroke, which is the fourth-leading cause of death in Catawba County and shares similar risk factors with heart disease, has also trended downward by17.9%. Stroke mortality has decreased from 58.5 deaths per 100,000 in 2004-2008 to 48.0 deaths per 100,000 in 2009-2013.

A major change in community health across the country has been the implementation of provisions required through the Affordable Care Act. Since the 2011 CHA, Catawba County has seen a decrease in the uninsured population under age 65 from 19.3% in 2009 to 18.4% in 2013. The percentage of uninsured children in Catawba County decreased by 30% between 2009 and 2012. After a small increase in 2013, the overall percentage of 7% was still significantly lower than in the 2011 CHA. Access to healthcare through Medicaid enrollment increased by 16.92% between 2009 and 2013. Other factors that may have influenced increased access to care in Catawba County include a decrease in unemployment since the 2011 CHA, as well as the 9,339 residents enrolled in federal marketplace insurance plans during the November 2014-February 2015 enrollment. Of those, 93.8% qualified for tax credits under the Affordable Care Act.

While these improvements in access to healthcare show promising trends in community-level health, socioeconomic risk factors continue to significantly impact health and wellbeing. There has been an increase in poverty among residents, especially among children. In 2009, 12.2% of Catawba County residents were living in poverty. This has increased to 15.3%, or 23,265 community residents, living in poverty in 2014. Poverty among





children has increased by 36% between 2009 and 2014, with 23.4% of children in the community living in poverty.

In addition to affecting access to and affordability of healthcare, poverty impacts a variety of protective and risk factors related to wellbeing. Catawba County has experienced a 432% increase in the number of individuals receiving SNAP food assistance since 2000, with a 20.8% increase between 2010 and 2014. This indicator is of particular concern given recent evidence that SNAP recipients are less likely to eat healthy foods like fresh fruits and vegetables, with cost remaining a barrier. Additionally, Catawba County's food desert census tracts have increased in number since the 2011 CHA, from two to six. Many of these census tracts also represent lower income and higher poverty communities, indicating risk for poor nutrition in terms of both cost and physical access.

With regard to youth in Catawba County, several positive trends have been identified since the 2011 CHA. A significant reduction in the number of 6th-graders reporting tobacco use, from 2.4% in 2008 to 0.6% in 2013, suggests a growing delay in the onset of tobacco use among Catawba County youth. Analysis of teen pregnancy data shows a 40.86% decrease overall from 55.8 per 1,000 in 2009 to 33.0 per 1,000 in 2013. This rate exceeds the Healthy North Carolina 2020 goal of 34.8 per 1,000. Decreases in teen pregnancy are also seen across racial and ethnic groups, as the teen pregnancy rate among Hispanic/Latina youth more than halved from 2009 and 2013.

Suicide is an emerging trend of concern, especially among the younger population in Catawba County. Suicide rates increased from 14.8 per 100,000 deaths in 2005-2009 to 15.6 per 100,000 deaths in 2009-2013. This increase has resulted in suicide becoming the 10th-leading cause of death overall in Catawba County. In analyzing mortality across age groups, suicide is the third-leading cause of death for ages 20-39. According to the 2013 Catawba County Pride Survey, 22.6% of students surveyed in the sixth, eighth, 10th, and 12th grades indicated that they have thought about committing suicide at least once. Of these, 5.4% indicated suicidal ideation "often" or "a lot," an increase from 4.7% in 2008.

Positive trends were also noticeable in assessing senior health. Approximately 24,600 residents, or 15.9% of the county population, are 65 years or older. While chronic diseases remain the leading causes of death in this age group, there are evident positive trends related to mortality and chronic disease. In analyzing five-year mortality rates from 2004-2008 and 2009-2013, mortality rates associated with cancer, heart disease, diabetes, stroke, and Alzheimer's disease dropped in the older adult population. Most significantly, mortality associated with Alzheimer's disease decreased by 47.07%, and diabetes-associated deaths decreased by 36.81%.

While the decrease in mortality associated with chronic diseases in the older adult population is promising, there is a concerning trend related to falls. Since 2011, the number of emergency room visits attributed to falls among older adults in Catawba County has experienced a net increase from 1,704 to 1,811.

Health Disparities

Health disparities are defined as inequitable differences in health status, disease, and mortality based on geography, socioeconomic status, race, or other social and biological determinants. These disparities can have a disproportionate negative impact on the health of certain populations within the community. Several





disparities were noted in the health assessment process, with particular attention to racial and ethnic disparities:

- The African-American population is more likely to die from heart disease, diabetes, cancer, stroke, and kidney disease.
- While overall stroke mortality has decreased since the 2011 CHA, it has increased in the African-American community.
- Community Health Opinion survey respondents that had lower income, lower educational attainment, or were African-American were more likely to be obese.
- African-American mothers were less likely to report access to early and adequate prenatal care than White mothers.
- There is a disparity between White infant mortality rates and African-American infant mortality rates in Catawba County. The infant mortality racial disparity ratio between the two groups is 4.00. This is higher than the state disparity ratio of 2.52 and the Healthy NC 2020 goal of 1.92.
- The teen pregnancy rate for Hispanic/Latina youth (52.3 per 1,000) is almost double that of the White population (26.2 per 1,000). The African-American teen pregnancy rate is the highest at 54.8 per 1,000.
- Food desert tracts and census tracts with lower access to parks were more likely to represent areas with lower income and higher minority populations.

Notable disparities in social determinants of health may also play a role in the health-specific disparities mentioned above. Poverty disproportionately affects minority communities in Catawba County. While 68% of the county's population living in poverty is White, this represents 12.5% of the total White population. While African-Americans make up only 8.4% of the total population, 17.2% of those living in poverty are African-American. This means that 31.7% of the African-American community in the county lives in poverty.

Hispanic/Latinos are also at a disadvantage economically, with 36.5% of this population living in poverty in 2014. This represents more than 20% of the poverty-stricken population in the county, despite only 8.4% of the total population being Hispanic/Latino. This economic disparity helps to provide context to how poverty impacts the needs of the county population overall, as well as how poverty can disproportionately impact minority communities.

Conclusion

Trends in data since the 2011 CHA show both community health improvement, as well as emerging issues that indicate areas of concern to address related to wellbeing. Trends from the last four years also provide context surrounding populations of community residents that are disproportionately affected by negative health outcomes, or whose health trends do not mirror overall community improvements. Combined, these trends all have the ability to guide conversation, decision making, and action for improving wellbeing in Catawba County in an impactful, sustainable, and equitable manner.





Overview

Catawba County benefits from a wide array of partnerships and services dedicated to improving health. As part of the health assessment process, the CHA Action Team compiled lists of health promotion and treatment resources specific to their health topics. Additionally, Action Team members collaborated to identify subject-specific lists of health promotion and treatment needs that are currently not being addressed in the community. These lists are intended to help broadly inform decisions regarding the selection of local health priorities and the development of new programs to address community health.

Access to Care

ASSETS

Catawba County residents have access to two major hospitals, Catawba Valley Medical Center (CVMC) and Frye Regional Medical Center (FRMC), which provide medical, educational, and emergency care services to the region.

CVMC's primary care practices (Catawba Valley Medical Group) accept patients with Medicaid.

Urgent Care Service Expansion: Catawba Valley Medical Group's (CVMG) Northeast Hickory practice expanded in September 2013 to include after-hours urgent care services.

PCMH Designation for Catawba Valley Medical Group: Catawba Valley Medical Group has achieved Level III Patient-Centered Medical Home Recognition through the National Committee for Quality Assurance (NCQA) for 12 family medicine practices. The patient-centered medical home is a model of care that emphasizes care coordination and communication to transform primary care practices into medical homes, which can lead to higher quality, lower costs, and improved patient and provider experiences of care. CVMG also associated with 3 specialty practices, 2 urgent cares, and employer health clinics.

Catawba Family Care, Inc.: Federally Qualified Health Center: Funding for a Federally Qualified Health Center (FQHC) was approved for Catawba County in partnership with Gaston Family Health Services. The FQHC, which will function as a primary care provider to uninsured and Medicaid patients, opened January 2014 in downtown Hickory.

The Greater Hickory Cooperative Christian Ministry's (GHCCM) health clinic provides primary medical care and access to specialty care, at no charge, as well as prescription medications at a nominal cost to uninsured adults who are within 200% of the federal poverty level.

In Newton, the Upper Room Family Care, Family Health Care Practice, and Mission Medical Clinic are operated. These clinics accept clients without insurance and may charge fees.

St. Joseph's Good Samaritan Clinic in Newton serves those without a doctor for a \$5 fee.

In coordination with Hickory-based medical practice Bowen Primary & Urgent Care PA, Patient Physician Cooperative (PPC), a nonprofit organization, offers access to primary care, urgent care, and diagnostic services (such as lab work) to those without insurance for a low monthly fee.

Catawba County Public Health offers an array of medical and preventive health services along with interpreters as needed. Some services have eligibility requirements, while others are available to the general public. Case Management for coordination of services is available and offered to Medicaid enrolled, eligible pregnant women and children.

Insurance enrollment authorized by the Patient Protection and Affordable Care Act (PPACA), also known as the Affordable Care Act or ACA, launched October 1, 2013. North Carolina elected to not expand Medicaid and to participate in the Federal Insurance Marketplace rather than establishing a state-based exchange.

Three health insurance providers currently offer plans through the federal Marketplace, which is available to North Carolinians seeking insurance coverage: Blue Cross Blue Shield NC, United Healthcare, and Aetna (Coventry Health Care of the Carolinas). Beginning January 2016, Humana will begin offering Marketplace plans limited to Davidson, Forsyth, Mecklenburg and Rowan counties.

The Affordable Care Act provides significant coverage for preventive health services and screenings, including 15 covered preventive services for adults, 22 covered preventive services for women (including pregnant women), and 26 covered preventive services for children. These services must be covered without the patient having to pay a copayment or co-insurance or meet a deductible, as long as services are delivered by a network provider.





The Seniors' Health Insurance Information Program (SHIIP) is a division of the North Carolina Department of Insurance that offers free, objective information about Medicare, Medicare prescription drug coverage, Medicare Advantage, long-term care insurance and other health insurance issues. SHIIP's trained volunteers provide one-on-one counseling in all 100 counties.

Public Health's School Health program operates the Kids In Need (KIN) Fund, which helps cover the cost of basic healthcare – including preventive, diagnostic and treatment services, prescribed medications, and some dental work – for eligible children who lack medical coverage.

Catawba County Social Services coordinates a medication discount program that offers cards for discounted medications to anyone without a prescription card.

Catawba County Public Health partners with Catawba County Social Services to promote and enroll children in North Carolina Health Choice (NCHC) as well as children and eligible adults in Medicaid. NCHC provides access to free or reduced-price comprehensive care for children whose families make too much money to qualify for Medicaid but too little to afford rising health insurance premiums.

The NC Fast system was implemented in 2013 at Catawba County Social Services to streamline and expedite the application and eligibility processes for Medicaid and other assistance programs.

The Program for All-Inclusive Care for the Elderly (PACE) is a federal program mostly funded through Medicaid and Medicare that provides care and services five days a week to people who otherwise would need nursing home care. Catawba Regional Hospice, Lutheran Services for the Aging, Adult Life Programs, and CVMC have worked together to bring the service to the area.

Greenway Public Transportation, the county's mass transit system, provides bus, dial-a-ride, flex route, and reduced-rate para-transit (for the disabled per ADA guidelines) services. Routes cover the "medical corridor" around both hospitals and along Tate Boulevard, where many medical offices are located.

American Cancer Society's Road to Recovery Program offers transportation for cancer patients to treatment or therapy through volunteer drivers.

Centro Latino offers interpreter services for medical appointments.

Catawba Valley Community College offers a "Health and Human Services Interpreter" class to familiarize bilingual individuals with professional interpreting techniques, ethics and legal considerations for interpreting in health and social services settings.

NEEDS

Transportation to medical services, especially for residents in outlying areas, is limited.

A more comprehensive system is needed to help individuals assess and learn about health care coverage options, as well as refer and connect them with the most appropriate health care provider.

Catawba County's capacity to offer low cost medications to low income and uninsured residents should be increased, either by expanding the GHCCM pharmacy or by developing similar programs in other areas of Catawba County.

Cancer

ASSETS

The Breast and Cervical Cancer Control Program (BCCCP) through Catawba County Public Health aims to ensure early cancer detection and provide treatment referrals for low-income women ages 40-64.

Public Health's Women's Preventive Health clinic provides preventive physicals, breast exams and education on self breast exams.

A partnership between Catawba Valley Medical Center (CVMC) and Public Health offers mammograms to eligible women utilizing CVMC's Mobile Mammography Unit.

Free mammograms are available for eligible women through Public Health due to funding provided by Centro Latino. The NC Foothills Affiliate of Susan G. Komen Race for the Cure raises money at the local level to support breast cancer prevention and treatment efforts in Catawba County. This includes the opportunity for Public Health to refer eligible women with breast abnormalities for diagnostic testing and surgical follow-up. Frye Regional Medical Center (FRMC) offers mammograms utilizing funding through the affiliate.

The Catawba County Breast Cancer Coalition provides breast health education classes to community groups.





Breast cancer support groups and programs include Breast Friends (FRMC), Hearts of Hope (CVMC), Look Good Feel Better (American Cancer Society-ACS), and Reach to Recovery (ACS).

CVMC and FRMC offer a range of services aimed at prevention, early detection, and treatment of breast cancer. These include digital mammography, BSGI (Breast Specific Gamma Imaging), breast MRI (Magnetic Resonance Imaging), and patient navigation services.

FRMC is approved as an Accredited Breast Center by NAPBC (National Accreditation Program for Breast Centers).

The Catawba County Home Extension Camisole Project provides camisoles and care bags to breast cancer patients.

FRMC offers CT colonography screening and patient navigation services for colorectal cancer patients.

Gastroenterology Associates offers in-house colon cancer screenings and colonoscopies.

ACS maintains a strong presence as a community resource through education and events, including several cancer support groups and Relay for Life.

Carolina Oncology offers treatment services for all cancers except childhood cancers and leukemia.

CVMC and FRMC are approved as Comprehensive Community Cancer Centers by the American College of Surgeons.

CVMC offers the Cancer Warriors support program for people who are newly diagnosed with cancer.

The ACS Road to Recovery program works with volunteers to provide transportation to patients for cancer-related medical appointments.

CVMC and FRMC offer a range of services aimed at early detection and treatment, including Inpatient/Outpatient Chemotherapy, Radiation Oncology Centers, Specialized Surgical Care, CT/PET (Computerized Axial and Positron Emission Tomography), Cancer Resource Centers, Mobile Screening Unites, and Enterstomal Therapy.

The Catawba County Wig Bank provides free gently-used and new wigs, scarves, hats, mastectomy bras and prostheses for female cancer patients. A community "Wig Walk" event is hosted annually to help raise funds for the Wig Bank.

The ACS Look Good, Feel Better support group is offered locally to female cancer patients.

Catawba Regional Hospice provides specialized care and services to cancer patients and their families.

The Greater Hickory Cooperative Christian Ministry's medical clinic makes referrals for clients diagnosed with cancer.

CLIMB (Children's Lives Include Moments of Bravery) is a grief support program offered through CVMC for children of cancer patients.

ACS has included Catawba County residents in the national Cancer Prevention Study-3. The 20-30 year study is being conducted to better understand the factors that cause or prevent cancer.

CVMC and FRMC provide cancer patients with access to a licensed clinical social worker for counseling and related services.

CVMC is employing a transportation coordinator to assist oncology patients with accessing radiation therapy and infusion center appointments. In the future, CVMC will ultimately expand this service to other hospital patients.

CVMC and FRMC each have a health educator on staff to promote skin cancer prevention through classes targeted toward children, teens and adults.

Gardasil (a vaccine to prevent several strains of HPV, including those that cause cervical cancer) is available locally to young women and men.

The Catawba County Cancer Task Force received a \$40,000 grant from the National Association of City and County Health Officials (NACCHO) to develop the Cancer Task Force WellBusiness program, which is designed to provide recognition to companies utilizing wellness practices or policies that help prevent cancer. The program evaluates worksites to determine how well they are achieving evidence-based worksite standards in four cancer risk areas: tobacco use, physical activity, nutrition, and cancer screening. The program, which aims to increase cancer prevention among a broad and diverse segment of Catawba County's adult population, recognized 19 WellBusinesses in its inaugural year (2015).

FRMC launched a mobile unit to provide EKG, PFT, PSA, mammogram, and other screenings throughout the community.

In 2013, both CVMC and FRMC began providing lung cancer CT screening. Lung CT screenings have been shown to detect tumors early and reduce lung cancer mortality by up to 20%. Screenings are recommended for current or former smokers ages 55-74 who have greater than a 30-pack per year history of smoking.

The YMCA of Catawba Valley was approved in 2015 to offer LIVESTRONG at the YMCA, a national health and wellness program which helps cancer survivors improve their strength and quality of life.





The National Colorectal Cancer Roundtable has released resources to help increase colorectal cancer screening rates, including a guidebook for health practitioners and a communications toolkit for reaching the unscreened. The Roundtable also launched the 80% by 2018 national initiative increase colorectal cancer screening rates across community sectors.

The ACS provides free prevention, early detection, and cancer site-specific educational materials.

The ACS has developed the Health Card Kit, a resource to help providers talk with patients about health tests, and is piloting the program with three regional healthcare systems.

To support cancer prevention strategies in the workplace, the ACS maintains a website (acsworkplacesolutions.com) as a resource for corporate partners.

NEEDS

While the Affordable Care Act has mandated insurance coverage for most cancer screenings, follow-up screenings and other related diagnostics and treatment are not always covered by insurance. These costs can still limit access to appropriate screenings for lower income individuals.

Although many cancer prevention and early detection programs are available in Catawba County, racial disparities continue to exist in cancer deaths. Improved outreach to minority communities about the importance and availability of cancer screenings may help lessen those disparities.

Transportation to medical appointments is a large barrier; special service transportation is available through Greenway Public Transit, but there is currently a waiting list for this service which requires scheduling at least 3 days in advance; it also cannot accommodate multiple appointments/destinations in one day. Social Services also provides transportation to medical appointments for Medicaid patients, but these services must also be scheduled at least 3 days in advance. The ACS "Road to Recovery" program provides transportation, and volunteer drivers are always needed.

To help clarify the confusion surrounding recent changes to national cancer screening recommendations, local healthcare providers must take a more proactive role in ensuring patients understand these recommendations in order to receive timely and appropriate screenings. This includes using screening reminder systems (such as mailers or phone calls), proactive scheduling practices, and verbally informing patients of screening needs during office visits especially if patients only make sick visits and do not make annual well visits.

Participation in cancer screenings could be much higher among adults in Catawba County. Additional promotion of screenings (including education about screening benefits, costs/coverage, and what to expect) is needed to help increase awareness and debunk fears about cancer screening.

The Gardasil HPV vaccine is underutilized among eligible young men and women. More education for both young adults and their parents about the vaccine's benefits is needed in order to help boost vaccination rates.

While colorectal cancer prevention/early detection assets (such as colonoscopy and stool testing kits) are becoming increasingly available and affordable, a coordinated effort among local hospitals and family care practitioners is needed to increase colon cancer screening rates among the general population and among the target populations most affected by colon cancer.

Research has shown that by offering colon cancer screening options (colonoscopy screening and stool test kits), overall colon cancer screening rates increase. Thus, more healthcare providers should make both options available to patients.

Despite widespread progress in tobacco control throughout the county, lung cancer deaths continue to outnumber all other cancer-related deaths in the county and the state. Efforts to prevent lung cancer must focus on smoking prevention, reduction, and cessation in the county's adult population. Additional promotion to boost awareness of the availability of lung cancer screening is also needed.

The ability for local hospitals to offer prostate screenings has been limited due to new guidelines encouraging physician consultation in conjunction with screenings.

Encourage more local businesses with active wellness programs to apply for an achieve Cancer Task Force WellBusiness designation, which recognizes companies for their efforts to promote employee wellness and prevent cancer.





Communicable Disease

ASSETS

The Catawba County Public Health Communicable Disease division:

- Utilizes the North Carolina Electronic Disease Surveillance System (NCEDSS) to monitor patterns of top communicable diseases.
- Works to prevent and control the spread of communicable diseases by investigation, implementation of preventive and control measures, and education of the public and medical community.
- Monitors and controls TB through x-ray, preventive drug treatment, contact investigation and online NCEDSS surveillance.
- Monitors and utilizes the NCEDSS reporting tools for Catawba County as well as surrounding counties for potential crossover of disease activity.
- Ensures treatment of all North Carolina reportable communicable diseases diagnosed locally has access to epidemiologists, infectious disease physicians, and other communicable disease experts through contract with the North Carolina General Communicable Disease Branch.
- Conducts an annual tetanus, diphtheria, and Pertussis (TdaP) and Menactra vaccination program for all children entering 7th grade.

Public Health's Environmental Health division 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.

Public Health's Communicable Disease nurses have a collaborative partnership with infectious disease nurses at Catawba Valley Medical Center (CVMC) and Frye Regional Medical Center (FRMC) to monitor, identify and report any reportable diseases and potential outbreaks and assist in educating the community about these diseases.

CVMC and FRMC both have infectious disease physicians on staff.

NEEDS

Disseminate prevention education and promote preventive measures, such as vaccination, handwashing and tuberculin skin tests, more proactively in the community. Education is also needed to help prevent the spread of Hepatitis B and C, and tuberculosis (TB).

Help prevent the spread of communicable disease by ensuring people know how to recognize signs and symptoms and where to get treated.

Utilize the school nurse program to disseminate vaccines to decrease the incidence of preventable communicable diseases, such as tetanus, diphtheria, Pertussis, HPV, and meningitis among the school-age population.

Utilize Early Childhood Support Team nurses and other partners to distribute immunization information to parents through local day cares, pre-K programs, and home school associations.

Partner with local hospital infection prevention nurses and educate providers to improve the reporting of communicable diseases and the monitoring of trends in the community.

Employ an epidemiologist in the county who can consult on various public health issues of concern.

Diabetes

ASSETS

A Diabetes Readmissions Collaborative comprised of participants from Catawba Valley Medical Center, Greater Hickory Cooperative Christian Ministries (GHCCM), and NC AccessCare formed in 2013 to study root causes leading to diabetes-related hospital admissions. Diabetes is currently the number one cause of hospital readmissions in the county. The collaborative will determine resources, education, and access needs that can help prevent these readmissions.

The YMCA Diabetes Prevention Program is part of the Centers for Disease Control and Prevention-led National Diabetes Prevention Program and is nationally supported by the Diabetes Prevention and Control Alliance. The program provides a supportive environment where participants work together in a small group to learn about healthier eating and increasing their physical activity in order to reduce their risk for developing diabetes. The program, which is led by a trained Lifestyle Coach in a classroom setting, is delivered over a 12-month period beginning with 16 weekly sessions followed by monthly maintenance. Insurance and financial assistance options may apply.





Catawba Valley Medical Center (CVMC) and Frye Regional Medical Center (FRMC) are recognized by the American Diabetes Association for meeting the National Standards for Medical Care for Diabetes-Self Management Education. Both facilities have Certified Diabetes Educators (CDE) on staff and offer comprehensive diabetes education (for fee or insurance).

Piedmont Endocrinology employs three board-certified endocrinologists (one of whom is fluent in Spanish) and a physician assistant.

Piedmont Endocrinology offers patients the use of Continuous Glucose Monitoring (CGM) systems.

CVMC offers the following programs:

- Taking Charge of Your Diabetes, a 4-week class providing information on nutrition, medications, physical activity, lifestyle changes, and monitoring BG levels to improve or learn about diabetes. Classes are offered at various times. HgbA1c testing is offered at the beginning and end of class for comparison of blood glucose management. There is a fee for the program, however CVMC accepts private insurance, charity care, and referrals of uninsured patients from Catawba Family Care and GHCCM.
- Blood sugar screenings (monthly) and free cooking demonstrations at the Health First Center, including special presentations during National Diabetes Month (November)
- Fasting blood sugar and lipid panel screenings for current patients
- Adult and youth support groups
- Insulin pump and Continuous Glucose Monitoring training/instruction
- Outreach in community senior centers, churches and industry sites
- Free classes for Catawba County employees with 4 weeks of elevated fasting glucose or HgbA1c levels

FRMC offers the following programs:

- Insulin pump and Continuous Glucose Monitoring education, training and management
- Group classes and individual educational sessions for Type 1 and Type 2 diabetes
- Quarterly support group for persons affected with diabetes
- Modules (low cost fee for service) for persons with no insurance coverage or high deductibles focused on individualized educational needs
- Interpreters for languages other than English and for hearing impaired
- Monthly free cardiovascular risk assessment including blood sugar screening for diabetes and pre-diabetes

NEEDS

Catawba County residents who are uninsured, underinsured, have high deductibles or whose benefits do not specify comprehensive diabetes care lack adequate diabetes education, resources for supplies, and access to related medical exams.

Specialized diabetes education and outreach is needed for large segments of the Hmong and Latino communities due to language differences and lack of insurance.

Health care providers must take a leading role in referring patients to diabetes educators. Patients need comprehensive education to prevent long-term and often irreversible complications.

Employers would benefit from continuing education regarding the importance of including provisions in employee insurance plans for diabetes education, treatment, and supplies.

Investigate the possibility of applying to participate in a state-based diabetes treatment program for the population that is not eligible for traditional or GHCCM chronic disease management services.

The North Carolina Diabetes Education Recognition Program offers funding and guidance to develop diabetes self-management education programs through local public health agencies. Although this is already covered by both hospitals and Piedmont Endocrinology, it may be an opportunity to enhance those services if needed.

Hospital patients with a primary or secondary diagnosis of diabetes need referrals for diabetes-specific follow-up care, counseling, and education upon discharge.





Environmental Health

ASSETS

The Catawba County Environmental Health Division supports the mission of Catawba County Public Health and the North Carolina Department of Environment and Natural Resources, Division of Environmental Health by providing local environmental health education and enforcement programs.

The Catawba County Food, Lodging and Institution section's mission is to reduce the risk of food-borne illness and other communicable diseases by ensuring reasonable protection by providing progressive leadership, enforcement, resources and education to promote public health within required establishments.

Catawba County has access to expertise and additional workforce help from a Public Health Preparedness Regional Team based in Charlotte. The team provides expertise in epidemiology, industrial hygiene, and pharmaceutical technical assistance.

Catawba County's On-site Water Protection program provides evaluation, permitting, inspection, and approval of subsurface wastewater disposal systems and private water supply wells in areas not served by public water and sewer systems in order to protect public health by helping to ensure safe and effective wastewater disposal and protection of water resources.

There are currently two ozone monitors that provide air quality surveillance for our area, one in Lenoir and the other in Taylorsville.

The Catawba County EcoComplex is a developing system that recovers all useable products and by-products from a group of private and public partners that work together to use each other's waste products either as a source of energy or as a raw material for the manufacture of their own product. The EcoComplex is focused on making and using "green" energy and on the economic development of Catawba County. Currently, the County generates enough green energy to power 1,400 average sized homes annually. This project reduces carbon dioxide emissions by over 100,000 metric tons.

Catawba County is currently ranked number one in the state in recycling due to its forward thinking approach to recycling and waste reduction. Based on state reporting for FY13/14, the county's recycling rate of more than 507 pounds per capita can in large part be attributed to the Catawba County EcoComplex and Resource Recovery Facility as well as the strong partnerships with its municipalities, schools, businesses and the community. The county has ranked in the top five counties in North Carolina for recycled materials (per capita) since 2000.

Catawba County offers a Commercial Recycling and Waste Reduction Partnership Program that assists local businesses with establishing and growing their environmental programs. Currently, there are 22 corporate partners participating in the program.

Catawba County provides residential curbside service for trash and recycling in the unincorporated areas of the county. In 2013, the county transitioned to single stream recycling and moved from 18 gallon bins to 96 gallon carts.

Catawba County provides an annual one-day collection event for residential household hazardous waste. In 2013, the county began operation of a year-round permanent collection site for paint and electronics.

Required ServSafe credentialing courses, which educate local restaurant managers and staff regarding safe food handling, preparation and storage practices, are available locally through Catawba Valley Community College and several other sources throughout the year.

NEEDS

Provide continual promotion of proper hand washing and no bare hand contact of food among restaurants and food service establishments.

Increase capacity in environmental health staff in order to offer more in-services and trainings related to health and safety.

Continue encouraging restaurant/establishment owners/operators to complete food safety classes.

Conduct continuing outreach and education for the community related to recycling.

Educating community on availability of single stream recycling, including more education on what should and should not be placed in containers.

Increase public knowledge of ozone alerts using various media outlets.

Increase education on how ozone is produced and how to reduce its output.





Heart Disease & Stroke

ASSETS

Catawba Valley Medical Center (CVMC) and Frye Regional Medical Center (FRMC) offer comprehensive cardiac rehabilitation programs.

Both hospitals employ stroke and cardiovascular case managers to assist patients through the recovery process.

CVMC hosts the Stroke Support Group monthly for stroke patients and their families.

FRMC offers free monthly Cardiovascular Risk Screenings with educational resources to educate about risk factor reduction.

FRMC sponsors educational opportunities for Catawba County EMS personnel to learn about early detection of heart attacks.

FRMC is currently recognized by three of the American Heart Association's (AHA) quality improvement programs: Mission: Lifeline® STEMI Receiving Gold Plus, Get With The Guidelines®-Heart Failure Gold Plus, and Get With The Guidelines®-Stroke Gold Plus.

Both CVMC and FRMC have been identified as regional facilities for early treatment of heart attacks as part of the RACE initiative in North Carolina (Reperfusion of Acute MIs in Carolina Emergency Rooms).

Both CVMC and FRMC utilize Telestroke, which enables specialists to remotely evaluate people who have had acute strokes and make diagnoses and treatment recommendations to emergency medicine doctors.

Both CVMC and FRMC are certified by the AHA /American Stroke Association and The Joint Commission as Primary Stroke Centers.

Both CVMC and FRMC are chest pain accredited through the Society of Cardiovascular patient care.

FRMC and the American Heart Association sponsor an annual fundraising event to raise research funds and encourage CVD awareness and education.

Both CVMC and FRMC provide resources to address cardiovascular disease (CVD) risk factors, such as tobacco cessation programs, diabetes control centers, bariatric surgery and weight management programs, healthy eating and nutrition classes, and cholesterol, blood pressure and stroke screenings.

FRMC is accredited by the AHA and Society of Chest Pain as a Heart Attack Receiving Center.

Both CVMC and FRMC have a Stroke Team that does stroke risk analysis at health fairs and provide compression only CPR education to churches and civic groups upon request.

FRMC's mobile unit sponsors education at community events regarding stroke, peripheral vascular disease (PVD) and blood pressure screenings.

CVMC offers a Walk with the Doc program monthly to encourage physical activity and have medical questions answered by a cardiologist.

Catawba County EMS received a Bronze award in the Mission: Lifeline EMS program recognizing their efforts in improving STEMI systems of care and quality of life for all STEMI patients.

NEEDS

Hospitals can help influence outcomes for stroke patients by developing and implementing strategies to improve the time between arrival at the hospital and treatment.

Many Catawba County residents need more knowledge about CVD risk factors, signs and symptoms, and the importance of rapid treatment.

Educational programs need to be tailored based on education level, preferred language and cultural and minority differences and should be offered on-site to church, business, and civic groups.

Workplace programs should be initiated or enhanced to include CVD-related screenings, education, health incentives and access to nutritional foods.

CVD is often treated with medication, which can be costly. Physicians should take a patient's ability to pay into account before prescribing expensive medications. Physicians should also encourage providers to use pharmacies that are in close proximity to bus routes to promote accessibility.

Because noncompliance can lead to less than optimal management of the controllable risk factors for stroke and hypertension, continued education about the importance of following medication and treatment guidelines is critical. Identify priority populations and develop programming that helps meet their educational needs and access to care. Increase worksite participation in the American Heart Association's Fit-Friendly program.





Immunization

ASSETS

Physician offices throughout the county offer most recommended and required vaccinations to patients.

Catawba Valley ID Consultants, a Catawba Valley Medical Center clinic, offers a wide variety of infectious disease immunizations.

In Catawba County, 85% of private practices are now using the North Carolina Immunization Registry (NCIR). This enables physicians to access immunization records and make recommendations for patients as needed.

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

- Childhood vaccinations are provided for all children and adults. Vaccines may be free or have a fee depending on eligibility and insurance status.
- School nurses work closely with the school systems and routinely review and audit student records to ensure that immunizations are up to date. Nurses ensure all students are compliant with required vaccines before entering kindergarten (DtaP, Polio, MMR, Hepatitis B, Hib, Varicella) and seventh grade (TdaP and Meningococcal) or anytime a student enters the school system.
- Children's vaccination records are reviewed in the Special Supplemental Nutrition Program for Women, Infants, and Children (commonly known as WIC) when children receive food vouchers. This additional step aids in increasing vaccination rates.
- A wide variety of immunizations recommended for travel to foreign countries is available and provided upon request.

In 2015, Catawba County Public Health implemented a county-wide outreach campaign to inform parents about changes to immunization requirements and promote childhood immunizations in general. The materials were designed to be used annually.

Most insurance companies cover all required and recommended immunizations according to Advisory Committee on Immunizations (ACIP) guidelines.

NEEDS

The elimination of universal vaccine coverage for children will mean more parents may have to pay out of pocket for their children's required vaccines. For practices that do not provide vaccines, the parent may incur out of pocket costs to receive vaccines at another facility.

The NCIR is unable to run specific reports for a county, such as demographic information, which limits the community's ability to identify and assist under-immunized individuals.

Increase education of medical practitioners in private practices pertaining to new vaccine requirements.

Public Health and other providers must continue to work with school systems to help enforce NC immunization laws.

Partnerships with private practices to conduct immunization clinics will enable more children to have access to vaccines.

The Gardasil HPV vaccine is underutilized among eligible young men and women. More education for both young adults and their parents about the vaccine's benefits is needed in order to help boost vaccination rates.

Infant Mortality

ASSETS

The Catawba Valley Medical Center (CVMC) Maternity Services Prenatal Program provides comprehensive prenatal care to low income women in Catawba and surrounding counties without regard to ability to pay or insurance status.

The CVMC Maternity Services Prenatal Program partners with Catawba County Public Health to provide 17P (a medication that can prevent preterm birth) at no cost to low-income pregnant women at high risk for preterm birth, as recommended by the American College of Obstetrics and Gynecology.

The CVMC Maternity Services Prenatal Program partners with Public Health to provide smoking cessation education, counseling and support. Each pregnant woman that identifies as a smoker is automatically enrolled in an intensive program that offers one on one and group support for smoking cessation as well as direct access to the NC Quitline.

Public Health Pregnancy Care Managers provide case management services to Medicaid eligible, high-risk maternity patients during their pregnancy and up to 8 weeks after delivery. The purpose of this program is to resolve issues that could adversely affect the unborn or newborn baby.





Public Health's Newborn Home Visitation Program provides a home visit to all deliveries from its prenatal practice to ensure continuation of health services for mother and baby.

Public Health's Care Coordination for Children (CC4C) provides community based interventions for children to maximize health outcomes and targets the highest risk and highest cost children for care management.

Public Health offers the **Special Supplemental Nutrition Program for** Women, Infants, and Children (WIC) to ensure that both mother and baby receive proper nutrients and vitamins during critical periods of growth and development before and after delivery.

WIC also provides a Breastfeeding Peer Counseling Program, which is designed to improve infant health by increasing the practice of breastfeeding.

The CVMC Maternity Services Prenatal Program works closely with the March of Dimes to ensure the Centering Pregnancy Program is well funded and available to offer pregnant women an evidence-based option for care that reduces incidence of low birth weight and prematurity.

Public Health employs SIDS counselors who provide prevention education to the general public and families directly affected by SIDS.

The interagency Child Fatality Prevention Team identifies deficiencies in the delivery of services to children and families by public agencies, makes and carries out recommendations for changes that will prevent future child deaths, and promotes understanding of the causes of child deaths.

Catawba County Schools' Early Head Start program provides services to pregnant women to assist in prevention of low birth weight infants. They also provide weekly services for children from birth to age 3.

Catawba County Schools' Parents as Teachers program provides home visits focused on child development and parenting skills for parents of infants from birth – 5 years.

Public Health partners with Catawba Pediatric Associates to provide a medical home with quality preventive and acute health services for children ages 2 weeks – 20 years.

The POD (Maternal Child Education), located in CVMC's Center for Women and Children, offers classes and programs to support childbirth and beyond including Lamaze, breastfeeding classes, infant CPR, lactation supplies, and an infant car seat class.

Public Health's Care Coordination for Children Program provides a safe sleep kit, including a pack-n-play crib and safe sleep education, for children and families in need of a safe sleep environment for their baby.

The Catawba County Children's Advocacy and Protection Center champions the "ABCs of Safe Sleep" campaign, providing community-wide education about safe sleep and the dangers of co-sleeping.

The Period of Purple Crying (child abuse prevention curriculum) is given to all new parents/caregivers at both CVMC and FRMC.

NEEDS

Increase efforts to engage minority populations in available educational resources regarding causative factors and preventive measures for infant mortality.

More targeted education is needed among all populations regarding the importance of receiving prenatal care within the first trimester.

More community education is needed during prenatal, postpartum, and well-child visits to better inform parents about measures to prevent SIDS.

Inform the public about the classes offered at The POD and its location at CVMC.

Influenza & Pneumonia

ASSETS

Catawba County Public Health's Immunization Clinic provides two influenza and pneumonia vaccine clinics to the general public for a fee depending on insurance status.

In 2010, the vaccine company Sanofi Pasteur, Inc., began providing a Fluzone High-Dose influenza vaccine specifically designed for people over 65 years of age. Fluzone High-Dose vaccines contain 4 times the amount of antigen compared to regular flu shots, which is intended to create a stronger immune response.





Flu and pneumonia vaccines are widely accessible in the community from many physician offices, Frye Regional Medical Center (FRMC), Catawba Valley Medical Center (CVMC), and pharmacies.

CVMC and FRMC review the immunization status of all adult admitted patients who are diagnosed with influenza (October 1-March 31) and pneumonia and recommend both vaccines for patients who have not received them.

CVMC requires all health care workers to receive an annual flu vaccine. Other health care facilities strongly recommend annual flu vaccines.

NEEDS

Immunizations are typically viewed as a preventive method for children but not adults. However, adults as well as children need them for diseases such as influenza and pneumonia. Adults over age 65 and those who fall into high-risk categories should get the pneumonia vaccine and all adults, with few exceptions, should get the influenza vaccine annually.

Education of adults 65 and older is needed to increase awareness of new recommendations for two different pneumococcal vaccinations, PCV 13 and Pneumovax 23.

A commonly cited reason for not getting flu and pneumonia vaccinations is the mistaken belief that the vaccines will cause the disease. There is a need to educate the public and dispel this myth while providing correct information about the risks and benefits of vaccines and encouraging people to get vaccinated.

Injury & Violence

ASSETS

Catawba County's Child Fatality Prevention Team meets on a quarterly basis to review child deaths and propose recommendations. This team, in conjunction with the Community Child Protection Team, developed a Distracted Driving Committee to focus on risk awareness and prevention of distracted driving.

Catawba County Public Health provides child safety seats (if available) to eligible families for a small fee in an effort to reduce the number of injuries and fatalities for children from motor vehicle crashes.

Catawba Valley Medical Center (CVMC) serves as the lead agency for the Safe Kids Catawba County coalition. Safe Kids Catawba County performs routine child safety seat inspections in the community, oversees several permanent checking stations, provides discounted-price car seats (if available) to needy families in order to ensure proper seat installation, and conducts an annual health fair to raise awareness of childhood injuries.

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.

Catawba Valley Community College (CVCC), in conjunction with the Safety and Health Council of North Carolina, offers "Alive at 25," a 4-hour defensive driving course designed for teens that have been charged with a minor traffic violation in the 25th District or for any teen wishing to take the course.

Child restraint laws have been upgraded to require that all passengers under the age of 16 be in a proper restraint; a stricter booster seat law has also been enforced to mandate use of the seat until a child reaches the age of 8 or a weight of 80 pounds.

North Carolina has a mandatory child bicycle helmet law that requires every person under age 16 to wear an approved bicycle helmet when operating a bicycle on any public road, public bicycle path, or other public right-of-way.

Catawba County Social Services established a Community Standard for Child Abuse and Neglect document that can be used to gauge both the presence and severity of child abuse and neglect.

The Rape Crisis Center is funded through the United Way to assist women who have been sexually assaulted.

Some Catawba County communities engage in Neighborhood Watch programs to decrease the incidence of violence, theft, or burglary in their neighborhoods.

The Children's Advocacy & Protection Center and Children's Resource Center offer an awareness course, "Darkness to Light," which educates parents, caregivers, and community members about sexual abuse.

The Hickory Police Department maintains a Gang of One Resource Network, which aims to prevent at-risk youth from joining gangs by establishing programs that provide positive activities for youth wanting to separate from gang activity. Counselors are available in all schools to address the various needs of the students. The counselors maintain student confidentiality; however, appropriate action is taken and referrals are made if needed.





Family Net, a program within Catawba County Social Services, offers the Sexual Abuse Intervention Program (SAIP), an enhanced treatment program that provides comprehensive evaluation and treatment to legally adjudicated adolescent sex offenders to protect both current and future victims from further sexual victimization and abuse.

The Family Guidance Center, funded by United Way, offers a First Step program that offers shelter to victims of family violence.

The Catawba County Sheriff's Department offers a Conflict Resolution Center that provides techniques to handle combative situations and anger management.

CVCC and all high schools and middle schools in Catawba County employ resource officers who are on campus at all times to minimize and control situations which may arise among the students.

Catawba County Public Health's Women's Preventive Health Clinic screens all patients for emotional, sexual, and physical abuse, and nurses are available to counsel patients on request.

Are You OK? is a free computerized telephone program provided by the Catawba County Sheriff's Office available to elders who are disabled, handicapped or homebound residing in Catawba County. An automated system contacts them every day and the client must respond by pushing a number as a response. If there is no response, then law enforcement is dispatched to their residence to provide assistance if needed.

Fall prevention programs and presentations are offered by the Area Agency on Aging, Catawba County Social Services' Senior Morning Out program, CVMC, FRMC, Catawba County EMS, and local home health providers. Some programs provide in-home assessments to assist with eliminating fall risks in the home.

Lifeline personal emergency response systems and medication dispensers are offered by Catawba Valley Medical Center.

Fire Prevention & Life Safety Education classes are performed throughout the county by local fire department personnel and certified fire safety educators.

Operation Pill Stoppers collects and destroys unneeded prescription medications to prevent accidental ingestion/poisoning by children, pets, or other household members.

Catawba County EMS offers poisoning prevention education and classes.

NEEDS

Offer incentives to teenagers who complete a driving safety course, such as lower insurance rates.

Secure funding for a driving test track for students to practice safe driving.

Offer driving safety courses to the Hispanic community through churches and Centro Latino.

Secure funding to utilize impaired driving simulators in driver's education.

Assess driver's education curriculum for areas of improvement regarding safe driving practices.

Expand Safe Kids Catawba County partnerships and programs offered in the community.

Encourage law enforcement to organize Neighborhood Watch groups in communities and/or neighborhoods that do not already have them.

Provide gang initiation prevention programs to youth and parents at schools, churches, businesses and community centers.

Offer the "Darkness to Light" awareness program to adults at schools, churches, businesses and community centers.

Work with businesses to offer mental health services, such as employee assistance programs and other resources, in order to prevent suicide and help manage other mental health issues.

Increase access to suicide prevention resources by expanding the community's mental health treatment and support services, offering community prevention programs, and developing suicide prevention programming for schools.

Secure funding for child safety seats that can be donated to families who lack the resources to purchase them.

Offer conflict resolution/prevention training programs in the community.

Offer more educational programming to help prevent falls.





Nutrition

ASSETS

The county is home to six farmers markets - Downtown Hickory Farmers Market, Conover Farmers Market, Claremont Farmers Market, Farmers Market at Center United Methodist Church (Catawba), Abernathy Laurels Farmers Market, and Catawba County Public Health Farmers Market - that operate on seasonal schedules and offer a wide selection of fresh, locally grown produce. The Downtown Hickory Farmers Market operates three days per week (Wednesdays, Thursday evenings, and Saturdays) during market season.

The Western North Carolina Epilepsy Association's HOPE (Help Our People Eat) Garden Project grows and harvests fruits and vegetables for use at the Hickory Soup Kitchen, Eastern Catawba County Christian Ministries, members of the association, and individuals/families in Catawba County.

Catawba Valley Medical Center (CVMC), Frye Regional Medical Center (FRMC) and Catawba County Public Health's WIC program offer breastfeeding classes, peer groups, and peer counselors to encourage breastfeeding within the first year of a baby's life.

The CVMC Health First Center's Lactation Station offers breastfeeding education and supplies.

CVMC's Cardiopulmonary Rehabilitation program provides participants with dietitian-led nutrition education on a monthly basis.

CVMC's Health First Center offers healthy cooking classes.

Absolute Organics operates a CSA that delivers locally-grown produce to homes.

Give Healthy is a local movement designed to encourage the donation of foods filled with the nutrients adults and children need for healthy living. The movement is supported by food assistance agencies across Catawba County, including Eastern Catawba Cooperative Christian Ministry, Greater Hickory Cooperative Christian Ministry, Hickory Soup Kitchen, PORCH, the Backpack Program and The Corner Table.

The Hickory Soup Kitchen is partnering with Catawba County Public Health and Lenoir-Rhyne University's Solmaz Institute on "Dining on a Dime," an event which combines nutritional information, recipes, and cooking demonstrations to provide education on low-cost healthy meal preparation. The event is intended to take place twice annually.

In 2014, Catawba County Public Health provided nutrition and healthy shopping education to residents at the Family Care Center. This initiative was adopted by Lenoir-Rhyne University's Solmaz Institute in 2015.

Both CVMC and FRMC offer nutritional counseling to patients.

All three public school systems in Catawba County participate in the Universal Breakfast Program, which provides a free, healthy breakfast to students in selected schools during the school year. The program is intended to reach low-income children who may not be eating breakfast at home with a goal of increasing student achievement.

Catawba County Schools is operating a Summer Food Service Program for students in Newton-Conover, Hickory and Catawba County Schools. The program is funded by the U.S. Department of Health and Human Services to serve food-insecure children during the summer vacation.

In 2013, the Catawba County Board of Commissioners approved a Catawba County Farm and Food Sustainability Plan, which is designed to help form partnerships that bring food producers, citizens, and related agencies together to sustain farmland and farming as a profession. The desired result is to ensure local food production continues, and residents have convenient access to fresh fruits, vegetables and meat. A Local Food Advocate is implementing in partnership with NC Cooperative Extension.

As of 2015, the Public Health Farmers Market is the only market in the county to accept SNAP/EBT food assistance benefits.

All three of Catawba County's public school systems participate in the Farm to School program, which enables them to utilize foods from local farms in their school menus.

Mt. Olive Lutheran Church operates Micah's Cupboard, which helps meet the nutritional needs of local school children and their families during school breaks and vacations, plus other immediate needs identified by the church or school guidance counselors.

The Backpack Program provides weekend nourishment to students in Catawba County during the school year. The program serves students in all three school systems and other student groups.

Eastern Catawba Cooperative Christian Ministry, Greater Hickory Cooperative Christian Ministry, and several other organizations and churches operate food pantries to provide food assistance to residents.





The Solmaz Institute and Hickory High School are implementing THRIVE (Totally Healthy Rewarding Ideas for Vitality Everyday), a wellness group which meets for six weeks during lunchtime to discuss nutrition and healthy eating.

Catawba County Library's Main Library in Newton maintains a community vegetable garden and donates produce from the garden to local food pantries and The Corner Table.

The Family Care Center (FCC) offers the use of 16 raised vegetable garden beds to clients who reside in its facility.

Catawba County Cooperative Extension Service maintains a Teaching and Demonstration Garden for use when promoting community vegetable gardening. The Service also offers vegetable gardening programs and workshops, such as the annual Master Gardener course and an Advanced Gardener course, throughout the community.

Several area churches and organizations operate community gardens, including the City of Hickory's Civitan Community Garden.

The Solmaz Institute provides healthy nutrition and physical activity workshops for local childcare centers.

The Solmaz Institute provides healthy cooking classes and events for Inspired Learning, a Maiden-Rosenwald project.

The American Heart Association in partnership with the Solmaz Institute offers the Kids Cook with Heart, a two-week instructional program focused on nutrition and cooking education, at both Grandview and Northview middle schools.

NEEDS

A Fruit & Vegetable Prescription Program (FVRx), in partnership with local physicians, nutritionists, and farmers markets, would help increase fruit and vegetable consumption and healthier eating practices among high BMI and atrisk patients.

Develop a nutrition education program in conjunction with CVMC, FRMC, and WIC for all new moms to provide important knowledge to moms and families at a vital and receptive time. This would include a focus on healthy early childhood nutrition, from the breastfeeding years through the toddler years.

Encourage healthy food guidelines/policies for employer-based cafeterias.

Work at the policy level to incorporate pricing incentives that make healthy foods more affordable.

Provide more access to water fountains in public places and parks.

Encourage healthier options in restaurants, including low-calorie and vegetarian options, menu labeling with health information, and utilization of appropriate portion sizes. Place an emphasis on working with individual restaurants or chains with less than 20 locations which will not be affected by pending FDA menu labeling requirements (2016).

Provide nutrition education to residents when they apply for SNAP benefits.

Implement food assistance policies that allow only healthy food purchases and increase the amount of healthy food items that can be purchased with these benefits.

Promote the use of WIC Works, a website that can provide nutritional guidance to WIC clients between program appointments.

Develop more community and school gardens to encourage healthier eating habits among residents and children.

Explore ways to change habits and cultural norms regarding eating choices and food preparation among high-risk populations.

Increase SNAP/EBT, WIC Farmers Market Nutritional Program, and Senior Farmers Market Nutritional Program access at farmers markets in the county.

Encourage more breastfeeding-friendly public places and worksites.

Increase access to nutritious meals for homebound elderly due to funding decreases in the Catawba County Social Services nutrition and home delivered meal programs.

Obesity

ASSETS

The Solmaz Institute at Lenoir-Rhyne University is an obesity prevention, treatment and research facility serving youth ages 5 and up regardless of their ability to pay.

Catawba County Public Health's School Nurses are currently implementing a case management program for students in the 1st, 7th and 9th grades who are in high-risk categories for obesity. The multi-year program assists students with meeting individualized goals related to nutrition and physical activity and provides students and their families with ongoing access to obesity prevention resources and support, including connecting with their medical home.





Frye Regional Medical Center (FRMC) and Catawba Valley Medical Center (CVMC) both offer multidisciplinary bariatric surgery programs staffed by case managers who also lead monthly support groups.

Public Health offers nutritional counseling to pregnant women and mothers of young children through the Women, Infants and Children (WIC) Program.

Childhood obesity is on the national agenda thanks to a childhood obesity prevention program sponsored by First Lady Michelle Obama called "Let's Move!"

Stretch-n-Grow classes are offered to participating preschoolers with the goal of building a foundation for lifelong healthy food choices and consistent physical activity. The program partners with the NC pre-K program to reach 1,300 children per month.

The Healthy Schools Recognition Program, operated by Catawba County Public Health's School Health program, designated 32 Healthy Schools during the 2014-15 school year, impacting more than 20,000 students. The program asks schools to voluntarily meet standards and implement policies that increase access to physical activity and healthy foods in the school setting.

The Healthy Childcare Center Recognition Program designated 37 Healthy Childcare Centers in 2015, impacting more than 2,000 children. The program asks childcare centers to voluntarily meet standards and implement policies that increase access to physical activity and healthy foods in the childcare setting. In 2014, these policies expanded to require a 100% tobacco-free facility. This program is maintained by Catawba County Public Health's Early Childhood Support Team nurses.

NEEDS

Encourage all primary medical care providers to do routine BMI screening and provide relevant counseling and/or referrals for every at-risk, overweight or obese patient, from children to adults.

Increase access/remove barriers to healthy foods and spaces for physical activity. Develop nutrition and physical activity resources (or ways to easily connect residents to existing resources) for the less populated/more rural parts of the county.

Develop educational programming that promotes the benefits of physical activity and nutrition.

Develop ways to engage parents in the importance of promoting/participating in physical activity and nutrition for their children and families.

Develop systems to gather relevant local data to better understand and address the magnitude and impact of obesity in Catawba County.

Provide training and incentives to faith-based and other private childcare facilities on healthy menu planning (meals and snacks) and physical activity to help prevent childhood obesity.

Increase participation in existing nutrition and physical activity programming through outreach and marketing. This could include: developing a "one-source" communication platform that would enable residents to access/filter all opportunities for physical activity and nutrition in the county; improving communication of existing physical activity and nutrition assets to residents (from the county, municipalities, public and private organizations, etc.); advertising family-friendly physical activity and nutrition programs in the "Kids Scoop" newspaper that goes home with school children; developing a media campaign (advertising, billboards, social media) promoting physical activity and nutrition; and/or including physical activity and nutrition events/information in the City of Hickory's utility bill newsletter.

Oral Health

ASSETS

Gaston Family Health Services, through a partnership with Catawba County Public Health, began operating the Catawba Family Dentistry practice at Catawba County Public Health's newly-expanded dental facility in 2015. The practice provides dental care for children with Medicaid and NC Health Choice and has plans to expand to serve adults as well as those with or without insurance.

Public Health's school nurses and Early Childhood Support Team nurses support the state dental hygienist in providing dental education and follow up.

Seventeen high risk elementary schools in Catawba County participate in the Fluoride Mouth Rinse Program. Ninety percent of the students participate in the sodium fluoride solution rinse once a week for 32 weeks in the school year to provide protection against cavities.





The North Carolina Oral Health Program coordinates *Give Kids A Smile*, which provides dental care and information to low-income children in partnership with 26 schools from the 3 public school systems, Catawba County School Health Nurses, the Catawba Valley Community College dental hygiene program, Western Piedmont Dental Assisting Program, 22 dental offices, and community volunteers. Through this program, more than 3,000 children receive dental health education and approximately 300 children receive free dental care.

Greater Hickory Cooperative Christian Ministry (GHCCM) offers basic dentistry services to low-income, uninsured and eligible adults who are referred by the GHCCM clinic.

The North Carolina Oral Health Section provides a public health dental hygienist to serve Catawba County. Public Health assists this state position by providing administrative and operational support.

NEEDS

Increase the number of dentists in Catawba County for younger children (ages 1-5) and children with special medical, developmental, and emotional needs.

Find alternate sources of funding as funding is decreased for dental prevention programs such as North Carolina Oral Health Section Dental Hygienists and Seal the State campaign; Smart Start-Early Childhood Support Team Nurses; and Medicaid rates for preventive and treatment services. Decreased funding could have a significant impact in the progress that has been made in oral health for children.

Provide oral health outreach and education targeted toward low income and minority populations.

Explore dental preventive and treatment options for low income, mentally disabled, and older adults.

Physical Activity

ASSETS

Catawba County Planning & Parks has expanded Carolina Thread Trail sections in Newton, including development of a master plan to connect a new Thread Trail section to an existing greenway and proposed sidewalks leading into downtown Newton.

The City of Newton's Appearance Commission, Newton Parks & Recreation and Catawba County Health Partners worked together to implement a downtown Newton walking route system. The system, which is designed to encourage physical activity, features mile markers and a map that delineates three walking routes in and around downtown Newton.

In 2013, the Western Piedmont Council of Governments facilitated development of a Long Range Transportation Plan for the region, which included soliciting community input on the plan. The plan, which includes a goal related to promoting health through easy accessibility for physical activity, features maps and development goals for the Hickory Metro area for freight, highway, vehicular, pedestrian, and bicycle transportation.

In 2013, the City of Hickory's "Inspiring Spaces" initiative was launched to explore community development projects that can help revitalize job and community growth and make Hickory a more appealing and active community. These efforts are aligned with the city's goals of increasing connectivity, which include opportunities for increased physical activity. In November 2014, Hickory residents passed bond referendums of \$40 million to pursue parts of this initiative, including a "river walk" developed from Rotary Geitner Park along the river to LP Frans Stadium to spur new retail jobs and residential growth; a "city walk" developed along Main Avenue from LRU to downtown to continue the growth of professional jobs in the city's central business district; and improvement of gateways and streetscapes. In 2015, the Bond Commission appointed community members to three subcommittees to focus on developing the River Walk, City Walk, and Streetscapes/Gateways components.

Catawba County Planning & Parks secured 15 acres of land and an option on another 12 acres to expand the Bunker Hill Covered Bridge Park to 35 acres. Development of a walking trail from the I-40 rest stop to the covered bridge is a planned feature of the park expansion. Funding for the land purchase was made available through the Conservation Fund of the USA and National Heritage Trust Fund.

Frye Regional Medical Center organizes the annual Do the Unthinkable 5K, which includes a school challenge: schools that have the most student participation received supplies to stock the nurses' stations.

Lenoir-Rhyne University and area high schools are utilizing Catawba County Parks as training facilities for cross country teams.





Friends of Hickory is an organization of private citizens that aims to support and develop projects in Hickory that will improve the attractiveness and livability of the community. FOH began work in 2014 on its first project: the development of a downtown park that will incorporate play space and an interactive water feature. FOH is part of Partners for Parks, a non-profit 501(c) 3 designated organization based in Charlotte, NC.

Several private fitness centers offer memberships and other services, such as personal training and nutritional counseling. CVMC also operates a fitness center that offers memberships and fitness programs to the public.

Several churches operate fitness/5K training programs with nutrition components for church members, such as "Run for God" (Christ Church).

YMCA of Catawba Valley offers member-based fitness facilities, physical activity programs and various sports leagues for children and adults on a sliding scale and offers financial aid as needed.

Catawba County operates 3 public parks that provide passive opportunities for residents to walk, hike, canoe, fish, and bike, along with other outdoor activities.

The cities of Hickory, Conover, Newton, Maiden, and Catawba provide a total of 36 public parks which offer anything from passive spaces for physical activity to a variety of organized indoor and outdoor activities and recreational programming.

In 2015, the Western Piedmont Council of Governments finalized a Western Piedmont Bicycle Plan in cooperation with the North Carolina Department of Transportation, Public Health, and planners from Catawba and surrounding counties. The plan makes prioritized recommendations for the improvement of bicycle access throughout the county.

The walking tracks at various YMCAs (particularly Hickory Foundation and Shuford), Lenoir-Rhyne University, CVMC, and at various churches and schools are utilized by residents as open spaces for physical activity.

Silver Sneakers and Silver & Fit are free fitness programs for seniors covered by Medicare and other insurance companies. Various facilities in the area offer these programs.

Several elementary schools operate running clubs, walk/run fundraisers, and "Jump Rope for Heart" programs for students.

The Shuford YMCA organizes the Kids Marathon on an annual basis in May and Healthy Kids Day in April.

Several charity and other organized fitness events take place across the county on an annual basis, including the Carolina Cycle Challenge, the Charity Chase, the Lake Norman Excursion bicycling event; Murray's Mill bike ride; the Get Your Rear in Gear and Susan G. Komen 5Ks; the March of Dimes walk; Relay for Life; and various other charity 5Ks and fun runs/walks.

Fit for Motion is a collaborative effort between the YMCA, Hickory Public Schools and the Solmaz Institute at Lenoir Rhyne University. The 10-week program is designed to get kids involved in aerobic activities for 60-minutes per day and to provide lifelong lessons in healthy choices. The program is for 2nd graders in Hickory Public Schools.

YMCA of Catawba Valley organizes the annual Turkey Trot that includes a school and corporate challenge.

Work is commencing on the Downtown Newton Streetscape Master Plan, which would include infrastructure and streetscape improvements to make the area safer and more appealing to pedestrians and cyclists.

NEEDS

Increase walkability by adding new and improving existing sidewalks, walk signals, crosswalks, and ordinances requiring sidewalk development in neighborhoods and throughout communities.

Enhance/improve sidewalk ordinances to require sidewalks in developments and/or incentivize developers to include sidewalks instead of paying the fee to waive the requirement.

Ensure all schools comply with North Carolina's statue for mandatory daily physical activity.

Encourage more joint use/shared use agreements for spaces enabling physical activity at schools, churches, and other organizations serving the community; providing access to legal protection to schools allowing public access in their facilities; and ensuring that maintenance can be provided for facilities used by the public.

Enhance bus stops to make them more accommodating and user-friendly.

Improve the safety and appeal of neighborhoods to encourage physical activity – cleanliness, lighting, trees, signage, etc.

Develop guidelines and recommendations for planners to promote easier access to active living for seniors in communities. Examples include more benches at parks and along walking trails; handrails to assist with walking along uneven areas; etc.





Increase the number of bike lanes and trails in communities and parks.

Encourage worksites and public places to promote the use of stairs instead of elevators/escalators.

Develop a ride share program to make bicycling more accessible to the public.

Preparedness

ASSETS

Catawba County has numerous agencies within the county that focus on preparedness. These include American Red Cross; Catawba County Emergency Management; Catawba Valley Medical Center (CVMC); Frye Regional Medical Center (FRMC); all three school systems (Catawba County Schools, Hickory City Schools, and Newton Conover Schools); Lenoir-Rhyne University; Catawba Valley Community College; Citizen Corps; and United Way.

Catawba County Public Health maintains a Local Information Team that is capable of communicating critical information, including preparedness messages, guickly and efficiently through several venues during a crisis.

Catawba County Emergency Management manages plans to be prepared for all hazards, including all natural and manmade disasters.

Catawba County has access to expertise and additional workforce help from a Public Health Preparedness Regional Team based in Charlotte. The team provides expertise in epidemiology, industrial hygiene, and pharmacy.

The State of North Carolina provides services in epidemiology, communicable disease, preparedness, and immunizations, as well as oversight for any additional expertise that may be needed.

The North Carolina Office of Emergency Medical Services Western Branch field office is located in Catawba County.

Citizen Corps is a council comprised of representatives from Emergency Management, Fire Services, United Way, Sheriff's Department, Public Health, Community Watch, Red Cross, Cooperative Christian Ministries, and local businesses. The council coordinates resources, volunteers, and activities to ensure the safety of Catawba County citizens through preparedness education, information, and training.

Catawba County has Community Emergency Response Teams (CERT) and offers CERT training periodically throughout the year to educate people about disaster preparedness for hazards that may impact their area and train them in basic disaster response skills, such as fire safety, light search and rescue, team organization, and disaster medical operations.

An automated Community Alert System that contacts residents through their phone or e-mail is used within the county to notify residents of various crisis-related scenarios that may affect them.

Public Health has a designated Epidemiology (EPI) Team that meets regularly and takes advanced training to monitor illness rates and respond to outbreaks within the community.

Public Health maintains a Risk Communication Plan to ensure the appropriate and accurate delivery of critical information to county residents in the event of a health crisis.

FRMC is a member of the Triad Healthcare Coalition and CVMC is a member of the Metrolina Healthcare Coalition. Both coalitions have regional assets that could be deployed if needed.

Catawba County Public Health and Emergency Management are part of the multi-disciplinary Disaster Preparedness Region (DPR7).

NEEDS

Increase the number of people within the county with a preparedness plan by promoting its importance and providing education.

Incorporate new businesses, partners, and agencies into the Local Information Team to help expedite crisis communication throughout the community.

Offer preparedness education to businesses and their employees.

Increase county-wide communication capabilities by installing appropriate and compatible technology and hardware, such as more 800MHz radios.

Develop and implement a county-wide preparedness public service campaign.

Improve special needs shelter operation preparedness through training and exercises.

Increase the number of people in the county within the 10-mile EPZ who receive doses of KI.

Increase the participation and availability of large scale incident management and communication among multiple agencies through larger, multi-agency exercises and drills.





Senior Health

ASSETS

The Eldercare Locator, located at www.eldercare.gov, is a free United States Administration on Aging service and is administered by the National Association of Area Agencies on Aging. It provides the public with information about resources on aging issues through its toll-free telephone number, website, and partnerships with other agencies.

The Foothills Office of the Western Carolina Chapter of the Alzheimer's Association is located in Hickory and offers many patient and family services.

Western Piedmont Council on Governments' (WPCOG) Area Agency on Aging (AAA) is located in Hickory. The AAA works within a federal mandate to inform, advocate, and plan for community services on behalf of older adults and their families/caregivers.

The AAA publishes the *Resource Directory for Older Adult*, a valuable guide to services for seniors and service providers. The Directory lists Support Groups, Housing Options, Recreation/Wellness, Home Care Agencies, Caregiver Resources, Disability Resources, Mental Health Resources, etc. The Directory is available at the WPCOG office, Catawba Council on Aging, and online.

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 North Carolina General Assembly as a top priority each year.

Catawba County Social Services operates several nutritional programs for older adults in Catawba County:

- Meals on Wheels volunteers deliver hot and nutritious meals to homebound older adults.
- The Congregate Meal program Seniors Morning Out provides a nutritious lunch along with health and wellness activities, fellowship, monthly grocery shopping, and other activities.
- The Frozen Meals program provides frozen meals to homebound older adults who are not on a Meals on Wheels
 route.
- The Nutritional Supplements (Boost/Ensure) program provides one case of a nutritional supplement a month to older adults who may be at nutritional risk and/or cannot chew or swallow solid foods.
- The Meals on Wheels Pet Food program provides pet food to Meals on Wheels recipients. The program delivers pet food because older adult pet owners who are in difficult financial situations may share their meals with their pet or buy food for their pet in lieu of personal necessities.
- Options Counseling services help individuals and families make service and support choices that fit well with their needs, goals and preferences.

Adult day care programs in Catawba County are operated by Adult Life Programs. The program offers care and supervision to elderly or disabled adults, providing their caregivers respite and allowing them to work. There are centers in Conover, Hickory, and Maiden. The Hickory center is the only day adult healthcare site in Catawba County.

A Regional Ombudsman is available to assist local residents and families with complaints or questions they may have regarding long-term care. The Ombudsman advocates for the rights of residents in long-term care facilities.

West Hickory Senior Center/Catawba Council on Aging is a multipurpose senior center that offers multiple classes, income tax assistance, recreational and volunteer opportunities, and programs including health promotion to older adults aged 60 years and older. They also have trained Senior Information and Insurance Program (SHIIP) volunteers to assist seniors with Medicare questions and enrollments.

Greenway Public Transportation provides reduced-rate transportation to medical appointments and shopping for adults age 60 and older.

Many pharmacies offer free prescription delivery service.

The Project Lifesaver program, administered by the Catawba County Sheriff's Department, is an innovative rapid response program aiding victims and families suffering from Alzheimer's disease and related disorders such as Down syndrome and autism. By forming partnerships with local law enforcement and public safety organizations, Project Lifesaver deploys specially trained teams with the most reliable technology available to quickly locate and return wandering adults and children to their families and caregivers.

Are You Okay?, a program provided by the Catawba County Sherriff's Department, is a computerized telephone program that automatically dials the phone number of an older adult at a set day and time. If the older adult cannot be





reached after a second call, a designated contact person is called. If no contact can be made with the older adult or the contact person, a deputy is dispatched to check on the older adult.

North Carolina Baptist Aging Ministry (NCBAM) has a local representative available to assist adults age 65+ and their families by providing information, referrals, and assistance with resources to meet various needs.

The Program of All Inclusive Care for the Elderly (PACE at Home) assists adults age 55+ who have been certified by the state to need nursing home care, live within 45 minutes of the program location, and can safely live in the community. The program provides an adult day care that includes nursing, physical, occupational and recreational therapies, prescription drugs, meals, nutritional counseling, social work, and personal care. The program has a doctor and nurse practitioner on site and also provides door-to-door transportation to and from the older adult's home.

Catawba Regional Hospice provides hospice, palliative, and end-of-life care to patients with an incurable illness, as well as support for their families.

Catawba County has 6 Nursing homes with 742 nursing homes beds and 128 adult care home beds for a total of 870 beds; 10 adult care homes with 595 beds; and 5 family care homes with 30 beds.

Silver Sneakers and Silver & Fit are free fitness programs for seniors covered by Medicare and other insurance companies. Various facilities in the area offer these programs.

The Catawba Aging Coalition was created by the Catawba County Commissioners in 2011 as a result of the Catawba County Aging Plan. This group meets monthly to discuss senior issues in Catawba County. The group is currently updating the Aging Plan.

Catawba County has two acute Inpatient Physical Rehabilitation Centers located within Catawba Valley Medical Center and Frye Regional Medical Center. These inpatient programs provide 3 hours of intensive therapy 5 out of 7 days.

Neighbors Network is a membership-oriented, non-profit organization that has been established to give people both the support and confidence to live life to the fullest safely at home. They are housed at a community-based facility called The Mayor's House in Conover. Through this program, senior citizens gather to connect with the community, engage in health and educational programs, and support one another in everyday activities.

SIR (Senior Information Resources) is a non-profit organization that is an educational resource for seniors, their families, and their caregivers. In collaboration with the Catawba County Chamber of Commerce and the Catawba Aging Coalition, SIR has established an annual Prime of Life Expo showcasing community products and services focused directly at our community's seniors. SIR also sponsors an annual *Prime of Life* publication containing senior-related articles written by SIR members.

The Catawba County Veteran's Service Officer assists veterans and their dependents in filing claims with the Veterans Administration for benefits and service. There is also a Veteran's Community Based Outpatient Clinic in Hickory.

Legal Aid of NC holds annual clinics at the Catawba Council on Aging to provide free services to seniors to create Wills, Advance Care Directives, and Power of Attorney documentation.

ACAP (Adult Children of Aging Parents) community is a nationally-unique non-profit organization whose mission is to support adult-child caregivers as they care for their aging parents and for themselves. ACAP offers a variety of supports including face-to-face educational programs presented by experts, podcasts and other webbased resources. ACAP provides information, resources, support and community for those caring for a loved one. Although designed specifically for adult-children caring for aging parents, ACAP community programs are open to all who are interested.

NEEDS

Explore options to build a centrally located multi-purpose senior center.

Expand the availability of physicians who accept new Medicare patients.

Recruit and expand the availability of geriatric-trained physicians.

Offer affordable dental care for low income Medicare recipients.

Expand fall prevention and awareness programs in the county to face the growing number of falls among older adults.





Substance Abuse

ASSETS

Community Care of North Carolina is overseeing the expansion of Project Lazarus, which promotes safer practices surrounding how drugs are prescribed by doctors, dispensed by pharmacies and stored by consumers, through distribution of \$2.6 million grant funding from the Kate B. Reynolds Trust and the state. A Project Lazarus work group has been formed to address accidental prescription drug overdose prevention strategies in the community.

In conjunction with the Sheriff's Department, Operation Pill Stoppers established unused medication drop boxes in law enforcement offices throughout Catawba County.

McLeod Addictive Disease Center is a methadone clinic providing outpatient and day treatment services.

Hickory Metro Treatment Center is a butrenorphine and methadone clinic serving clients in the region.

The North Carolina ABC Commission has begun organizing the North Carolina Governor's Initiative on Underage Drinking/Addiction, which aims to draft legislation and identify research and successful programs to assist in prevention and treatment strategies. The Talk It Out initiative is a multi-media campaign designed to raise awareness of the issue, and to give parents the right tools for talking to kids about the dangers of underage drinking.

The Governor's Substance Abuse and Underage Drinking Prevention and Treatment Task Force is an initiative launched by North Carolina Gov. Pat McCrory. The pilot program, aimed at substance abuse prevention and treatment, is in full effect at six North Carolina universities: East Carolina University (ECU), UNC Chapel Hill, North Carolina A&T, UNC Charlotte, UNC Wilmington and UNC Greensboro.

In 2013, the NC General Assembly passed Senate Bill 20 (SB20), Good Samaritan Law/Naloxone Access, legislation aimed at reducing drug overdose fatalities in North Carolina. SB20 provides limited criminal immunity from prosecution charges for less than one gram of drugs or paraphernalia to people who call 911 to report an overdose. The immunity also applies to underage drinkers who seek help for alcohol poisoning.

The 2008 North Carolina Controlled Substances Reporting System Act was amended July 2013 (effective January 2014) requiring pharmacists/prescribers to enter controlled substance prescription data within three days into the North Carolina Controlled Substances Reporting System (CSRS), which is designed to help identify controlled substance abusers or misusers and refer them for treatment, and to identify and stop diversion of prescription drugs in an efficient and cost-effective manner that will not impede the appropriate medical utilization of controlled substances.

The North Carolina Policy Alliance was formed by substance abuse prevention coalitions across the state to advocate at the state level for best practices to maintain state control over alcohol, raise taxes on alcohol, reclassify alcopops, and support action alerts and legislation relating to alcohol.

In 2014, Catawba County Health Partners' substance abuse coalition undertook the Pride Survey, a nationally accredited survey designed to identify youth substance abuse trends and risk factors. The survey identified substance abuse trends among 2,235 students in grades 6, 8, 10, and 12 within Catawba County's three public school systems. School-level data was shared with each of the public school systems to support their education and prevention initiatives.

The Cognitive Connection provides assessment, counseling, and outpatient treatment to individuals, groups, and families as well as prevention and education services in the community. The organization also operates a substance treatment service, which is a medication-assisted treatment program for opioid dependence.

Family N.E.T. delivers psychiatric and substance abuse services, individual group and family therapy, assessment, day treatment, and case management.

Catawba Valley Behavioral Health (CVBH) delivers psychiatric and substance abuse services through its Assertive Community Treatment (ACT) team.

Doris Lasley and Associates provides DWI assessment and DWI counseling services.

Catawba Valley Medical Center (CVMC) provides inpatient multi-disciplinary short-term treatment, crisis intervention, and chemical detox.

Frye Regional Medical Hospital (FRMC) provides inpatient multi-disciplinary short-term treatment, crisis intervention, and chemical detox.

Safe Harbor is a rehabilitation program for women that provides long term recovery for dual diagnosis and substance use.





Partners Behavioral Health Management, The Cognitive Connection, and Catawba Valley Behavioral Health are working together to provide comprehensive treatment services to individuals with co-occurring disorders.

Catawba County's Drug Treatment Court (DTC) enhances and monitors the delivery of treatment services to chemically dependent adult offenders while holding those offenders accountable in complying with their court-ordered treatment plans.

The Criminal Justice Partnership (CJPP) of Catawba County is a state-funded grant program that provides outpatient substance abuse services, aftercare, and transportation to eligible probationers. The program partners with organizations such as The Cognitive Connection and Insight or services and transportation.

Partners Behavioral Health Management has a contractual agreement with The Cognitive Connection to provide screening and referral services by a Qualified Substance Abuse Professional for clients involved with the Work First Program, Child Protective Service Program, and/or the Food Assistance Program.

The North Carolina Department of Juvenile Justice and Delinquency Prevention Program (JCPC) supports funding in Catawba County to assist in reducing and preventing juvenile delinquency by effectively intervening, educating, and treating youth.

Recovery support systems are available, including Peer Support, Alcoholics Anonymous, Narcotics Anonymous, Ala-Non, Ala-Teen, NAMI, Christ Church, and Exodus Homes.

Partners Behavioral Health Management provides a care coordination service for both Catawba and Burke County individuals who are admitted to a state facility or are in jail, which could involve linking the individual with a substance abuse service provider.

NEEDS

Increase the number of inpatient beds for medical detox in Catawba County hospitals or at non-medical detox centers to meet the needs of people with addiction.

Increase the currently scarce number of residential and outpatient youth treatment options in the county, including facilitating the acceptance of youth under the age of 18 at local non-medical detox centers.

Increase access to health and dental care for individuals without insurance, which includes a high percentage of individuals with addiction issues.

Improve funding and sustainability of addiction-related services in the community to help meet growing demands.

Determine ways to provide housing for addicts, many of whom are not able to stay off drugs long enough to qualify for existing services.

Increase the number of psychiatrists and psychiatric care options in the county for addicts and individuals with co-occurring disorders.

Increase the amount of substance abuse education to middle and high school students as well as college age students.

Teen Pregnancy

ASSETS

The Council on Adolescents of Catawba County (COA) teaches comprehensive sexual education programs in all three public schools systems in Catawba County. These classes provide uniform, medically accurate, age appropriate information to help teens avoid early sexual involvement and prevent teen pregnancy. In 2014, there was a 44% increase in knowledge among teens who participated in these programs.

In 2012, the COA began partnering with Hickory High School to provide comprehensive sexual education to 10th grade students, to address need identified in the 2011 CHA. Programming is still being piloted and in 2014, participants showed a 23% increase in knowledge from COA programming. The COA also has a Parents as Teacher educator stationed at Hickory High.

In 2013, COA created the Teen Talk program, which is a community-based initiative to provide additional comprehensive sexual education to at-risk teens. 100 middle and high school youth are served through this program each year.

The COA added a Smart Moms program in 2015, which serves pregnant and parenting teens in Hickory Public Schools' two high schools. Goals of this program are to prevent subsequent pregnancies and ensure these teens graduate from high school.





Catawba County Social Services offers therapeutic programs for at-risk teens (Teen Up in middle school and Upward Connection in high school) that have helped prevent unintended pregnancy.

Catawba County Public Health's Women's Preventive Health clinic provides physical exams, lab tests, birth control methods, and family planning education to all females who are in their childbearing years.

Young People of Integrity is an award-winning community program specifically targeted to teens identified as being atrisk of becoming teen parents, potential substance abusers, and/or school dropouts.

Since the peak in teen pregnancy rates in Catawba County in the early 1990s, rates have significantly declined in Catawba County by more than 53%.

NEEDS

Required comprehensive sexual education past 9th grade could help prevent pregnancies among teens that are increasingly sexually active in high school. While COA is piloting 10th grade programming in one high school, requiring this programming across all school systems would be beneficial.

More programs to educate and involve parents and mentors in the sexual education of their children are needed.

Parents need to be encouraged to have open communication with teens regarding sexual messages that teens are exposed to via television, the internet, and texting.

Financial support is needed to continue the pregnancy prevention programs currently in place.

More programs addressing pregnancy prevention among adolescent males are needed.

Tobacco

ASSETS

Catawba County and six municipalities – Brookford, Catawba, Claremont, Conover, Newton, and Hickory (Parks & Recreation) – adopted tobacco-free campus policies or ordinances in 2014, creating healthier government facilities and parks for the combined 146,140 residents they serve.

All three local K-12 public school systems, Catawba Valley Community College, Catawba Valley Medical Center (CVMC), Frye Regional Medical Center (FRMC), Catawba County Public Health, and Greater Hickory Cooperative Christian Ministry's Community Health Clinic have policies prohibiting the use of tobacco on campus.

The 37 childcare centers most recently participating in the Healthy Childcare Centers Recognition Program have implemented tobacco-free campus policies.

House Bill 2 (Session Law 2009-27, commonly known as the North Carolina Smoke-free Restaurants and Bars Law) was passed in 2009 and implemented in 2010. This law requires all North Carolina public restaurants and bars to be smoke free.

The CVMC Maternity Services Prenatal Program partners with Public Health to provide smoking cessation education, counseling and support. Each pregnant woman that identifies as a smoker is automatically enrolled in an intensive program that offers one on one and group support for smoking cessation as well as direct access to the NC Quitline.

Catawba County Social Services' Teen Up program offers a tobacco education component that encourages teens to stay tobacco free.

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 7 days a week.

CVMC offers the American Cancer Society's Fresh Start Smoking Cessation program and provides individual consultations to help smokers quit.

FRMC offers the Kick the Habit smoking cessation program and provides individual consultation to help smokers quit.

In July 1992, Congress enacted the Alcohol, Drug Abuse, and Mental Health Administration Reorganization Act (PL 102-321), which includes the Synar Amendment (section 1926) aimed at decreasing youth access to tobacco. The Cognitive Connection distributes Synar retailer information packets to assist in training retailers in identifying underage youth attempting to purchase tobacco products. The Cognitive Connection also educates participants about the dangers of tobacco use as part of the program.

Catawba County has access to a Regional Tobacco Control Coordinator who assists with tobacco-free policy development and prevention programming in a 10-county region. The coordinator is grant funded and based at the Mecklenburg County Health Department.





In November 2015, the U.S. Department of Housing and Urban Development issued a proposed rule to make public housing properties smoke-free. A decision regarding the proposed rule will be made in 2016.

NEEDS

Catawba County has numerous services available to assist both youth and adults in achieving their goal of cessation; however, many of these services are not readily marketed in the schools or in the community.

There is room for continued improvement to encourage all workplaces, public places, and multi-unit housing complexes to prohibit smoking and adopt tobacco-free policies.

Increase marketing strategies for public awareness of North Carolina Quitline, especially for middle and high school students as well as internal medicine providers.

There is a need to secure more information concerning the potential health risks of electronic cigarettes, including vapes. This includes preventing the use of these devices by youth, which could include providing education about health risks and prohibiting youth-oriented marketing.

Provide more information to smokers and the community about the dangers of thirdhand smoke.

Encourage more primary care providers to screen for tobacco use, prescribe smoking cessation therapies, and refer clients to smoking cessation programs. This includes screening parents to determine their interest in smoking cessation assistance during child visits to pediatric offices.





Overview

North Carolina Community Health Assessment (CHA) guidelines require community participation not only in the collection of information and creation of the CHA, but also in the identification of the county's health priorities based on findings from the assessment process. Once local priorities are identified, communities create and implement action plans to help improve outcomes related to community wellbeing over time. Health priorities are defined as issues that:

- Demand action by nature of their magnitude and severity in the community.
- In most cases cannot be remedied by one entity or one change alone.
- Require broad-based community collaboration to change outcomes.

Following the 2007 CHA, access to care, childhood obesity, substance abuse and cancer were named health priorities. In 2011, these health priorities were maintained in Catawba County, with obesity being expanded to the entire population.

Determining Priorities

On January 12, 2016, findings from the 2015 Catawba County Community Health Assessment were shared at a Community Health Summit. While many stakeholders from CHA Action Teams were present, the event was also advertised through community partners and media as open to the general public. The purpose of this event was to gather input toward determining Catawba County's health priorities for 2015-2018. Representatives from the CHA Action Team shared summaries of primary and secondary information related to morbidity and mortality in the community, as well as current community assets and needs related to each health issue. Using this information, attendees scored each issue from 1 to 5 (with 1 being very low and 5 being very high) on the following criteria:

- Magnitude: How big is the problem? How many individuals does the problem affect, either actually or potentially? In terms of human impact, how does it compare to other health issues?
- Seriousness of Consequences: What degree of disability or premature death occurs because of this problem? What would happen if the issue were not made a priority? What is the level of burden on the community (economic, social or other)?
- Feasibility: Is the problem preventable? How much change can be made? What is the community's capacity to address it? Are there available resources to address it sustainably? What's already being done, and it is working? What are the community's intrinsic barriers, and how big are they to overcome?

Scores were tallied, and the final results were presented to the Catawba County Health Partners board of directors for review.





Health Topic	Magnitude	Seriousness of Consequences	Feasibility	Total Score
Obesity	4-45	3.35	4.07	12.88
Heart Disease/Stroke	4.46	4.49	3.92	12.87
Diabetes	4.39	4-33	3.93	12.66
Cancer	4.29	4.31	3.83	12.43
Nutrition	4.09	4.2	3.86	12.15
Physical Activity	3.99	4.11	3.94	12.04
Injuries/Violence	3.87	4.16	3.72	11.76
Tobacco	3.79	4.07	3.57	11.44
Infant Mortality	3.75	4.13	3.53	11.41
Teen Pregnancy	3.69	3.84	3.61	11.15
Substance Abuse	3.64	3.85	3.42	10.9
Senior Health	3.69	3.53	3.5	10.72
STD	3.44	3.55	3.26	10.55
Communicable Disease	3.04	3.39	3.48	9.9
Access to Care	2.98	3.49	3.17	9.63
Pneumonia/Flu	2.97	3.15	3.34	9.45
Immunizations	2.67	3.35	3.39	9.41
Preparedness	2.74	3.21	3.15	9.11
Oral Health	2.81	2.86	3.02	8.69
Environmental Health	2.14	2.52	2.79	7.46

Overall:

- 1. Obesity
- 2. Heart Disease/Stroke
- 3. Diabetes
- 4. Cancer
- 5. Nutrition
- 6. Physical Activity
- 7. Injuries/Violence
- 8. Tobacco
- 9. Infant Mortality
- 10. Teen Pregnancy

Magnitude:

- 1. Heart Disease/Stroke
- 2. Obesity
- 3. Diabetes
- 4. Cancer
- 5. Nutrition

Seriousness of Consequences:

- 1. Heart Disease/Stroke
- 2. Diabetes
- 3. Cancer
- 4. Nutrition
- 5. Injuries/Violence

Feasibility:

- 1. Obesity
- 2. Physical Activity
- 3. Diabetes
- 4. Heart Disease/Stroke
- 5. Nutrition





Catawba County Health Partners, a nonprofit organization managed by Catawba County Public Health, fosters partnerships aimed at sustainably improving Catawba County's health priorities through collaborative evidence-based strategies and interventions. The board evaluated results from the assessment, as well as organizational and community capacity to impact change related to the top-ranking health issues. Based on this evaluation, the Health Partners board made a formal recommendation for three health priorities to the Catawba County Board of Health:

- Nutrition
- Physical Activity
- Chronic Disease

On February 1, 2016, the Catawba County Board of Health approved the recommendations made by Catawba County Health Partners to refocus priorities through 2018. These priorities emphasize the importance of primary prevention while recognizing the long-term impact of morbidity and mortality related to these priorities. These priorities encourage broad and inclusive community collaboration and align with community interest, assets, and needs. Per state guidelines, Catawba County Health Partners will collaborate with Catawba County Public Health to develop action plans for each priority outlining evidence-based strategies that will be implemented, monitored, and/or evaluated by Health Partners or other community partners.

Catawba County Health Priorities: 2015-2018

Following is a review of the three approved health priorities for Catawba County, along with the rationale for their selection. This review also includes required comparisons to peer counties: Cabarrus, Henderson, Iredell, Onslow, and Union.

Nutrition

Poor nutrition is a major risk factor for four of the top ten leading causes of death in Catawba County. Several factors affect the availability of fruits, vegetables, and other nutritious foods in a community. Physical access to healthy foods, or having a market or store geographically close enough or within the reach of available transportation, has been shown to be key in promoting healthy eating in communities. Access can also be considered in terms of cost.

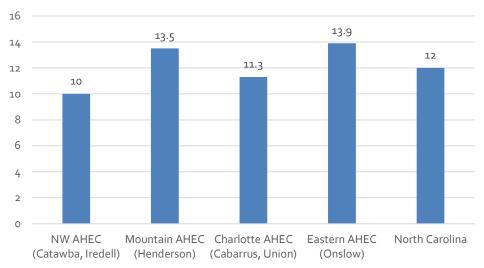
A healthy, nutritious diet reduces the risk of hypertension, heart disease, diabetes, overweight and obesity, some types of cancers, and other chronic illnesses. Individuals can achieve proper nutrition by eating a variety of foods that supply the recommended amounts of fat, protein, carbohydrates, water, vitamins, and minerals. Five or more servings of fruits and vegetables per day are recommended, and added fats, sugars, and sodium should be limited.

Recent data shows a need for the promotion of healthy eating at the community level in Catawba County. According to the 2013 Behavioral Risk Factor Surveillance Survey (BRFSS), only 10.0% of people living in the Northwest AHEC region (which includes Catawba County) consumed the recommended amount of fruits and vegetables daily. This survey also shows 30.8% of adults in the region drink 1 or more sugar sweetened sodas per day, and 23.4% drink one or more servings of other sugar sweetened beverages per day. Results from the 2015 Community Health Opinion Survey showed that the top reason respondents do not eat the recommended servings of fruit and vegetables are a lack of awareness and cost.









Source: State Center for Health Statistics, BRFSS, 2013, Nutrition

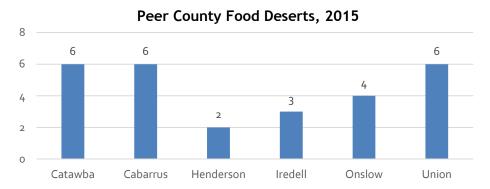
Given limited access to county-level nutrition data, peer comparisons were made between the AHEC regions representing Catawba's peer counties and the state. The Eastern AHEC (representing Onslow) and Mountain AHEC (representing Henderson) results show adults being more likely to eat the recommended servings of fruits and vegetables than the other regions. The Northwest AHEC (representing Catawba and Iredell) were the least likely when compared to the other regions as well as to North Carolina overall.

The proportion of individuals living in poverty in Catawba County is 15.2%, and the percentage of minors living in poverty is 23.6%. This represents a significant piece of the population that may struggle to have access to healthful foods. Over 14% of Catawba County households received Supplemental Nutrition Assistance Program (SNAP) benefits in 2013. During the 2014 to 2015 academic year, 57.2% of students across the three school districts in the community were enrolled in the free and reduced price lunch program. Respondents to the 2015 Community Health Opinion Survey indicated that better/increased health food options was one of the leading areas in most need of improvement in the community. Respondents also indicated that nutrition was the number one topic about which our community needs the most information and support.

Food desert data released in 2013 by the USDA shows that Catawba County went from previously having two food deserts to six. A food desert is recognized by the USDA as a low-income census tract where a significant number or share of residents is more than 1 mile (urban) or 10 miles (rural) from the nearest supermarket. This measure is helpful in evaluating not only social determinants related to healthy food access, such as poverty, but also environmental barriers that can prevent access. It is important to note that environmental factors, such as physical access and distance, and social factors, such as poverty and access to transportation, often influence each other in creating barriers or access to healthful and affordable foods. Addressing a factor such as physical access has the potential to help mitigate the impact of poverty on affordable and equitable access to nutritious foods.







Source: USDA Food Access Research Atlas, 2015

Food desert data comparison between Catawba County and its peers show Catawba, Cabarrus, and Union tied at the top with the most food desert-classified census tracts. Henderson has the least at only two, with Iredell and Onslow both at below five.

Results from the Community Health Summit ranking process support both surveillance data and data collected from the survey. Nutrition ranked fifth overall and in terms of both magnitude and feasibility. It ranked fourth in the seriousness of consequences category. This feedback, further supported by growing community and coalition support and engagement around healthy eating, provided a strong foundation for nutrition to be recommended and approved as a health priority.

Physical Activity

Inadequate physical activity is another risk factor related to the prevalence of obesity and chronic disease in Catawba County, statewide, and nationally. Together, physical inactivity and unhealthy eating are the second leading preventable cause of death in North Carolina. A proper balance of nutrition and physical activity is essential for disease prevention and lifelong health.

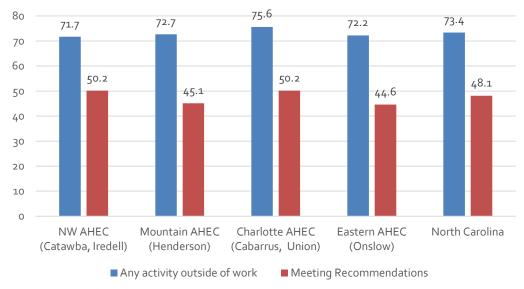
Regular physical activity is necessary to maintain a healthy weight. It helps reduce the risk of cardiovascular disease, diabetes, osteoporosis, and colon cancer and helps build a healthier body by strengthening bones, muscles, and joints. Physical activity also improves depression and anxiety, enhances the immune system, and helps reduce high blood pressure and arthritis pain and disability. The recommendations for an adequate amount of physical activity are 30 minutes of moderate physical activity per day, 5 days per week; or vigorous physical activity for 20 or more minutes per day, 3 or more days per week.

According to the 2013 Behavioral Risk Factor Surveillance System (BRFSS), 71.7% of people living in the Northwest AHEC region, which includes Catawba County, participated in physical activity outside of their job in the last month. This is lower than the statewide 73.4% of adults. The same survey noted that only 50.2% of adults in the region meet the recommended 150 minutes of moderate to vigorous physical activity per week. Results from the Community Health Opinion Survey show that the most common reasons respondents were not physically active were not having enough time to exercise and being too tired to exercise.





Percentage of Adults Exercising and Meeting Recommendations for Physical Activity, 2013



Source: State Center for Health Statistics, BRFSS, 2013, Physical Activity

Given limited access to county-level physical activity data, peer comparisons were made between the AHEC regions representing Catawba's peer counties and the state. Overall, there was little significant difference in the percentage of adults reporting any exercise or physical activity outside of work, with the Charlotte AHEC (representing Cabarrus and Union) having a slight advantage. When reviewing the percentage of adults meeting recommendations for physical activity, the Northwest AHEC (representing Catawba and Iredell) and the Charlotte AHEC (representing Cabarrus and Union) had higher percentages of adults meeting the recommended guidelines for physical activity than the other regions and the state. This shows that, while the regions are fairly even in the percentage of people exercising at all, the Northwest and Charlotte AHECS are more likely to have adults meeting physical activity recommendations for a healthy lifestyle.

Physical activity can also be impacted by the environments in which people live, work, and play. Having access to publicly-accessible and safe spaces for activity is an important environmental factor that can promote community residents of all ages participating in regular physical activity. In Catawba County, thirteen census tracts do not have park access within a half mile for residents, and an additional six offer half mile or less access to parks for less than 10% of residents. The Community Health Opinion Survey showed that over a quarter of respondents indicated more and/or improved facilities for recreation as one of the most important improvements in Catawba County. The most common suggested community improvements related to physical activity included the following: sidewalks, walking paths, more parks, greenways, bike lanes, and better lighting. In the same survey, 40% of respondents indicated that the community needed more information about exercise and fitness.

Results from the Community Health Summit ranking process support both surveillance data and data collected from the survey. Physical activity ranked sixth overall and second in terms of feasibility. This feedback also mirrors an increased community and coalition interest and effort to promote physical activity in the community, not only for exercise, but for leisure and transportation as well.





Chronic Disease

Chronic disease represented six out of the top ten leading causes of death in Catawba County between 2009 and 2013. Chronic diseases and conditions are among the most common, costly, and preventable health problems. Many can be caused, triggered, or worsened by health behaviors like physical activity, nutrition, tobacco use, and alcohol abuse. According to the Centers for Disease Control and Prevention, these behavioral risk factors are the cause for much of the illness, poor quality of life, and early death related to chronic diseases and conditions. Many of these conditions are comorbidities, meaning that they can occur simultaneously and have an increased negative impact on health. One in four Americans has multiple chronic conditions; as a person's number of chronic conditions increases, the risk of dying prematurely, being hospitalized, and having poor quality of life increases.



Credit: 3-4-50 Chronic Disease in San Diego County

3-4-54: Between 2009 and 2013, over half the deaths in Catawba County were related to diseases associated with preventable risk behaviors like tobacco use, poor diet, and physical inactivity. These diseases are linked with premature death and are also chronic and costly to treat. This information reveals a need for a focus on prevention in the community, especially in regards to chronic disease and related risk factor behaviors.

Percentage of Deaths Related to Behavior-Related Chronic Disease, 2009-2013

3 Risk Factors + 4 Chronic Diseases =	% Overall Deaths
Cabarrus	57%
Henderson	56%
Iredell	59%
Onslow	58%
Union	56%
North Carolina	58%

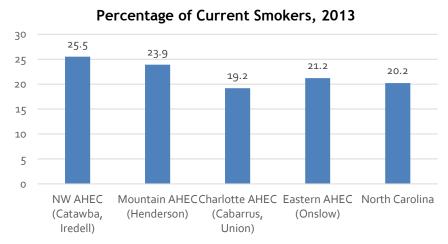
Source: State Center for Health Statistics, Leading Causes of Death, 2009-2013

Analyzing data from other counties shows a similar trend among Catawba's peers and at the state. Each peer county's mortality data from 2009 through 2013 shows chronic diseases related to preventable behaviors like





physical activity, nutrition, and tobacco use make up over half of deaths seen in their communities. Cancer, heart disease/stroke, type 2 diabetes, and lung disease were responsible for 58% of deaths in North Carolina, which was beat by only Iredell County at 59%. Catawba County had the lowest proportion at 54% of total deaths. This analysis shows that affecting positive change related to preventable behaviors upstream can have a downstream effect on morbidity and mortality related to chronic disease not only in Catawba, but in peer counties and across the state as well.



Source: State Center for Health Statistics, BRFSS, 2013, Tobacco

Tobacco use is the leading cause of preventable death in North Carolina and is a major risk factor for chronic disease. Regional data from 2013 shows the Northwest AHEC (representing Catawba and Iredell counties) has a higher proportion of current smokers than peer counties and the state. Along with physical activity and nutrition, assessing tobacco use provides another example of the important role prevention plays in lessening the impact of chronic disease related to negative health behaviors.

Selecting chronic disease as a priority encourages collaboration and partnerships among a diverse set of stakeholders in the community that can allow for cross-cutting approaches to improving population health. Prioritizing chronic disease allows for a collective approach in addressing risk factors and behaviors, linking community and health care efforts to prevent and control disease, and impacting systems and environments to support health. This priority is inclusive in a manner that does not restrict attention to a specific disease, but rather aims at identifying shared risk factors, barriers, and opportunities for prevention.

Community input gathered from the assessment process also shows an overall prioritization of the most common chronic causes of morbidity and mortality in the county, as well as related risk factors like physical activity, nutrition, and tobacco use. These conditions also ranked high in the areas of magnitude, seriousness of consequences, and feasibility. Input from action team members and local stakeholder leadership also showed a vested interest in collaborative evidence-based strategies and interventions aimed at the prevention and management of chronic diseases.

Prioritizing physical activity, nutrition, and chronic disease creates an inclusive and cross-cutting platform for a diverse set of stakeholders, resources, and target populations with different needs, interests, and perspectives. Focusing on preventable risk factor behaviors like promoting healthy eating and active lifestyles can impact not only morbidity and mortality related to disease, but overall wellbeing and quality of life as well.







Demographics				
	Catawba County	North Carolina		
Population	154,726	9,848,917		
Percent Female	50.9%	51.3%		
Percent Male	49.1%	48.7%		
Percent under 5 yrs old	5.8%	6.2%		
Percent under 18 yrs old	23.1%	23.2%		
Percent 65 yrs old and over	15.9%	14.3%		
Percent White	85.0%	71.7%		
Percent African American	8.8%	22.0%		
Percent American Indian and Alaska Native	0.5%	1.6%		
Percent Asian	4.0%	2.6%		
Percent Native Hawaiian and Other Pacific Islander	0.1%	0.1%		
Percent Two or More Races	1.7%	2.0%		
Percent Hispanic or Latino*	8.7%	8.9%		
Percent White, not Hispanic or Latino	77.2%	64.4%		
State and County Quick Facts- US Census Bureau, 2013; *Included in	n various other races			
Rate of Natural Increase*				
White, non-Hispanic	-1.6	0.9		
Black, non-Hispanic	4.5	6.1		





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Other races, non-Hispanic	N/A		N/A	
Hispanic	21.4		21.5	
Total population	1.7		4.3	
State Center for Health Statistics, 2009-2013, rate per 1,000; *Exces	ss of births over deaths among	residents of an area		
Data in red indicate rates based on small numbers (fewer than	20 cases). These rates are u	nstable and should be	interpreted with caution.	
S	Socioeconomic F	actors		
Unemployment				
	Catawba County		North Carolina	Healthy NC 2020 Target
Unemployment rate	5.2%		5.2%	
North Carolina Department of Commerce- Bureau of Labor State	istics, April 2015 rate (not sec	sonally adjusted)		
Income and Poverty				
	Catawba County		North Carolina	Healthy NC 2020 Target
Per capita income¹	\$23,232		\$25,284	
Median household income¹	\$44,332		\$46,334	
Median family income ¹	\$54,596		\$56,928	
Percentage population below poverty level ¹	15.2%		17.5%	12.5%
Percentage families below poverty level ¹	11.3%		12.9%	
Percentage under age 18 living below poverty level ¹	23.6%		24.9%	
Percentage age 65 and older living below poverty level ¹	9.1%		10.0%	





	Catawba County	North Carolina	Healthy NC 2020 Target
¹ N.C. Department of Public Instruction , 2010-11 entering 9th grad Census Bureau, 2013; population 25 years and over Social Factors	iers graduating in 2013-14 or earlier (dat	a aggregatea by CFIA); -American Comr	nunny survey - OS
Percentage of population with graduate or professional degree ²	6.6%	9.3%	munity Company LIC
Percentage of population with bachelor's degree ²	14.5%	18.0%	
Percentage of population with high school degree ²	30.1%	27.0%	
Percentage of population with high school degree or higher ²	82.3%	84.9%	
Four-year cohort high school graduation rate ¹	89.967%	83.9%	94.6%
	Catawba County	North Carolina	Healthy NC 2020 Target
1 American Community Survey - US Census Bureau, 2013; ² N.C. I Education	Department of Public Instruction , 2014-	2015	
Percentage of students enrolled in free and reduced lunch ²	57.2%	57.6%	
Percentage of households with Food Stamp/SNAP benefits in the past 12 months ¹	14.3%	13.8%	
Percentage of renter-occupied units spending 30 percentage or more of household income on rental housing ¹	48.9%	51.0%	36.1%
Percentage of households without a vehicle ¹	5.6%	6.6%	





I		ı		
Percentage of foreign born population not U.S.				
citizens	63.8%		68.1%	
American Community Survey - US Census Bureau, 2013				
Timerican Community Burvey OB Census Bureau, 2013				
	Access to Health	Care		
				Healthy NC 2020
	Catawba County		North Carolina	Target
Dentists per 10,000¹	4.4		4.5	
Physicians per 10,000¹	24.4		22.3	
Primary care physicians per 10,000¹	8.1		7.6	
Hospital Discharge Rate²	96.5		95.6	
Uninsured estimates for children (0-19) ³	7.0%		6.9%	
Uninsured estimates for adults (18-64) ³	22.9%		22.5%	
Uninsured estimates for non-elderly (0-64) ³	18.4%		18.1%	8.0%
¹ NC Health Professions Data System, 2012; ² State Center for Hea (SAHIE), 2013	lth Statistics, 2013, rate per 1,	,000; ^{3U} .S. Bureau of th	e Census , Small Area Health	Insurance Estimates
Medicaid				
	Catawba County		North Carolina	Healthy NC 2020 Target
Percentage of total population enrolled in Medicaid¹	22.8%		21.9%	
Percentage of children enrolled in Medicaid receiving preventive care ²	62.6%		59.2%	





Percentage of Medicaid-eligible children receiving dental services ³	No Updated Data		57.3%	
¹State Center for Health Statistics, 2013; ²Division of Medical Ass. Health and Human Services, Division of Public Health 2012, child			age 0-20; 3State of North Car	rolina Department of
	Mortality			
	Overall Morta	lity		
Age-Adjusted Mortality Rates by Race/Ethnicity and Sex				
	Catawba County		North Carolina	Healthy NC 2020 Target
White, non-Hispanic population	900.1		781.7	
Male	1076.1		923.5	
Female	763.1		667.3	
African American, non-Hispanic population	1018.4		910.2	
Male	1281.7		1142.6	
Female	841		754.0	
Other races, non-Hispanic population	442.7		363.6	
Male	487.8		404.6	
Female	393.1		331.0	
Hispanic population	288.5		285.0	
Male	334.3		318.4	
Female	235.8		248.9	





Total Male population	1060.7	940.6	
Total Female population	751.8	673.4	
Total population	886.6	790.9	

State Center for Health Statistics, 2009-2013, rates per 100,000 (age-adjusted)

Leading Causes of Death

Unadjusted Mortality Rates by Leading Causes of Death

	Catawba County Rank	Catawba County Rate	North Carolina Rank	North Carolina Rate
Total deaths- all causes		996.9		830.0
Cancer- all sites	1	206.9	1	188.1
Diseases of the heart	2	206.3	2	178.9
Chronic lower respiratory diseases	3	74.8	3	48.4
Cerebrovascular disease	4	53.7	4	45.2
All other unintentional injuries	5	35.9	5	29.9
Alzheimer's disease	6	30.9	6	29.0
Diabetes mellitus	7	26	7	23.3
Pneumonia & influenza	8	25.5	8	18.4
Nephritis, nephrotic syndrome, & nephrosis	9	21.2	9	18.3
Septicemia			10	14.0
Suicide	10	16.4		





State Center for Health Statistics, 2009-2013, rates per 100,000 (unadjusted) Note: Unadjusted death rates for Catawba County are not comparable to the unadjusted death rates for North Carolina **Age-Specific Unadjusted Mortality Rates for Leading Causes of Death Catawba County Catawba County** Rate Conditions originating in the perinatal period 16.4 0-19 Motor vehicle injuries 6.5 Congenital Abnormalities 5.0 All other unintentional injuries 20-39 29.2 Unintentional motor vehicle injuries 20.6 Suicide 19.0 Cancer - All sites 40-64 175.5 Diseases of the heart 133.3 Chronic lower respiratory diseases 36.0 65-85 Cancer - All sites 886.6 Diseases of the heart 68_{7.0} Chronic lower respiratory diseases 364.4 Diseases of the heart 3865.0 85+ Cancer - All sites 1514.4 Alzheimer's disease 1235.6





State Center for Health Statistics, 2009-2013, crude death rates per 100,000 (unadjusted)

Data in red indicate rates based on small numbers (fewer than 20 cases). These rates are unstable and should be interpreted with caution.

Data in red indicate rates based on small numbers (fewer than 20 cases). These rates are unstable and should be interpreted with caution.					
Age-Adjusted Mortality Rates for Leading Causes of Death by Sex					
	Catawba County	Catawba County Rate			
Males	1. Diseases of the heart	243.1			
	2. Cancer	221.8			
	3. Chronic lower respiratory diseases	71.4			
	4. All other unintentional injuries	48.8			
	5. Cerebrovascular disease	48.5			
	6. Pneumonia and influenza	27.8			
	7. Diabetes mellitus	27.6			
	8. Nephritis, nephrotic syndrome and nephrosis	25.0			
	9. Suicide	23.7			
	10. Unintentional Motor Vehicle Injuries	23.5			
	11. Alzheimer's disease	22.5			
Females	1. Cancer	145.0			
	2. Diseases of the heart	136.6			
	3. Chronic lower respiratory diseases	61.9			
	4. Cerebrovascular disease	46.4			







	5. Alzheimer's disease	30.8
	6. All other unintentional injuries	22.7
	7. Pneumonia and influenza	19.3
	8. Diabetes mellitus	18.9
	9. Nephritis, nephrotic syndrome and nephrosis	14.9
	10. Septicemia	10.6
State Center for Health Statistics, 2009-2013, rates per 100,000 (age-adjusted)	
Age-Adjusted Mortality Rates for Leading Causes of Death by Race		
	Catawba County	Catawba County Rate
White, non-Hispanic	1. Diseases of the heart	184.5
	2. Cancer	177.3
	2. Cancer3. Chronic lower respiratory diseases	177.3
	3. Chronic lower respiratory diseases	67.6
	3. Chronic lower respiratory diseases 4. Cerebrovascular disease	67.6 47·3
	3. Chronic lower respiratory diseases 4. Cerebrovascular disease 5. All other unintentional diseases	67.6 47.3 38.1
	3. Chronic lower respiratory diseases 4. Cerebrovascular disease 5. All other unintentional diseases 6. Alzheimer's disease	67.6 47.3 38.1 29.4
	3. Chronic lower respiratory diseases 4. Cerebrovascular disease 5. All other unintentional diseases 6. Alzheimer's disease 7. Pneumonia and influenza	67.6 47.3 38.1 29.4 22.8





Black, non-Hispanic	1. Cancer	236.2
	2. Diseases of the heart	202.2
	3. Cerebrovascular disease	66.3
	4. Diabetes mellitus	56.1
	5. Chronic lower respiratory diseases	51.5
	6. Nephritis, nephrotic sydrome, and nephrosis	47.8

State Center for Health Statistics, 2009-2013, rates per 100,000 (age-adjusted)

Data in red indicate rates based on small numbers (fewer than 20 cases). These rates are unstable and and have been suppressed.

Alzheimer's Disease

	Catawba County	North Carolina	Healthy NC 2020 Target
White, non-Hispanic population	29.4	29.8	
African American, non-Hispanic population	N/A	26.3	
Other races, non-Hispanic population	N/A	9.2	
Hispanic population	N/A	9.9	
Male population	22.5	23	
Female population	30.8	32	
Total population	28.4	28.9	

State Center for Health Statistics, 2009-2013, deaths per 100,000 (age-adjusted)

Data in red indicate rates based on small numbers (fewer than 20 cases). These rates are unstable and have been suppressed.







	Cancer		
All Cancers			
	Catawba County	North Carolina	Healthy NC 2020 Target
White, non-Hispanic population	177.3	171.3	
African American, non-Hispanic population	236.2	201.5	
Other races, non-Hispanic population	N/A	94	
Hispanic population	N/A	65.2	
Male population	221.8	217.6	
Female population	145	143.0	
Total population	176.8	173.3	
Prostate (Male)			
	Catawba County	North Carolina	Healthy NC 2020 Target
White, non-Hispanic population	15.3	18.2	
African American, non-Hispanic population	N/A	47.4	
Other races, non-Hispanic population	N/A	N/A	
Hispanic population	N/A	9.8	
Total population	18.1	22.1	
Breast			





	Catawba County	North Carolina	Healthy NC 2020 Target
	Catawba County	North Carollia	rarget
White, non-Hispanic population	21,1	20.4	
African American, non-Hispanic population	N/A	28.8	
Other races, non-Hispanic population	N/A	9.2	
Hispanic population	N/A	9.1	
Male population	N/A	N/A	
Female population	20.5	21.7	
Total population	20.5	21.7	
Trachea, Bronchus, & Lung			
	Catawba County	North Carolina	Healthy NC 2020 Target
White, non-Hispanic population	55.0	53.0	
African American, non-Hispanic population	63.6	51.6	
Other races, non-Hispanic population	N/A	24.3	
Hispanic population	N/A	11.0	
Male population	74.9	69.7	
Female population	39.1	38.3	
Total population	54.0	51.6	
Colon, Rectum, & Anus			
	1		





	T T		
White, non-Hispanic population	14.6	13.6	
African American, non-Hispanic population	37.5	20.3	
Other races, non-Hispanic population	N/A	5.5	
Hispanic population	N/A	5.6	
Male population	22.0	17.7	
Female population	11.1	12.0	
Total population	15.9	14.5	
Pancreas			
	Catawba County	North Carolina	Healthy NC 2020 Target
White, non-Hispanic population	10.7		
	10.7	10.2	
African American, non-Hispanic population	N/A	13.6	
African American, non-Hispanic population Other races, non-Hispanic population			
	N/A	13.6	
Other races, non-Hispanic population	N/A N/A	7.1	
Other races, non-Hispanic population Hispanic population	N/A N/A N/A	7.1 4.2	

State Center for Health Statistics, 2009-2013, deaths per 100,000 (age-adjusted)

Data in red indicate rates based on small numbers (fewer than 20 cases). These rates are unstable and have been suppressed.







Cerebrovascular Disease					
	Catawba County		North Carolina	Healthy NC 2020 Target	
White, non-Hispanic population	47.3		41.3		
African American, non-Hispanic population	66.3		57.1		
Other races, non-Hispanic population	N/A		29.1		
Hispanic population	N/A		17.6		
Male population	48.5		44.1		
Female population	46.4		42.5		
Total population	48.0		43.7		

State Center for Health Statistics, 2009-2013, deaths per 100,000 (age-adjusted)

Data in red indicate rates based on small numbers (fewer than 20 cases). These rates are unstable and have been suppressed.

Chronic Liver Disease and Cirrhosis

	Catawba County	North Carolina	Healthy NC 2020 Target
White, non-Hispanic population	12.5	10.5	
African American, non-Hispanic population	N/A	7.1	
Other races, non-Hispanic population	N/A	3	
Hispanic population	N/A	4.0	
Male population	17.3	13.2	
Female population	7.7	6.2	





Total population	12.2		9.5		
State Center for Health Statistics, 2009-2013, deaths per 100,000 (age-adjusted)					
Data in red indicate rates based on small numbers (fewer than	20 cases). These rates are u	nstable and have beer	suppressed.		
Chronic	Chronic Lower Respiratory Diseases				
	Catawba County		North Carolina	Healthy NC 2020 Target	
White, non-Hispanic population	67.6		50.9		
African American, non-Hispanic population	51.5		28		
Other races, non-Hispanic population	N/A		9.7		
Hispanic population	N/A		8.8		
Male population	71.4		52.9		
Female population	61.9		42		
Total population	65.1		46.1		
State Center for Health Statistics, 2009-2013, deaths per 100,000 (age-adjusted) Data in red indicate rates based on small numbers (fewer than 20 cases). These rates are unstable and have been suppressed.					
Diabetes Mellitus					
				Healthy NC 2020	

Catawba County

21.3

56.1



White, non-Hispanic population

African American, non-Hispanic population

North Carolina

17.4

43.4

Target





Other races, non-Hispanic population	N/A	9.9	
Hispanic population	N/A	8.1	
Male population	27.6	25.7	
Female population	18.9	18.4	
Total population	22.4	21.7	

State Center for Health Statistics, 2009-2013, deaths per 100,000 (age-adjusted)

Data in red indicate rates based on small numbers (fewer than 20 cases). These rates are unstable and have been suppressed.

Diseases of the Heart (Heart Disease)					
	Catawba County	North Carolir	Healthy NC 2020 Target		
White, non-Hispanic population	184.5		168		
African American, non-Hispanic population	202.2		193.2		
Other races, non-Hispanic population	N/A		66		
Hispanic population	N/A		50.7		
Male population	243.1		217.3		
Female population	136.6		134.0		
Total population	181.9		170.0		

State Center for Health Statistics, 2009-2013, deaths per 100,000 (age-adjusted)

Data in red indicate rates based on small numbers (fewer than 20 cases). These rates are unstable and have been suppressed.







Infant Mortality				
Neonatal Mortality (Deaths under 28 days per 1,000 live births)				
	Catawba County	North Carolina	Healthy NC 2020 Target	
White, non-Hispanic population	N/A	3.9		
African American, non-Hispanic population	N/A	9.1		
Other races, non-Hispanic population	N/A	3.3		
Hispanic population	N/A	2.6		
Total population	4.4	5.0		
State Center for Health Statistics, 2009-2013, death rates per 1	,000 live births			
Data in red indicate rates based on small numbers (fewer tha	an 20 cases). These rates are unstable and	have been suppressed.		
Infant Mortality (Deaths under 1 year per 1,000 live births)				
	Catawba County	North Carolina	Healthy NC 2020 Target	
White, non-Hispanic population	4.8	5.4		
African American, Non-Hispanic population	19.2	13.6		
Other races, non-Hispanic population	N/A	5.7		
Hispanic population	N/A	4.8		
Total population	6.1	7.3	6.3	
State Center for Health Statistics, 2009-2013, death rates per 1	,000 live births			





Data in red indicate rates based on small numbers (fewer than 20 cases). These rates are unstable and have been suppressed. **Infant Mortality Disparity Ratio** Healthy NC 2020 **Catawba County** North Carolina **Target** Ratio between African American, non-Hispanic and White, non-Hispanic infant mortality rates* 4.00 2.50 1.9 State Center for Health Statistics, 2009-2013 **Injuries Unintentional Motor Vehicle Injuries** Healthy NC 2020 **Catawba County Target North Carolina** White, non-Hispanic population 18.0 13.9 African American, non-Hispanic population N/A 14.1 Other races, non-Hispanic population N/A 5.5 Hispanic population N/A 10.3 Male population 20.2 23.5 Female population 9.5 7.7 **Total population** 16.3 13.7 State Center for Health Statistics, 2009-2013, deaths per 100,000 (age-adjusted) Data in red indicate rates based on small numbers (fewer than 20 cases). These rates are unstable and have been suppressed.







All Other Unintentional Injuries				
	Catawba County		North Carolina	Healthy NC 2020 Target
White, non-Hispanic population	38.1		33.9	
African American, non-Hispanic population	N/A		19.7	
Other races, non-Hispanic population	N/A		9.8	
Hispanic population	N/A		11.6	
Male population	48.8		38.7	
Female population	22.7		21.3	
Total population	34.6		29.3	
State Center for Health Statistics, 2009-2013, deaths per 100,000	(age-adjusted)			
Data in red indicate rates based on small numbers (fewer than	20 cases). These rates are u	nstable and have beer	suppressed.	
Unintentional Poisonings				
	Catawba County		North Carolina	Healthy NC 2020 Target
Unintentional Poisonings	14.9		11.1	9.9
State Center for Health Statistics, 2009-2013, deaths per 100,000 Injuries rates listed above	(age-adjusted); Note: Uninte	ntional poisoning dea	ths are also included in All Ot	her Unintentional
Nephritis, Nephrotic	Syndrome, & Ne	ephrosis (Kid	ney Disease)	
	Catawba County		North Carolina	Healthy NC 2020 Target
	1			







African American, non-Hispanic population	47.8	34.1	
Other races, non-Hispanic population	N/A	7.9	
Hispanic population	N/A	8.6	
Male population	25.0	21.4	
Female population	14.9	15.1	
Total population	18.7	17.6	

State Center for Health Statistics, 2009-2013, deaths per 100,000 (age-adjusted)

Data in red indicate rates based on small numbers (fewer than 20 cases). These rates are unstable and have been suppressed.

Pneumonia and Influenza

	Catawba County	North Carolina	Healthy NC 2020 Target
White, non-Hispanic population	22.8	18.3	
African American, non-Hispanic population	N/A	16.9	
Other races, non-Hispanic population	N/A	11.3	
Hispanic population	N/A	6,6	
Male population	27.8	20.5	
Female population	19.3	16.2	
Total population	22.6	17.9	

State Center for Health Statistics, 2009-2013, deaths per 100,000 (age-adjusted)

Data in red indicate rates based on small numbers (fewer than 20 cases). These rates are unstable and have been suppressed.







	Septicemia		
	Catawba County	North Carolina	Healthy NC 2020 Target
White, non-Hispanic population	12.0	12.3	
African American, non-Hispanic population	N/A	19.2	
Other races, non-Hispanic population	N/A	5	
Hispanic population	N/A	5.7	
Male population	14.2	14.6	
Female population	10.6	12.3	
Total population	12.1	13.3	

State Center for Health Statistics, 2009-2013, deaths per 100,000 (age-adjusted)

Data in red indicate rates based on small numbers (fewer than 20 cases). These rates are unstable and have been supressed.

Violent Deaths

Homicide Healthy NC 2020 **Catawba County North Carolina** Target White, non-Hispanic population 6.1 3.2 African American, non-Hispanic population N/A 12.9 Other races, non-Hispanic population N/A 3.3 Hispanic population N/A 4.8





Male population	9.6	9.0	
Female population	N/A	2.5	
Total population	7.3	5.8	6.7

State Center for Health Statistics, 2009-2013, deaths per 100,000 (age-adjusted)

Data in red indicate rates based on small numbers (fewer than 20 cases). These rates are unstable and have been suppressed.

Suicide Healthy NC 2020 **Catawba County** North Carolina Target White, non-Hispanic population 17.8 15.7 African American, non-Hispanic population N/A 4.8 Other races, non-Hispanic population N/A 5.1 Hispanic population N/A 3.6 Male population 19.8 23.7 Female population 8.2 5.4 **Total population** 15.6 8.3 12.2

State Center for Health Statistics, 2009-2013, deaths per 100,000 (age-adjusted)

Data in red indicate rates based on small numbers (fewer than 20 cases). These rates are unstable and have been suppressed.







	Morbidity		
	Asthma		
Inpatient Hospitalization Rates for Asthma			
	Catawba County	North Carolina	Healthy NC 2020 Target
Ages 0-14	109.9	162	
Total Population	94.8	104.2	

State Center for Health Statistics, 2009-2013, rates per 100,000

Cancer Incidence

Cancer Incidence

	Catawba County	North Carolina	Healthy NC 2020 Target
All Cancers	460.3	488.9	
Prostate (Male)	116.7	139.4	
Breast (Female)	148.8	157	
Lung/Bronchus	67.3	71.9	
Colon/Rectum	37.1	39.8	

NC Central Cancer Registry, 2008-2012, rate per 100,000 (age-adjusted)







	HIV and AID	S		
Incidence of First Diagnosis				
	Catawba County		North Carolina	Healthy NC 2020 Target
HIV	6.5		15.6	22.2
AIDS	0.6		9.2	
N.C. Division of Public Health, Department of Health and Huma incomplete interstate deduplication, *HIV Disease includes all no AIDS)				
	Motor Vehicle Cr	ashes		
All Injury Crashes				
	Catawba County		North Carolina	Healthy NC 2020 Target
Fatal injury crashes	17		1,158	
Non-fatal injury crashes	1,241		69,547	
Total crashes*	4,246		220,309	
Highway Safety Research Center at University of North Carolina meet \$1,000 damage threshold	at Chapel Hill, 2013; *Note:	Crashes include only r	eportable crashes on publicly-	maintained roads and
Alcohol-Related Crashes				
	Catawba County		North Carolina	Healthy NC 2020 Target







Fatal injury crashes (Percentage of total fatal injury crashes)	4 (23.6%)	324(28.0%)	
Non-fatal injury crashes (Percentage of total non-fatal injury crashes)	84 (6.8%)	5306(7.6%)	
Total crashes (Percentage of total crashes)*	196 (4.6%)	10802(4.9%)	4.7%

Highway Safety Research Center at University of North Carolina at Chapel Hill, 2013; *Note: Crashes include only reportable crashes on publicly-maintained roads and meet \$1,000 damage threshold

	Oral Health		
	Catawba County	North Carolina	Healthy NC 2020 Target
Children aged 1-5 years enrolled in Medicaid who received any dental service during the previous 12 months ¹	No Updated Data	57.3%	56.4%

¹The NC Division of Public Health, Oral Health Section, 2012

C	verweight and C	besity		
Overweight and Obese Children				
	Catawba County		North Carolina	
2-4 year olds	33.9		29.4	

NC-NPASS (North Carolina-Nutrition and Physical Activity Surveillance System), 2012(overweight and obesity combined), reflective of the population at 185% of the federal poverty level.







F	Pregnancy and Liv	e Births		
Pregnancy Rates (15-17 years old)		-		-
	Catawba County	Northwestern PCR	North Carolina	Healthy NC 2020 Target
White, non-Hispanic pregnancies	N/A	11.7	10.1	
African American, non-Hispanic pregnancies	N/A	24.6	25.5	
Other races, non-Hispanic pregnancies	N/A	N/A	6.6	
Hispanic pregnancies	N/A	28.9	30.5	
	12.9	15.9	16.6	
Total pregnancies	12.9	1).9		
Total pregnancies State Center for Health Statistics, 2013, rates per 1,000	12.9	17.9		
			suppressed.	
State Center for Health Statistics, 2013, rates per 1,000 Data in red indicate rates based on small numbers (fewer that			suppressed.	
State Center for Health Statistics, 2013, rates per 1,000			suppressed. North Carolina	Healthy NC 2020 Target
State Center for Health Statistics, 2013, rates per 1,000 Data in red indicate rates based on small numbers (fewer that	an 20 cases). These rates are u	nstable and have been Northwestern		-
State Center for Health Statistics, 2013, rates per 1,000 Data in red indicate rates based on small numbers (fewer that Teenage Pregnancy Rates (18-19 years old)	Catawba County	Northwestern PCR	North Carolina	-
State Center for Health Statistics, 2013, rates per 1,000 Data in red indicate rates based on small numbers (fewer that Teenage Pregnancy Rates (18-19 years old) White, non-Hispanic pregnancies	Catawba County	Northwestern PCR	North Carolina 45.2	-
State Center for Health Statistics, 2013, rates per 1,000 Data in red indicate rates based on small numbers (fewer that Teenage Pregnancy Rates (18-19 years old) White, non-Hispanic pregnancies African American, non-Hispanic pregnancies	Catawba County 54.4 N/A	Northwestern PCR 47.2	North Carolina 45.2 80.0	-
State Center for Health Statistics, 2013, rates per 1,000 Data in red indicate rates based on small numbers (fewer that Teenage Pregnancy Rates (18-19 years old) White, non-Hispanic pregnancies African American, non-Hispanic pregnancies Other races, non-Hispanic pregnancies	Catawba County 54.4 N/A N/A	Northwestern PCR 47.2 65.4 49.4	North Carolina 45.2 80.0 39.1	-
State Center for Health Statistics, 2013, rates per 1,000 Data in red indicate rates based on small numbers (fewer that Teenage Pregnancy Rates (18-19 years old) White, non-Hispanic pregnancies African American, non-Hispanic pregnancies Other races, non-Hispanic pregnancies Hispanic pregnancies	Catawba County 54.4 N/A N/A 87.6	Northwestern PCR 47.2 65.4 49.4 97.8	North Carolina 45.2 80.0 39.1 99.5	-





Teenage Pregnancy Rates (15-19 years old)							
	Catawba County	Northwestern PCR	North Carolina	Healthy NC 2020 Target			
White, non-Hispanic pregnancies	26.2	26.1	24.7				
African American, non-Hispanic pregnancies	54.8	44.4	49.2				
Other races, non-Hispanic pregnancies	N/A	24.2	19.9				
Hispanic pregnancies	52.3	56.0	57.9				
Total pregnancies	33.0	33.1	35.2				
State Center for Health Statistics, 2013, rates per 1,000 Data in red indicate rates based on small numbers (fewer than	State Center for Health Statistics, 2013, rates per 1,000 Data in red indicate rates based on small numbers (fewer than 20 cases). These rates are unstable and have been suppressed.						
Percentage of Pregnancies that Were Repeat (15-19 years old)							
•							
	Catawba County		North Carolina	Healthy NC 2020 Target			
Total pregnancies	Catawba County 26.4%		North Carolina	•			
Total pregnancies State Center for Health Statistics, 2013, rates per 1,000				•			
				•			





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White, non-Hispanic population	8.5%		7.5%		
African American, non-Hispanic population	17.2%		13.9%		
Other races, non-Hispanic population	7.7%		9.3%		
Hispanic population	7.0%		6.6%		
Total population	9.1%		9.0%		
State Center for Health Statistics, 2009-2013					
Percentage Very Low Birth Weight (% of live births weighing less than 3lbs 30z)					
	Catawba County		North Carolina	Healthy NC 2020 Target	
White, non-Hispanic population	1.4%		1.3%		
African American, non-Hispanic population	4.7%		3.3%		
Other races, non-Hispanic population	1.3%		1.5%		
Hispanic population	1.2%		1,2%		
Total population	1.7%		1.8%		
State Center for Health Statistics, 2009-2013					
Percentages in red indicate rates based on small numbers (fewe	r than 20 cases). These rate	es are unstable and sh	ould be interpreted with caus	tion.	
Percentage Births to Mothers Who Smoked Prenatally					
	Catawba County		North Carolina	Healthy NC 2020 Target	
White, non-Hispanic	19.9%		13.0%		







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African American, non-Hispanic	22.1%		9.8%	
Other races, non-Hispanic	3.7%		1.8%	
Hispanic	3.3%		1.7%	
Total	16.0%		10.3%	6.8%
State Center for Health Statistics, 2013				
Percentages in red indicate percentages based on small number	rs (fewer than 20 cases). The	ese rates are unstable a	and should be interpreted w	ith caution.
Percentage of Births With Very Late or No Prenatal Care				
	Catawba County		North Carolina	Healthy NC 2020 Target
White, non-Hispanic	3.5%		4.6%	
African American, non-Hispanic	9.0%		9.4%	
Other races, non-Hispanic	5.1%		7.7%	
Hispanic	6.5%		9.2%	
Total	4.6%		6.6%	
State Center for Health Statistics, 2013, Note: Began prenatal car	e in the third trimester of pre	egnancy or received no	prenatal care at all	
Percentages in red indicate rates based on small numbers (fewer	er than 20 cases). These rate	s are unstable and sho	ould be interpreted with caus	tion.
Percentage of Births to Mothers Who Received Early and Adequate Prenatal Care [*]				
	Catawba County		North Carolina	Healthy NC 2020 Target
White, non-Hispanic	83.7%		78.6%	







African-American, non-Hispanic	73.4%	67.0%	
Other races, non-Hispanic	76.3%	69.6%	
Hispanic	75.3%	62.5%	
Total	80.7%	72.9%	

State Center for Health Statistics, 2013, Note: Populations are determined by the mother's race/ethnicity.

*Defined as a score of either "adequate" or "adequate plus" on the Kotelchuck Adequacy of Prenatal Care Utilization Index. It is a measure of prenatal care utilization that combines the month of pregnancy prenatal care begun with the number of prenatal visits.

Percentage of Births Delivered by Cesarean Section

	Catawba County	North C	arolina	Healthy NC 2020 Target
White, non-Hispanic	31.3%		31.1%	
African American, non-Hispanic	29.2%		32.2%	
Other races, non-Hispanic	16.3%		30.3%	
Hispanic	26.2%		24.3%	
Total	29.1%		30.3%	

State Center for Health Statistics, 2013, Note: Populations are determined by the mother's race/ethnicity.

Percentage Short Interval Births

(% of births with interval from last delivery to conception of six months or less)

	Healthy NC 2020
	•
orth Carolina	Target
(orth Carolina





Short Interval Births	13.5%	12.6%	
State Center for Health Statistics, 2009-2013, Note: Percen	t of all births excluding 1st pregnancies		
Percentage of Births to Medicaid Mothers			
	Catawba County	North Carolina	Healthy NC 2020 Target
Medicaid Births	68.2%	55.9%	
State Center for Health Statistics, 2012; Note: Measured by	Medicaid payment for hospital stay of the newl	born	
Percentage of Births to WIC Mothers			
	Catawba County	North Carolina	Healthy NC 2020 Target
WIC Births	51.4%	46.3%	
State Center for Health Statistics, 2012; Note: Percent on V			
Percentage of Infants Breastfed at Discharge	e		
	Catawba County	North Carolina	Healthy NC 202 Target
White, non-Hispanic infants	75.1%	80.7%	
White) non inspune munes	1,5	- 1,11	
•	50.0%	62.7%	
African American, non-Hispanic infants		,	
African American, non-Hispanic infants Other races, non-Hispanic infants Hispanic infants	50.0%	62.7%	







STDs (Sexually Transmitted Diseases)						
Catawba County North Carolina Target						
Chlamydia	351.2	496.5				
Gonorrhea	73.2	140.1				
Syphilis, total*	1.9	6.9				
State Center for Health Statistics, 2013, cases per 100,000 population (unadjusted); *Note: Includes primary, secondary and early latent syphilis						







Healthy North Carolina 2020

Tobacco Use

	Catawba County	Northwest AHEC	North Carolina	Healthy NC 2020 Target
Adults Who Are Current Smokers (2013)1	N/A	25.5%	20.2%	13.0%
High School Students Reporting Current Use of Tobacco Products (2013) ²	N/A	N/A	15.0%	15.0%
Exposure to Secondhand Smoke in the Workplace (2013)1	N/A	10.10%	9.9%	0.0%

¹Behavioral Risk Factor Surveillance System, State Center for Health Statistics; ²State Center for Health Statistics

Physical Activity and Nutrition

	Catawba County	Northwest AHEC	North Carolina	Healthy NC 2020 Target
High School Students Who are Neither Overweight nor Obese (2013)1	N/A	N/A	72.3%	79.2%
Adults Getting Recommended Amount of Physical Activity (2013) ²	N/A	50.2%	48.1%	60.6%
Adults Who Consume Five or More Servings of Fruits and Vegetables per Day (2013) ²	N/A	10.0%	12.3%	29.3%

 ${}^{\scriptscriptstyle 1}\!N.C.\ Youth\ Risk\ Behavior\ Surveillance\ System,\ N.C.\ Department\ of\ Public\ Instruction\ ;\ {}^{\scriptscriptstyle 2}\!Behavioral\ Risk\ Factor\ Surveillance\ System,\ State\ Center\ for\ Health\ Statistics\ System,\ State\ Center\ for\ System,\ State\ Center\ for\ System,\ State\ Center\ for\ System,\







Catawba County	Northwest AHEC	North Carolina	Healthy NC 2020 Target
14.9	N/A	11.1	9.9
9.0	N/A	8.8	5.3
7.3	N/A	5.8	6.7
-	County 14.9 9.0	County AHEC N/A	County AHEC Carolina 14.9 N/A 11.1 9.0 N/A 8.8

¹State Center for Health Statistics

Maternal and Infant Health

	Catawba County	Northwest AHEC	North Carolina	Healthy NC 2020 Target
Infant Mortality Racial Disparity Between Whites and African Americans Ratio (2009-2013)¹	4.00	N/A	2.52	1.92
Infant Mortality Rate (2009-2013)¹	6.1	N/A	7.3	6.3
Women Who Smoke During Pregnancy (2013) ¹	16.0%	N/A	10.3%	6.8%

¹State Center for Health Statistics

Sexually Transmitted Disease and Unintended Pregnancy

	Catawba County	Northwest AHEC	North Carolina	Healthy NC 2020 Target
Pregnancies that are Unintended (2011)1	N/A	N/A	42.70%	30.9%
Positive Results among Individuals Aged 15-24 Test for Chlamydia (2013) ²		N/A	10.6%	8.7%
New HIV Infection Diagnoses (2009-2013) ²	6.5	N/A	15.6	22.2







¹Pregnancy Risk Assessment Monitoring System (PRAMS), State Center for Health Statistics; ²State Center for Health Statistics. State Center for Health Statistics, 2009-2013, cases per 100,000 population (unadjusted). The 2013 HIV and AIDS numbers are artificially inflated due to incomplete interstate deduplication (see http://epi.publichealth.nc.gov/cd/stds/figures/std13rpt.pdf)

Substance Abuse

	Catawba County	Northwest AHEC	North Carolina	Healthy NC 2020 Target
High School Students Who Had Alcohol (2013)1			32.2%	26.4%
Traffic Crashes that are Alcohol-Related (2013)²	4.60%	N/A	4.90%	4.7%
Individuals Aged 12 Years and Older Reporting Any Illicit Drug Use (2013) ³	19.8% (2013)	No Updated Data	8.9% (2011)	6.6%

¹N.C. Youth Risk Behavior Surveillance System, N.C. Department of Public Instruction; ²Highway Safety Research Center at University of North Carolina at Chapel Hill: ³²⁰¹⁴ Pride Survey

Mental Health

	Catawba County	Northwest AHEC	North Carolina	Healthy NC 2020 Target
Suicide Rate (2009-2013) ¹	15.6		12.2	8.3
Poor Mental Health Days among Adults (2010)1	No Updated Data	No Updated Data	6.3	2.8
Adults Who Have Had Poor Mental Health Days In Past 30 Days*(2013)	N/A	33%	30.5%	
Mental Health-Related Visits to Emergency Departments $(N/A)^1$	N/A	N/A		82.8

 1 State Center for Health Statistics; *Healthy NC 2020 comparison data has not been published, this is the closest mental health indicator available







Oral Health				
	Catawba County	Northwest AHEC	North Carolina	Healthy NC 2020 Target
Children Aged 1-5 Years Enrolled in Medicaid who Received Any Dental Service (2012) ¹	N/A	N/A	57.3%	56.4%
Decayed, Missing or Filled Teeth among Kindergartners (2012-2013)1	1.54	N/A	1.54	1.1
Adults Who Have Had Permanent Teeth Removed Due to Tooth Decay or Gum Disease (2012) ²	N/A	52.80%	48.30%	38.4%
¹ State Center for Health Statistics; ² Behavioral Risk Factor Surveillance Syste	m, State Center for H	ealth Statistics		
Environmental Health				
	Catawba County	Northwest AHEC	North Carolina	Healthy NC 2020 Target
Air Monitor Sites Meeting the Current Ozone Standard (2009-2011) ¹		N/A		100.0%
Average Annual Mean PM2.5 (2011-2013)2	9.5 ug/m3	N/A		
Population Served by Community Water Systems with no MCL Violations (2013)3	100%	N/A	No Updated Data	95.0%
Mortality Rate from Work-Related Injuries (2013)4	N/A	N/A	2.5	3.5
¹ State Center for Health Statistics; ^{2NC Dept. of Air Quality, 3} U.S. Environmental Pro		Bureau of Labor Stat	istics	
Infectious Disease and Foodborne Illness	<u> </u>			
	Catawba County	Northwest AHEC	North Carolina	Healthy NC 2020 Target







Children Aged 19-35 Months Who Receive the Recommended Vaccines (2013) ¹	N/A	N/A	87.5%	91.3%
Pneumonia and Influenza Mortality Rate (2009-2013) ¹	25.5	N/A	18.4	13.5
Critical Violations per Restaurant or Food Stand (FY2014-2015)2	3.74	N/A		5.5

¹State Center for Health Statistics, 2 CCPH Environmental Health

Social Determinants of Health

	Catawba County	Northwest AHEC	North Carolina	Healthy NC 2020 Target
Individuals Living in Poverty (2013)¹	15.2%	N/A	17.5%	12.5%
Four-Year High School Graduation Rate (2012-2013)2	89.967%	N/A	83.9%	94.6%
Percentage of Renter-Occupied Units Spending 30 Percent or More of Household Income on Rental Housing (2013) ³	48.9%	N/A	51.0%	36.1%

¹U.S. Census Bureau, Small Area Estimates Branch (See note at end); ²State Center for Health Statistics; ³U.S. Census Bureau

Chronic Disease

	Catawba County	Northwest AHEC	North Carolina	Healthy NC 2020 Target
Cardiovascular Disease Mortality Rate (2009-2013)1	242.9		229.6	161.5
Adults with Diabetes (2013)2	N/A	13.5%	11.4%	8.6%
Colorectal Cancer Mortality Rate (2009-2013)1	16.3		14.3	10.1

¹State Center for Health Statistics 2Diabetes NC







Cross-Cutting							
	Catawba County	Northwest AHEC	North Carolina	Healthy NC 2020 Target			
Life Expectancy (2011-2013)1	77.4	N/A	78.3	79.5			
Adults Reporting Good, Very Good or Excellent Health (2013) ²	N/A	77.7%	79.9%	90.1%			
Uninsured individuals under age 65 (2013) ³	18.4%	N/A	18.1%	8.0%			
Adults Who are Neither Overweight nor Obese (2013) ²	N/A	31.9%	33.9%	38.1%			

 ${\it ^1State \ Center for \ Health \ Statistics; ^2Behavioral \ Risk \ Factor \ Surveillance \ System, \ State \ Center for \ Health \ Statistics; ^3NC \ Institute \ of \ Medicine}$



^{*}Note: No Updated Data means that data is no longer tracked or updated data has not been released since last SOTCH report was published



2015 Catawba County Community Health Opinion Survey

This survey asks you to share your opinion about the health status of our community. It is part of the community health assessment currently in progress in Catawba County. Information from the survey will be used to identify community health needs and concerns and then develop ways to address them. **This survey is anonymous and should take less than 10 minutes of your time to complete.** Thank you for your participation. Catawba County Public Health

	1. Do you live in Catawba County?☐ Yes		No (If you do not live in Catawba County, please do no complete the rest of the survey. Thank you.)
2.	If yes, what is your zip code?	_	
3.	How old are you? (Mark age category.) 15 - 19 20 - 24 25 - 29 30 - 34 35 - 39	☐ 40 - 44 ☐ 45 - 49 ☐ 50 - 54 ☐ 55 - 59 ☐ 60 - 64	☐ 65 – 69 ☐ 70 – 74 ☐ 75 – 79 ☐ 80 – 84 ☐ 85 or older
4.	What is your sex? ☐ Male		Female
5.	Are you of Hispanic, Latino, or Spanish or ☐ Yes	igin?	No
6.	Which of the following would you say is you White Black or African American American Indian or Alaska Native Asian including Hmong, Asian Indian, Confilipino, Japanese, Korean, Vietnamese	hinese,	.) Pacific Islander including Native Hawaiian, Samoan, Guamanian/ Chamorro Biracial/Multiracial Other
7-	What is the highest level of school, colleg ☐ Less than 9 th grade ☐ 9-12 th grade, no diploma ☐ High school graduate (or GED/ equivale) ☐ Associate's Degree or Vocational Traini	ent)	sat you have finished? (Check only one.) Some college (no degree) Bachelor's degree Graduate or professional degree
8.	What was your total household income la ☐ Less than \$10,000 ☐ \$10,000 to \$14,999 ☐ \$15,000 to \$24,999 ☐ \$25,000 to \$34,999 ☐ \$35,000 to \$49,999 ☐ \$Public ☐ Health	st year, before taxes?	\$50,000 to \$74,999 \$75,000 to \$99,999 \$100,000 to \$149,999 \$150,000 to \$199,99 \$200,000 or more



9.	counts as someone living on your income					support b	out your child is not living with you, this still
10.	What is your employment status? ☐ Employed full-time ☐ Employed part-time ☐ Retired] Self-e	ployed for more than 1 year mployed ployed for 1 year or less
11.	How much do you weigh without cl pregnancy?) (Please answer with a new pregnancy)						nant, how much did you weigh before your
12.	How tall are you without shoes? (Pl inches	lease	answ	er with num	bers for	your hei	ight in feet and inches.)feet
				cludes phys	ical illne:	ss and in	ijury, for how many days during the past 30
	days was your physical health not g None 1-2 days	jood?		3-7 days 8-29 days			☐ 30 days ☐ Don't know / Not sure
14.	Thinking about your mental health emotions, for how many days during None		past				
_	Do you currently have any of the fo		n g he a Yes		ons? No		Don't Know/Not Sure
O ₁	verweight		Yes		No		Don't Know/Not Sure
Ol	besity		Yes		No		Don't Know/Not Sure
Hi	gh cholesterol		Yes		No		Don't Know/Not Sure
De	epression		Yes		No		Don't Know/Not Sure





Hea	Health Improvement							
16.	In your opinion, which of the following (Choose up to 3.)	ıg sei	rvices needs the most improvement in	your	neighborhood or community?			
			More health care providers		Positive teen activities			
П	Child care options	П	Culturally appropriate health	П	Transportation options			

	Animal control Child care options Elder care options Services for disabled people More affordable health services Better/ more healthy food choices More affordable/better housing		More health care providers Culturally appropriate health services Counseling/mental health/ support groups Better/more recreational facilities (parks, trails, community centers) Healthy family activities		Positive teen activities Transportation options Availability of employment Higher paying employment Road maintenance Road safety Other None				
17.	In your opinion, which health behavior	rs do	people in our community need more i	nfor	mation about? (Choose up to				
	Eating well/ nutrition Exercising/ fitness Managing weight Going to a dentist for check- ups/ preventive care Going to the doctor for yearly check-ups and screenings Getting prenatal care during pregnancy Getting flu shots and other vaccines		Preparing for an emergency/disaster Using child safety seats Using seat belts Driving safely Quitting smoking/ tobacco use prevention Child care/ parenting Elder care Caring for family members with special needs/ disabilities		Preventing pregnancy and sexually transmitted infections Drug or alcohol abuse prevention Suicide prevention Stress management Anger management Domestic violence prevention Crime prevention Rape/ sexual abuse prevention Other None				
18.	 □ Don't know / Not sure □ No, I believe the vaccine is ineffective □ No, I don't get sick □ No, I have gotten sick or know someone who has gotten sick from the vaccine 								
☐ <u>Acc</u> 19.	 No, I don't like going to the doctor No, I cannot pay for the shot Other Access to Health Care 19. Do you have any health care coverage, such as health insurance or government plans such as Medicaid or Medicare? 								
	Yes		No		Don't know/Not sure				





20.	If you answered no, why not? (Check all th	nat apply.) <i>(If yes, skij</i>	o to next question.,)	
	I cannot afford it	I do not qualify for a			I don't want it
	I do not qualify for Medicaid	government subsidy	to help		I don't know my options
	I am unemployed	pay for insurance			Other
21	About how long has it been since you last	visited a doctor for a	routine checkun?	A ro	outine checkup is a general
21.	physical exam, not an exam for a specific i		-	A 10	odine checkop is a general
П	Within the past year	• • • • • • • • • • • • • • • • • • • •	5 or more years a	αo	
	Within the past 2 years		Don't know/ Not	_	1
	Within the past 5 years		Never		•
22.	How long has it been since you last visited	l a dentist or a dental	clinic for any reas	on?	
	Within the past year		5 or more years a		
	Within the past 2 years		Don't know / Not	_	2
	Within the past 5 years		Never		
23.	Where do you go for medical care most of	ten when vou are sicl	c?		
		-	Emergency room		
	Any doctor's office that will see me		Pharmacy clinic		
	Health department		I don't seek medi	cal c	are when I'm sick
	Free clinic		Other		
	Urgent care center	_			
24	In the past 12 months, what prevented yo	u from getting health	n care vou needed	, (C	heck all that apply)
	No way to get there		Hospital would no		
	Didn't know where to go				take my insurance or Medicai
	Couldn't get an appointment		•		ke my insurance or Medicaid
	The wait was too long				te my insorance or medicale
	Insurance didn't cover what I needed				ne from getting health care
	My share of the cost (deductible/co-pay) wa			.u 11	ic from getting fleditificate
	Doctor would not take my insurance or Med		Other		
Exe	<u>ercise</u>				
25.	During a normal week, other than in your	regular job, do you e	ngage in any exerc	cise	that lasts at least a half an
	hour? (Check all that apply.)				
	Yes		No, I don't know	how	to find exercise partners
	No, my job is physical or hard labor		No, I don't like to	exe	rcise
	. , ,		No, it costs too m	iuch	to exercise
	•	like a			
	pool, golf course, or track				nient place to exercise
	No, I don't have enough time to				
_	exercise				
			I don't know		
	No, I would need child care and I don't have		Other		
	·	_			
COUN	ublic lealth		Community Heal	th A	ssessment 2015



26.	What community improvements woul	d m	ake it easier for you	J to	o be physically acti	ve?	(Choose up to 3.)
	Sidewalks		Better lighting		I		More/closer parks
	Bike lanes		Crosswalks		I		Lower crime
	Walking routes/paths		Places to rest (such	n as	benches)		Bus routes to greenways, etc.
	Greenways		Playgrounds				Other
	Slowing down traffic		Ball fields or courts	;			
	<u>trition</u>						
27.	One recommendation for healthy eati						
_	or potato chips). Do you eat this many	y se	_				
	Yes.				No, I don't have tir		
	No, I (or my family) won't eat them.				No, they're too exp		
	No, I don't know how to prepare them.						t for me to buy them.
	No, I just don't think about it.		L	_	Otner		
28.	Do you feel it is easy to purchase healt	thy	foods, such as whol	le g	grain foods, low fat	ор	tions, and fruits and
_	vegetables? (Check all that apply.)		_				
	Yes, I have easy access to a grocery stor				No, I do not know		•
	Yes, I have easy access to a farmers mai						sportation to the store.
	No, the stores closest to me don't carry No, I cannot afford them.	the	m. l		Other		
_	rvo, realmoramora them.						
Tol	bacco Use						
29.	Do you now smoke cigarettes every da	ay, s	some days, or not a	t a	II?		
	Every day		Some days		1		Not at all
30.	During the past 12 months, have you	stop	ped smoking for or	ne d	day or longer becau	Jse	you were trying to guit?
	Yes		No		_		Does not apply
31.	In the past 30 days, which of the follow	wing	g products have you	J US	sed on at least one	day	/? (Check all that apply.)
	Cigarettes		. [Dissolvable tobacc	ор	roducts, such as strips, orbs,
	Smoking tobacco from a pipe				sticks, or lozenges	-	
	Chewing tobacco		[Electronic cigarett	e (e	-cigarette), electronic hookah
	Cigars or cigarillos				(e-hookah), or vap	е ре	en
	Snuff		[None of the above	-	
	Smoking tobacco from a hookah or a wa	ater	pipe [Don't know/Not su	ire	





Alcohol Consumption

32.	One drink containing alcoholiquor. During the past 30 daverage?							
	1 drink	☐ 3 drinks			5 drinks		I did not drink	
	2 drinks	☐ 4 drinks			6 or more drinks		alcohol	
	ner Topics		111 111 24	CI.				
	Which of the following have		ne while driving? (
	Talk to other passengers in the	ne venicie			Adjust the car radio			
	Eat or drink				Change CDs, DVDs, or tap		P	
	Make or accept phone calls	: Dl I	Zi - Ji -		Use a portable music player	er , inci	uding a smartphone	
	Read, such as a book, newsp	•	Kindle		with headphones on		P	
	Read e-mails or text message			☐ Use a portable music player, including a smartphone				
	Send text messages or e-mai	IIS		with external speakers or with the car's speakers Use your smartphone for driving directions				
	Check social media	San Albanda and San						
	Talk or interact with children					or ariv	ing directions	
	Do personal grooming/check	appearance i	n mirror		None of the above			
	Do you keep the prescriptio Yes	n medication				ntaine	er?	
	163	_	medications	picse	inpuon in No			
35.	Do you feel you are prepare	d for a natura	al disaster or other	eme	ergency that may require y	/ου an	d your family	
	(including any pets) to rema							
	Yes	•	•		-	•		
	No							
	Don't know/Not sure							





Over the course of data collection, 2,339 surveys were submitted to Catawba County Public Health through both internal and partner distribution. Out of this total number, 183 responses were omitted from analysis due to the respondent residing outside of the county. An additional 84 entries were omitted due to insufficient response to the survey. A final total of 2,072 valid responses were used for analysis.

Demographics were collected surrounding age, gender, race/ethnicity, employment status, income, educational attainment, and zip code. Each of these indicators provide perspective in regards to community representation in the survey, as well as provide socioeconomic context to other survey constructs.

Age	Frequency	Percent
15-19	36	1.75%
20-24	130	6.32%
25-29	159	7.73%
30-34	181	8.79%
35-39	191	9.28%
40-44	223	10.84%
45-49	220	10.69%
50-54	243	11.81%
55-59	213	10.35%
60-64	163	7.92%
65-69	92	4.47%
70-74	73	3.55%
75-79	48	2.33%
80-84	50	2.43%
Total	2022	

Race	Frequency	Percentage
American Indian or Alaska Native	8	0.40%
Asian	55	2.76%
Biracial/Multiracial	25	1.25%
Black or African-American	212	10.62%
Pacific Islander	1	0.05%
White	1661	83.22%
Other	34	1.70%
Total	1996	

Hispanic/Latino Origin	Frequency	Percent
No	1897	94.19%
Yes	117	5.81%
Total	2014	

Gender	Frequency	Percent
Female	1,632	79.84%
Male	412	20.16%
Total	2,044	





Percent

7.32%

16.46%

24.02%

20.21%

13.67%

2.98%

15.33%

Zip Code	Frequency	Percent		Educational Attainment	Frequency
28037	2	0.10%	9-12th	grade, no diploma	150
28092	6	0.30%	Associa	ate's degree or vocational training	337
28168	32	1.59%	Bachel	or's degree	492
28601	577	28.68%	Gradua	ate or professional degree	414
28602	342	17.00%	High so	High school graduate (or GED/equivalent)	
28603	4	0.20%	Less than 9th grade		61
28609	57	2.83%	Some college (no degree)		314
28610	106	5.27%	Total	Total	
28613	329	16.35%			
28650	123	6.11%			
28658	401	19.93%		Employment Status	Frequency
28673	26	1.29%		Employed full-time	1264

0.35%

7

2012

Employment Status	Frequency	Percent
Employed full-time	1264	63.14%
Employed part-time	182	9.09%
Retired	293	14.64%
Self-employed	51	2.55%
Unemployed for 1 year or less	60	3.00%
Unemployed for more than 1 year	152	7.59%
Total	2002	

28682

Total



How many people does this income support?	Frequency	Percentage
0	16	0.87%
1	376	20.50%
2	576	31.41%
3	335	18.27%
4	361	19.68%
5	120	6.54%
6	33	1.80%
7	11	0.60%
8	4	0.22%
9	2	0.11%
Total	1834	

Weight Status	BMI Range	Frequency	Percentage
Underweight	< 18.5	32	1.66%
Normal Weight	18.5 - 24.9	616	31.95%
Overweight	25.0 - 29.9	566	29.36%
Obese	30.0+	714	37.03%
Total		1928	

Weight status was analyzed by calculating BMI based on respondents' self-reported height and weight. Results from BMI analysis show that over one third of respondents were classified as obese, with almost thirty percent being classified as overweight. Average BMI among respondents was 28.95. Respondents without a high school degree were more likely to be overweight/obese than those with higher educational attainment. African-American respondents were more likely to be overweight/obese than other races.



Thinking about your physical health, which includes physical illness and injury, for how many days during the past 30 days was your physical health not good?

	Frequency	Percent
1-2 days	406	20.36%
3-7 days	268	13.44%
8-29 days	106	5.32%
30 days	59	2.96%
Don't know / Not sure	109	5.47%
None	1046	52.46%
Total	1994	

Most respondents (52.46%) indicated poor physical health for no days within the past month.

African-American respondents were less likely to have no poor physical health days than other ethnic groups.

Thinking about mental health, which includes stress, depression/feelings of sadness, and problems with emotions, for how many days during the past 30 days was your mental health not good?

Respondents were more likely to report having no poor physical health days than having no poor mental health days in the last month.

Younger respondents (under 65) were less likely to report no poor mental health days than elderly respondents.

Asian respondents were less likely to report no mental health days than other ethnic groups.

	Frequency	Percentage
1-2 days	394	19.87%
3-7 days	337	16.99%
8-29 days	174	8.77%
30 days	69	3.48%
Don't know / Not sure	76	3.83%
None	933	47.05%
Total	1983	





Do you have any of the following health conditions?

	Y	'es	No Don't Know / Not Sure		w / Not Sure	2	
Condition	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage	Total
Depression	349	18.85%	1415	76.45%	87	4.70%	1851
Hypertension	535	27.76%	1352	70.16%	40	2.08%	1927
High Cholesterol	390	20.91%	1404	75.28%	71	3.81%	1865
Overweight	991	52.30%	853	45.01%	51	2.69%	1895
Obesity	391	21.72%	1358	75.44%	51	2.83%	1800

In your opinion, which of the following services needs the most improvement in your community?

	Frequency	Percentage
Animal Control	198	10.27%
Child care options	217	11.26%
Elder care options	400	20.75%
Services for disabled people	266	13.80%
More affordable health services	611	31.69%
Better/more healthy food options	547	28.37%
More affordable/better housing	341	17.69%
More health care providers	137	7.11%
Culturally appropriate health care	95	4.93%
Counseling/mental health/support groups	316	16.39%





Better/more recreational facilities	530	27.49%
Healthy family activities	434	22.51%
Positive teen activities	532	27.59%
Transportation options	313	16.23%
Availability of employment	571	29.62%
Higher paying employment	749	38.85%
Road maintenance	367	19.04%
Road Safety	185	9.60%
None	82	4.25%
Total	1928	

The most commonly reported community services needing improvement were: higher paying employment, more affordable health services, availability of employment, better/more healthy food options, positive teen activities, and better/more recreation facilities.



In your opinion, which health behaviors do people in our community need more information about?

	Frequency	Percentage
Eating well/nutrition	882	46.06%
Exercising/fitness	766	40.00%
Managing weight	631	32.95%
Going to a dentist for check-ups/preventive care	353	18.43%
Going to a doctor for yearly check-ups and screenings	411	21.46%
Getting prenatal care during pregnancy	153	7.99%
Getting flu shots and other vaccines	82	4.28%
Preparing for an emergency/disaster	346	18.07%
Using child safety seats	171	8.93%
Using seat belts	121	6.32%
Driving safely	323	16.87%
Quitting smoking/tobacco use prevention	513	26.79%
Child care/parenting	329	17.18%
Elder care	346	18.07%
Caring for family members with special needs/disabilities	303	15.82%
Preventing pregnancy and sexually transmitted infections	370	19.32%
Drug or alcohol abuse prevention	523	27.31%
Suicide prevention	214	11.17%
Stress management	559	29.19%



Anger management	294	15.35%
Domestic violence prevention	298	15.56%
Crime prevention	248	12.95%
Rape/sexual abuse prevention	182	9.50%
Other	53	2.77%
None	82	4.28%
Total	1915	

The most common topics that respondents felt the community needs more information about were: nutrition, physical activity, weight management, stress management, drug/alcohol abuse prevention, and tobacco use prevention. These topics represent a range of overall promotion of community wellbeing and fall in line with risk and protective factors for chronic diseases and conditions such as obesity, diabetes, heart disease, hypertension, stroke, and cancer.



During the past 12 months, have you had a flu shot?

	Frequency	Percent
Yes	1308	66.84%
No, I am worried about the side effects	93	4.75%
No, I believe the vaccine is ineffective	116	5.93%
No, I cannot pay for the shot	35	1.79%
No, I don't get sick	132	6.75%
No, I don't know where to get the vaccine	6	0.31%
No, I don't like getting shots	59	3.01%
No, I don't like going to the doctor	13	o.66%
No, I have gotten sick or know someone who has gotten sick from the vaccine	97	4.96%
Other	59	3.01%
Don't know / Not sure	39	1.99%
Total	1957	

A majority of respondents (66.84%) reported receiving a flu shot within the last year. Of those that did not receive the vaccine, the most common reason reported was respondent belief that they do not get sick, or a belief that the vaccine is ineffective.

African-American, Latino, and Asian respondents were less likely to report receiving the flu vaccine than the White response population.

There was a significant difference in flu vaccination based on educational attainment, with less educated respondents being less likely to be vaccinated than those with higher educational attainment (some college or above).



Do you have any health care coverage, such as health insurance or government plans such as Medicaid or Medicare?

	Frequency	Percent
Yes	1699	86.33%
No	253	12.86%
Don't know / Not sure	16	0.81%
Total	1968	

If you answered no, why not?

	Frequency	Percentage
I cannot afford it	117	52.00%
I do not qualify for Medicaid	87	38.67%
I am unemployed	42	18.67%
I do not qualify for a government subsidy to help pay for insurance	44	19.56%
I don't want it	11	4.89%
I don't know my options	23	10.22%
Other	13	5.78%
Total	225	

The most common reasons respondents gave for not having health insurance were not being able to afford coverage and not qualifying for Medicaid. Respondents with lower household incomes (\$25,000 per year or less) were more likely to not have insurance than those with higher household incomes.



About how long has it been since you last visited a doctor for a routine checkup? A routine checkup is a general physical exam, not an exam for a specific injury, illness, or condition.

	Frequency	Percent
Within the past year	1562	80.64%
Within the past 2 years	186	9.60%
Within the past 5 years	67	3.46%
5 or more years ago	63	3.25%
Never	15	0.77%
Don't know / Not sure	44	2.27%
Total	1937	

Over 84% of individuals with health insurance coverage reported receiving a general physical exam within the last year, compared to 55% of those without health insurance coverage.

Approximately 72% of Latino respondents received a physical exam within the past year compared to 79% of African-American respondents and 82% of White respondents.

How long has it been since you visited a dentist or dental clinic for any reason?

	Frequency	Percent
Within the past year	1310	67.53%
Within the past 2 years	236	12.16%
Within the past 5 years	132	6.80%
5 or more years ago	175	9.02%
Never	22	1.13%
Don't know / Not sure	65	3.35%
Total	1940	

Respondents who indicated more frequent physical exams also reported more frequent dental visits.

Those without insurance coverage were less likely to visit the dentist within the past year.

Approximately 49% of African-American respondents reported visiting the dentist within the past year compared to 60% of Latino respondents and 71% of White respondents.





Where do you go for medical care most often when you are sick?

	Frequency	Percent
My personal doctor's office	1514	78.20%
Any doctor's office that will see me	35	1.75%
Emergency room	80	4.13%
Urgent care center	96	4.96%
Pharmacy clinic	10	0.52%
Free clinic	33	1.70%
Health department	36	1.86%
Other (please specify)	70	3.62%
I don't seek medical care when I'm sick	63	3.25%
Total	1936	

While most respondents indicated that they would go to their own doctor's office to seek medical attention, there was a scattering of respondents that indicated pursuing as needed care at other clinics or practices. Respondents with household incomes below \$25,000 per year were more likely to report going to the emergency room when they need medical care than respondents with higher incomes.



In the past 12 months, what prevented you from getting health care you needed?

	Frequency	Percentage
No way to get there	43	2.50%
Didn't know where to go	25	1.45%
Couldn't get an appointment	71	4.13%
The wait was too long	62	3.60%
Insurance didn't cover what I needed	118	6.86%
My share of the cost (deductible/co-pay) was too high	276	16.04%
Doctor would not take my insurance or Medicaid	24	1.39%
Hospital would not take my insurance	7	0.41%
Pharmacy would not take my insurance or Medicaid	13	0.76%
Dentist would not take my insurance or Medicaid	22	1.28%
No health insurance	141	8.19%
Nothing prevented me from getting health care	1131	65.72%
Other	68	3.95%
Total	1721	

While a majority of respondents indicated that nothing prevented them from receiving health care, the most common reported cause that did prevent care was the cost burden of fees/deductibles/co-pays. Other common reported reasons were a lack of health insurance and insurance not covering needed services.



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

	Frequency	Percentage
Yes	1203	65.27%
No, my job is physical or hard labor	82	4.45%
No, I'm too tired to exercise	195	10.58%
No, there is no safe place to exercise	22	1.19%
No, I don't know how to find exercise partners	36	1.95%
No, exercise is not important to me	18	0.98%
No, I don't like to exercise	100	5.43%
No, I'm physically disabled	40	2.17%
No, it costs too much to exercise	53	2.88%
No, there is no convenient place to exercise	64	3.47%
No, I would need child care and I don't have it	49	2.66%
No, I don't have access to the things I need	53	2.88%
No, I don't have enough time to exercise	198	10.74%
I don't know	45	2.44%
Other	58	3.15%
Total	1843	

More than 65% of respondents reported being physically active outside of work during a normal week. The most common reasons given for not being physically active were not having enough time and being too tired for exercise.



What community improvements would make it easier for you to be physically active?

	Frequency	Percentage
Sidewalks	852	50.27%
Bike lanes	382	22.54%
Walking routes/paths	828	48.85%
Greenways	431	25.43%
Slowing down traffic	140	8.26%
Better lighting	370	21.83%
Crosswalks	134	7.91%
Places to rest	289	17.05%
Playgrounds	213	12.57%
Ball fields or courts	126	7.43%
More/closer parks	441	26.02%
Lower crime	255	15.04%
Bus routes to greenways, etc.	83	4.90%
Other	104	6.14%
Total	1695	

The most common suggested community improvements to promote physical activity were: sidewalks, walking routes/paths, more/closer parks, greenways, and better lighting. All of these recommendations promote accessible options for a variety of physical activities for leisure, transportation, and exercise.



One recommendation for healthy eating is to eat at least 5 servings of fruits and vegetables a day (not French fries or potato chips). Do you eat this many servings of fruits and vegetables daily?

	Frequency	Percentage
Yes	910	51.59%
No, I (or my family) won't eat them	87	4.93%
No, I don't know how to prepare them	27	1.53%
No, I just don't think about it	409	23.19%
No, I don't have time to fix them	147	8.33%
No, they're too expensive	310	17.57%
No, it is not convenient for me to buy them	60	3.40%
Other	185	10.49%
Total	1764	

Only 51% of respondents reported eating the recommended serving of fruits and vegetables per day. The most common reasons given for not eating fruits and vegetables were not thinking about it and cost. African-American and Latino respondents were less likely to report meeting fruit and vegetable intake recommendations than White respondents.



Do you feel that it is easy to purchase healthy foods, such as whole grain foods, low fat options, and fruits and vegetables?

	Frequency	Percentage
Yes, I have easy access to a grocery store	1430	75.78%
Yes, I have easy access to a farmers market	484	25.65%
No, the stores closest to me don't carry them	66	3.50%
No, I do not have transportation to the store	19	1.01%
No, I don't know what to buy	62	3.29%
No, I cannot afford them	370	19.61%
Total	1887	

Lower income respondents were less likely to indicate having easy access, and more likely to indicate not being able to afford healthy foods and not having transportation to the store. Cost was the most commonly indicated barrier to healthy food purchasing.

Do you now smoke cigarettes every day, some days, or not at all?

	Frequency	Percent
Every day	153	7.94%
Some days	79	4.10%
Not at all	1695	87.96%
Total	1927	

The 20 to 30 year old age group was more likely to report smoking every day than other age distributions.



During the past 12 months, have you stopped smoking for one day or longer because you were trying to quit?

	Frequency	Percent
Yes	132	7.03%
No	166	8.84%
Does not apply	1579	84.12%
Total	1877	

Approximately 43% of respondents reporting trying to quit within the last year were every day smokers.

In the past 30 days, which of the following products have you used on at least one day?

	Frequency	Percentage
Cigarettes	221	11.82%
Cigars or cigarillos	15	0.80%
Chewing tobacco	15	0.80%
Snuff	9	0.48%
Smoking tobacco from a pipe	7	0.37%
Dissolvable tobacco products	4	0.21%
Smoking tobacco from a hookah or water pipe	6	0.32%
Electronic cigarette, electric hookah, or vape pen	57	3.05%
None of the above	1582	84.64%
Don't know/Not sure	16	o.86%
Total	1869	

Cigarettes were the most commonly reported tobacco product used. This was seconded by a smaller but significant number of respondents indicating electronic cigarette use. Over 60% of electronic cigarette users responding were between the ages of 20 and 39.



One drink containing alcohol is equivalent to a 12-ounce beer, a 5-ounce glass of wine, or a drink with one shot of liquor. During the past 30 days, on the days when you drank alcohol, about how many drinks did you drink on average?

	Frequency	Percent
1 drink	436	22.84%
2 drinks	279	14.61%
3 drinks	116	6.08%
4 drinks	54	2.83%
5 drinks	17	0.89%
6 or more drinks	45	2.36%
I did not drink alcohol	962	50.39%
Total	1909	

Respondents indicated relatively low amounts of binge drinking (4+ drinks for women, 5+ drinks for men), with a large proportion (50.39%) reporting abstaining from alcohol the previous month.





Which of the following have you ever done while driving?

	Frequency	Percentage
Talk to other passengers in the vehicle	1634	86.05%
Talk or interact with children in the back seat	889	46.81%
Change CDs, DVDs, or tapes	709	37.34%
Check social media	193	10.16%
Do personal grooming/check appearance in mirror	421	22.17%
Use your smartphone for driving directions	814	42.86%
Use a navigation system for driving directions	674	35.49%
Send text or e-mails	418	22.01%
Read e-mails or text messages	446	23.49%
Read, such as a book, newspaper, iPad, or Kindle	41	2.16%
Adjust the car radio	1408	74.14%
Use a portable music player, including a smartphone, with external speakers or with the car's speakers	245	12.90%
Use a portable music player, including a smartphone, with headphones on	107	5.63%
Make or accept phone calls	1280	67.40%
Eat or drink	1477	77.78%
None of the above	171	9.00%
Total	1899	



The most common distracted driving behaviors reported by respondents were: talking to passengers, eating or drinking, adjusting the radio, making or accepting calls, interacting with children in the back seat, changing CDs/DVDs/tapes, and using a smart phone for navigation.

Do you keep prescription medications in your home in a locked cabinet, drawer, or container?

	Frequency	Percent
Yes	424	22.20%
No	1176	61.57%
I don't have any prescription medications	310	16.23%
Total	1910	

Almost three quarters (73%) of those with prescription medications do not keep them in a locked cabinet, drawer, or container.

Respondents between 20 to 30 years old were the most likely to report locking prescription medications away.

Do you feel you are prepared for a natural disaster or other emergency that may require you and your family (including any pets) to remain in your home without power or assistance for more than 3 days?

	Frequency	Percent
Yes	792	41.51%
No	850	44.55%
Don't know / Not sure	266	13.94%
Total	1908	

Respondents with lower household incomes (less than \$25,000) were more likely to report not being prepared for a natural disaster or emergency than those with higher household incomes.

Minority respondents were significantly less likely to report being prepared for a natural disaster or emergency than White respondents.



Nutrition



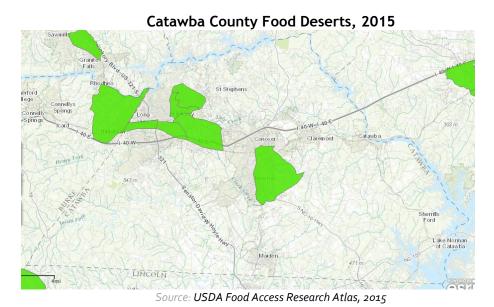
Overview

Poor nutrition is a major risk factor for four of the top ten leading causes of death in Catawba County. Several factors affect the availability of fruits, vegetables, and other nutritious foods in a community. Physical access to healthy foods, or having a market or store geographically close enough or within the reach of available transportation, has been shown to be key in promoting healthy eating in communities. Access can also be considered in terms of cost. Recent studies show that fresh fruits and vegetables may not be prioritized in a person's diet because they are too expensive in comparison to other less healthy options. This is especially important to take into account within areas of a community that are hardest hit with poverty.

A healthy, nutritious diet reduces the risk of hypertension, heart disease, diabetes, overweight and obesity, some types of cancers, and other chronic illnesses. Individuals can achieve proper nutrition by eating a variety of foods that supply the recommended amounts of fat, protein, carbohydrates, water, vitamins, and minerals. Five or more servings of fruits and vegetables per day are recommended, and added fats, sugars, and sodium should be limited. A healthy eating plan is determined on an individual basis by age, sex, height, weight, and physical activity level.

Catawba County Data

- According to the 2013 Behavioral Risk Factor Surveillance Survey (BRFSS), only 10.0% of people living in the Northwest AHEC region (which includes Catawba County) consumed the recommended amount of fruits and vegetables daily.
 - This survey also shows 30.8% of adults in the region drink 1 or more sugar sweetened sodas per day, and 23.4% drink one or more servings of other sugar sweetened beverages per day.



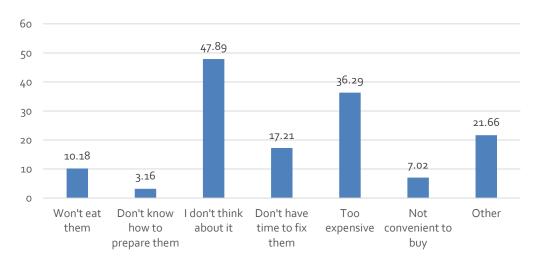
• Food desert data released in 2015 by the USDA shows that Catawba County went from previously having two food deserts to six. A food desert is recognized by the USDA as a low-income census tract where a significant number or share of residents is more than 1 mile (urban) or 10 miles (rural) from the

Nutrition



- nearest supermarket. The map above shows the county's current food deserts are located south and east of the City of Hickory as well as around and within the City of Newton.
- Poverty is a risk factor for poor nutrition and food insecurity. The proportion of individuals living in poverty in Catawba County is 15.2%, and the percentage of minors living in poverty is 23.6%. This represents a significant piece of the population that may struggle to have access to healthful foods.
- There are three assistance program indicators that are also helpful in looking at food insecurity and access to healthful foods:
 - 14.3% of Catawba County households received Supplemental Nutrition Assistance Program (SNAP) benefits in 2013.
 - Catawba County's Women Infants and Children (WIC) program served an average of 4,209 clients per month during fiscal year 2014-15. They also managed a network of 37 stores that accepted WIC vouchers and distributed additional vouchers for use at local farmers markets.
 - During the 2014-2015 academic year, 57.2% of K-12 students in Catawba County were enrolled in the free and reduced price lunch program.
- A 2015 survey of Public Health Farmers Market customers indicated 56.47% were at some point in the last year unable to eat healthy and nutritious foods due to a lack of money or resources.
 - 90.41% of respondents indicated that the Public Health Farmers Market helped them to increase the amount of fresh fruits and vegetables their family eats.
 - 76.19% of respondents using SNAP/EBT at the market indicated that being able to use their benefits at the market has increased the amount of fresh fruits and vegetables they consume.

Barriers to Eating Recommended Fruit and Vegetable Servings, 2015



Source: 2015 Catawba County Community Health Opinion Survey

- According to the 2015 Catawba County Community Health Opinion Survey:
 - 47.89% of respondents who do not eat the recommended amount of fruits and vegetables do not do so because they do not think about it regularly. This is a 72% increase from the 27.8% of respondents who indicated the same reason in 2011.
 - 36.29% of respondents who do not eat the recommended amount of fruits and vegetables do not do so because they are too expensive. This is a 190% increase from the 12.5% of respondents who indicated the same reason in 2011.



Nutrition



- The number of respondents who indicated that they do not know how to prepare fruits and vegetables increased significantly from 0.6% in 2011 to 3.16%.
- 28.37% of respondents indicated that better/increased healthy food options was an area in most need of improvement in the community. The only higher ranking choices were more affordable health services, higher paying employment, and the availability of employment.
- 46.06% of respondents selected eating well as the number one topic about which our community needs the most information and support. This topped exercising/fitness (40.00%) and managing weight (32.95%).

Access to Healthy Foods

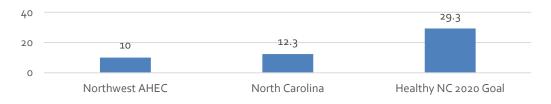
	Frequency	Percentage
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Yes, I have easy access to a farmers market	484	25.65%
No, the stores closest to me don't carry	66	3.50%
No, I do not have transportation to the store	19	1.01%
No, I don't know what to buy	62	3.29%
No, I cannot afford them	370	19.61%
Total	1887	

Source: 2015 Catawba County Community Health Opinion Survey

A majority of survey respondents indicated they do have access to a grocery store or farmers market. It is important to note that many who do have access to places to purchase fruits and vegetables still indicate facing barriers in terms of cost, knowledge, and transportation; 19.61% of respondents, including many who have proximal access to stores and markets, indicated cost as a barrier.

State Data

Recommended Servings of Fruits and Vegetables Consumed, 2013



Source: State Center for Health Statistics, BRFSS, 2013, Nutrition

- Only 12.3% of adult North Carolinians eat the recommended servings of fruits and vegetables.
 - North Carolina is less than halfway to meeting the Healthy NC 2020 goal of 29.3%.
 - The Northwest AHEC region has a slightly lower rate of fruit and vegetable consumption than the state and is just over one third of the way to meeting the Healthy NC 2020 goal.



Physical Activity



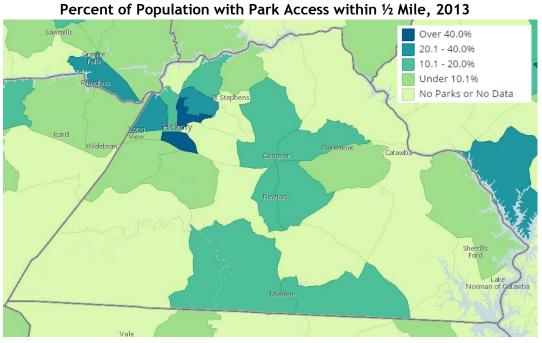
Overview

Inadequate physical activity and poor nutrition are two major contributing factors to the prevalence of chronic disease in the United States, including rising obesity rates among adults and children. Together, physical inactivity and unhealthy eating are the second leading preventable cause of death in North Carolina. A proper balance of nutrition and physical activity is essential for disease prevention and lifelong health.

Regular physical activity is necessary to maintain a healthy weight. It helps reduce the risk of cardiovascular disease, diabetes, osteoporosis, and colon cancer and helps build a healthier body by strengthening bones, muscles, and joints. Physical activity also improves depression and anxiety, enhances the immune system, and helps reduce high blood pressure and arthritis pain and disability. The recommendations for an adequate amount of physical activity are 30 minutes of moderate physical activity per day, five days per week; or vigorous physical activity for 20 or more minutes per day, three or more days per week.

Catawba County Data

- According to the 2013 Behavioral Risk Factor Surveillance System (BRFSS), 71.7% of people living in the Northwest AHEC region, which includes Catawba County, participated in any physical activity outside of their job in the last month. This is lower than the statewide 73.4% of adults.
- The same survey noted that only 50.2% of adults in the region meet the recommended 150 minutes of moderate to vigorous physical activity per week. This is higher than the statewide proportion of 48.1%.



Source: Catawba County GIS, ESRI/OSM, 2013

- In Catawba County, 13 census tracts do not have park access within half a mile for residents. Areas without a publicly-accessible safe place for play within walking distance are designated as play deserts.
- An additional six tracts show less than 10.1% of the population with access to a park within half a mile.

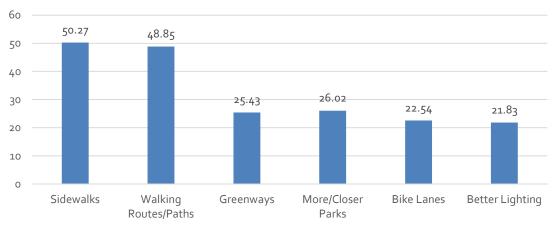


Physical Activity



- According to responses from the 2015 Catawba County Community Health Opinion Survey, 27.49% of
 respondents indicated improvements to or an increase in options for recreational facilities would be one
 of the most important improvements in our community. The survey also showed 40% of respondents
 felt our community needed more information about exercise and fitness.
- This survey also showed 65.27% of respondents indicated performing physical activity for at least half an hour other than their job.
- The most common reasons respondents gave for not being physically active were not having enough time to exercise (10.74%) or being too tired to exercise (10.58%). Not having enough time was also the most common response in 2011, but the proportion of respondents giving this reason in 2015 was more than halved.



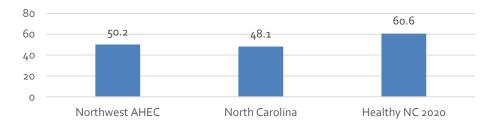


Source: 2015 Catawba County Community Health Opinion Survey

The chart above details the most popular responses for community improvement strategies that would increase physical activity among respondents (respondents could choose more than one option). The two most commonly requested strategies (sidewalks and walking routes/paths) are both related to increasing access to walkable, publicly-accessible methods of leisure physical activity, exercise, and active transportation.

State Data

Adults Meeting Recommendations for Physical Activity, 2013



Source: State Center for Health Statistics, BRFSS, 2013

 According to the data above, the Northwest AHEC region is slightly closer than the state to the Healthy North Carolina goal for adults meeting the recommended amount of physical activity.



Tobacco



Overview

Tobacco use continues to be the leading cause of preventable death and disease in the United States. Each year, approximately 480,000 Americans die prematurely from tobacco-related diseases, including 42,000 deaths related to exposure to secondhand smoke. Tobacco use is also related to a decrease in quality of life. More than 16 million Americans are living with a disease caused by smoking, such as cancer, heart disease, stroke, cancer, diabetes, chronic obstructive pulmonary disease, certain eye diseases, immune disorders like rheumatoid arthritis, and several oral health conditions. For each person who dies from smoking, there are at least 30 people living with a serious-smoking related illness.

Prevention and promoting cessation can save lives. Smokers die 10 years earlier than nonsmokers, and quitting smoking before the age of 40 reduces the risk of dying a smoking-related death by 90%. As much as 68.9% of adult smokers want to quit, and 42.7% nationwide have made an attempt to quit in the past year.

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. Each year, secondhand smoke causes 7,333 deaths from lung cancer and 33,951 deaths from heart disease. 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. Thirdhand smoke is a result of leftover pollution from cigarette smoking that forms a compound called nitrosamines. Nitrosamines release more than 250 chemicals into the immediate environment, many of which have already been linked to cancer. Because thirdhand smoke sticks to furniture, upholstery, home interiors and clothing, it can be a threat to vulnerable populations such as the elderly, people with breathing problems, pregnant women, and children.

An important trend to note since the last CHA is an increase in the popularity of electronic cigarettes. The National Youth Tobacco Survey shows that use of e-cigarettes has tripled between 2013 and 2014 to 13.4%. This new trend now affects approximately two million middle and high school students. Use among adults more than doubled in the same year; 2.6% of adults report using them regularly, and 3.3% have tried them once. The product is used in addition to conventional cigarettes by 36.5% of current smokers. Among former smokers, 9.6% now use e-cigarettes instead. Although conventional cigarette television advertising has been banned since 1971, e-cigarette companies spend much of their \$18.3 million advertising expenditures on this platform for promotion. Preliminary studies on e-cigs have shown alarming amounts of nicotine and carcinogens in these products. There is also concern about the lack of research on the long-term effects of e-cigarette use on health outcomes.

Catawba County Data

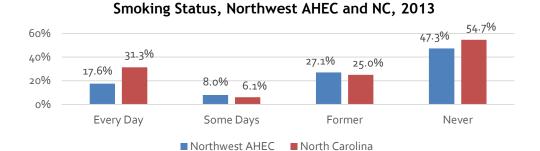
- Results from the 2015 Catawba County Community Health Opinion Survey show that 47.8% of respondents who identify as current smokers have also attempted quitting in the past year.
- Other data from the Community Health Opinion Survey indicate the following:
 - 7.94% of respondents said they smoke every day, and 4.10% said they smoke some days. 87.96% said they do not smoke at all.



Tobacco



- The most common tobacco product among residents surveyed was cigarettes (11.82%). The next most common product was electronic cigarettes (3.05%).
- The same survey also shows that 26.79% of respondents believe that tobacco use prevention is one of the top health behaviors that our community needs the most information about.



Source: State Center for Health Statistics, BRFSS, 2013

 Participants in the 2013 Behavior Risk Factor Surveillance System survey (BRFSS) were asked to classify their smoking frequency. The findings above indicate that the Northwest AHEC region, which includes Catawba County, has a lower percentage of adults who smoke every day than in North Carolina overall.

Total % Grade 6th 8th **10**th 2008 10.8 6.0 19.8 2.4 14.9 2013 0.6 6.3 18.6 10.7 13.4

Cigarette Use in the Last 30 Days (Grades 6-12)

Source: Catawba County Pride Survey, 2008 & 2013

- According to the chart above, a similar proportion of students in grades six to 12 report smoking in both the 2008 and 2013 cohorts. The only significant reductions were seen in the number of sixth-graders reporting smoking cigarettes in the last month.
- Prevalence increases as students go up in grade; in 2013, 0.6% of sixth-graders and 18.6% of high school seniors reported that they smoked.
- In 2013, tobacco was the second most common substance used annually by students (17.8%) behind alcohol (30.9%). Notably, past 30-day use of tobacco ranked third after alcohol (17.3%) and marijuana (11.8%).
- Other data from the 2013 Pride Survey indicate the following:
 - The average age of first use of tobacco is 13.8, which is the youngest age of initiation when compared to first use of alcohol (13.9), marijuana (14.2), and prescription drugs (14.2).
 - 87.9% of students perceive that parents would say tobacco use is wrong or very wrong, but only 61.5% perceive that friends would say tobacco use is wrong or very wrong.
 - 40% of students believe tobacco is fairly or very easy to get.



Tobacco



- 20.5% of students do not perceive moderate or great risk associated with tobacco use. However, the perception of risk is second highest in comparison to prescription drugs (highest), alcohol (third), and marijuana (fourth).
- 25.3% of sixth-graders reported that they believe cigarettes do not cause harm. This is a significant increase from 14% who reported this in 2008.
- The most common tobacco product used by students is cigarettes (8%), followed by electronic cigarettes (6%) and cigars/little cigars/clove cigarettes (5.1%).

State Data

• According to data collected through the national Behavioral Risk Factor Surveillance System (BRFSS), North Carolina has seen a decrease in the number of individuals identifying as a current smoker. The survey results from 2011 show 21.8% of North Carolinians reporting as current smokers, while information from 2013 shows a 7.34% decrease to 20.2%.





Overview

In 2010, healthcare reform became national law. The Patient Protection and Affordable Care Act (known as the ACA) aims to reduce the number of Americans without insurance by increasing the affordability and availability of health insurance coverage. Implementation began in 2010, with most of the major provisions enacted in 2014 and full implementation expected by 2018. Key tenets of the law include the following:

- An individual mandate requiring almost all individuals to have health insurance or pay a penalty
- Prevention of insurance companies from denying coverage to individuals for any reason
- Establishment of Health Insurance Marketplaces through which individuals and small businesses can purchase health insurance
- Expanded Medicaid coverage for individuals at or below 138% of the federal poverty level
- Premium subsidies to help make insurance more affordable for moderate-income individuals
- Expanded employer-sponsored coverage

As a result, millions of Americans have newly received health insurance coverage through Medicaid, Marketplaces, or their employers. The Kaiser Family Foundation (KFF) indicates that more than half (55%) of uninsured nonelderly people are eligible for financial assistance to gain coverage through either Medicaid or the Marketplaces, and one-fourth (25%) of uninsured individuals are eligible for premium tax credits to help them purchase coverage in the Marketplace. Approximately 30% are eligible for either Medicaid or CHIP.

However, not all uninsured individuals are eligible for assistance under the ACA. In 2013, the U.S. Supreme Court made the ACA-mandated Medicaid expansion optional for states. North Carolina exercised this option, and Medicaid eligibility in the state is still limited to pre-ACA requirements. Some low income adults in NC fall into a coverage gap, earning too much to qualify for Medicaid but not enough to qualify for subsidies to help supplement the cost of insurance. In addition, North Carolina limits adult Medicaid eligibility to the elderly, pregnant women, disabled, and parents of children. Additionally, KFF estimates that some individuals in the U.S. do not qualify for ACA assistance because they have incomes above the limit for tax credits or have access to coverage through a job (24%), or they are ineligible because they are undocumented immigrants (13%).

In the United States, low income persons face the greatest health access barriers and are the least likely to be insured. In 2015, the U.S. Department of Health & Human Services set federal poverty guidelines at incomes of \$11,770 or less for an individual and \$24,250 or less for a family of four. Since racial and ethnic minorities are more likely than whites to have incomes beneath the federal poverty level, they are also more likely than Whites to be uninsured.

A number of health issues may arise for U.S. adults without insurance. The uninsured are less likely to receive clinical preventive services; may delay or forgo physician visits and needed treatment; are more likely to be diagnosed with later-stage cancers; and are more likely to die from trauma or serious acute conditions.





Catawba County Data

Uninsured Estimates for Catawba County and North Carolina, 2013

	Catawba County	North Carolina
Uninsured Estimates for Children (0-19)	7.0%	6.9%
Uninsured Estimates for Adults (18-64)	22.9%	22.5%
Total Population (under 65)	18.4%	18.1%

Source: U.S. Census Bureau, Small Area Health Insurance Estimates (SAHIE), 2013

- In 2009, 19.3% (n = 26,069) of the Catawba County's total population under age 65 was uninsured according to SAHIE data. The most current number, 18.4% (n = 23,657), represents a 4.67% decrease in the uninsured population.
- The U.S. Department of Health and Human Services' Enroll America program estimates that 9,339 Catawba County residents enrolled in federal insurance marketplace plans between November 15, 2014 and February 22, 2015. Of those, 93.8% qualified for the tax credit.
- In Catawba County, the percentage of people below the poverty level rose from 9.1% in 2000 to 15.2% in 2013, a 67% increase. In many cases, a person's poverty level has a direct correlation to the ability to afford insurance or pay out-of-pocket costs for medical care.
- The percentage of uninsured children in Catawba County decreased by 30% between 2009 and 2012 but increased slightly from 6.7% in 2012 to 7% in 2013.
- Given the ACA's coverage expansions and premium subsidies together with an aging population, federal, state and local governments are projected to finance 47% of national health spending by 2024 (up from 43% in 2013).

Medicaid Enrollment, 2013

	Catawba County	North Carolina
Total Population Enrolled in Medicaid ¹	22.8%	21.9%
Children Enrolled in Medicaid Receiving Preventive Care ²	62.6%	59.2%

Sources: 1State Center for Health Statistics, 2013; 2Division of Medical Assistance, NC DHHS, state fiscal year 2013

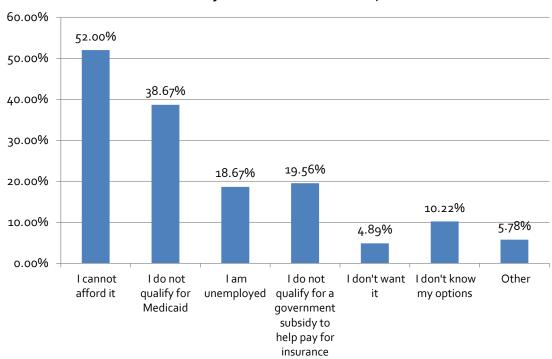
• Catawba County's total population enrolled in Medicaid has increased by 16.92% from 2009 (19.5%) to 2013 (22.8%).





- As of December 2013, Community Care of North Carolina identified 23,263 individuals eligible for managed care services among the 25,454 eligible for Medicaid in Catawba County; 92.1% of those eligible were enrolled in managed care.
- As of state fiscal year 2013, 62.6% of Catawba County children enrolled in Medicaid were receiving preventive care. This represents a 16.35% increase from 2010 (53.8%).

Community Barriers to Insurance*, 2015



Source: 2015 Catawba County Community Health Opinion Survey *Multiple choices allowed for this topic.

- The 2015 Catawba County Community Health Opinion Survey indicated the following results regarding access to care:
 - 86.33% of survey respondents indicated they had health care coverage (o.81% were unsure). Of the 12.86% who did not have health care coverage, more than half (52%) said they did not have health care coverage because they could not afford it and more than one third (38.67%) said it was because they could not qualify for Medicaid. Interestingly, 10.22% said they did not have insurance because they did not know their options, which may indicate a lack of knowledge about the ACA or insurance options available through the Marketplace.
 - 65.72% reported nothing prevented them from getting the healthcare they needed in the last 12 months. Among those who indicated they had been prevented from getting the healthcare they needed, cost-related barriers topped the list: share of cost was too high (16.04%); no health insurance (8.19%); and insurance didn't cover the needed services (6.86%).
 - When asked about the services needing the most improvement in their neighborhood or community, respondents selected financial needs as the top two:
 - Higher paying employment (38.85%)
 - More affordable health services (31.69%)





- 80.64% of respondents indicated they had received a routine check-up in the last year, which is better than the statewide average of 73.2%. The survey indicated 3.25% had not received a check-up in five or more years, and only 0.77% indicated they had never received one.
- 67.53% of respondents indicated they had visited a dentist or dental clinic for any reason within the past year. The survey indicated 9.02% had not visited a dentist in five or more years, and 3.35% had never visited a dentist.
- When asked where they go most often for medical care, 78.20% reported going to a personal doctor's office. This indicates a high percentage of respondents have an identified medical home. Among those who do not go to a personal doctor's office, urgent care centers (4.96%) and emergency rooms (4.13%) were the top two alternatives.
- Regional 2013 Behavioral Risk Factor Surveillance System (BRFSS) statistics, which include Catawba County, indicate the following additional factors related to access to care:
 - 18.6% of people under the age of 65 who were employed for wages did not have health insurance coverage. This is fairly consistent with the statewide percentage of 18.9%.
 - 12.6% of respondents indicated there was a time in the past 12 months when they did not take their prescribed medication because of cost.
 - 27.7% of respondents had medical bills that were paid off over time, indicating an ongoing healthcare cost burden for more than one-quarter of the population surveyed.

Access to Healthcare Providers, 2012

	Catawba County	North Carolina
Dentists per 10,000	4.4	4.5
Physicians per 10,000	24.4	22.3
Primary Care Physicians per 10,000	8.1	7.6

Source: NC Health Professions Data System, 2012

- The number of dentists per 10,000 has decreased slightly from the 4.5 reported in the 2011 CHA.
- While the number of total physicians per 10,000 has increased from 23.4 to 24.4, the number of primary care physicians per 10,000 has decreased slightly (from 8.2 to 8.1).
- In the 2015 Catawba County Community Health Opinion Survey, 7.11% of respondents indicated they saw a need for more healthcare providers. Additionally, 4.93% indicated a need for culturally appropriate healthcare.

State Data

■ The number of North Carolinians (almost 560,000) who bought or renewed health policies in the federal Marketplace in 2015 increased by 56% from 2014, the first year federally subsidized coverage was offered. North Carolina was one of six federal-marketplace-participating states that enrolled more than half of the people in the state (1.1 million) estimated to be eligible.





- According to the NC Office of Minority Health and Health Disparities (2013), 11.5% of White Non-Hispanics, 18.2% of African-American Non-Hispanics, 19.4% of American Indian Non-Hispanics, 17.8% of Other Races Non-Hispanics, and 39.3% of Hispanics/Latinos are uninsured in North Carolina.
- On September 23, 2015, the North Carolina General Assembly enacted Medicaid Transformation and Reorganization SL 2015-245. The impact of this law on low income children and adults is yet to be determined.





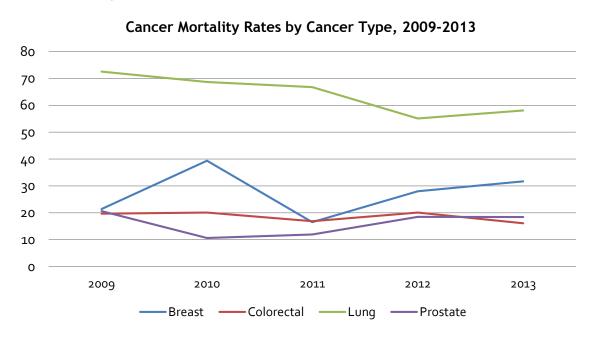
Overview

Cancer is a group of more than 100 different and distinctive diseases characterized by the uncontrolled growth and spread of abnormal cells. It continues to be the second-leading cause of death in the United States, surpassed only by heart disease. However, at both the state and local level, cancer is the overall leading cause of death. Prevention and early detection are critical to survival, which varies greatly by cancer type and stage at diagnosis.

There are a variety of risk factors related to cancer, including genetic and hormonal predispositions, age, tobacco use, sun exposure, radiation exposure, environmental pollutants, diet, physical activity, and carcinogenic exposures. Primary prevention is aimed at averting the development of cancer in individuals by preventing exposure to environmental factors and promoting healthful behaviors. Secondary prevention is aimed at screening and detecting early cancers or precancerous conditions to limit negative health impacts.

Treatment options may include, but are not limited to, surgery, chemotherapy, radiation therapy, immunotherapy, and biologic therapy. These treatments can be used individually or in combination. Clinical trials may be an alternate treatment option. Ultimately, the treatment option depends upon the diagnosis, health of the patient, and stage of cancer.

Catawba County Data



Source: State Center for Health Statistics, 2009-2013, deaths per 100,000 (age-adjusted)

Cancer mortality rates for colorectal and prostate cancer remained fairly consistent in Catawba County from 2009-2013. However, there has been a net increase in deaths attributed to breast cancer since 2011. A promising trend is the reduction in deaths attributed to lung cancer from 72.6 to 58.1 deaths per 100,000, a 19.97% decrease.





Cancer Mortality Rates, 2009-2013

All Cancers	Catawba County	North Carolina
White, non-Hispanic population	177.3	171.3
African American, non-Hispanic population	236.2	201.5
Male population	221.8	217.6
Female population	145	143.0
Total population	176.8	173.3
Prostate (Male)		
White, non-Hispanic population	15.3	18.2
Total population	18.1	22.1
Breast		
White, non-Hispanic population	21.1	20.4
Female population	20.5	21.7
Total population	20.5	21.7
Trachea, Bronchus, & Lung		
White, non-Hispanic population	55.0	53.0
African American, non-Hispanic population	63.6	51.6
Male population	74.9	69.7
Female population	39.1	38.3
Total population	54.0	51.6
Colon, Rectum, & Anus		
White, non-Hispanic population	14.6	13.6
African American, non-Hispanic population	37.5	20.3
Male population	22.0	17.7
Female population	11.1	12.0
Total population	15.9	14.5

Source: State Center for Health Statistics, 2009-2013, deaths per 100,000 (age-adjusted)

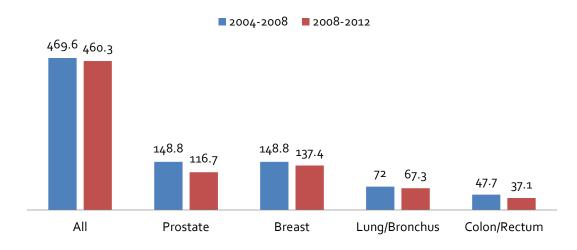
• Overall, Catawba County has higher mortality rates attributed to cancer than the state, with the exception of prostate and breast cancers.





- Rates of mortality associated with cancer were disproportionately higher among African-Americans.
 Cancer is the leading cause of death among African-Americans in Catawba County.
- The colorectal cancer mortality rate among men is nearly double that of women in Catawba County.

Cancer Incidence Trends in Catawba County, 2004-2012



Source: NC Central Cancer Registry, Cancer Incidence per 100,000, 2004-2008, 2008-2012

- There has been a decrease in the incidence of cancer in Catawba County across all types.
- This trend is better than the state, where overall incidence and incidence of breast cancer have risen.

Percent of Stage III and IV Cancer Diagnoses, 2014

Cancer Type	Percentage
Lung	63.13%
Rectum	46.34%
Colon	41.03%
Breast	15.42%
Prostate	11.20%
Melanoma (Skin)	9.80%
All Cancers	22.43%
Total for Sites Listed Above	35.74%

Source: NC Cancer Registries, Catawba Valley Medical Center & Frye Regional Medical Center, 2014

The chart above reflects the percentages of late-stage (Stages III and IV) diagnoses based on analytic cases of cancers for which preventive or early detection screenings are available: lung, breast, prostate, melanoma (skin), rectum, and colon. Late stage diagnosis can make successful treatment more difficult.

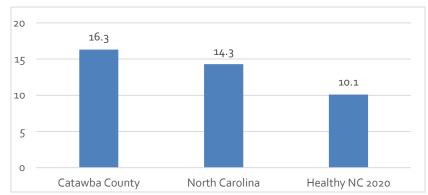




- Lung cancer had the most late-stage diagnoses at 63.13%, which may be somewhat attributable to the requirement that screening is limited to current or former smokers ages 55-74 who have greater than a 30-pack per year history of smoking.
- Other than lung cancer, late-stage diagnoses for rectal and colon cancers were significantly higher than the other cancers on the list (46.34% and 41.03%, respectively). This may be partially attributable to costs associated with colonoscopy screening and potential under-utilization of stool testing kits as an alternative to colonoscopy.

State Data

Colorectal Cancer Mortality Rate Compared to Healthy NC 2020, 2009-2013



Source: State Center for Health Statistics, 2009-2013, deaths per 100,000 (age adjusted)

- From 2009-2013, the mortality rate attributed to colorectal cancer in the state was 14.3 per 100,000, still short of the Healthy NC 2020 goal of 10.1 per 100,000.
- From 2009-2013, over 30% of all cancer deaths in North Carolina were attributed to cancers of the lung and bronchus.

Communicable Disease



Overview

Communicable or infectious diseases are caused by microorganisms, such as bacteria, viruses, fungi, or parasites. While many communicable diseases are passed from person to person, some are transmitted through bites from insects or animals. Others are acquired by ingesting contaminated food, water, or other exposures in the environment.

There are 96 different diseases mandated by law as reportable to the North Carolina General Communicable Disease Branch. These include illnesses that are foodborne (such as salmonella and E. coli), airborne (such as tuberculosis), bloodborne (such as Hepatitis B and C), waterborne (such as cholera and dysentery), and vector borne (including those from insect bites, such as Rocky Mountain spotted fever [RMSF] or West Nile virus). In addition to legally reportable diseases, communicable disease includes a variety of other public health concerns, such as MRSA, norovirus, influenza, and rabies.

Since some communicable diseases (such as HIV/AIDS, influenza, pneumonia, and sexually transmitted diseases) are covered in detail in other sections of the Community Health Assessment and local data is not available for others, this report focuses primarily on Hepatitis A, Hepatitis B, pertussis (whooping cough), salmonellosis (salmonella), and tuberculosis (TB).

Catawba County Data

- In SFY2014-2015, there were 124 reports of diagnosed communicable diseases (not including sexually transmitted infections). This is a 51.21% increase from the number of reports in 2010 (82).
- In response to these reports, 697 investigations occurred. Because one case may require screening and follow-up among several at-risk individuals, investigation efforts generally outnumber diagnosed cases.

Catawba County Communicable Disease Cases and Rates, 2014-2015

	Catawba County
Hepatitis A cases	2.0
Hepatitis A rate (per 100,000)	1.29
Hepatitis B cases	36.0
Hepatitis B rate (per 100,000)	23.38
Pertussis cases	3.0
Pertussis rate (per 100,000)	1.94
Salmonellosis cases	19.0
Salmonellosis rate (per 100,000)	12.33

Source: Catawba County Public Health, SFY2014-2015, rate per 100,000

• As shown in the table, Hepatitis B is the most common communicable disease seen in Catawba County based on reported data. The second highest incidence is salmonellosis.



Communicable Disease





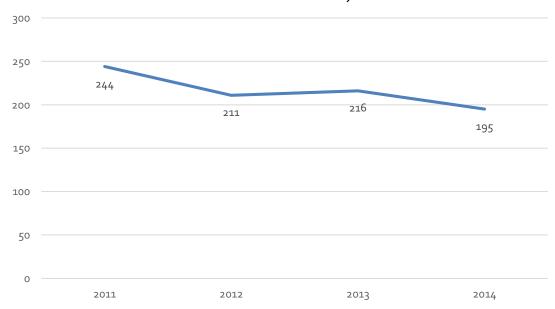


Source: NC TB Control, North Carolina Public Health, 2010-2014, rate per 100,000

 Although there was a sharp increase in the number of tuberculosis cases in 2012, both the number of cases and the rate of infection have remained low in Catawba County since 2010.

State Data

North Carolina Tuberculosis Cases, 2011-2014



Source: NC TB Control, North Carolina Public Health, 2010-2014

• The graph above shows a net decrease in the number of reported cases of tuberculosis in North Carolina, from 244 in 2011 to 195 in 2014.

Diabetes



Overview

Diabetes (diabetes mellitus) is a group of diseases characterized by high blood glucose levels that result from defects in the body's ability to produce and/or use insulin. There are four common diagnoses related to diabetes: type 1, type 2, gestational, and prediabetes. The cause of diabetes is not fully understood, but the onset of both type 1 and type 2 can be attributed to genetic, behavioral, and environmental factors. The 2014 National Diabetes Statistics Report shows that 29.1 million people, accounting for 9.3% of the U.S. population, are projected to have diabetes, with 21.0 million diagnosed cases and an estimated 8.1 million undiagnosed cases (27.8%). People diagnosed with diabetes have health care costs two to three times higher than those without at an average healthcare cost of \$13,700, with \$7,900 of the total directly corresponding to diabetes.

Type 1, previously called juvenile diabetes or insulin dependent diabetes mellitus, is most often diagnosed in adolescence and lasts a lifetime. Type 1 diabetes is an autoimmune disease in which a person's pancreas stops producing insulin, a hormone that enables people to get energy from food. To survive, people with Type 1 diabetes must have insulin delivered by injection or a pump. There is no known way to prevent or cure type 1 diabetes, and it accounts for approximately 5% of all diagnosed cases of diabetes.

Type 2 is the most common form of diabetes and accounts for 90-95% of all diagnosed cases. In type 2 diabetes, the body either does not produce enough insulin or does not use the insulin properly. Approximately 23 million Americans have been diagnosed with type 2 diabetes, and many more are unaware that they are at high risk. Type 2 diabetes is more common among minorities and the older population. The risk of developing type 2 diabetes, a metabolic disorder, is associated with older age, obesity, family history, poor nutrition, physical inactivity, and race/ethnicity. African-Americans, Hispanics/Latinos, American Indians, and some Asians, Native Hawaiians or other Pacific Islanders are at higher risk for developing type 2 diabetes and its complications. Type 2 diabetes in children and adolescents (early-onset type 2 diabetes) is also becoming diagnosed more frequently due to increased rates of overweight and obesity.

Gestational Diabetes (GDM) is diagnosed during pregnancy. Women diagnosed with GDM are more likely to have a family history of diabetes, especially on the maternal side. Older mothers and overweight women are also at a higher risk. In a majority of cases, GDM resolves after delivery; however, 35-60% of women diagnosed with GDM develop type 2 diabetes within 10-20 years. Gestational diabetes is also associated with a 70% lifetime risk of developing type 2 diabetes. Currently, 9.2% of pregnancies include a diagnosis of GDM.

Prediabetes is a formal diagnosis for individuals with consistently higher than normal blood glucose, but not high enough to be classified as diabetes. Approximately 35% of Americans are prediabetic. Research has shown that some long-term damage to the body, especially the heart and circulatory system, may already be occurring during prediabetes. People with prediabetes have an increased risk of developing type 2 diabetes, heart disease, and stroke. Studies and research have shown that people with prediabetes can delay or prevent by up to 58% the onset of type 2 diabetes through lifestyle changes.

Overall, the risk of death among people with diabetes is approximately twice that of people of similar age without diabetes. People with diabetes are two to four times more likely to develop cardiovascular disease; other complications include blindness, kidney disease, nervous system disease (neuropathy), and non-fatal amputation. Because diabetes can be a contributing or complicating factor for other illnesses, diabetes may be underreported as a cause of death.





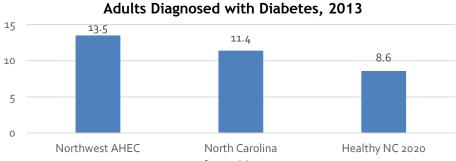
Catawba County Data

Diabetes Mellitus Death Rates, 2009-2013

	Catawba County	North Carolina
White, non-Hispanic population	21.3	17.4
African-American, non-Hispanic population	56.1	26.3
Hispanic population	N/A	8.1
Female Population	18.9	32
Male Population	27.6	23
Total Population	26.0	23.3

Source: State Center for Health Statistics, 2009-2013, deaths per 100,000 (age adjusted)

- When compared to state data, Catawba County residents have a higher rate of mortality from diabetes.
- Non-Hispanic African-Americans in Catawba County are at a substantially higher risk of diabetesrelated deaths when compared to non-Hispanic Whites.
- Men die from diabetes at a higher rate than women in Catawba County; statewide, the female death rate is higher.
- Diabetes is the seventh-leading cause of death in Catawba County.
- According to emergency department data collected through NC DETECT, diabetes was related to 9.81% of total emergency department visits in Catawba County in 2013.



Source: State Center for Health Statistics, BRFSS, 2013

- According to 2013 Behavioral Risk Factor Surveillance System (BRFSS) data for the Northwest AHEC region, which includes Catawba County:
 - 38.7% of adults have not been tested for diabetes within the past three years
 - 13.5% of adults have been diagnosed with diabetes
 - 9.6% of adults have been told that they are prediabetic
- According to the chart above, both North Carolina and the Northwest AHEC region are well above the Healthy NC 2020 goal of 8.6% or fewer adults diagnosed with diabetes.



Diabetes



State Data

- As of 2015, diabetes was the eighth-leading cause of death for the White population and the fourth-leading cause of death for the African-American population in North Carolina.
- As of 2013, 11.4% of North Carolinians have been diagnosed with diabetes.
- As of 2013, 232,000 North Carolinians were estimated to have undiagnosed diabetes and 376,000 adults were estimated to have prediabetes.



Environmental Health



Overview

Environmental health consists of any physical, chemical, or biological factor external to an individual that impacts behavior and quality of life. Those working in environmental health prevent disease and create environments that support health through measuring and controlling risks identified in the community, state, national, and global environments.

The Catawba County Environmental Health Division supports the mission of Catawba County Public Health, the North Carolina Department of Environmental Quality, the North Carolina Department of Health and Human Services, and the North Carolina Division Public Health by providing local environmental health education and enforcement programs. Authority and regulatory requirements for administration and enforcement of individual environmental health programs is provided by North Carolina General Statute and rules adopted by the NC Commission for Health Services.

The focus of environmental health programs in North Carolina is to promote public health goals and ensure best public health practices regarding food and institutional sanitation, sub-surface sewage disposal, ground water protection, investigation of health hazards, and other environmental health concerns.

Food, Lodging and Institutional Sanitation (FLI): FLI is the only program for permitting, conducting regular inspections, and investigating complaints in these types of facilities. In the last several years, temporary or mobile food service, festivals and other mass gatherings, tattooing establishments, and new public swimming pool regulations have fallen under the FLI regulatory umbrella.

On-site Water Protection (OSWP): The primary responsibilities of the OSWP program are the evaluation, permitting, inspection, and approval of sub-surface wastewater disposal systems and private water supply wells in areas not served by public water and sewer systems in order to protect public health by helping to ensure safe and effective wastewater disposal and protection of water resources. The importance of OSWP in North Carolina is many faceted. Septic tank systems serve approximately 50% of North Carolina's residents, and large numbers of rural residents have a private well as a primary water supply. Proper placement, inspection, and maintenance of these localized systems are matters of public health and safety, as well as significant frontline mechanisms for basic environmental protection.

Air Quality: In Catawba County, air quality measurements are based on fine particulate matter (PM) and ozone. Fine particulate matter can cause serious health problems, including 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 cause irritation of the respiratory system, reduced lung function, aggravation of asthma, and 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 of health consequences 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 PM 2.5 and ozone to project public health. The current 2012-2017 standard is 12 micrograms per cubic meter.

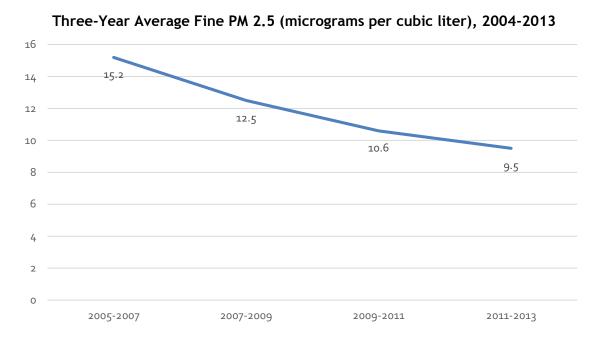


Environmental Health



Catawba County Data

- From July 2014-June 2015, 2,330 inspections were conducted at 991 permitted establishments. Catawba County was one of 45 NC counties to achieve a 100% inspection rate.
- During the same time, there were 1,776 critical inspection violations in restaurants and other establishments. Translating this into violations per restaurant, a measure used by the state, Catawba County had 3.74 critical violations per restaurant or food stand. This is much lower than the NC Healthy 2020 objective of 5.5 or less.
- In that same year, Catawba County Environmental Health issued 602 on-site water protection permits.
- Catawba County recycles an average of 507.55 pounds per person per year.
- As of May 2015, Catawba County ranks first in the state in per capita recycling. The county has also continued to rank in the top five North Carolina counties for recycling over the past fourteen years.



Source: NC Department of Air Quality, 2004-2013

- The chart above shows the significant decreasing trend in the concentration of PM 2.5 in Catawba County, which has decreased by an average of 5.7 micrograms since 2005.
- The current measure also shows that Catawba County sits well below the current EPA standard of 12 micrograms per liter.

State Data

- On August 1, 2014, Governor Pat McCrory issued an executive order to protect groundwater and drinking water from coal ash in North Carolina. Following this action, the state General Assembly passed legislation known as the Coal Ash Management Act. This act requires coal ash clean up with oversight from the North Carolina Department of Environmental Quality.
- In 1999, 111 orange or red warnings for bad air days were issued in North Carolina. In 2014, no warnings were needed.



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 the second-leading cause of death in both Catawba County and North Carolina and is also a major cause of premature death and years of potential life lost.

Heart disease is a term that includes several heart conditions, the most common of which is coronary heart disease (CHD). CHD is a narrowing of the arteries leading to the heart. A heart attack occurs when the heart is deprived of enough oxygen due to a blockage of these arteries, which can cause the heart muscle to die or become damaged.

Stroke, or cerebrovascular disease, occurs when the flow of blood to the brain is interrupted. It is the fourth-leading cause of death in both the county and the state. Strokes usually occur from a blood clot or broken blood vessel. This can cause the loss of abilities controlled by that part of the brain, such as speech or motor skills.

Major risk factors for CVD are tobacco use, poor nutrition, inactivity, obesity, diabetes, high blood pressure (hypertension), and high cholesterol. Prevention and control of these risk factors may help reduce the chances of developing heart disease and stroke. Immediate treatment of a heart attack or stroke increases the likelihood of patient survival.

Catawba County Data

Heart Disease Mortality Rate, 2009-2013

	Catawba County	North Carolina
White population	184.5	168.0
African-American population	202.2	193.2
Female population	136.6	134.0
Male population	243.1	217.3
Total population	181.9	170.0

Source: State Center for Health Statistics, 2009-2013, deaths per 100,000 (age adjusted)

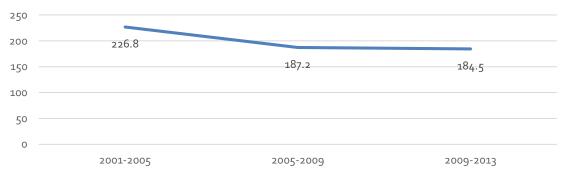
- Heart disease death rates are significantly higher among men than women in the county and the state.
- Heart disease is the second leading cause of death in Catawba County, but it is the number one killer of men in Catawba County.
- According to the 2015 Catawba County Community Health Opinion Survey, risk factors for heart disease are prevalent among a significant number of respondents:
 - 27.76% said they currently have hypertension.
 - 20.91% said they currently have high cholesterol.
 - 66.39% were classified as either overweight or obese.
 - 14.8% reported using tobacco at least once in the past month.



Heart Disease and Stroke



Heart Disease Incidence Rate, 2001-2013



Source: State Center for Health Statistics, 2001-2013

- Since 2001, morbidity associated with heart disease has decreased by 18.7% in Catawba County.
- Morbidity associated with heart disease is much higher among African-American individuals than among White individuals in both the county and the state.
- According to a report by the NC Disease Event Tracking and Epidemiologic Collection Tool (NC DETECT), 10.34% of emergency room visits in 2013 were connected to heart disease and 20.05% of emergency room visits that year were connected to hypertension, a primary heart disease risk factor.

Stroke Mortality Rate, 2009-2013

	Catawba County	North Carolina
White population	47.3	41.3
African-American population	66.3	57.1
Female population	46.4	42.5
Male population	48.5	44.1
Total population	48.0	43.7

Source: State Center for Health Statistics, 2009-2013, deaths per 100,000 (age adjusted)

- Cerebrovascular disease (stroke) is the fourth leading cause of death in Catawba County.
- Since 2009, Catawba County stroke death rates have decreased by 17.9%, from 58.5 (2004-2008) to 48.0 (2009-2013).
- Mortality associated with stroke in Catawba County has decreased in total and for the white population since 2009, but has increased from 63.0 (2005-2009) to 66.3 (2009-2013) among African-Americans.
- Overall and stratified by race and gender, Catawba County has a higher mortality rate associated with stroke than the state.

State Data

 While North Carolina's mortality rate due to heart disease has been close to the national average, stroke mortality is consistently higher than the nation's. North Carolina has the 10th highest stroke mortality rate in the nation.



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.

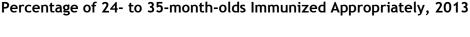
State law requires children to be vaccinated against diphtheria, tetanus, whooping cough, poliomyelitis, rubeola, and rubella. State law only allows exemptions based on medical reasons certified by a licensed physician or based on religious beliefs, not on personal beliefs held by parents or guardians.

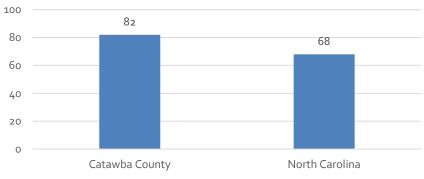
The North Carolina Immunization Program (NCIP) strives to meet two goals: to keep children in their medical homes and to remove cost as a barrier to age-appropriate immunizations. The NCIP provides many of the vaccines required for school entry at no charge to eligible children present in the state of North Carolina from birth through 18 years of age. Eligible children include those with Medicaid coverage, who are uninsured or underinsured, or are American Indian/Alaskan natives. Well over 95% of healthcare providers in North Carolina who administer vaccines to children participate in this program. While this program provides tools for local agencies to reach children who need immunizations, there are currently few resources available to track data related to immunizations at the local level.

While no vaccines are required by law for adults, they are available and highly recommended for influenza, pneumonia, shingles, tetanus, and Hepatitis B. Vaccines are also available for individuals traveling to foreign countries where they may be exposed to diseases not prevalent in the United States.

Catawba County Data

 Catawba County's current immunization exception rate is 0.11% for medical reasons and 0.43% for religious beliefs.





Source: NCIR, 2013

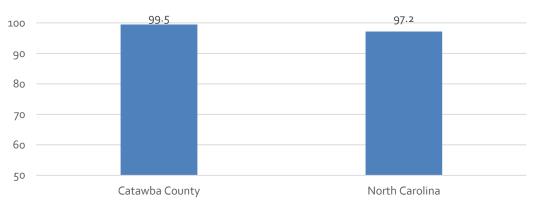
 In 2013, Catawba County had a significantly higher percentage of 22- to 35-month-olds receiving their recommended vaccines than children in North Carolina overall.



Immunizations



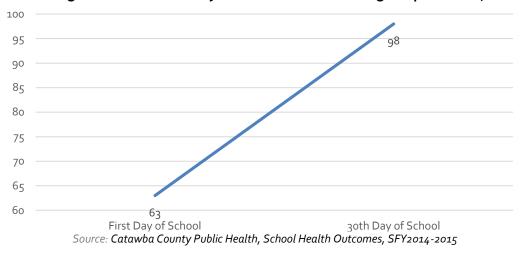
Percentage of Kindergartners Immunized Appropriately, 2013-14



Source: NCIR, 2013-2014

Catawba County's percentage of appropriately-immunized kindergartners has been over 99% for the last three school years (from 2011-12 to 2013-14). This rate has also been consistently above the state's rate, with the Catawba County rate sitting 2.26 percentage points higher than the state's rate at the 2013-2014 school year.

Percentage of Catawba County Sixth Graders Receiving Tdap Vaccine, 2014



Until 2015, NC immunization law required sixth-grade students to receive a Tdap booster vaccination by the 30th calendar day of the school year in an effort to prevent pertussis. In 2014, 98% of Catawba County sixth-grade students received the Tdap booster within the guidelines. This was a 55% increase from the 63% that had already received the booster by the first day of school. In 2015, state law began requiring this booster and the meningococcal vaccine (MCV) for seventh-graders instead of sixth-graders.

- According to the 2013 BRFSS survey, 56.9% of North Carolinians had received some form of tetanus shot since 2005.
- 22.2% of respondents indicated receiving a Tdap shot, which includes pertussis as well.



Infant Mortality



Overview

Infant mortality is defined as the death of a baby within its first year of life. The top three causes of infant mortality among all racial and ethnic groups in North Carolina are prematurity and low birth weight, birth defects, and complications with pregnancy and delivery.

Prematurity and Low Birth Weight: Premature babies are those born before 37 full weeks of pregnancy are completed. Approximately 67% of babies born prematurely also have low birth weight, which is measured at less than 5 pounds 8 ounces. This combination puts a baby at significant risk of health problems, disabilities, and death. The lower the birth weight, the greater the baby's risk of health problems

Birth Defects: Birth defects are conditions that cause structural changes in one or more parts of the body, are present at birth, and have a serious, adverse effect on the baby's health, development or functional ability. According to the Centers for Disease Control and Prevention, birth defects account for more than one of every five infant deaths nationally.

Some birth defects can be prevented if the mother takes steps to increase her chances of a healthy pregnancy. These include taking 400 milligrams of folic acid daily; abstaining from alcohol, smoking and illegal drugs; getting appropriate vaccinations; and obtaining appropriate prenatal care.

Pregnancy and Delivery Complications: There are several different types of complications that can occur in both pregnancy and delivery. High-risk conditions in pregnancy include pre-eclampsia (high prenatal blood pressure), problems with the placenta, hemorrhage (abnormal bleeding), blood clots, sepsis (infections of the blood stream or birth canal), and amniotic fluid embolism (a rare condition where amniotic fluid enters the mother's blood stream).

Labor and delivery complications include preterm labor (delivering before 37 weeks of pregnancy), prolonged labor (labor that does not progress at a normal rate), abnormal presentations (the baby presenting in breech), premature rupture of membranes (water breaking too early), and problems with the umbilical cord (this includes compression around the baby and prolapse of the cord).

Prenatal care, which includes regular medical check-ups to monitor the health of both mother and baby, has been shown to significantly improve birth outcomes. According to the National Women's Health Information Center, babies of mothers who do not get prenatal care are 3 times more likely to have a low birth weight and 5 times more likely to die than those born to mothers who do get care.

This report also details risk factors related to prenatal and perinatal health including tobacco use, access to prenatal care, short interval births, percentage of births to Medicaid mothers (an indicator used to measure socioeconomic status), as well as percentage of babies born at a low or very low birth weight.



Infant Mortality



Catawba County Data

Risk Factors Associated with Infant Mortality, 2009-2013

Percentage Low Birth Weight (2009-2013)	Catawba County	North Carolina
White, non-Hispanic population	8.5%	7.5%
African-American, non-Hispanic population	17.2%	13.9%
Hispanic/Latino population	7.0%	6.6%
Total population	9.1%	9.0%
Percentage Very Low Birth Weight (2009-2013)		
White, non-Hispanic population	1.4%	1.3%
African-American, non-Hispanic population	4.7%	3.3%
Total population	1.7%	1.8%
Percentage Births to Mothers Who Smoked Prenatally (2013)		
White, non-Hispanic population	19.9%	13.0%
African-American, non-Hispanic population	22.1%	9.8%
Total population	16.0%	10.3%
Percentage of Births with Very Late or No Prenatal Care (2013)		
White, non-Hispanic population	3.5%	4.6%
African-American, non-Hispanic population	9.0%	9.4%
Total population	4.6%	6.6%
Percentage Short Interval Births (2009-2013)		
Total population	13.5%	12.6%
Percentage Births to Medicaid Mothers (2012)		
Total population	68.2%	55.9%

Source: State Center for Health Statistics, 2009-2013

- The percentage of babies with a low birth weight in Catawba County has increased by 8.3% since 2001-2005, from 8.4% to 9.1%.
- According to the chart above, low birth weight affects a higher percentage of the minority population in Catawba County.
- Compared to the total population in Catawba County, a smaller percentage of African-American mothers obtain or have access to early and adequate prenatal care.
- Births to mothers who smoke in Catawba County (16.0%) are more than double the NC Healthy People 2020 goal of 6.8%. This is also an increase from the 14.6% of births to mothers who smoked as reported in the 2011 CHA.



Infant Mortality



- African-American mothers are more likely to smoke than White mothers in Catawba County, which is
 opposite from the trend statewide. African-American mothers in Catawba County are also more than
 twice as likely to smoke during pregnancy as African-American mothers statewide.
- The percentage of births to mothers with Medicaid is higher in Catawba County than the state. This indicator is used to determine the number of births among women who may face issues with poverty, unemployment, or access to healthcare.

Infant Mortality Rates, 2009-2013

	Catawba County	North Carolina	Healthy NC 2020 Target
White	4.8	5.4	
African-American	19.28*	13.6	
Hispanic/Latino	N/A	4.8	
Total Population	6.1	7.3	6.3

Source: State Center for Health Statistics, rates per 1,000 live births, 2009-2013

- According to the data above, Catawba County's infant mortality rate is lower than the Healthy NC 2020 target of 6.3 deaths per 1,000 live births. This also represents a significant decrease of almost 20% from the 2001-2005 rate of 7.6 deaths per 1,000 live births in Catawba County.
- There is a large disparity between White infant mortality rates and African-American infant mortality rates in Catawba County. The infant mortality racial disparity ratio between the two groups is 4.00. This is higher than the state disparity ratio of 2.52 and the Healthy NC 2020 goal of 1.92.

- North Carolina has a higher infant mortality rate than Catawba County but fares better in regards to racial disparity.
- Statewide, mothers are more likely to carry a baby to full term than in Catawba County.
- Over half of all births in North Carolina are to mothers participating in Medicaid.
- Across the state, 6.6% of mothers overall and 9.4% of African-American mothers received little to no prenatal care.



^{*}Rates with fewer than 20 cases should be interpreted with caution and may be unavailable.

Influenza and Pneumonia



Overview

Influenza (also referred to as flu) is a contagious viral infection of the respiratory system (nose, throat, and lungs) that can cause mild to severe illnesses and at times lead to death. Flu affects 5-20% of the U.S. population and causes an estimated 36,000 deaths annually. While everyone is at risk for flu, children younger than 5, adults 65 years and older, pregnant women, and individuals with certain medical conditions are at higher risk for contracting the virus or dying from the virus.

Pneumonia, which affects only the lungs, is responsible for more than 50,000 deaths in the United States each year and is the leading cause of death for children worldwide. It is most often caused by bacteria or viral infections and is contracted when the immune system is temporarily weakened. As with influenza, those most at risk of developing pneumonia are the elderly, the very young, and people with chronic conditions or impaired immune systems. Unlike influenza, pneumonia is not usually contagious.

The best way to prevent flu and pneumonia is to get vaccinated each year. It is recommend that everyone six months and older get the flu vaccine annually. The seasonal flu vaccine protects against the three or four influenza viruses that research suggests will be most common. Children under nine years of age who haven't been vaccinated against flu in the past need two doses of flu vaccine. Because pneumonia is often a complication that arises from flu, the flu vaccine can help prevent both illnesses. A bacterial pneumonia vaccine is also available and is recommended for adults over 65 or at high risk.

Influenza can be complicated by pneumonia and can also be a factor leading to the development of pneumonia. For this reason, data related to the two are often combined and reported jointly.

Catawba County Data

Pneumonia/Influenza Mortality Rate, 2009-2013

	Catawba County	North Carolina
White population	22.8	18.3
African-American population	N/A	16.9
Male population	27.8	20.5
Female population	19.3	16.2
Total population	22.6	17.9

Source: State Center for Health Statistics, 2009-2013, deaths per 100,000 (age-adjusted)

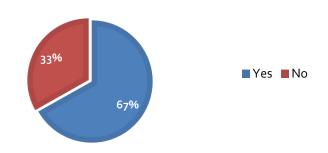
- Death rates for pneumonia/flu are significantly higher in Catawba County than in North Carolina.
- Men are more likely to die from pneumonia or flu than women in both North Carolina and Catawba County. The gap in Catawba County, however, is larger than the one seen at the state level.



Influenza and Pneumonia



Individuals Reporting Flu Vaccination, 2014-2015



Source: Catawba County Community Health Opinion Survey, 2015

- The 2015 Catawba County Community Health Opinion Survey found that 33.16% of Catawba County adults did not get an annual flu vaccine. This number is 27.6% lower than the 45.8% of respondents who reported not getting vaccinated in 2011.
- Among those surveyed who did not receive a flu shot, the most common reasons were as follows:
 - "I don't get sick." (20.34%)
 - "I believe the vaccine is ineffective." (17.87%)
 - "I've gotten sick or know someone who has gotten sick from the vaccine." (14.95%)
 - "I am worried about the side effects." (14.33%)

- According to BRFSS data, 46% of North Carolinians got a seasonal flu shot in 2013.
 - 49.2% of white residents reported getting flu shot, while only 40.1% of African-Americans and 38.6% of Latinos reported the same.
- According to the same survey, 31.3% of North Carolinains reported ever having a pneumonia shot.



Injury and Violence



Overview

Motor vehicle crashes, falls, homicides, poisonings, domestic violence, child abuse and neglect, and drug overdoses are just some of the tragedies reported every day in communities and on the news. Injuries and violence are commonplace in society. While injuries and violence can often be part of isolated incidents or disasters, many events resulting in injury, death, or disability are predictable and 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, this includes 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

 Other unintentional injuries (those not related to motor vehicle accidents) are the 5th leading cause of death in Catawba County with a rate of 35.9 deaths per 100,000 residents. Other unintentional injuries are also the leading cause of death among Catawba County residents ages 20-39.

Injury and Violence Related Causes of Death Rates, 2009-2013

Unintentional Motor Vehicle Injuries	Catawba County	North Carolina
Male population	23.5	20.2
Female population	9.5	7.7
Total population	16.3	13.7
All Other Unintentional Injuries		
Male population	48.8	38.7
Female population	22.7	21.3
Total population	34.6	29.3
Unintentional Poisoning		
Total population	14.9	11.1

Source: State Center for Health Statistics, 2009-2013, rate per 100,000

- Overall, Catawba County has higher rates of injury-related deaths and poisonings than North Carolina.
- Men in Catawba County are more likely to die from injuries, both motor vehicle related and other unintentional, than women.
- There were a total of 4,246 motor vehicle accidents in Catawba County in 2013. Of these, 17 were fatal and 1,241 resulted in non-fatal injuries.
- According to the 2015 Catawba County Community Health Opinion Survey, distracted driving is widespread among local drivers:
 - 86.05% of respondents talk to passengers in the vehicle while driving
 - 77.78% eat or drink while driving
 - 67.40% make or accept phone calls while driving

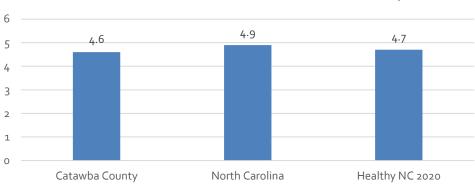


Injury and Violence



- 42.86% use their smartphone for driving directions
- 22.01% send texts or emails and 23.49% read texts or emails

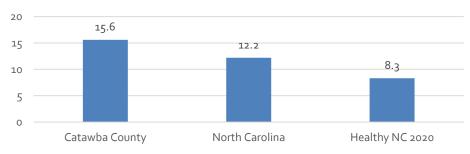
Percent of Alcohol-Related Motor Vehicle Accidents, 2013



Source: Highway Safety Research Center, UNC-CH, 2013

- Catawba County had a lower percentage of alcohol-related motor vehicle accidents than the state in 2013.
- Alcohol was involved in 4.6% (196) of Catawba County's total motor vehicle accidents, including 6.8% (84) of total accidents resulting in injuries and 23.6% (4) of total accidents resulting in fatalities.
 - Catawba County met the Healthy NC 2020 goal of 4.7% or less, while the state is still slightly above at 4.9%.
- Results from the 2013 Pride Survey (representing a random sample of students in grades 6, 8, 10 and 12 from all three Catawba County public school systems) indicate that 10.2% of students surveyed have been passengers in a car driven by someone who had been drinking alcohol one or more times in the past month.

Suicide Rate, 2009-2013



Source: State Center for Health Statistics, 2009-2013, rate per 100,000

- The suicide rate in Catawba County has risen from 14.8 deaths per 100,000 (2005-2009) to 15.6 per 100,000 in 2009-2013. This has moved suicide up to the 10th overall leading cause of death in Catawba County.
- Suicide is the third-leading cause of death among Catawba County residents ages 20 to 39 and is more common among men than women.
- Catawba County currently has a higher rate of deaths attributed to suicide than the state.
- Both Catawba County and the state have higher rates of suicide than the Healthy NC 2020 goal of 8.3 deaths or less per 100,000.
- According to the 2013 Catawba County Pride Survey, 22.6% of students surveyed in the 6th, 8th, 10th and 12th grades indicated they have thought about committing suicide at least once.



Injury and Violence



• When looking at frequency, 5.4% of students said that they thought about committing suicide often or a lot. This is an increase from the 4.7% of students that reported thinking often or a lot about suicide in 2008.

Violence Indicators among Students, 2013

Violence Indicator	% of Students Surveyed
Have threatened a fellow student	19.4%
Have gotten in trouble with police	15.5%
Have been afraid at school	15.2%
Have been hurt at school	11.2%
Participated in gang activity	4.2%

Source: Catawba County Pride Survey, 2013

- The chart above details indicators surrounding violence and violent behaviors that Catawba County students reported in 2013. There are several significant decreases in these indicators from 2008, including the following:
 - Students reporting participation in gang activity has almost halved from 8.3% in 2008 to 4.2% in 2013.
 - There was a 33.56% decrease in students reporting threatening a fellow student, from 29.2% in 2008 to 19.4% in 2013.
 - There was a 36.7% decrease in students reporting getting into trouble with police, from 24.5% in 2008 to 15.5% in 2013.
- Of the 15.2% who reported being afraid that another student would harm them at school, 3.4% (11) students reported carrying a gun to school. Of the 11.2% of students who reported actually being harmed at school, 6.4% (15) reported carrying a gun to school.

- For every motor vehicle accident related death in 2012, there were 5.2 hospitalizations and 79.7 emergency department visits for motor vehicle related injuries.
- In 2012, 1,941 North Carolinians died as a result of violence. Out of these, 65.8% were suicides and 28.2% were related to homicide.
- The most common methods of violent death were firearms and poisoning.

Obesity



Overview

The incidence of obesity in the United States continues to rise. The Centers for Disease Control and Prevention (CDC) indicates that a majority of states (43), including North Carolina, have adult obesity rates above 25%. As of 2015, approximately two-thirds of the national population was overweight or obese.

Overweight and obesity are measured by body mass index (BMI), a number that calculates weight and height and, for most people, correlates to a person's amount of body fat. According to the CDC, adults with a BMI between 25 and 29.9 are considered overweight; those with a BMI of 30 or higher are considered obese.

For children and teens, BMI is calculated differently to account for normal differences in body fat between boys and girls and among various ages. Overweight for this group is generally defined as a BMI equal to or greater than the 95th percentile of BMI values on the CDC's growth chart. Even with these considerations, overweight and obese children are more likely to become overweight and obese adults. Childhood obesity is reaching epidemic proportions and is putting today's youth on a course to potentially be the first generation to live shorter, less healthy lives than their parents.

Being obese or overweight is a major factor in increasing one's risk for chronic diseases, such as diabetes, hypertension, and cardiovascular disease. Other health complications include asthma, sleep apnea, respiratory problems, and joint problems. More and more, these health issues are being diagnosed in overweight or obese individuals of all ages, including young children.

Catawba County Data

Prevalence of Overweight and Obesity among Adults, 2013 80 70 60 50 28.3 29.4 32.1 40 30 20 United States North Carolina NW AHEC

Source: State Center for Health Statistics, BRFSS, 2013

- The data above show relatively similar prevalence rates of adult overweight and obesity in the United States, North Carolina, and the BRFSS Northwest AHEC region, which includes Catawba County.
- The Northwest AHEC region has a lower prevalence of overweight, but a higher prevalence of obesity than the national and state levels.





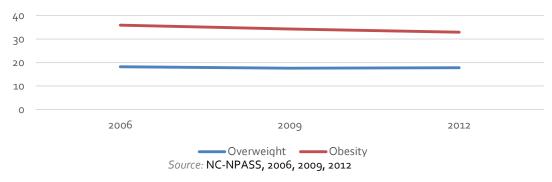
Percentage of Adults Overweight or Obese, 2015

Population	Overweight	Obese
Catawba County Total	29.36%	37.03%
Men	38.92%	34.28%
Women	26.66%	37.99%
White	28.91%	36.66%
African-American	29.32%	47.64%
High school or less	30.02%	37.29%
Some college +	28.87%	37.07%
Earning less than \$50,000	28.27%	40.81%
Earning \$50,000+	29.77%	34.00%

Source: 2015 Catawba County Community Health Opinion Survey

- According to the 2015 Catawba County Community Health Opinion Survey, 66.39% of adults surveyed in Catawba County were overweight or obese based on BMI data compiled from self-reported height and weight. Among those surveyed, local overweight incidence (29.36%) is lower than national, state, and regional percentages; however, obesity incidence (37.03%) is significantly higher in comparison.
- The incidence of overweight in men in Catawba County is significantly higher than in women, but a larger percentage of women are obese.
- Lower income respondents had a similar prevalence of overweight as those with higher incomes, but they show a significantly higher obesity rate.
- The African-American population has a similar percentage of overweight adults but has a slightly higher percentage of obese adults when compared to the white population.
- Approximately 20% of respondents whose BMI calculations indicated they are obese responded that
 they are not obese or that they have not been told by a healthcare provider they are obese. 27.29% of
 overweight respondents indicated the same about their weight status.

Prevalence of Overweight and Obesity, 2-to-4-year-old WIC Participants Catawba County, 2006-2012





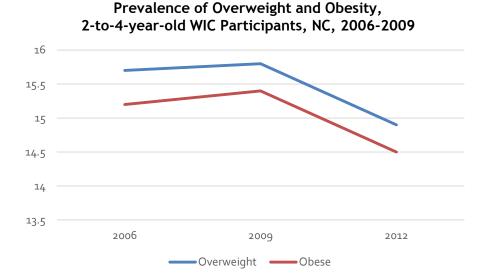
Obesity



- Catawba County has seen a net decrease in both the prevalence of overweight and obese low income 2-4 year old children participating in the WIC food benefit program from 2006 and 2012.
 - There was a 2.19% decrease in the prevalence of overweight young children from 18.2% in 2006 to 17.8% in 2012.
 - There was a 14.68% decrease in the prevalence of obese young children from 17.7% in 2006 to 15.1% in 2012.

State Data

Prevalence of adult overweight and obesity has remained relatively stable in the state since 2011. Overweight has risen from 36.0% in 2011 to 36.7% in 2013; and obesity has risen from 29.1% in 2011 to 29.4% in 2013. North Carolina's current total prevalence of overweight and obesity is 66.1%, 2.3% higher than the national prevalence.



Source: NC-NPASS, 2006, 2009, 2012

• Overall the state has seen a significant decrease in the prevalence of overweight and obesity among young children participating in the NC WIC program over the last six years. Overweight prevalence among two to four year olds has seen a net decrease from 15.7% to 14.9%, while obesity has seen a net decrease from 15.2% to 14.5%.

Oral Health



Overview

Poor oral health is a significant health problem experienced by many people in Catawba County and across the United States. Adults and children needlessly endure pain from oral diseases and disorders, tooth loss, and oral infections. Tooth decay ranks as one of the most common chronic diseases in the United States and worldwide. Complications of tooth decay can also lead to more serious conditions, such as cardiovascular disease, stroke, diabetes, and poor pregnancy outcomes.

The good news is that tooth decay and other oral diseases that affect our population are preventable. The combination of dental sealants and fluoride has the potential to nearly eliminate tooth decay in school-age children. No matter what age, access to dental treatment and preventive services, coupled with proper home care of teeth and good nutrition, can alleviate the unnecessary pain and medical complications associated with dental disease.

Catawba County Data

- According to the NC Health Professions Data System, the rate of dentists in Catawba County is 4.4 per 10,000 residents, comparable to the state rate of 4.5 per 10,000 residents.
- Currently, 10 of the 88 public water systems in Catawba County are fluoridated. This represents the
 following municipalities: Catawba, Claremont, Maiden, Longview, Newton, Conover, and Hickory. It
 should be noted that all public schools in Catawba County receive fluoridated water.
- According to North Carolina Assessment Data for the 2008-2009 school year, approximately 14% of Catawba County children entered kindergarten with untreated dental decay compared to 17% in North Carolina.

Children with Oral Health Issues, 2012-2013

	Catawba County	North Carolina
Average Number of Decayed, Missing and Filled Primary Teeth in Kindergarten	1.54	1.54
Percent of 5 th Graders with Permanent Teeth Free of Decay	81%	78%
Percent of 5 th Graders with Sealants	62%	45%

Source: State Center for Health Statistics, 2012-2013

- The average number of decayed, missing, and filled primary teeth for kindergarten children in Catawba County is the same as the state average.
- Both the percentage of fifth-graders free of decay and the percentage with sealants in Catawba County are higher than the state average.
 - Since 2008, there has been a 9.5% increase in the rate of fifth-graders in Catawba County with no decay, from 74% in 2008 to 81% in 2012-2013.



Oral Health



Adults Who Have Had Permanent Teeth Removed Due to Tooth Decay or Gum Disease, 2012

Northwest AHEC	North Carolina
52.8%	48.3%

Source: State Center for Health Statistics, BRFSS, 2012

• The Northwest AHEC area, a region including Catawba County, has a higher rate of adults with permanent teeth removed due to decay or disease than the state.

- North Carolina has surpassed three national Healthy People 2020 goals related to oral health:
 - 41.9% of third-graders in North Carolina have ever had a dental disease compared to the Healthy People 2020 goal of 49% or less.
 - 14.3% of third graders in North Carolina have untreated cavities compared to the national 2020 target of 25.9% or less.
 - 45.3% of third graders in North Carolina have had preventive dental sealants compared to the national 2020 goal of at least 28.1% or more
- North Carolina has also surpassed one of its Healthy NC 2020 goals related to oral health:
 - 57.3% of children aged one to five years enrolled in Medicaid received any dental service in 2012 compared to the state 2020 goal of at least 56.4% or more.

Preparedness



Overview

The terrorist attack of September 11, 2001 forever changed national, state, and local preparedness. Prior to the attacks, emergency responders were primarily responsible for being prepared and taking care of those requiring assistance. That responsibility has now broadened to include a variety of agencies in all jurisdictions.

North Carolina's Office of Public Health Preparedness defines preparedness as "enhancing the capability and readiness of public health and health care systems, communities, and individuals to identify, prevent, protect against, respond to, and recover from public health emergencies whose scale, scope, timing, or unpredictability threatens to overwhelm routine capabilities." It applies to manmade disasters, such as terrorist attacks, and natural disasters such as fires, tornadoes, floods, hurricanes, and evolving outbreaks of communicable disease. From a public health point of view, preparedness relates to any incident that may threaten or harm the health of residents on a large scale.

In the event of a local disaster, a coordinated and comprehensive crisis response strategy is critical to preventing harm and loss of life. Catawba County Public Health and Emergency Management (EM) staff members are trained in the Federal Emergency Management Agency's Incident Command System, which guides federal and state response to crisis situations. If a health emergency were to occur, partnerships and response plans are in place with Public Health, EM, Catawba Valley Medical Center (CVMC), Frye Regional Medical Center (FRMC), fire and law enforcement, and other response agencies. Public Health's role may include things such as distributing medication, staffing shelters or reception centers, or investigating outbreaks of foodborne illness.

Response strategies place a priority on assisting people with special needs. In the context of emergencies and disasters, a working definition of people with special needs includes members of the community with little or no ability to successfully address, implement, or be fully responsible for their own emergency preparedness, response, or recovery. This includes people whose life circumstances leave them unable or unwilling to follow emergency instructions, as well as anyone unable or willing to fully access or use traditional disaster preparedness and response activities.

Catawba County Data

- Catawba County Emergency Management and Public Health have enlisted additional training for staff
 to effectively handle preparedness related events. Public Health has a 100% completion rate for this
 training, well exceeding the state's 80% requirement.
- Public Health maintains a Medical Countermeasures (MCM) plan for mass distribution of medical countermeasures, which may include antibiotics, antivirals, vaccines, and antitoxins. The plan is updated annually to meet new state and federal standards, which are reviewed and scored annually to ensure compliance.
- Once every 5 years, each North Carolina county or health district is required to complete a full scale medical countermeasures dispensing exercise that is HSEEP (Homeland Security Exercise and Evaluation Program) compliant. In 2015, a full scale regional exercise was conducted among the 12 counties located within the CRI (Cities Readiness Initiative) emergency planning region: Anson, Cabarrus, Catawba, Cleveland, Iredell, Lincoln, Mecklenburg, Rowan, Stanly, and Union.
 - Catawba County Public Health (22 staff), Catawba County Emergency Management, and Catawba County Sheriff's Department participated in the exercise, which involved the following activities: opening and staffing Public Health Emergency Operations Centers in all 12 counties;



Preparedness



opening a Local Receiving Site in Iredell County; operating drive-through Points of Dispensing in Cleveland and Lincoln counties; and opening a Local Receiving Site and walk-up Point of Dispensing in Union County.

- Public Health periodically distributes free Potassium Iodide (KI) pills to Catawba County residents who live within the 10-mile Emergency Planning Zone (EPZ) around McGuire Nuclear Station for use in the event of a nuclear disaster. Most recently in 2014, 969 two-day doses of KI were distributed to 324 Catawba County households. Catawba County has approximately 1, 700 residents within the EPZ.
- Within Catawba County there are 28 pre-identified emergency shelter locations. The decision to open a specific shelter is based on the affected area(s) and need. Not all shelters would be operational for one singular event; use would be based on the magnitude of the incident and where it has occurred.
- In 2015, 946 residents were listed on the Emergency Assistance Database that is maintained by Catawba County Emergency Management with information obtained through self-registration and supplied by Catawba County Social Services, Public Health, and community partners.
- In response to the Ebola epidemic that emerged in Africa in 2014, Public Health facilitated joint Ebola preparedness activities with partner agencies including Emergency Management, Emergency Medical Services, Catawba Valley Medical Center, Frye Regional Medical Center, and Piedmont Pathology. This included the development of coordinated Ebola response plans in the event someone presented locally with the appropriate symptoms and travel history. The organizations participated in three tabletop exercises to test response to potential Ebola scenarios. In addition, both hospitals identified patient containment areas and practiced protocols for donning and doffing Personal Protective Equipment (PPE). Public Health staff spent more than 331.25 hours on these activities in the fall of 2014.

- It is estimated that in North Carolina, 13% of the population has a physical condition, functional need or disability that would require additional assistance if an emergency incident occurred.
- Since 2011, there have been five disaster declarations for North Carolina: 4/16/2011 for severe storms and tornadoes in 20 eastern counties; 8/31/11 for Hurricane Irene; 9/25/2013 for severe storms, flooding, landslides and mudslides during July 3-13, 2013; 10/29/2013 for severe storms, flooding, landslides and mudslides on July 27, 2013; and 3/31/2014 for a severe winter storm.



Senior Health



Overview

Adults age 60 and older are among the fastest growing age group in the nation. In the United States, this population numbered more than 62.8 million in 2013 and is projected to be about 77.6 million in 2020. By 2030, all baby boomers will be categorized as older adults.

Older adults who practice healthy behaviors (e.g., physical activity, nutritious diet, abstaining from tobacco); take advantage of medical preventive services (e.g., cancer screenings and immunizations); and continue to socialize and communicate with family and friends are more likely to remain healthy, live independently, and incur fewer health-related costs. Essential components to keeping older adults healthy are preventing chronic diseases, reducing associated complications, and engaging in physical activity. The ability to complete basic daily activities may decrease if illness, chronic disease, or injuries limit physical or mental ability of older adults.

Catawba County Data

- In Catawba County, 15.9% of the population or approximately 24,600 people are 65 years or older.
- In 2013, 9.1% of individuals in Catawba County age 65 and older were living below the poverty line.
- In 2010, 29.2% of older adults 65 years and older lived alone in Catawba County.
- In fiscal year 2013-2014, Catawba County Social Services assisted a total of 1,539 seniors by serving 119,726 meals through nutrition programs for older adults.
- A total of 117 accepted reports of older adult abuse, neglect, or exploitation were made through Adult Protective Services in 2013-2014. Through this process, 158 persons were provided services and 100% of confirmed reports did not experience a repeat violation.
- According to the 2015 Catawba County Community Health Opinion Survey, 20.75% of respondents indicated elder care options as a service needing the most improvement in the community.

Emergency Room Visits Attributed to Senior Falls 1850 1800 1811 1750 1700 1704 1694 1650 1656 1600 1550 2011-2012 2012-2013 2013--2014 2014-2015 Source: NC DETECT, ED Senior Falls, 2011-2015

 Since 2011, there has been a net increase in the number of emergency room visits attributed to falls among older adults in Catawba County.



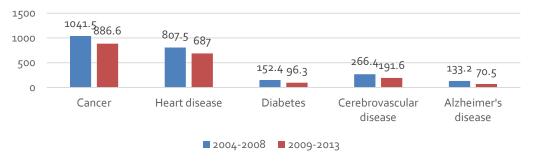
Leading Causes of Death in Catawba County, Ages 65-84, 2009-2013

	Rate per 100,000
1. Cancer- all sites	886.6
2. Diseases of the heart	687.0
3. Chronic lower respiratory diseases	364.4
4. Cerebrovascular disease	191.6
5. Diabetes mellitus	96.3
6. Nephritis, nephritic syndrome, & nephrosis	86.4
7. Pneumonia & influenza	74.5
8. Alzheimer's disease	70.5
9. Other unintentional injuries	65.5
10. Septicemia	51.6

Source: State Center for Health Statistics, 2009-2013, death rates per 100,000

- The causes of death listed for ages 65-84 reflect the leading causes of death for the total Catawba County population, but there are differences in rank depending on age. The top four causes of death among older adults in Catawba County match the top four causes of death among the overall population in the county. The biggest discrepancy is with Other Unintentional Injuries, which is ranked fifth among the total population but ninth among older adults.
- Alzheimer's disease ranks eighth in Catawba County among adults ages 65 to 84 but ranks third among adults 85 and older, which indicates increased mortality with age. Across all ages, Alzheimer's disease is the sixth leading cause of death in the county.

Trends in Senior Mortality Rates



Source: State Center for Health Statistics, Leading Causes of Death by Age, 2004-2008 & 2009-2013



Senior Health



Over the past five years, mortality rates attributed to chronic diseases among seniors in Catawba
 County have decreased. Most significantly, deaths from Alzheimer's disease have decreased by 47.07% and the diabetes death rate has decreased by 36.81%.

State Data

Leading Causes of Death in North Carolina, Ages 65-84, 2009-2013

	Rate per 100,000
1. Cancer- all sites	849.3
2. Diseases of the heart	652.7
3. Chronic lower respiratory diseases	250.2
4. Cerebrovascular disease	172.9
5. Diabetes mellitus	95.9
6. Alzheimer's disease	89.8
7. Nephritis, nephritic syndrome, & nephrosis	77.6
8. Pneumonia & influenza	63.3
9. Other unintentional injuries	59.0
10. Septicemia	57-3

Source: State Center for Health Statistics, 2009-2013, death rates per 100,000

• The table above shows the top 10 causes of death among older adults in North Carolina. While similar trends and rates can be seen in the state and the county, there are several differences. The top five causes of death, for example, are the same in both the county and the state, but there are slight differences in the ranking of Alzheimer's disease, nephritis, and pneumonia & influenza.

STDs and HIV/AIDS



Overview

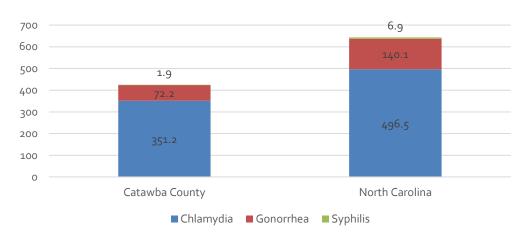
With up to 75% of sexually active men and women getting a sexually transmitted disease (STD) during their lifetime, STDs remain a major public health challenge in the United States. STDs are infections that are acquired and transmitted by intimate sexual contact. While substantial progress has been made in preventing, diagnosing, and treating certain STDs in recent years, the Centers for Disease Control and Prevention (CDC) estimates that 19 million new infections occur annually. Almost half of those are among young people 15 to 24 years of age.

Untreated STDs can lead to long-term health consequences, particularly for adolescent girls and women. The CDC estimates that untreated gonorrhea and chlamydia cause infertility in at least 24,000 women in the United States each year. In addition, disproportionately high rates of STDs are diagnosed among racial and ethnic minorities across the United States and North Carolina.

Public health law requires the reporting of chlamydia, gonorrhea, syphilis, and human immunodeficiency virus/acquired immune deficiency syndrome (HIV/AIDS) by local physicians, area hospitals, and health departments. Any positive lab result for these STDs is entered into the North Carolina Electronic Disease Surveillance System (NCEDSS) for tracking and follow-up. Because many cases of STDs go undiagnosed — and some common viral infections, such as human papillomavirus (HPV) and genital herpes, are not reported to CDC at all — reported cases of chlamydia, gonorrhea, syphilis, and HIV/AIDS represent only a fraction of the true burden of STDs in the United States.

Catawba County Data

Catawba County and North Carolina STD Rates, 2013



Source: North Carolina HIV/STD Surveillance Report, 2013, rate per 100,000 population

- Rates of STDs are lower in Catawba County than in NC.
- Data indicate a high incidence of chlamydia in both Catawba County (351.2) and NC (496.5). This
 mirrors a national increase in chlamydia infection.
- The incidence of gonorrhea in Catawba County (73.2) is roughly half the rate of infection statewide (140.1).

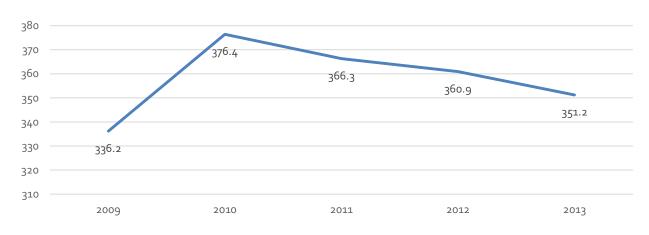


STDs and HIV/AIDS



The incidence of syphilis in Catawba County is 1.9 per 100,000; these rates are much lower than the statewide rate of 6.9 per 100,000.

Catawba County Chlamydia Rate Trend, 2009-2013



Source: North Carolina HIV/STD Surveillance Report, 2013, rate per 100,000 population

 The incidence of chlamydia diagnoses in Catawba County has decreased steadily since 2010 following a sharp increase in 2009.

HIV/AIDS Incidence, 2013

	Catawba County	North Carolina
HIV	6.5	15.6
AIDS	0.6	9.2

Source: N.C. Division of Public Health, Department of Health and Human Services, 2013, rate per 100,000 population

- HIV and AIDS rates per 100,000 are significantly lower in Catawba County than the state.
- The incidence rate of HIV diagnoses in Catawba County has decreased by 30.9% since the 2011 CHA, and the incidence rate of AIDS diagnoses has decreased by 88% during the same time period.
 - These trends do not directly mirror those at the state level. The state has seen only a 1.8% decrease in the incidence of HIV and has seen an almost 8% increase in the incidence of AIDS.

- According to the most recent 2011 state rankings, North Carolina ranked eighth highest in terms of new HIV diagnoses.
- According to the CDC, 47.3% of North Carolina high school students reported having sexual intercourse in 2013. Of those sexually active students, 39.2% did not use a condom.
- North Carolina is ranked 10th highest in terms of chlamydial infections. North Carolina women are 3.3 times more likely to become infected than men.



Substance Abuse



Overview

Alcoholism, excessive drug use, and addiction, collectively known as substance use disorders, are costly and complex problems. The majority of medical researchers and scientists now consider substance use disorder to be a long-term illness such as asthma, hypertension, and diabetes.

Across the country, substance abuse is rising among all age groups and genders. The rise is driven in large part by increases in marijuana use, which may in part be attributed to the legalization of marijuana in several states, as well as increased use of illicit drugs such as ecstasy and methamphetamines. The nonmedical use of prescription drugs has also risen in dramatic proportions nationwide and is considered a root cause of the concurrent rise in heroin use.

Substance abuse prevention, diagnosis, and treatment are difficult for several reasons. Many individuals with substance abuse problems either do not recognize they have a problem or do not seek treatment. The few who do seek treatment may encounter problems accessing the help they need due to service availability or cost.

Within the broad category of substance abuse, two categories are of particular relevance to national trends:

Alcohol Use Disorder: After much controversy, new revisions have been made to the Diagnostic and Statistical Manual of Mental Disorders (DSM) that no longer characterize alcohol abuse and alcohol dependence as two separate categories. They now recommend a single diagnosis, known as alcohol use disorder, which is thought to better match the symptoms that patients experience. The previous standalone diagnosis of alcohol dependence caused confusion because individuals equated alcohol dependence with addiction. However, dependence can also be the body's normal response to using a substance. Under the new guidelines, there is only one diagnosis of alcohol use disorder, but with the distinction of mild, moderate, or severe.

Prescription Drug Abuse: Prescription opiate abuse is defined as the use of prescription painkillers in a way that is not intended by the prescribing doctor. Prescription drug abuse or problematic use includes everything from taking a friend's prescription painkiller for a backache to snorting or injecting ground-up pills in order to get high. Prescription opiate abuse can affect all ages. Opioid painkillers, sedatives, anti-anxiety medications, and stimulants are among the prescription drugs that are most abused. Because of their highly addictive qualities, prescription opiates are considered a potential gateway to heroin use and addiction. However, early identification and early intervention may prevent the problem from turning into an addictive behavior.

Catawba County Data

- According to 2013 Behavioral Risk Factor Surveillance System (BRFSS) data, 10.7% of respondents in the Northwest AHEC region (which includes Catawba County) reported binge drinking within the last month. Binge drinking is defined as drinking a high number of alcoholic beverages over a short period of time with the primary intention of getting intoxicated.
- A report produced by the NC Disease Event Tracking and Epidemiologic Collection Tool (NC DETECT) indicates that in Catawba County, substance abuse was related to 3.79% of all emergency room visits in 2013.
- Data gathered directly from NC DETECT shows that from September 2014 through August 2015:
 - Of a total 90,094 emergency department visits, 0.48% (433) were attributed to drug overdose. Of those overdoses, 171 were classified as unintentional.
 - Approximately 13% (57) of reported drug overdoses in Catawba County were related to prescription opioids. A total of 20 overdoses (4.6%) were related to heroin.



Substance Abuse



- Catawba County Public Health partnered with the NC Division of Public Health Injury and Violence
 Prevention Branch to analyze data related to prescription opioid drug use across the year spanning June
 2014 to May 2015. This data was provided to the local Project Lazarus coalition to support and inform
 local prevention efforts. Results of the analysis show the following:
 - A total of 35 overdoses were classified as both unintentional and related to prescription opioids. This is 8.08% of the total number of overdoses seen that year.
 - A majority of prescription opioid overdoses (80%) were among people between 30 and 90 years of age.
 - Previous mental health disorder diagnoses were listed in 29% of prescription opioid overdoses.
 - Alcohol abuse was listed in 15% of the prescription opioid overdose records.

Percentage of Catawba County Students Reporting Substance Abuse, 2013-2014

J	Within the last year %	Within the last month %
Alcohol	30.9	17.3
Tobacco	17.8	11.4
Marijuana	17.4	11.8
Cocaine	3.5	1.8
Inhalants	2.9	1.4
Hallucinogens	3⋅5	1.7
Heroin	1.9	1.4
Steroids	2.3	1.5
Ecstasy	3.2	1.4
Methamphetamine	2.0	1.4
Prescription Drugs	7.1	4.2
Over the Counter Drugs	4.5	2.4
Any Illicit Drug	19.8	13.7

Source: PRIDE Student Questionnaire, 2013-2014

- Results from the 2013-2014 PRIDE Student Questionnaire (representing a random sample of students in grades 6,8,10, and 12 from all three Catawba County public school systems) indicate:
 - Alcohol, tobacco, and marijuana are the substances most often used by Catawba County youth, with alcohol being the substance of choice.
 - The majority of students surveyed use substances at a friend's house (16.4%). By comparison, 11.4% of students report using alcohol at home. This could suggest the need for future intervention efforts aimed at addressing parental influence.
 - The percentage of students reporting using alcohol in the last year dropped significantly from 43.5% in 2008 to 30.9% in 2013.



Substance Abuse



- Tobacco use dropped by just over 30% from 2008, when 25.6% students reported using tobacco products within the last year; in 2013, only 17.8% reported the same.
- The average ages of first use of tobacco and alcohol in Catawba County are 13.8 and 13.9, respectively.
- Overall, there is a lower perception of risk associated with substance use among students in 2013 than in 2008. Fewer students are reporting that they see a moderate or great risk associated with alcohol, tobacco, and marijuana use.
- 10.2% of students surveyed indicated they have been passengers in a car driven by someone who had been drinking alcohol one or more times in the past month.

- BRFFS data from 2013 shows that 13.0% of North Carolinians report binge drinking in the last month.
- Data gathered from NC DETECT shows that from September 2014 through August 2015:
 - Of a total of 4,818,898 emergency department visits, 0.46% (22,196) 4,818,898 *0.46% = 22,167 were attributed to drug overdose. Of those overdoses, 8,493 (38.26%) were classified as unintentional.
 - Approximately 8.9% (1,985) of reported drug overdoses in North Carolina were related to prescription opioids.
 - There was also a total of 1,254 overdoses (5.6%) related to heroin.
- Since 1999, the number of medication or drug poisonings or overdoses has increased by 235% from 363 to 1,215 in 2013.
- Prescription opioids accounted for more 50% of medication or drug poisoning deaths in 2013.
- The number of heroin deaths in North Carolina has tripled from 45 deaths in 2011 to 171 deaths in 2013.

Teen Pregnancy



Overview

Teen pregnancy and childbearing carry substantial social and economic costs through both immediate and long-term impact on teen parents and their children. Teen mothers are more likely to drop out of school, have lower educational attainment and income, and incur increased demand for healthcare and foster care services. Growing percentages of teen moms are also likely to have subsequent (two or more) pregnancies during their teen years. Their children are more likely to have lower school achievement, higher school dropout rates, higher incarceration rates, higher teen birth rates, and higher unemployment rates in adulthood.

Teen pregnancy prevention programs are occurring on a local level through North Carolina House Bill 88's Healthy Youth Act, which passed in 2009. The Healthy Youth Act requires North Carolina schools to provide age-appropriate comprehensive sex education using evidence-based methods for students beginning in seventh grade. Previously, the only sex education that was permitted in most schools in Catawba County was related to the abstinence-only model. The comprehensive model includes education regarding the use of contraceptive methods, STDs, and dating violence. Although North Carolina mandates that comprehensive sex education is provided in all schools, parents may exclude their children from participating. All three school districts in Catawba County have updated their Comprehensive Health Education Program policies since the passing of the Healthy Youth Act to reflect this change is legislature.

Catawba County Data

Teen Pregnancy Rates, Ages 15-19, per 1,000, 2013

	Catawba County	North Carolina
White population	26.2	24.7
African-American population	54.8	49.2
Hispanic/Latino population	52.3	57.9
Total population	33.0	35.2

Source: State Center for Health Statistics, 2013, rates per 1,000

- Since 2009, Catawba County's total teen pregnancy rate has decreased by 40.86% from a rate of 55.8 in 2009 to 33.0 in 2013. This decrease is seen across all races and mirrors decreases seen at the state level.
- The teen pregnancy rate for Hispanics (52.3) in Catawba County is almost double the rate of white teenage pregnancies (51.8). However, this rate has more than halved since 2009 and has dropped below the rate of African-American teenage pregnancies.
- Catawba County has lower rates of total teenage pregnancies and pregnancies among Hispanic teens than those of the state.
- 26.4% of pregnancies among 15-19 year olds in 2013 were repeat pregnancies.
- Catawba County ranks 58th in teen pregnancy rates among North Carolina counties.



Teen Pregnancy



- Over the last twenty years, the teen pregnancy rate in North Carolina has decreased by 53%.
- Since the 2011 CHA, the Adolescent Pregnancy Prevention Campaign of North Carolina (now SHIFT NC), brought together a group of experts and stakeholders to review teen pregnancy across the state. That group set forth a goal for North Carolina to reduce teen pregnancy by 30% by 2020.
- The state is well on its way to meeting its 2020 goal. Since 2011, teen pregnancy has dropped from a rate of 43.8 to 35.2, just shy of the 30% goal of 34.8 with five more years to go.





Following is a directory of healthcare resources in Catawba County that has been compiled from a variety of sources, including Catawba County's local hospitals and human service agencies. For some time, Catawba County has had a fairly consistent number of primary care physicians and dentists relative to the county's population size. Residents also have access to a variety of specialized services within the county or through relationships with medical and/or trauma centers in outlying areas (notably Charlotte and Winston-Salem).

It is anticipated that demand for more providers who accept Medicaid – from primary care providers to specialty practices – will continue to grow. Specialty physicians are also needed to provide care to patients referred from the county's low-cost/free clinics. An expansion of transportation options is also needed.

Hospitals

Catawba Valley Medical Center 810 Fairgrove Church Road SE Hickory, NC 28602 (828) 326-3000

Physician Referral Line: (828) 324-2273

Frye Regional Medical Center 420 North Center Street Hickory, NC 28601 (828) 315-5000

Low-cost/Free Clinics

Catawba County Public Health 3070 11th Ave. Dr. SE Hickory, NC 28602 (828) 695-5800 (Immunizations, Adult Health, Women's Preventive Health, & WIC)

Catawba Family Care 133 1st Ave. SE Hickory, NC 28602 (828) 994-4544

The Community Health Center Greater Hickory Cooperative Christian Ministry 31 1st Avenue SE Hickory, NC 28602 (828) 327-0979

Family Healthcare Practice 130 1st St. NW Conover, NC 28613 (828) 466-3000 Mission Medical Practice 105 N. Main Avenue Newton, NC 28658 (828) 466-2330

St. Joseph's Catholic Church Good Samaritan Clinic 720 W. 13th Street Newton, NC 28658 (828) 465-2878

Veterans' Community Based Outpatient Clinic 2440 Century Place SE Hickory, NC 28602 431-5600

Upper Room Family Care 105B N. Main Ave. Newton, NC 28658 (828) 465-6800

Additional Healthcare Resources

AIDS Leadership Foothills Area Alliance (ALFA), 322-1447
Apollo Healthcare Cooperative, 256-1471
Medicaid Family/Children, Social Services, 695-5712
Medicaid Adult – Social Services, 695-5692
Pregnancy Care Center, 322-4272
Services for the Blind, 695-5605
Services for the Deaf/Hard of Hearing, (800)205-9920

Affordable Care Act Enrollment

Catawba Family Care, 994-4544





Child Care Assistance

Catawba County Day Care Unit, 695-5721 Children's Resource Center, 695-6565 Community Schools Program, 464-9355

Counseling Clinics/Referrals

Catawba DSS Options Counseling, 695-5609
Catawba Valley Behavioral Healthcare, 695-5900
Children's Advocacy Center, 465-9296
Cornerstone Counseling, 322-4941
Crossroads, 327-6633
Family Guidance Center/First Step, 322-1400
FamilyNET, 695-6500
New Directions, 267-1740
Partners Behavioral Health Management, 327-2595
The Counseling Group, 322-8736

Crisis Assistance

Catawba Valley Legal Services, 1-800-849-5195
Child Support Unit/Social Services,
695-5611 or 695-5612
Christian Community Outreach Ministry, 328-1803
Consumer Credit Counseling, 322-7161
Eastern Catawba Cooperative Christian Ministry,
465-1702
Family Care Center, 324-9917
Greater Hickory Cooperative Christian Ministry,
327-0979
Rape Crisis Center, 322-6011
Safe Harbor Rescue Mission, 326-7233
Salvation Army, 322-8061
Social Services General Assistance Fund, 695United Way Volunteer Center, 324-4357 or 327-6851
Women's Resource Center, 322-6333

Cultural Resources

Centro Latino, 441-2493 Hmong Carolinas, Inc., 327-6137

Food Assistance

Eastern Catawba Cooperative Christian Ministry, 465-1702 Food Assistance/Social Services, 695-5693 or 695-5694 Greater Hickory Cooperative Christian Ministry, 327-0979 Hickory Church of Christ, 464-4983 Hickory Soup Kitchen, 327-4828
Highways and Hedges, 781-8095
Living Word Fellowship, 325-4773
Meals on Wheels/Social Services, 695-5610
St. John's Lutheran Church, 464-4071
The Corner Table, 464-0355
Women, Infants & Children (WIC), 695-5884

Health Programming

Catawba County Cooperative Extension, 465-8240 Catawba County Public Health, 695-5800 Council on Adolescents, 322-4591 CVMC Health First Center, 485-2300 Frye Regional Medical Center, 315-3391 Solmaz Institute, Lenoir-Rhyne Univ., 328-7886 YMCA of Catawba Valley, 324-2858 YMCA Diabetes Prevention Program, 324-2858 YMCA Livestrong, 464-6130

Parenting/Family Support

Child Service Coordination, 695-5771
Children's Developmental Services Agency, 267-6464
Early Childhood Resource Center, 695-6505
Family Builders, 465-8901
Family Guidance Center, 322-1400
FamilyNET, 695-6500
Family Support Network, 256-5202
Parents as Teachers, 358-6112
Parenting Network, 465-9295
Safe Kids Catawba County, 485-2300
Single Parent Association, 1-800-704-2102

Poison Control

NC Poison Control Center, 1-800-222-1222

Prescription Assistance

Bowman Drug Company, Conover, 464-1354 Catawba County Council on Aging, 328-2269 Catawba County NACo Discount Drug Plan, 695-5714 Greater Hickory Cooperative Christian Ministry, (828) 327-0979 NC MedAssist, www.medassist.org





Senior Resources

Area Agency on Aging, 322-9191 Catawba County Council on Aging, 328-2269 Senior Information Resource (SIR), http://sirnc.org/

Shelters

5th Street Shelter, Statesville, 704-872-4045 Blue Ridge Community Action (Weatherization & Repairs), 438-6255 Family Care, 324-9917 Family Guidance/First Step, 322-1400 Grace House Day Program, 324-9957 Habitat for Humanity, 328-4663 Safe Harbor Rescue Mission, 326-7233 Salvation Army, 322-8061

Transportation

ACS Road to Recovery, 1-800-227-2345 Diamond Cab & Yellow Cab, 322-5555 Greenway Bus & Vans, 464-9444 Medicaid Transportation /Social Services, 695-5608 Newton Yellow Cab, 465-0000

Tobacco Cessation

Catawba Valley Medical Center, 485-2300 Frye Regional Medical Center, 315-3596

<u>Tutoring</u>

Catawba County Schools, 695-2600 Centro Latino, 441-2493 Early Head Start, 327-3689 Head Start, 464-8875 Hickory Public Schools, 322-2855 International Newcomer Center, 855-9387 Newton-Conover Public Schools, 464-3191 Smart Start, 695-6505

Suicide Prevention

National Suicide Prevention Lifeline, 1-800-273-TALK (8255)

Substance Abuse

Cognitive Connection Counseling Group, 327-6026 Exodus Homes, 324-4870 FamilyNET, 695-6500 Flynn Home, 324-8767 McCleod Center, 464-1172, 1-855-824-9458 Partners Behavioral Health Management, 327-2595 Rudisill Family Practice, 322-5915

Online Resource Directories

Area Agency on Aging Resource Directory for Older Adults

http://www.wpcog.org/vertical/Sites/%7BE99D40D7-DoC1-44A4-88D1-

14077F3EBFA6%7D/uploads/Res_Dir2012.pdf
Catawba County Partnership for Children's Parent
Helpbook

http://catawbakids.com/parent-helpbook/





Physician Directory

Allergy & Asthma
Hickory Allergy & Asthma Clinic
220 18th St Cr SE
Hickory, NC 28602
Phone: 828-322-1275
Inglefield, Joseph T. MD

Anesthesiology
Western Piedmont
Anesthesiology
PO Box 488
Conover, NC 28613
Phone: 800-221-5630 ext 2031
Chimiak, James M. MD
Gildersleeve, Ronald C. MD
Harline, Corbin DO
Hill, Thomas R. MD
McKenney, Todd W. MD
Rinaldo, Frank E. MD
Williams, Larry T. MD

Cardiology

Catawba Valley Cardiology 3521 Graystone Place, SE Conover, NC 28613 Phone: 828-326-2354 Luney, Derek J. MD Steg, Brian D. MD

Piedmont Cardiology Associates 2660 Tate Blvd SE Hickory, NC 28602 Phone: 828-261-0009 Alexander, Daniel DO Alkoutami, Ghassan N. MD Morrison, John A. MD Paspa, Philip A. MD Patrone, Vincent J. MD Rerkpattanapipat, Pairoj MD Schultz, Richard D. MD Stern Cardiovascular Clinic 4324 Quail View Road Charlotte, NC 28226 Phone: 980-355-1959 Stern, Herbert J. MD

The Sanger Clinic
1001 Blythe Blvd, Ste 300
Charlotte, NC 28203
Phone: 704-373-0212
Bengur, Ahmet R. MD
Bensky, Andrew S. MD
Herlong J. Rene MD
Paolillo, Jr., Joseph, MD
Riopel, Donald A. MD
Sliz, Nicholas B. MD
Smith, Richard T. MD

Western Piedmont Heart Centers /Hickory Cardiology Associates, PLLC 1771 Tate Blvd SE - Ste 201 Hickory, NC 28602 Phone: 828-324-4804 Dy, Johnny R. MD Hearon, Brian P. MD Isserman, Steven M. MD McDonald, R. Norman MD Miller, Ryan V. MD Patel, Sanjay K. MD Ross, Andrew M. MD Wiley, Thomas M. MD

Catawba Mammography Phone: 828-326-3858

Dentistry

Catawba Family Dentistry 3070 11th Ave. Dr. SE Hickory, NC 28602 (828) 695-5778 Hunter-Riley, Jennifer, DDS P. Jeffrey Lowe, DMD, PA 430 W. 20th St. #2 Newton, NC 28658 (828) 464-2151 Lowe, P. Jeffrey DMD

Joshua M. Millsaps, DDS 935 4th St. Dr. NE Hickory, NC 28601 (828_ 322-2977 Millsaps, Joshua DDS

Christopher N. Reese, DDS, PA 3034 N. Oxford St. Claremont, NC 28610 (828) 202-3854 Reese, Christopher DDS

Dale Spencer, DDS 1170 Fairgrove Church Rd SE Hickory, NC 28602 Phone: 828-328-6118 Spencer, Dale E., DDS

Michael Wimberly, DDS 1183 Fairgrove Church Rd SE Conover, NC 28613 Phone: 828-466-2488

Pediatric Dentistry
Growing Smiles Pediatric
Dentistry
430 West 20th St
Newton, NC 28658
Phone: 828-464-9220
Penland, Ross, DMD

S. Kimberly Jones, DDS 1204 N. Center St. Hickory, NC 28601 (828) 327-9029 Jones, S. Kimberly DDS





Smile Starters 508 10th St. NW Conover, NC 28613 Phone: 828-469-3000

Dermatology

Hickory Dermatology 1985 Tate Blvd SE Hickory, NC 28602 Phone: 828-328-4449 Salomon, Richard J. MD Wold, Karen T. MD

Piedmont Plastic Surgery & Dermatology-Hickory 1771 Tate Blvd SE, Ste 202 Hickory, NC 28602 Phone: 828-325-9849 Bergamo, Bethany M. MD Johnson, Charles S. MD Magel, George MD Curtis-Yount, Jessica PA-C Johnston, Casey PA-C

Piedmont Plastic Surgery & Dermatology-Viewmont 245 11th Ave. NE Hickory, NC 28601 (828) 328-3500 Hunt, Dori L. MD Pruitt, Jerry L. MD

Reed Dermatology 1870 N Center St Hickory, NC 28601 Phone: 828-322-7546 Reed, Charles N. MD Sorrentino, Brian PA-C

Emergency Medicine

Catawba Valley Emergency Physicians 810 Fairgrove Church Rd SE Hickory, NC 28602 Phone: 828-326-3850 Crain, Bert J. MD Curtis, Rachel, L. MD Einfalt, Eric S. MD
Einstein, Norman Z. MD
Fisher, William G. MD
Geertz, Christopher E. MD
Giometti, Jon. MD
Greer, Gary W. MD
Huggins Jr, H. Lawson MD
Wesselman, David M. MD
Williamson, Steven G. MD

Endocrinology

Piedmont Endocrinology 311 9th Ave Dr NE Hickory, NC 28601 Phone: 828-322-7338 Barber, A. Rodman. MD Donepudi, Venkatarama S. MD Orozco, Ian MD Woods, Michelle PA

Ear, Nose, and Throat

Carolina ENT Head & Neck 304 10th Ave NE Hickory, NC 28601 Phone: 828-322-2183 Cost, Jamey L. MD Griesen, Dawn E. MD Harrill, Willard C. MD Jarrett, William A. MD Mauldin, Frank W. MD Seshul, Merritt J. MD Williams Jr, Robert C. MD

Family Medicine

Bethlehem Family Practice 174 Bolick Lane - Ste 202 Taylorsville, NC 28681 Phone: 828-495-8226 Faruque, Mark A. MD Vass-Eudy, Kimberly R. DO

Catawba Family Practice 200 2nd St SW PO Box 914 Catawba, NC 28609 Phone: 828-241-2377 Chi, H.Y., MD Catawba Valley Family Care 105 B South Main Ave. Newton NC 28658 Phone: 828-464-7770 Patel, Shital MD

Catawba Valley Family Medicine-Catawba 200 Rosenwald School St. Catawba, NC 28609 (828) 241-2377 Fox, Jim PA-C

Catawba Valley Family Medicine-Claremont 2890 S Lookout St Claremont, NC 28610 Phone: 828-459-7324 Bailey, Amanda DO

Catawba Valley Family Medicine-Maiden 137 Island Ford Rd Maiden, NC 28650 Phone: 828-428-2446 Chesson, Andrew L. MD McManus, Keith MD Stump, Teresa DO Pressler, Cindy PA-C

Catawba Valley Family Medicine-Medical Arts 24 2nd Ave. NE Hickory, NC 28601 Phone: 828-328-2231 Burton, Michael MD Glenn, Robert MD Leonard, Baxter MD Polster, Scott MD Tridico, Trina MD





Catawba Valley Family Medicine-Mt. View 2712 S NC 127 Hwy Hickory, NC 28602 (828) 330-0511 Witke, Christopher MD Lucia, Christi FNP

Catawba Valley Family Medicine-North Hickory 212 29th Ave NE Hickory, NC 28601 Phone: 828-326-0658 Sanderson, Steven L. MD

Catawba Valley Family
Medicine-Northeast Hickory
2386 Springs Rd NE
Hickory, NC 28601
Phone: 828-256-2112
Hamilton-Brandon, Gail MD
Kauth, Brian G. MD
Moua, Jacques Txuj Ci MD
Ramos, Jennifer FNP-C

Catawba Valley Family Medicine-Southeast 6127 S Hwy 16 PO Box 809 Denver, NC 28037 Phone: 704-483-0340 Restino, Elizabeth MD Alexander, Julia PA-C

Catawba Valley Family Medicine-Taylorsville 50 Macedonia Church Rd. Suite A Taylorsville, NC 28681 Merrill, Steven MD Okuboye, Deji DO Duckworth, Joy NP-C Millsaps, Tonya PA-C Catawba Valley Family Medicine-Viewmont 221 13th Ave Pl NW Hickory, NC 28601 Phone: 828-324-1699 Summers, Shane O., MD Andrews, Maureene PA-C

Catawba Valley Family Medicine-West Mtn. View 1940 Briarwood Drive Suite A Hickory, NC 28602 (828) 294-1116 (option #1) Kihneman, Jason MD Lutz, Michael PA-C Matlock, Penny FNP-C

Catawba Valley Family Medicine-South Hickory 1985 Startown Road Suite 102 Hickory, NC 28602 (828) 327-4745 Sykes, Paul MD Benton, Cammy MD

Catawba Valley Family Medicine-Sandy Ridge 2820 16th St. NE Hickory, NC 28601 (828) 304-0840 Goodman, Benjamin MD Brooks, Gregory MD

Conover Family Practice Crown HealthCare, PA PO Drawer 1239 Conover, NC 28613 Phone: 828-464-3821 Coffey III, David G MD Long, William E. MD Michael, Douglas W. MD Vierling, Brian S. MD Mull, Cameron FNP-C Sigmon, Alicia PA-C Crossroads Family Medical Care 3121 Plateau Rd Newton, NC 28658 Phone: 704-276-9200 Parker, Bill Jack MD

Generations Family Medicine Crown HealthCare, PA 212 29th Ave NE Hickory, NC 28601 Phone: 828-485-2762 Caporossi, Lisa M. MD Chambers, Dana L. MD

Bruce M Goodson, MD 1251 16th St NE Box 11223 Hickory, NC 28603 Phone: 828-322-7700 Goodson, Bruce M. MD

Graystone Family Healthcare 3511 Graystone Place Conover, NC 28613 Phone: 828-326-9355 Gold, Steven A. MD Laney Jr, Thomas MD

Greater Hickory Family Practice 2336 1st Ave SW Hickory, NC 28602 Phone: 828-431-4988 Gill, Daniel N. MD

Hart Family Practice 221 13th Pl NW - Ste 202 Hickory, NC 28601 Phone: 828-322-8484 Cavendish, Aimee, MD Hart, R. Eric MD

Mountain View Family Practice 1940 Briarwood-Suite A Hickory, NC 28602 Phone: 828-294-3116 Hoover, Don L. MD





Newton Family Physicians
Newton Family Physicians, PA
767 W 1st St
Newton, NC 28658
Phone: 828-465-3928
Forshey, Alan G. MD
Lopina, Bart J. MD
Peltzer, David E. MD
Sherfey, Shannon M. MD
Story, Alan W. MD
Manus, Tonya FNP
Moretz, Dana Marie FNP
Pruett, Kari FNP

Rudisill Family Practice 211 A Hwy 127 South Hickory, NC 28602 Phone: 828-322-5915 Rudisill, Elbert MD Cabaniss, Bill PA-C

Springs Road Family Practice 2359 Springs Road Hickory, NC 28601 Phone: 828-256-9853 Faltermayer, Jr., William MD Nelson, John D. MD

Unifour Family Practice 2874 S. NC 127 Hickory, NC 28602 Phone: 828-294-4100 Duralia, David R. MD Lee, Robert H. MD

Gastroenterology

Gastroenterology Associates 415 N Center St - Ste 300 Hickory, NC 28601 Phone: 828-328-3300 Allport, Simon J. MD Diamonti, Gregory N. MD Koscheski, Caroll D. MD Meier, John H. MD Nikrooz, Susan MD Richardson, Gaa O. MD Sura, Siddharth MD Wright, Frank D. MD Ellis, Justin PA-C Hilliard, Michelle PA-C

Lawrence M. Caldwell II, MD 24 S Brady Ave PO Box 849 Newton, NC 28658 Phone: 828-464-4550 Caldwell II, Lawrence M. MD

Gynecology

A Woman's View 915 Tate Blvd SE - Ste 170 Hickory, NC 28602 Phone: 828-345-0800 Bilhorn, Denise MD Lovin, Vickie W. MD Walsh, Alicia MD

The Woman's Clinic 1205 N Center Street Hickory, NC 28601 Phone: 828-328-2901 Bishopric, F. Alice, MD Merta, Steven R. MD Carroll, Nicole S. MD

Catawba Women's Center 1501 Tate Blvd SE - Ste 201 Hickory, NC 28602 Phone: 828-322-4140 Boyd, Robert D. MD

Infectious Disease

Hickory ID Consultants 810 Fairgrove Church Rd SE Hickory, NC 28602 Phone: 828-326-2145 Williams, Wheaton J. MD

Internal Medicine

Adult Internal Medicine, PA 21 18th Ave NW Hickory, NC 28601 Phone: 828-267-2246 Carter, Lawrence S. MD Bowen Primary & Urgent Care 2365 Springs Rd. NE Hickory, NC 28601 (828) 325-0950 Bowen, Samuel T. MD Orton, Jonathan MD

Catawba Valley Internal Medicine 1771 Tate Blvd - Ste 103 Hickory, NC 28602 Phone: 828-322-1128 Hughes, Garland L. MD Miller, Douglas P. MD Moseley, Jonathan A., MD Shenoy, Nitin P. MD

Internal Medicine & Psychiatric Services of the Piedmont, PLLC 50 Cloninger Mill Road Hickory, NC 28601 Phone: 828-325-0555 Myles, Sidney L., MD

Swisher Internal Medicine 30 13th Ave NW Hickory, NC 28601 Phone: 828-324-0100 Swisher, Jenette T. MD Geerdes, Korey PA

Neonatology

Neonatology & Pediatric Acute Care Specialists, Inc 352 2nd St NW PO Box 1305 Hickory, NC 28603 Phone: 828-345-0877 Berry, David B. MD Wellman, Samuel D. MD





Nephrology

Hickory Adult Medicine & Kidney Specialists 1344 N Center St Hickory, NC 28601 Phone: 828-326-8888 Pisel, Gregory A. MD

Piedmont Nephrology & Hypertension Associates 1899 Tate Blvd SE - Ste 2101 Hickory, NC 28602 Phone: 828-327-7788 Harvey, David L. MD Higerd, Michele L. MD Paul, Richard V. MD

Neurology

Armstrong Neurology 1622 Tate Blvd. SE Hickory, NC 28602 Phone: 828-855-2406 Armstrong, James A. MD

Neurology Associates 1985 Tate Blvd SE - Ste 600 Hickory, NC 28602 Phone: 828-328-5500 Menard, Dale A. MD Weymann, Catherine, A.MD Yapundich, Robert A., MD

Neurosurgery

Catawba Valley Neurosurgical and Spine Services 915 Tate Blvd - Ste 120 Hickory, NC 28602 Phone: 828-327-6433 McCloskey, Scott M. MD Miller, Peter D. MD, PhD

Piedmont Neurosurgery, PA 1899 Tate Blvd SE, Ste 2108 Hickory, NC 28602 Phone: 828-327-6500 Jones, David M. MD

Obstetrics/Gynecology

A Woman's View
915 Tate Blvd SE – Ste 170
Hickory, NC 28602
Phone: 828-345—0800
Faruque, Laura MD
Gonzalez, Anne MD
Harraghy, Claire MD
Montes, Anita MD
Curtis, Dara CNM
Herman, Teri NP
Trivette, Janese NP

Catawba Women's Center 1501 Tate Blvd SE - Ste 201 Hickory, NC 28602 Phone: 828-322-4140 Chase, Stephanie MD Chatham, Scott T. MD Dufour Jr, Harold C. MD Highland, Robert A. MD Toy, Nancy J. MD Walker, Jason A. MD Whitton, Allison C. MD Helminen, Jessica NP Monroe, Pamela NP Zook, Kathy NP Brumley, Jamie CNM Howell, Sybilla CNM Stites, Kimberly CNM

Women's Institute-CMC
Maternal Fetal Medicine
1025 Morehead Medical Drive,
Ste. 500
Charlotte, NC 28204
Phone: 704-355-3149
Ernest, Joseph, MD
Joy, Saju, MD

Piedmont Ob/Gyn 210 13th Ave PI NW Hickory, NC 28601 Phone: 828-322-3017 Goins, James R. MD Locklear, Brandon E. MD McDonell, Charles F. MD-GYN Richardson, Ryan N. MD
Oncology/Hematology
Carolina Oncology Specialists
2406 Century PI, SE
Hickory, NC 28602
PO Box 3710
Hickory, NC 28603
Phone: 828-324-9550
Orlowski, Richard N. MD

Oncology/Radiation

Tate, Michael N. MD

Southeastern Radiation Oncology 810 Fairgrove Church Rd SE PO Box 2654 Hickory, NC 28603 Phone: 828-326-3856 DelCharco, John O. MD Sigmon Jr, W. Reginald MD Tomlinson, Shannon K. MD

Oral Surgery

Brown and Neuwirth 261 18th St Cr SE Hickory, NC 28602 Phone: 828-327-7867 Brown, Christopher H. DDS Neuwirth, Bryan R. DDS, MD

Drs. Darab, & Richardson 3452 Graystone PI SE PO Box 2526 Hickory, NC 28603 Phone: 828-322-1667 Darab, David J. DDS Richardson, Paul E. DDS

Ophthalmology

Graystone Ophthalmology Associates 2424 Century PI, SE Hickory, NC 28602 PO Box 2588 Hickory, NC 28603 Phone: 828-322-2050 Adair, Brian C. MD





Chang, Richard I. MD
Hargrove, Roderick N. MD
Harris Jr, James W. MD
Joslyn, Ann K. MD
Kelty, Patrick J., MD
Oursler III, Ralph E. (Trey) MD
Williams, Randal J. MD
Williams, T. Reginald MD

Southeastern Eye Center 27 13th Ave NE Hickory, NC 28601 Phone: 828-322-6040 *Kirk A. Murdock MD*

Orthopaedics

Carolina Orthopaedic **Specialists** 2165 Medical Park Dr Hickory, NC 28601 Phone: 828-324-2800 Brazinski, Mark S. MD Campbell, Donald A. MD Daley, Christopher T. MD dePerczel, John L. MD Geissele, Alfred E. MD Keverline, Jeffrey P. MD Kirkland, Timothy H. MD Martin, Christopher R. MD Maxy, Ralph J. MD Sladicka, Stephen J. MD Tiffany, Mark A. MD Walker, Earl W, MD

Hickory Orthopaedic Center 214 18th St SE
Hickory, NC 28602
Phone: 828-322-5172
Geideman, William M. MD
Hurley, Peter T. MD
Johnson, Jeremy C. MD
Knapp, Jeffrey A. MD
Krenzel, Brian, A. MD
McGinnis, Mark R. MD
Norcross, Jason MD
Pekman, William M. MD
Sohagia, Kinjal, MD

Joint Replacement Specialists 36 14th Ave NE – Ste 103 Hickory, NC 28601 Phone: 828-345-6468 *Peak, E. Louis MD*

Palliative Care

Caldwell County Hospice & Palliative Care 902 Kirkwood St NW Lenoir, NC 28645 Phone: 828-754-0101 Ray, Thomas M. MD

Palliative CareCenter & Hospice of Catawba Valley 3975 Robinson Rd Newton, NC 28658 Phone: 828-466-0466 Cotton, Michael A MD Moffet, Cynthia A. MD Thompson III, William C. MD

Pathology

Piedmont Pathology
Associates
1899 Tate Blvd SE, Ste. 1105
Hickory, NC 28602
Phone: 828-322-3821
Foster, Toby E. MD
Highland, Kelly E. MD
Olympio, Georgia K. MD
Parker, James L. MD
Patel, Neil P. MD
Payne, Kerry D. MD
Reutter, Jason MD
Van Noy, Joanna W. MD
Vogel, Joseph V. MD

Pediatrics

Catawba Pediatric Associates 240 18th St Cr SE Hickory, NC 28602 Phone: 828-322-2550 Barrett, Mark, MD Bates, P. Kenneth MD Bridgeman, Kelly B. MD Froedge, Jerry K. MD Harrill, Kiran C. MD Lowry, Joy E. MD

The Childhealth Center 1455 25th Ave Dr NE Hickory, NC 28601 Phone: 828-322-4453 Frierson, Angela M. MD Golub, Tatyana V. MD Luckadoo, Laura J. MD Summer, Kenneth V. MD Abel, Seth PA-C Mitchell, Jennifer FNP-C Niehues, Denise PA-C

Unifour Pediatrics 3411 Graystone Pl. Conover, NC 28613 Phone: 828-328-1118 Hata, L. Brooke MD Millsaps, David M. MD Spees, Lynn B. MD

Physiatry

Espiritu Clinic, PLLC 715 Fairgrove Church Road, SE Conover, NC 28613 Mail: 2425 N. Ctr. St #370 Hickory, NC 28601 Phone: 888-898-7130 Espiritu, M. Carmen MD Unifour Rehab Medicine 1333 2nd Street, NE, Ste. 300 Hickory, NC 28601 Phone: 828-328-9200 Coates-Wynn, Geoffrey S. MD

Plastic Surgery

Alicia Carroll MD Ophthalmic Plastic & Reconstructive Surgery 2660 Tate Blvd. #200 Hickory, NC 28602 (828) 267-2660 Carroll, Alicia MD





Hickory Plastic and Reconstructive Surgery 50 13th Ave NE Ste 2B Hickory, NC 28601 Phone: 328-322-8380 Fewell Jr, Joseph E. MD Siciliano, Steven A. MD

Piedmont Plastic Surgery & Dermatology Center 315 19th St. St. SE Hickory, NC 28602 Phone: 828-325-9849 Nowicky, David MD Swank, Gregory M., MD

Podiatry

Carolina Foot & Ankle 1501 Tate Blvd, SE, Ste. 203 Hickory, NC 28602 Phone: 828-304-0400 Kukla, Robert F. DPM Weaver, Seth A. DPM Williams, Todd A. DPM

Carolina Podiatry Center 419B 2nd St NW Hickory, NC 28601 Phone: 828-327-3029 Johncock, William J. DPM

Unifour Podiatry 912 2nd St NE Hickory, NC 28601 Phone: 828-267-1916 *Grogan, John H, DPM*

Preventive Medicine

Catawba Valley Medical Center Occupational Health 810 Fairgrove Church Rd SE Hickory, NC 28602 Phone: 828-326-3230 Osbahr III, Albert MD

Psychiatry

Catawba Valley Psychiatric Services 1120 Fairgrove Church Rd SE Hickory, NC 28602 Phone: 828-326-2828 Branyon, David W., MD Davis, Charles, B. MD Eustice, Isabelle H, MD Spraque, Marie, DO

Hickory Psychiatric Center 24 2nd Avenue NE Hickory, NC 28601 Phone: 828-324-9900 McKean, Thomas K. MD Synn, Jay MD

New Directions Counseling Services 201 Government Ave, SW, Ste. 305 Hickory, NC 28602 Phone: 828-267-1740 Munoz, Rigardy P, MD

Rudy Santoso, MD 1019 Lenoir Rhyne Blvd Hickory, NC 28601 Phone: 828-324-4143 Santoso, Rudy A. MD

Pulmonary

Hickory Chest, PLLC 1771 Tate Blvd - Ste 103 Hickory, NC 28602 Phone: 828-322-1128 Anderson, Daniel E. MD

McKendree E. McNabb, MD 24 2nd Ave NE - Ste 210 PO Box 9498 Hickory, NC 28603 Phone: 828-323-8230 McNabb, McKendree E. MD

Radiology

Catawba Radiological Associates 18 13th Ave NE PO Box 308 Hickory, NC 28603 Phone: 828-322-2644 Baker, Chandra M MD Battiston, John MD Bools, John C. MD Dyson, Matthew D, MD Farris, Stephen L. MD Frankel, Nicholas N. MD Harlan, Steven D. MD Harper, Keith W. MD Holtzman, Adrian W. MD Jacobs, M. Todd MD Johnson, Eric V. MD Massengill, Alan D. MD Meredith, Eric MD Pearce, R. Edward MD Rautiola, Eric C. MD Scheil, Charles D. MD Tate, Knox R. MD Thorwarth Jr, William T. MD

Rheumatology

Piedmont Rheumatology 225 18th St SE Hickory, NC 28602 Phone: 828-322-1996 Caldwell, R. David MD McClory, Jill A., MD Payne, D. Dennis MD

Surgery

Cardiovascular & Thoracic Hickory Heart, Lung and Vascular Associates, PA 420 N Center St Hickory, NC 28601 Phone: 828-323-1100 Carlton, Richard A. MD Hennington, Mark H. MD Purut, Jim M. MD





General Surgery

Carolina Surgery and Cancer Center 1501 Tate Blvd SE - Ste 202 Hickory, NC 28602 Phone: 828-485-2707 Locke, Ronald N. MD McCluer, Bryan MD Pabst, Susan J. MD

Catawba Surgical Associates 3513 Graystone Pl Conover, NC 28613 Phone: 828-322-8485 Fitzgerald, Dwight M. MD Thompson Jr, Aaron D. MD Hickory Surgical Clinic, Inc 415 N Center St - Ste 102 Hickory, NC 28601 Phone: 828-327-9178 Bradshaw, Peter H. MD Cook, L. James MD Cox, Montgomery H. MD Hata, Jonathan A. MD Kiell, Charles S. MD Parish, Kenneth L. MD

E. Gary McDougal MD, PLLC 1899 Tate Blvd SE - Ste 2106 Hickory, NC 28602 Phone: 828-322-9105

Urgent Care

Catawba Valley Urgent Care-Maiden 137 Island Ford Rd. Maiden, NC 28650 Phone: 828-428-2446

Catawba Valley Urgent Care-Piedmont 2972 N. Center St. Hickory, NC 28601 Phone: 828-431-4955 Goforth, James MD McKaraher, Charles MD

Urology

Viewmont Urology Clinic 1202 N Center St Hickory, NC 28601 Eller, Douglas A. MD Gerrard Sr, Edward R. MD Gerrard Jr, Edward R. MD Hardaway Jr, David M. MD

Area Physicians Accepting New Medicaid Patients (as of August 2015)

http://www.catawbacountync.gov/dss/Adult/family-physicians-and-pediatricians.pdf (Practices listed in BOLD are located in Catawba County)

Pediatricians			
Practice Name	Physicians in Practice	Address	Phone
Catawba Pediatrics	Froedge, Bridgeman, Harrill, Lowry, Barrett	18 th St Cr SE, Hickory	828-322-2550
Center for Pediatric & Adolescent Medicine	Tilt, Little, Thomas, Gallagher	Mooresville	704-799-2878
Childhealth Center	Luckadoo, Summer, Frierson, Golub	Sandy Ridge Rd., Hickory	828-322-4453
Lincoln Pediatrics	Israel, Mofrad, Moore	Lincolnton	704-735-1441
Mountain View Pediatrics –	Whalley, Medina, Harden, Carrion, Clapp,	Morganton	828-433-4484
Morganton ,Lenoir & Valdese	Gonzalez		
Mulberry Pediatrics	Dodds, Dravland, Kunkle	Lenoir	828-757-5509
Northlake Pediatric Care	Borja	Statesville	704-871-2323
Pediatric Medical Associates	Shah	Lincolnton	980-212-2680
Piedmont Healthcare Pediatrics	Hutchinson, Benson, Evans, Stoner	Statesville	704-838-8245
Unifour Pediatrics	Millsaps, Spees, Lawrence-Hata	Graystone Place, Conover	828-328-1118
Adults and Families			
Bremnor Family Medicine	Dr. Bremnor	Mooresville	704-660-9780
Catawba Family Care	Black, Duran	Hickory	828-994-454
Catawba Valley Medical Center	Prenatal Clinic Only	Hickory	828-466-7196
Maternity	,	-	







Catawba Valley Family Medicine	Fox	Catawba	828-241-2377
(CVFM)-Catawba			
CVFM-Claremont		Lookout St. Claremont	828-459-7324
CVFM-Maiden	Pressler, McManus	Island Ford Rd. Maiden	828-428-2446
CVFM-Mt. View	Lucas, Witke	Hwy 127 S, Hickory	828-330-0511
CVFM-Northeast	Kauth, Moua, Hamilton-Brandon,	Springs Rd, Hickory	828-256-2112
	Ramos		
CVFM-North Hickory	Sanderson, Kihneman	29 th Ave NE	828-326-0658
CVFM-Southeast Catawba	Restino, Alexander	Hwy 16 Denver	704-483-0340
CVFM-Viewmont	Summers	13 th Ave Pl NE, Hickory	828-324-1699
CVFM-Catawba Valley Family	Patel	S Main Ave, Newton	828-464-7770
Care			
Catawba Valley Primary Care	Osterer	NW Blvd., Newton	828-464-7800
Family Care Center	Inman, Faulkenberry, Katz, Craig, Devries	Taylorsville	828-632-9736
Fryecare Family Northeast	Britton, Fisher, Feddeer	Hickory	828-449-8458
Mooresville Family Practice	Gross, Renich, Holmes, Worsham	Mooresville	704-663-3063
Rudisill Family Practice	Rudisill	Hwy 127S, Hickory	828-322-5915
Upper Room Family Practice	Morrison	Newton	828-465-6800

Area Dentists adn Specialty Physicians Accepting Medicaid (as of December 2015)

http://www.catawbacountync.gov/dss/Adult/dentists-and-physician-specialists2.pdf

Dentists Accepting Medicaid (Adults and Children)				
Dr. Bee Yang, Hickory	828-256-3400			
Claremont Family Dentistry-Dr. Gordon	828-459-1400			
Mountain View Family Dentistry (age 7 and over)	828-294-1448			
Dr. Josh Millsaps (ages 5 and over)	828-322-2977			
Drs. Bailey, Hudson (age 12 and over)-can do anterior root canals (front teeth)	828-726-0202			
Dr. Morris (Statesville) **	704-873-0347			
Catawba Family Dentistry (Hickory)	828-695-5778			
Affordable Dentures (Conover)**	828-464-6742			
Hickory Distinctive Dentistry-Dr. Gaffney (6yrs-adult)**	828-267-6800			
(provides dental care for pregnant women)				
Viewmont Family Dentistry (2 years-adult)**	828-267-6858			
**Will make dentures and/or partials				
Dentists Accepting Medicaid (Children Only)				
Wimberly Family Dental Practice, Hickory	828-466-2488			
Dr. Ross Penland, Newton	828-464-9220			
Lincoln County Dental Services, Lincolnton (age 3 - 18)	704-735-2230			
The Smile Zone (Dr. John Lyons), Gastonia	704-396-6166			
Morganton Children's Dental Center (Dr. Sharon Foreman)	828-433-5800			
Smile Starters, Conover (ages 0-20)	828-469-3000			
Viewmont Family Dentistry (2yrs-adult)**	828-267-6858			
Claremont Family Dentistry-Dr. Gordon	828-459-1400			
Hickory Distinctive Dentistry-Dr. Gaffney (6yrs-adult)**	828-267-6800			
Oral Surgeons Accepting Medicaid (may require a referral from a general dentist)				
Dr. Neuwirth, Hickory (any age)	828-327-7867			
Dr. Amy Brooks, Morganton (children only)	828-438-1010			







Dentists Accepting NC Health Choice				
Wimberly Family Dental Practice, Hickory	828-466-2488			
Dr. Bee Yang, Hickory	828-327-0054			
Dr. Pendleton Waldron	828-464-9220			
Dr. Conn, Boone (children age 2 and up)	828-264-5450			
Dr. Josh Millsaps (age 5 and over)	828-322-2977			
Dr. Hatchett, Denver (age 3 and up)	704-489-9919			
Catawba Family Dentistry (Hickory)	828-695-5778			
Morganton Children's Dental Center	828-433-5800			
The Smile Zone , Gastonia	704-396-6166			
Smile Starters, Conover (ages 0-20)	828-469-3000			
Hickory Distinctive Dentistry-Dr. Gaffney (6 yearrs-adult)**	828-267-6800			
Orthodontists (services must be reviewed for Medicaid orthodontic approval)				
Drs. Hamilton and Herring, Hickory	828-324-4535			
Dr. Penna, Mooresville	704-663-3473			
Dr. David Small, Morganton	828-433-1242			
Eye Doctors—Ophthalmologists and Optometrists				
**Patients do not need a referral for eye exams, glasses, or treatment of pink ey	ye. All other eye care services			
require a referral from their primary care doctor.				
Graystone Ophthalmology Associates	828-322-2050			
Newton Vision Center	828-464-4136			
Dr. Boyles (Startown Rd)	828-327-4006			
Dr. Bisanar (Downtown Hickory area)	828-322-8052			
Catawba Valley Eye Center (Hwy 127, Viewmont)	828-327-9679			
Family Vision Center (Downtown Hickory area)	828-327-2922			
Dr. Crystal Hefner (Conover)	828-464-6030			
Maiden Eye Clinic	828-428-9175			
Dr. Ralph Maynard (Springs Road)	828-256-6577			
Hickory Eye Care Center (LR Blvd—Speaks Spanish)	828-328-3900			



Community Profile

- Western Piedmont Council of Governments.
- United States Census Bureau. 2010 Census, American FactFinder. <a href="http://2010.census.gov/2010census.gov/201
- United States Census Bureau. 2010-2014 American Community Survey 5-Year Estimates.
 http://factfinder.census.gov/faces/nav/jsf/pages/community_facts.xhtml
- United States Census Bureau. 2014 American Community Survey. http://factfinder.census.gov/faces/nav/jsf/pages/community_facts.xhtml
- North Carolina Department of Commerce, AccessNC, 2015. Catawba County Profile. http://accessnc.commerce.state.nc.us/docs/countyProfile/NC/37035.pdf
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- United States Bureau of Labor, Bureau of Labor Statistics, 2015. Catawba County Occupational Employment Statistics and Wage Estimates.
- United Way of NC, 2015. 211 Counts Dashboard, Catawba County. http://nc.211counts.org/
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 http://www.catawbacountync.gov/dss/anreport/AnReport13-14.pdf

Health Data Results

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Nutrition

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Physical Activity

- Centers for Disease Control and Prevention, Division of Nutrition, Physical Activity, and Obesity, 2015. Physical Activity. http://www.cdc.gov/physicalactivity/index.html
- Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, 2015. Chornic Diseases: The Leading Causes of Death and Disability in the United States. http://www.cdc.gov/chronicdisease/overview/
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- North Carolina Department of Health and Human Services, Division of Public Health, State Center for Health Statistics, 2015. Behavioral Risk Factor Surveillance Survey Results 2013, Physical Activity.

Tobacco





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 Carolina Population & Health Data by Race and Ethnicity, 2009-2013.
 http://www.schs.state.nc.us/schs/pdf/NCPopHealthDatabyRaceEthOct2014.pdf
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 Care, 1991-2009. https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/Downloads/res-tables.pdf
- Centers for Medicare & Medicaid Services. National Health Expenditure Projections Forecast Summary, 2014-2024.
 https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/Downloads/proj2014.pdf





Cancer

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