2017 Community Health Report Ashe County

A community health report presented by community health partners

Acknowledgments

This report is a result of a collaborative effort of Ashe County. Many individuals and organizations played an integral role in the development and implementation of the community health assessment plans, particularly:

Appalachian District Board of Health
Ashe Health Alliance
Ashe Memorial Hospital

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AppHealthCare
Caring for our Community

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Executive Summary

At its core, population health is about measuring health outcomes and their causes, and using these measures to direct improvements to our community's health. At AppHealthCare (Appalachian District Health Department), we monitor these measures to know how well we are meeting our mission to prevent, promote and protect the public's health.

Every one of us has a part to play in improving community health. This report is the result of a community effort to assess the state of health in Ashe County. Collaboration with numerous community partners led to the development of a comprehensive plan with two key phases for assessing and addressing the status of health in the county.

The first phase of this process includes the collection and analysis of community input through an opinion survey and community secondary data review. A Community Health Assessment Planning Committee comprised of multi-disciplinary stakeholders and community leaders from Alleghany, Ashe and Watauga Counties met in June 2017 to guide implementation of the community health assessment timeline and ensure the process engaged the community in an inclusive and respectful manner. This phase was completed in February 2018. This report comprises the results of this first phase of the process.

The second phase will be conducted between March-August, 2018 through the development of Community Health Action Plans. See the Community Health Assessment Process section for more information about this collaborative process.

The partnerships table to the right identifies the sectors that contributed to the community health assessment process by offering their time, expertise, and outreach.

The following leaders served as members of the Community Health Assessment Planning Committee. Their valuable input and feedback guided each phase of the community health assessment:

- Candy Jones – Community Outreach, Appalachian Regional Healthcare System
- Erin Bouldin – Assistant Professor, Public Health Program, Beaver College of Health Sciences, Appalachian State University
- Gretchen Summerville – Prevention Consultant, Western Youth Network
- Jan Jones – Regional Outreach Manager, Second Harvest Food Bank
- Jennifer Schroeder – Director of Quality Improvement, AppHealthCare
- Kim Barnes – Director, Ashe County Partnership for Children
- Lee Cornett – Director, DANA, Alleghany Drug Abuse Coalition
- Maria Julian – Director of Community Health Services, AppHealthCare
- Nancy Kautz – Advocate and advisor, Ashe Memorial Hospital
- Paige Stephens – Ashe and Alleghany Clinic Director, Daymark Recovery Services
- Patty Parsons – PR/Marketing, Ashe Memorial Hospital

Community Health Assessment Partnerships

Sector	# partners
Public Health Agency	2
Hospital/healthcare system	5
Behavioral healthcare providers	1
Dental health providers	1
All other healthcare providers	3
First responders/law enforcement	2
Pharmacies	1
Community organizations	22
Local government entities	3
Businesses	4
Higher educational institutions	1
Public school system	1
Media/communication outlets	2
Public members	3

The socioecological model was the primary framework used to guide the community health assessment process. This report is also informed by guidelines for conducting a community health assessment from the North Carolina Division of Public Health and NACCHO (National Association of County and City Health Officials) guidelines for conducting a community health assessment.

The community health assessment was not developed with support from a regional community health initiative or a privately contracted vendor.

Key Findings

Ashe County was ranked #53 among the 100 counties in North Carolina for overall health outcomes in the County Health Rankings (where 1 is best), a decline since the last Community Health Assessment (CHA) with a ranking of #41.

Ashe County's population has decreased and is expected to slowly decline over the next 10 years. Overall, our community is aging. The median age in the county is 47 years, almost 1.5 years older than the average resident at the time of the last Community Health Assessment in 2014.

The median household income in the county continues to rise, and the annual unemployment rate has decreased dramatically since 2012, now below the state average. Ashe County's annual poverty rate has decreased and is comparable to the North Carolina average.

Some health disparities exist among different populations in our community by race, ethnicity, socioeconomic status and sexual orientation; however, these disparities are sometimes not reportable due to small numbers of minority populations or lack of available data. We look to state data on racial and ethnic disparities for some health topics in this report. Racial disparities in unemployment persist in Ashe County for nearly every non-white race, and black or African American residents are the most affected by this disparity.

Social and economic determinants continue to play an important role in the health of each individual in Ashe County, as well as the community as a whole. Data on income, employment, education level, community safety, housing, and family & social support are included in this report as key social and economic determinants of health. Some health outcomes are linked to disparities in socioeconomic status. For example, individuals with a household income of $50,000 or less are twice as likely to smoke as individuals with a household income above $50,000.

Substance misuse is the number one health concern in Ashe County based on health opinion survey data collected in 2017. This health concern is consistent with current data trends that show an increase in the prevalence of substance misuse. Unintentional poisoning from opioids has increased in the county over the last 10 years, which is consistent with the statewide trend of increased opioid poisoning. The opioid epidemic in North Carolina is also linked to increasing rates of communicable diseases due to injection drug use. The number of acute hepatitis C cases confirmed in Ashe County increased from 0 cases in 2015 to 2 cases in 2016.

Other health priorities for Ashe County residents include mental health, suicide, cancer, access to care and community safety. The Community Health Opinions and Concerns section gives more detail on major themes from the opinion survey data. Community opinion trends are included throughout the report.

The leading causes of death in Ashe County remain largely due to chronic diseases. Many leading causes of death in the county have not changed in the last three years; however, cerebrovascular diseases was not among the 10 leading causes of death from 2009-2013 and is now the 4th leading cause of death in the county. Cancer and heart disease remain the most common causes of death in Ashe County, each accounting for 21 percent of deaths in 2016.

The life expectancy at birth in Ashe County is 77.6 years overall, but 74.7 years for men and 80.8 years for women. This gender disparity in life expectancy driven by differences in chronic disease mortality rates by gender. Nearly twice as

many men die from lung cancer than women in Ashe County. While some chronic disease mortality rates are declining for Ashe County residents, the overall cancer mortality rate has increased and remains higher than that of Macon County and North Carolina overall.

Tobacco use remains the single leading cause of preventable death and disability in Western North Carolina, and in the United States. More than one in four high school students in Western North Carolina still use tobacco products, setting them up for a lifetime of addiction. Many other risky behaviors among youth in Ashe County Ashe County have declined, however, such as behaviors related to motor vehicle safety.

Some maternal and child health outcomes in Ashe County are moving in the right direction, with 4 out of every 5 women in Ashe County receive early prenatal care (within the first three months of their pregnancy). Ashe County has a much higher percentage of births to women who smoked during pregnancy (19 percent) when compared to North Carolina (9.8 percent).

Community Health Priorities Selected

The three health priorities below highlight key areas that community coalitions within Ashe County will focus on and work to improve from 2018-2021:

Mental/behavioral health
Depression, anxiety, emotional wellbeing, suicide prevention, and support/intervention for those with mental illness

Substance use and misuse prevention
Drugs, alcohol, and tobacco; including misuse or abuse of prescription drugs and use of e-cigarettes or other devices for nicotine delivery

Physical activity and nutrition
Access to physical activity or recreation, accessing healthy foods, and making healthy choices for eating healthy and making physical activity easier for all

Together, we are addressing our shared vision for a healthier Ashe County.

Next Steps for Community Health Improvement Planning

The findings in this document lead us to action. We will address the above health priorities with consideration to our community context and through the planning and implementation of evidence-based interventions (where they exist). Community input will be solicited through listening sessions in a variety of community locations. One specific session will be focused on asset mapping so that community collaborators already engaged in related work can participate in identifying assets that support health and potential gaps that may exist. Community members will learn key facts about their community's health and will suggestion solutions or provide input about proposed solutions that employ evidence-based strategies. This process will take place in the spring/summer of 2018. Results from community listening sessions will lead the CHA Planning Team toward the development of a comprehensive community health improvement plan that will be used for the next three years to implement and measure results.

Community Health Assessment Process

Introduction & Background

Community Health Assessment (CHA) is an important part of identifying, understanding and addressing the main health problems in Ashe County. The CHA is a core function for each local health department in North Carolina in identifying and monitoring health needs, and taking action on the health priorities of the community. As part of the Patient Protection and Affordable Care Act passed in 2010, nonprofit hospitals are also required to file community health assessments along with evidence of addressing community needs through filing a Form 990 Schedule H to the IRS with supporting documentation.[1]

The CHA is a systematic process involving the community to identify and analyze community health needs and assets, prioritize those needs and then implement a plan to address significant unmet needs.

Upon completing the assessment, AppHealthCare develops implementation strategies to address the significant community health needs identified in the CHA.

Community engagement is central to each step of the CHA process.
The CHA provides a structure for addressing the determinants of health and illness in our community through continuous community improvement planning.[2]

About AppHealthCare

AppHealthCare (Appalachian District Health Department) is the primary public health agency in Alleghany, Ashe and Watauga counties. Our mission is to promote safe and healthy living, prevent disease, and protect the environment. We serve Alleghany, Ashe, and Watauga counties. Services include child health, maternity care, family planning services, primary care, dental care, immunizations, communicable disease services, community health and outreach, WIC and environmental health services. We also act as the central lead county for various regional projects, including the CHA. AppHealthCare conducts the CHA every three to four years.

[1] NC Hospital Association (2018)
[2] Association for Community Health Improvement: Community Health Assessment Toolkit

Process & Methods

At the January 2017 meeting, the Appalachian District Board of Health adopted a timeline for completing the Community Health Assessment (CHA). A CHA Planning Committee comprised of multi-disciplinary stakeholders and community leaders from Alleghany, Ashe and Watauga Counties met in June 2017 to guide implementation of the CHA timeline and ensure the process engaged the community in an inclusive and respectful manner.

The first phase of the CHA process included the collection and analysis of community input through an opinion survey and community secondary data review.

Community Health Opinion Survey

Development of the Community Health Opinion Survey tool was guided by CDC demographic data collection standards, NACCHO guidelines for conducting a Community Health Assessment, Behavioral Risk Factor Surveillance System, Youth Risk Behavior Survey, WNC Healthy Impact Initiative, and the 2014 Ashe County Community Health Opinion Survey.

Several key community partners provided input on survey questions, such as Ashe Memorial Hospital, High Country Area Agency on Aging, and Western Youth Network. Appalachian District Board of Health members provided input about the survey questions and distribution points. The Injury and Violence Prevention Branch of the Division of Public Health also provided guidance on question development.

The Community Health Opinion Survey was conducted from July 17 - August 18, 2017. The opinion survey was promoted and distributed in the following ways:

- Distributed electronically by website posting, social media and email listservs to various area employers
- Promoted through a press release and radio segment on WKSK
- Distributed as traditional hard copies in various community locations, including but not limited to:
    - AppHealthCare clinic and WIC office
    - Ashe County Chamber of Commerce
    - Ashe County Farmers Market
    - Ashe County Parks & Recreation
    - Ashe County Transportation Authority
    - Ashe County EMS
    - Ashe County Fire Department
    - Ashe Public Library
    - Ashe Family Literacy Center
    - Ashe Outreach Ministries
    - Ashe Memorial Hospital
    - Ashe Partnership for Children
    - Ashe Safety Day
    - Ashe Sharing Center Health Fair
    - Daymark Recovery Services
    - Mountain Family Care Center
    - Mount Jefferson Family Medicine
    - Riverview Community Center
    - St. Francis Church
    - Summit Support Services

The survey was available and promoted online and in paper form in English and in Spanish. Respondents of the Community Health Opinion Survey include 729 Ashe County residents. The survey sample increased by 149 percent since the last opinion survey was conducted in 2014.

AppHealthCare staff planned and monitored survey distribution to track whether the survey sample was representative of county demographics. The table below compares the survey sample to the county population by gender identity, race/ethnicity, age, highest educational level, and household income. The table identifies several key ways in which the opinion survey does not represent the overall county population. Opinion survey respondents were disproportionately comprised of females and individuals with higher education degrees. The opinion survey lacked proportional responses from men, individuals ages 65 or older, and individuals with a household income less than $20,000. Many survey respondents chose not to answer the demographic questions in the survey.

Comparison of Opinion Survey Sample to County Population

Demographic characteristic			Percent of survey respondents	Percent of county overall
Gender identity	Male		18.7	49.7
	Female		69.6	50.3
	Transgender		0.0	0.6
	Do not identify as M/F/T		0.3	0.0
Race/ethnicity	Asian/Pacific Islander		0.0	0.6
	Black/African American		0.1	0.9
	Hispanic/Latino		2.9	5.3
	Native American		1.2	0.3
	White/Caucasian		82.8	97.1
	Other		1.1	3.4
Age	18-25		7.3	7.1
	26-39		17.4	15.0
	40-54		25.4	21.4
	55-64		22.2	15.6
	65 or older		15.9	24.5
Highest education level	Some high school		7.4	9.6
	High school diploma/GED		16.2	25.3
	Some college, no degree		15.8	18.9
	Associate's/vocational		16.2	10.7
	Bachelor's degree		19.9	9.6
	Graduate degree		10.6	4.7
Household income*	Less than $20,000	Less than $25,000	22.5	34.6
	$20,000 to $29,999	$25,000 to $35,000	11.7	12.9
	$30,000 to $49,999	$35,000 to $50,000	15.5	17.0
	$50,000+	$50,000+	25.9	35.4
Overall population (numbers)			729	26,924

Community Health Opinion Survey income groups are listed in the left column; Census data income groups are listed in the right column.

Survey Limitations

The Community Health Opinion Survey was conducted using a stratified convenience sample method due to resources available. This method of sampling is inexpensive and less time consuming; however, the results are not generalizable to the target population and there is no way to estimate how reliable or precise the data are. The stratified convenience sample is also more susceptible to selection bias than probability-based sampling since the respondents who are present when the survey is distributed may be different from each county's population as a whole. Some opinions were inevitably missed, so the results can only be reported as the opinions of the people surveyed.

Secondary Data

Secondary data collected from trusted sources such as the US Census Bureau and the NC State Center for Health Statistics are included throughout this report. This data provide us with information about the demographic profile of the community, population growth trends, and trend analyses of key issues like income and poverty, health behaviors, and leading causes of illness and death.

This report includes comparisons between the county, a peer county, and the state of North Carolina overall. We use these comparisons to better understand how this county's statistics differ from a similar county or the state. Some data are reported in rates per a certain number in the population (e.g., 100,000), while other are reported as a percent. New cases of a disease are often reported as a rate while health behaviors and prevalence of a disease existing in the population is reported as a percentage.

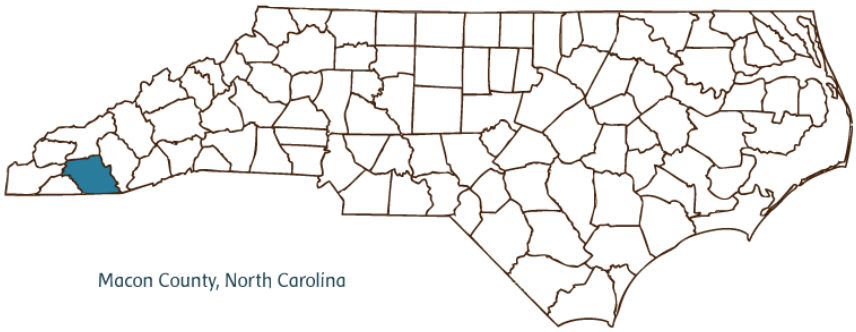
County statistics that are significantly different from the peer county or North Carolina overall are noted in the report. Trends that show significant change over time and disparities between populations (such as people from different ages, genders or race/ethnicity) are also noted throughout the report.

Special caution is needed when the county statistics include a rate below 20.[3] Rates can be more sensitive to spikes in the data on particular years; therefore, higher rates one year may level out if tracked using a trend analysis of the measure overtime. This is especially important due to the small size of the county population. Rates that are unstable because of small numbers may not be included in this report. The number of cases is sometimes used to provide greater context for the meaning of a rate or percent. See Appendix 3 to review the secondary data used to inform this report.

About the Peer County: Macon County, NC

The North Carolina Division of Public Health has grouped communities into peer subgroups in order to assist counties in drawing comparisons of statistics at the county level. This report makes comparisons between Ashe County and Macon County in order to better understand how the county's statistics differ from a similar county in North Carolina.

Ashe County is included in Group M along with Cherokee, Beaufort, and Macon Counties. Population size and age distribution, population density, and percentage of people in poverty are considered to group these counties.[4]


Macon County, North Carolina

Community Health Priority Setting

The Ashe Health Alliance met in February 2018 to review primary and secondary data reports. Members of the initiative reviewed a PowerPoint presentation of primary and secondary community health data to guide the selection of community health priorities. Members were given criterion for selecting priorities (as described in health priorities section) and used three stickers to vote for their top priorities. Data review included socioeconomic data such as population numbers and growth trends, racial/ethnic profile of the community, and a review of leading causes of death and illness in the county using trends of incidence and prevalence.

[3] NC Center for State Health Statistics (2018)
[4] North Carolina Division of Public Health (2017)

Community Health Priorities Selected

Health priorities were selected by the Ashe Health Alliance in February, 2018 as described in the methods section above. These priorities are not all-inclusive; they highlight priority areas that community coalitions within Ashe County will focus on and work to improve from 2018-2021. The health priorities chosen by the Ashe Health Alliance also reflect the top health concerns that were reported in the Ashe County Community Health Opinion Survey. Additional key areas are highlighted in this report to ensure that all groups working to support health have the ability to inform their work with community data.

Mental/behavioral health
Depression, anxiety, emotional wellbeing, suicide prevention, and support/intervention for those with mental illness

Substance use and misuse prevention
Drugs, alcohol, and tobacco; including misuse or abuse of prescription drugs and use of e-cigarettes or other devices for nicotine delivery

Physical activity and nutrition
Access to physical activity or recreation, accessing healthy foods, and making healthy choices for eating healthy and making physical activity easier for all

The next steps in addressing important health priorities are briefly described at the end of this report.

Community Health Opinions and Concerns

Substance misuse is the number one health concern in Ashe County.

The most pressing health concern for survey respondents is consistent with current data trends that show an increase in the prevalence of substance misuse. Nearly 90 percent of all respondents cited substance misuse as the most important risky behavior in the community. When asked what the top health problem in the community is, nearly 80 percent again responded with alcohol and/or drug use. This majority opinion parallels the alcohol-poisoning rate and number of alcohol-related visits to the Emergency Department in Ashe County, both of which are higher than state averages.[5] Three out of five respondents indicated they would support a program that would provide unused needles to drug users. Harm reduction strategies such as needle exchanges have been proven to help protect first responders and prevent the spread of disease in the community. The pattern in these responses indicate that Ashe County residents see the effects of substance misuse in their community, and feel it is important to address this issue.

Access to care, community safety, and a strong economy are important for a healthy Ashe County.

Survey respondents listed three equally popular factors they thought were important for a healthy community: access to healthcare, good jobs and a healthy economy, and low crime and safe neighborhoods. This reflects Ashe County residents' values of overall community wellbeing, encompassing everything from financial security to safety measures. Half of all survey respondents also noted that the community in Ashe County is "somewhat healthy". While the county has many assets, it also has some areas that could be improved to reach a higher level of health for all residents. Some of these areas include addressing alcohol and/or drug use, cancer prevalence, and mental health problems. These are the three issues that were most commonly reported by survey respondents as the top health issues in the community.

Accessibility in a rural setting is a major concern, especially for older adults.

[5] National Poisoning Data System (2015)

Access to services in Ashe County is a concern for many people. Current research shows that people living in rural communities typically have more difficulty accessing the same kinds of products, services, and programs than those living in urban communities.[6] For those residents who do not have reliable transportation or comprehensive health insurance, being able to access needed services can be a challenge. This is also true for special populations who may face even more barriers to accessing services, including older adults. The majority of survey respondents expressed a desire to support older adults in Ashe County by ensuring they have transportation to get to appointments and access supportive services and programs. Respondents also indicated the need to offer medication assistance programs to help older adults get the medications they need with ease.

Among survey respondents, 65 percent indicated that the local hospital is their first choice for usual inpatient and outpatient services. Nearly the same percentage of respondents noted that they or someone they know has needed to seek specialty healthcare somewhere outside of the county.

Access to healthy food is important for a healthy Ashe County.

Another common theme among community opinions is the need to reduce barriers to healthy eating. Being overweight and having poor eating habits were the second and third most commonly cited risky behaviors. Many respondents also expressed that food assistance programs such as food pantries are an important part of the solution to promoting healthy eating within the community. Increasing access to affordable, locally grown and raised food is also important to Ashe County survey respondents. This suggests that some residents find it difficult to access food, especially healthy foods.

Some opinions are different based on the language in which the survey was completed.

Some survey respondents chose to complete the survey in Spanish. There were a few key differences in responses for surveys completed in Spanish compared to responses completed in English. It is important to note that these differences do not represent generalizable differences among the Spanish-speaking population; rather, these differences can only be noted between surveys that were completed in Spanish and surveys completed in English:

The majority of individuals who completed the survey in Spanish (92 percent) reported having no form of health insurance, compared to 19 percent of individuals who completed the survey in English. This difference is somewhat consistent with the disparity in health insurance across North Carolina. On average, 26 percent of Hispanic individuals in North Carolina were uninsured in 2016 compared to 10 percent of white individuals in North Carolina.[7]

Access to healthcare is an important factor for half of all survey respondents, regardless of the language in which the survey was completed. Other factors for a healthy community were different among responses in Spanish, however, compared to responses in English. Having a clean environment and having healthy behaviors/lifestyles were also important to the majority of respondents who completed the survey in Spanish.

Responses in Spanish also revealed a strong theme around nutrition. Responses in Spanish listed bad eating habits as the number one risky behavior in the community. When asked what is most important in order to promote healthy eating, 92 percent of responses in Spanish indicated a better understanding of how to cook healthy food.

The top three most commonly reported health issues was slightly different for responses in Spanish than responses in English. While alcohol/drug use and cancer were reported among all survey respondents, diabetes and dental problems were also top health issues for individuals who completed the survey in Spanish. This concern for diabetes is also reflected in responses in Spanish for the top three risky health behaviors, which included poor eating habits and lack of exercise. While all survey respondents listed that transportation services and medication assistance programs are most needed to support older adults, responses in Spanish also indicated the need for substance misuse prevention programs. This

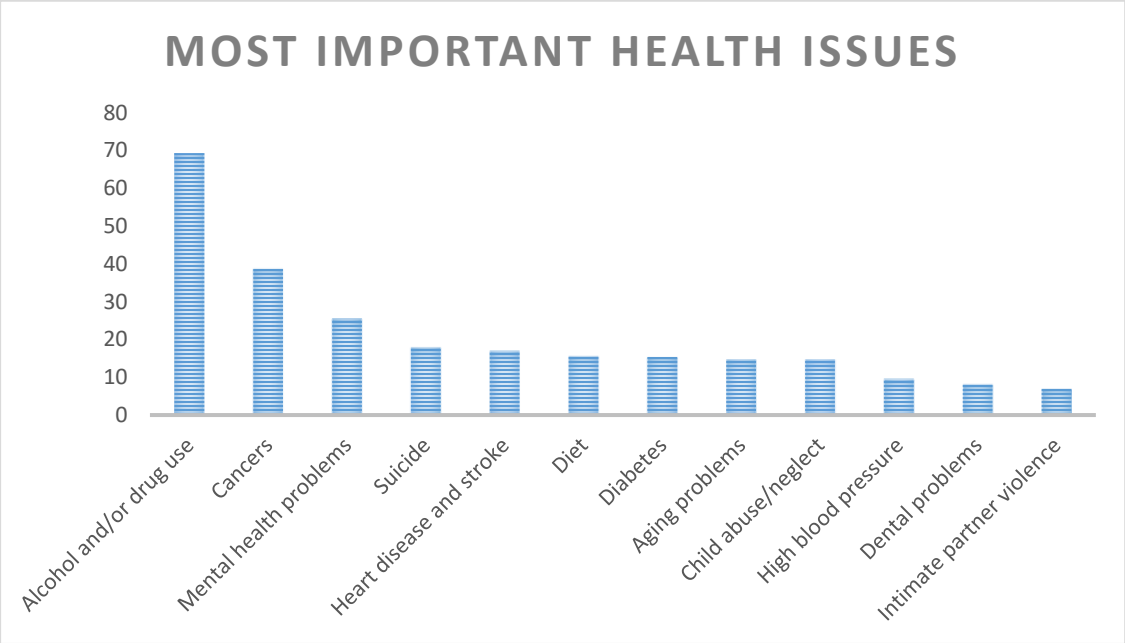
[6] Rural Health Information Hub (2018)

[7] Census Bureau's March Supplement to the Current Population Survey: Annual Social & Economic Estimates (2014-2017)

answer was not very prevalent among responses in English, but is a priority among those who completed the survey in Spanish.

Cancer, mental health problems and suicide are also top health issues in Ashe County.

Survey respondents were asked what they think are the three most important "health problems" in our community (those problems that have the greatest impact on overall community health). The most common responses were consistent with the three health priorities that were selected by the Ashe Health Alliance. The table below shows the most important health issues cited by all opinion survey respondents in Ashe County.



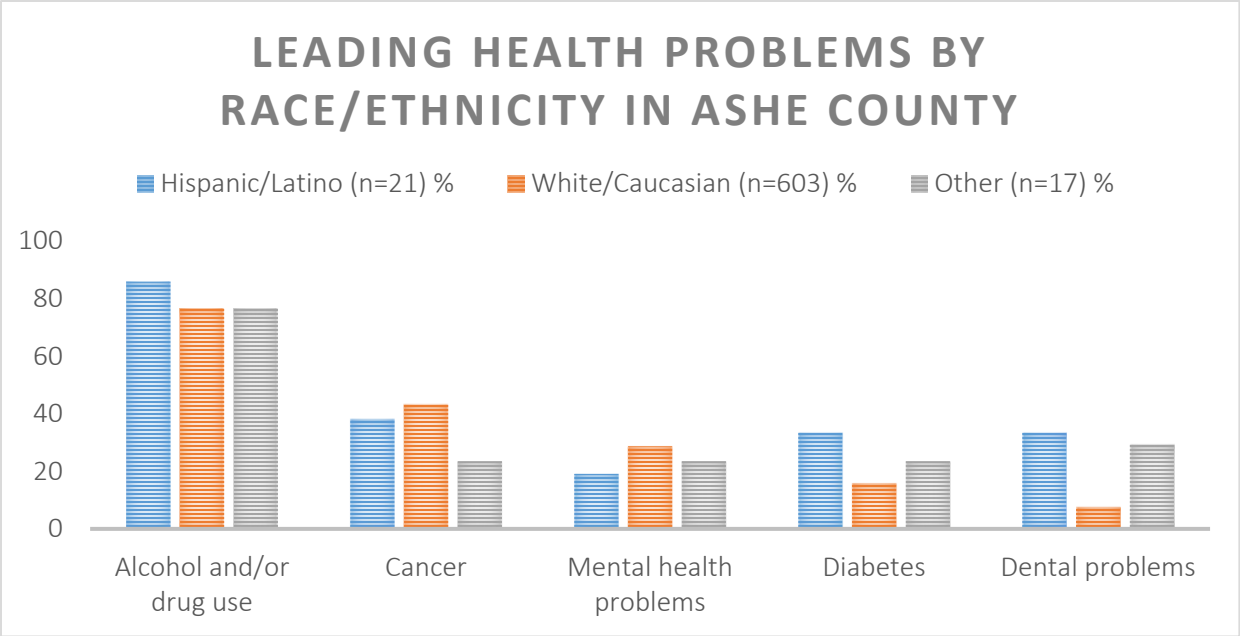
Alcohol and/or drug use was reported as a top health problem for 69 percent of respondents. Cancer was reported as a top health problem for 39 percent of respondents, and mental health problems was reported as a top health problem for 26 percent of respondents. Eighteen percent of respondents listed suicide as a to health problem in the county.

The least reported health problems were firearm-related injuries, HIV/AIDS, homicide and sexually transmitted infections, all reported by 1 percent of respondents.

Some top health concerns are different based on racial/ethnic identity.

The majority of survey respondents (83 percent) identified as white/Caucasian; therefore, it is important to also examine the leading health problems reported by minority populations that are not reflected in the overall results.

The table below shows how the top health problems differ according to racial/ethnic identity. While alcohol and/or drug use is the top health problem for all respondents (regardless of race/ethnicity), diabetes and dental problems were the second most reported health problem for Hispanic/Latino respondents. Differences in health concerns by other racial and ethnic identities are not reportable for Ashe County respondents due to small reporting numbers.



The table below shows the leading health problems by race/ethnicity for Alleghany, Ashe and Watauga Counties for all racial/ethnic identities included in the opinion survey. The three top health problems for each racial/ethnic identity are shaded in blue. Bolded numbers indicate significant differences from the responses of white/Caucasian respondents.

Leading Health Problems by Race/Ethnicity across Alleghany, Ashe, Watauga Counties						
Health Problem	Black/ African-American (n=13)	Asian/ Pacific Islander (n=7)	Hispanic/ Latino (n=64)	Native American (n=19)	Other (n=24)	White/ Caucasian (n=1,505)
	%	%	%	%	%	%
Alcohol and/or drug use	61.5	**85.7**	**81.3**	73.7	70.6	71.7
Cancers	23.1	14.3	25.0	**36.8**	17.7	**35.9**
Mental health problems	38.5	**57.1**	18.8	15.8	29.4	33.8
Diet	30.8	**71.4**	12.5	5.3	23.5	27.7
Diabetes	**38.5**	**38.6**	**39.1**	15.8	17.7	20.0
Heart disease and stroke	0	0	6.3	21.1	11.7	18.3
Aging problems	23.1	14.3	10.9	10.5	**35.3**	17.2
Child abuse/neglect	15.4	0	4.7	10.5	5.9	15.2
Suicide	0	0	9.4	5.3	**23.5**	12.6
High blood pressure	15.4	0	15.6	**47.4**	0	9.8
Dental problems	0	0	**26.6**	10.5	**23.5**	8.2

Alcohol and/or drug use remains the top health problem for all respondents (regardless of race/ethnicity); however, the second and third leading health problem varies for each racial/ethnic response group from the white/Caucasian responses, which comprise 76 percent of all opinion survey responses.

"If I could change one thing…"

One of the questions in the community opinion survey asks "If you could change one thing to improve the health of the community, what would it be?". Respondents had the opportunity to write in answers for this question, and the responses indicate what respondents think are important action steps to take for a healthier community. Responses varied greatly, ranging from providing help to the homeless to ending discrimination. The majority of respondents held similar opinions about three topics:

- The most common theme for write-in responses related to health insurance and access to care. Many responses express the need for more affordable healthcare, especially for low-income and uninsured populations. Free health insurance or healthcare was suggested by dozens of survey respondents.

- The second most common theme in write-in responses relates to promoting a healthy lifestyle for community members. Improving access to healthy foods and providing education about healthy eating choices were key themes related to a healthy lifestyle. Many respondents suggested increasing nutrition education in schools and offering incentives for physical activity such as workplace wellness programs, and increasing the number of walking trails in the community.

- Many responses also called for addressing substance misuse in the community. Some responses call for addressing mental health and substance use issues together. Several write-in responses suggested the need to help individuals quit smoking.

Ashe County Demographics

Ashe County, North Carolina is located in the northwestern corner of North Carolina. The county borders Watauga, Wilkes and Alleghany Counties, in addition to Tennessee and Virgina. Ashe County sits in the Blue Ridge Mountains with a large variety of outdoor recreation and cultural attractions. The two largest townships are West Jefferson and Jefferson, both located in the central areas of the county.

Ashe County is home to five mountains that each rise above 5,000 feet.[8] The county is home to Mount Jefferson, with a peak that towers more than 1,600 feet above the towns of Jefferson and West Jefferson.[9]

Ashe County Map: US Census

[8] Ashe County NC Peaks List (2018)
[9] North Carolina State Parks: Mount Jefferson State Natural Area

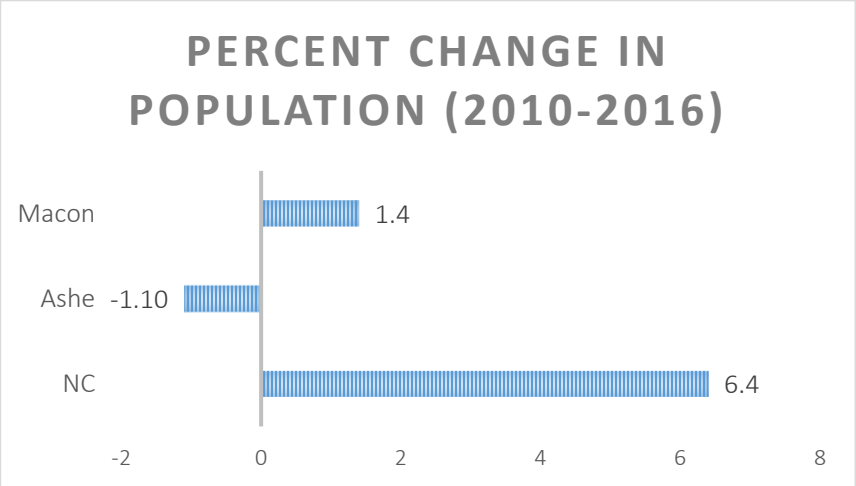
Ashe County communities include the townships in the table below, according to the most recent census in 2010:[10]

Township	Number of persons	% county Population	Median age
Grassy Creek	637	2.3%	47.9
Lansing	3,521	13%	45.9
Creston	1,876	6.9%	48.3
Todd	2,141	7.9%	44.9
Jefferson	4,719	17.4%	46.2
West Jefferson	7,744	28.5%	45.2
Fleetwood	2,714	10%	41.1
Crumpler	2,261	8.3%	42.6
Warrensville	1,700	6.3%	46
Scottville	35	0.1%	49.3
Laurel Springs	1,494	5.5%	48.9

Population

Ashe County's population has decreased.

The population of Ashe County is 26,992[11] with an even distribution of males and females. According to the 2016 estimate, Ashe County's population decreased by 1.1 percent from 2010 to 2016, compared to a population increase of 6.4 percent for the state of North Carolina. The population has plateaued since 2010 and is expected to slowly decrease over the next ten years.[12]



Our community is aging.

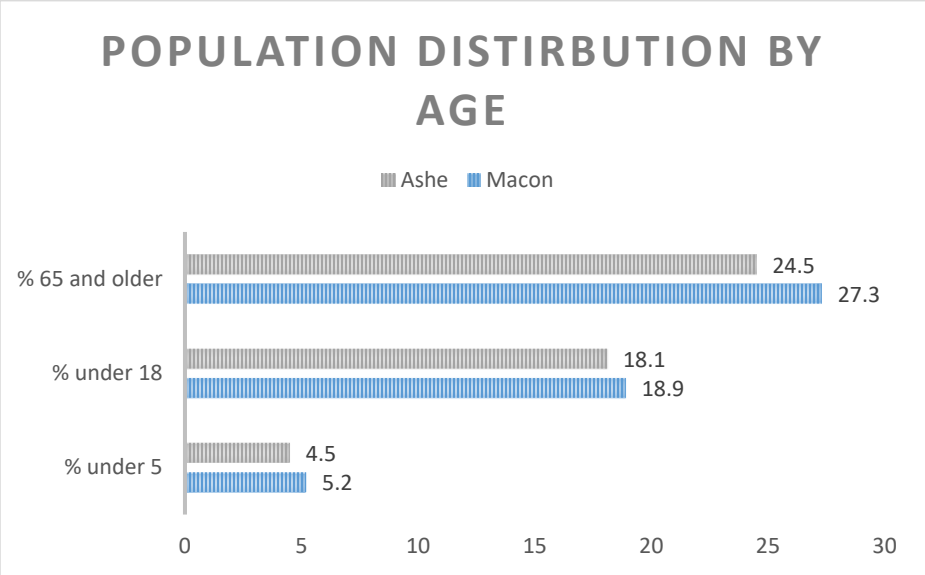
The average Ashe County resident is 47 years old, almost 1.5 years older than the average resident three years ago. The median age is 49 years for Macon County and 38.3 years for North Carolina overall.

	2014 CHA	2017 CHA	Change
Population	27,151	26,924	1% decrease
Median age	45.5 years	46.9 years	3% increase

This graph compares the population distribution by age in Ashe and Macon

[10] US Census Bureau (2010)
[11] US Census Bureau (2016)
[12] NC Office of State Budget and Management (2018)

Counties. Approximately 19 percent of individuals in Ashe County are less than 18 years old, comparable to that of Macon County. [13]

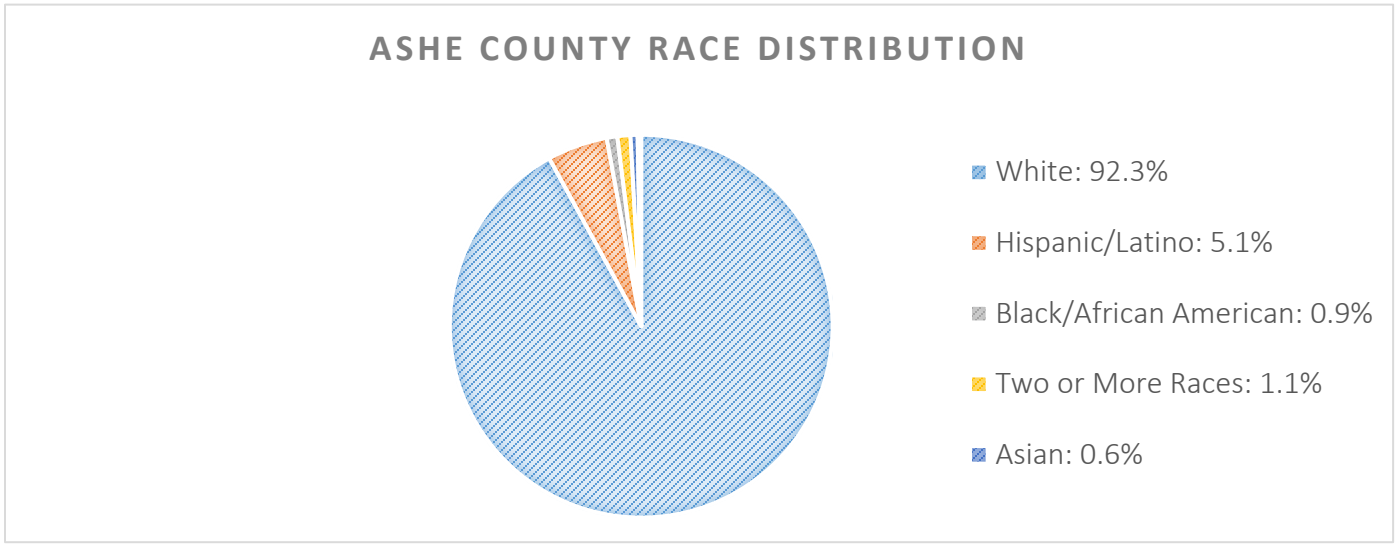


The majority of residents in Ashe County (92.3 percent) identify as white, non-Hispanic compared to 68.5 percent of people across North Carolina. The percentage of African American, non-Hispanic residents in Ashe County is much lower at 1.1 percent than North Carolina (21.5 percent).

The percent of Hispanic or Latino residents in Ashe County remains at 5 percent, compared to 8.9 percent in North Carolina, 3.4 percent in Watauga County, and 9.6 percent in Alleghany County. Approximately 1.1 percent of the population identifies as 2 or more races.[14]

Approximately 1,382 Ashe County residents are Hispanic or Latino. Among those, 81.9 percent are Mexican, 0.1 percent are Puerto Rican, 0.7 percent are Cuban, and 0.1 percent are from some other country of origin.

Asian residents represent less than 1 percent of the population; of those, 34 percent are Filipino, 19 percent are Asian Indian, and 47 percent are of a different Asian decent. The number of Asian residents in Ashe County has increased slightly since the 2014 CHA.[15]



Health Disparities among Minority Populations

Nationwide, some groups of people experience health disparities, which are preventable differences in health outcomes that are created by social, economic, and environmental conditions. These conditions lead to behaviors such as smoking,

[13] American Community Survey 5-year estimates (2012-2016)
[14] American Community Survey 5-year estimates (2012-2016)
[15] American Community Survey 5-year estimates (2012-2016)

poor nutrition, and lack of exercise, which affect our health. Health disparities are inequitable and are directly related to the historical and current unequal distribution of social, political, economic, and environmental resources.[16] While racial and ethnic minority populations in Ashe County still comprise a small percentage of the overall population, it is important to pay close attention to differences in health outcomes for these populations. Health disparities among populations are noted throughout this report by health topic.

The North Carolina Center for State Health Statistics notes that race or ethnicity does not cause a particular health problem or status. It is likely that factors such as income, education, access to health care, stress and racism are among the major causes of the poorer health of minorities on many health measures compared to whites. Few sources of health data record these types of health information, although most data sources have information on race or ethnicity. Showing data by race can identify specific areas of disparities and can help target resources and interventions to populations most in need.[17] Refer to the section on social determinants of health for more information on the factors that are likely to cause health disparities among different racial and ethnic groups.

Racial and Ethnic Disparities in North Carolina

The North Carolina Office of Minority health and Health Disparities and the North Carolina State center for Health Statistics publish a Racial and Ethnic Health Disparities Report Card every 10 years that uses ratios to compare race and ethnic groups in North Carolina. These ratios are a measure in one racial or ethnic group divided by the measure in the white group. The ratios show areas with the greatest health disparities, areas with growing disparities, and disparity areas that are improving.

Letter grades ranging from "A" for very good to "F" for failing are given to each racial or ethnic minority group in North Carolina as compared to the measures of the white population of North Carolina. The state report card on social and economic well-being is included in this report.[18]

County Health Ranking

Ashe County was ranked #53 among the 100 NC counties for overall health outcomes in the 2017 County Health Rankings (where 1 is "best"). The county's rank declined since the last CHA from #41 to #53. The County Health Rankings provide a snapshot of the factors that affect health in Ashe County and allow us to compare the health status of our county to the health status of other counties and of North Carolina.

County Health Rankings provide the reminder that where we live matters to our health. The factors that influence our health are far greater than access to medical care, although this is also a part of the overall ranking.[19] The County Health Rankings measure factors associated with community health, ranging from socioeconomic indicators and behavioral risk factors to environmental health determinants.

The chart below shows how Ashe County compares to North Carolina state averages for each County Health Ranking factor. Metrics that are shaded in green indicate where Ashe County measures at least 1 percent better than the state average. Metrics shaded in yellow indicate where Ashe County measures within 1 percent of the state average. Metrics shaded in red indicate where Ashe County measures at least 1 percent worse than the state average.

[16] Centers for Disease Control and Prevention (2018)
[17] NC Center for State Health Statistics: Minority Health (2018)
[18] Racial and Ethnic Health Disparities in North Carolina Report Card (2010)
[19] County Health Rankings & Roadmaps (2017)

					2017 County Health Ranking, North Carolina: Ashe County = 53rd
Metric	Ashe	NC	County Health Ranking	Year of Data	Measurement Definition
Length of Life	**	**	71st		
Premature Death (YPPL/100,000)	8,800	7,200		2012-2014	Years of potential life lost before age 75 per 100,000 population (age-adjusted)
Quality of Life	**	**	41st		
Poor or Fair Health	17%	18%		2015	Percentage of adults reporting fair or poor health (age-adjusted)
Poor Physical Health Days	4.0	4.0		2015	Avg. number of physically unhealthy days reported in past 30 days (age-adjusted)
Poor Mental Health Days	3.9	3.7		2015	Avg. number of mentally unhealthy days reported in past 30 days (age-adjusted)
Low Birthweight	8%	9%		2008-2014	Percentage of live births with low birthweight (< 2,500 grams)
Health Behaviors	**	**	22nd		
Adult Smoking	17%	19%		2015	Percentage of adults who are current smokers
Adult Obesity	29%	30%		2013	Percentage of adults that report a BMI of 30 or more
Food Environment Index	7.7	6.8		2010&2014	Index of factors that contribute to a healthy food environment (0 worst, 10 best)
Physical Inactivity	24%	24%		2013	Percentage of adults aged 20+ reporting no leisure-time physical activity
Access to Exercise Opportunities	63%	75%		2014	Percentage of population with adequate access to locations for physical activity
Excessive Drinking	15%	15%		2015	Percentage of adults reporting binge or heavy drinking
Alcohol-Impaired Driving Deaths	21%	32%		2011-2015	Percentage of driving deaths with alcohol involvement
Sexually Transmitted Infections	73.7	478.7		2014	Number of newly diagnosed chlamydia cases per 100,000 population
Teen Births	47	36		2008-2014	Number of births per 1,000 female population aged 15-19
Clinical Care	**	**	90th		
Uninsured	20%	15%		2014	Percentage of population under age 65 without health insurance
Primary Care Physicians	2,090:1	1,410:1		2014	Ratio of population to primary care physicians
Dentists	3,860:1	1,890:1		2015	Ratio of population to dentists

Metric	Ashe	NC	County Health Ranking	Year of Data	Measurement Definition
Mental Health Providers	710:1	490:1		2016	Ratio of population to mental health providers
Preventable Hospital Days	80	49		2014	Number of hospital stays for ambulatory-care conditions per 100,000 Medicare enrollees
Diabetes Monitoring	93%	89%		2014	Percentage of diabetic Medicare enrollees aged 65-67 that receive HbA1c monitoring
Mammography Screening	66%	68%		2014	Percentage of female Medicare enrollees aged 67-69 received mammography screening
Social & Economic Factors	**	**	**51st**		
High School Graduation	86%	86%		2014-2015	Percentage of ninth-grade cohort that graduates in four years
Some College	53%	65%		2011-2015	Percentage of adults age 25-44 with some pose-secondary education
Unemployment	6.0%	5.7%		2015	Percentage of population ages 16 + unemployed but seeking work
Children in Poverty	32%	23%		2015	Percentage of children under age 18 in poverty
Income Inequality	4.6	4.8		2011-2015	Ratio of household income at the 80th percentile to income at the 20th percentile
Children in Single-Parent Household	30%	36%		2011-2015	Percentage of children living in a household headed by a single parent
Social Associations	12.5	11.5		2014	Number of social associations per 100,000 population
Violent Crime	78	342		2012-2014	Number of reported violent crimes per 100,000 population
Injury Deaths	75	65		2011-2015	Number of deaths due to injury per 100,000 population
Physical Environment	**	**	**39th**		
Air Pollution – Particulate Matter	8.2	9.1		2012	Avg. daily density of fine particulate matter ($\mu g/m^3$)
Drinking Water Violations	Yes			2013-2014	Percentage of population potentially exposed to water exceeding a violation limit during past year
Severe Housing Problems	16%	17%		2009-2013	Percentage of households with ≤ 1 of 4 housing problems: overcrowding, high housing costs, lack of kitchen plumbing facilities
Driving Alone to Work	80%	81%		2011-2015	Percentage of work force that drive alone to work
Long Commute – Driving Alone	38%	31%		2011-2015	Percentage of workers commuting alone for more than 30 minutes

*Color Code: Green = Ashe Co. outcome > 1% better than NC; Yellow = Ashe Co. within 1% of NC; Red = Ashe Co. outcome > 1% worse than NC

Source: Robert Wood Johnson Foundation & University of Wisconsin; County Health Rankings

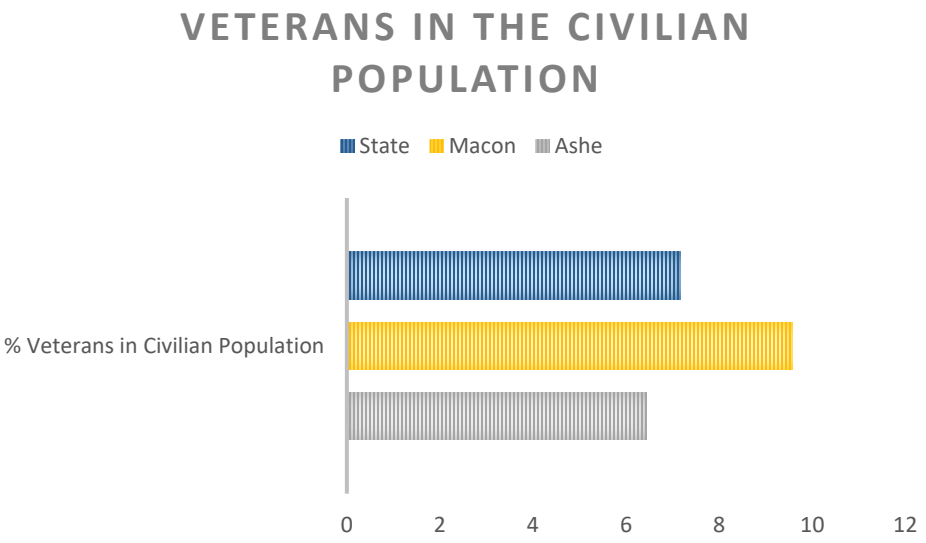
Special Populations to Consider

Special populations are specific groups of people that require special consideration or protection. A special population may exist because of their socioeconomic status, age, gender, first language, or other reasons. Special populations are sometimes also referred to as socially vulnerable, at-risk, or as having access and functional needs.

Veterans

Our service men and women are considered a special population by the Centers for Disease Control and Prevention. Many military service veterans and their families face challenges upon returning home, including debilitating injuries, problems finding work, and serious mental health issues that contribute to homelessness and substance misuse problems.[20]

The ratio of veterans living in Ashe County (6.4 percent) is comparable to the state percentage of 7.2 percent. Approximately 60 percent of veterans in Ashe County are more than 65 years of age; 5.9 percent are between ages 18-34. Among those in the civilian population where poverty status is determined, an estimated 11.4 percent of veterans are living below the poverty level, which is .4 percent higher than the rate in 2013. Among Ashe County veterans for whom poverty status is determined, 30 percent have a type of disability.[21]



Individuals with a Disability or Special Healthcare Need

The percent of Ashe County residents with a disability under 65 years of age is 13 percent, higher than that of Macon County (11.8 percent) and North Carolina (9.7 percent).[22]

One out of four North Carolinians are directly or indirectly impacted by disability.

Nearly all North Carolinians with disabilities live in households, with just six percent living in group facilities such as nursing homes. An additional 1.2 million individuals in North Carolina are not disabled, but share a household with someone who has a disability. Overall, 2.5 million people are either directly or indirectly impacted by disability.

[20] American Association of Retired Persons (2016)
[21] American Community Survey (2016)
[22] American Community Survey (2012-2016)

Nationally,

- 5 percent of children and young adults under 21 report a disability.
- 12 percent of adults ages 21 to 64 have a disability.
- 39 percent of adults 65 and older have a disability.[23]

Individuals with an Intellectual or Development Disability (I/DD)

The functional abilities of people with Intellectual or Development Disabilities (I/DD) vary widely. The federal definition of developmental disability is "a severe, chronic disability of an individual that is attributable to mental or physical impairment, or combination of mental of physical impairments, which is manifested before age 22." North Carolina law expands this definition to include traumatic brain injury acquired after age 22.[24]

An estimated 158,271 individuals with intellectual or developmental disabilities live in North Carolina. Of those individuals with an I/DD, 68 percent live with a family caregiver, 15 percent live alone or with a roommate, and 17 percent live in a supervised residential setting.[25]

Other special populations to consider in our community include, but are not limited to:

- Children and older adults
- People with a gender identity or sexual orientation that differ from the heterosexual and cisgender majority
- People without health insurance or who are underinsured
- People who are geographically isolated
- People who are food insecure
- People of color
- People without documentation
- Seasonal workers
- People who speak a language other than English at home

Social Vulnerability and Emergency Preparedness

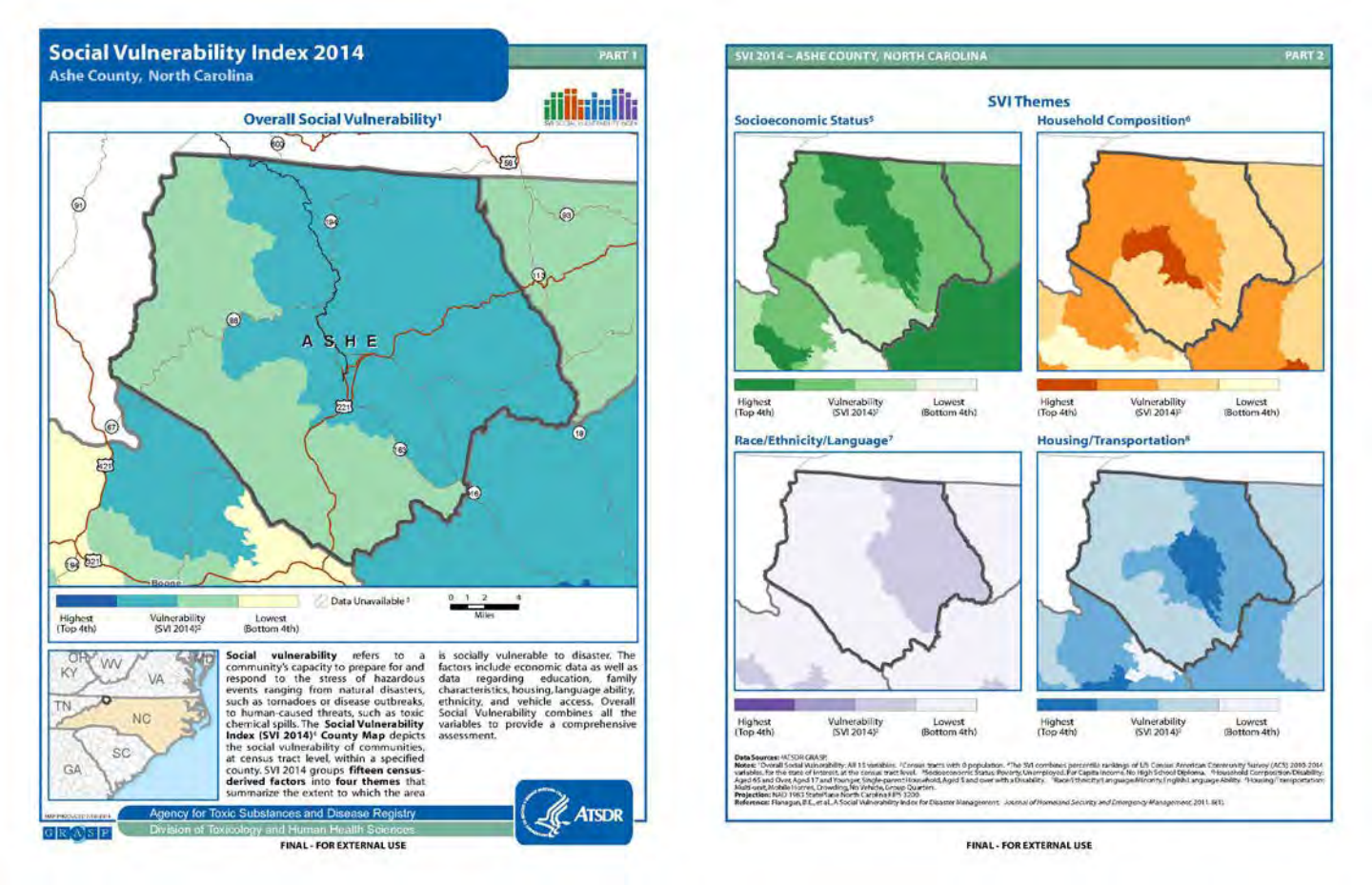
Every community must prepare for hazardous events, from a natural disaster like a tornado or disease outbreak to a human-made event like a harmful chemical spill. A number of factors (including poverty, lack of access to transportation, and crowded housing) may weaken a community's ability to prevent human suffering and financial loss in the event of disaster. These factors are known as social vulnerability.

Previous research has shown that populations with higher levels of social vulnerability are more likely to experience negative consequences in the event of a disaster. These individuals may have additional needs before, during and after an emergency. A person can have an access and/or functional need with or without having a disability. Individuals in need of additional assistance before, during or after an emergency response may include:[26]

- People who live in institutionalized settings
- Children and older adults
- Individuals from diverse cultures
- Individuals who are transportation disadvantaged
- People with chronic or temporary health conditions
- Women in late stages of pregnancy
- People with limited English proficiency, low literacy or additional communication needs
- People with very low incomes
- People with physical, mobility, sensory, intellectual, developmental, cognitive or mental health disabilities
- People experiencing homelessness

[23] UNC Carolina Demography (2014)
[24] PHE Preparedness Planning: Access and Functional Needs
[25] University of Colorado: The State of States in Developmental Disabilities (2015)
[26] PHE Preparedness Planning: Access and Functional Needs

The Agency for Toxic Substances and Disease Registry has created a tool to help emergency response planners and public health officials identify and map the communities that will most likely need support before, during, and after a hazardous event. The Social Vulnerability Index (SVI) uses U.S. Census data to determine the social vulnerability of every Census tract. Census tracts are subdivisions of counties for which the Census collects statistical data. The SVI ranks each tract on 14 social actors, including poverty, lack of vehicle access, and crowded housing, and groups them into four related themes. Maps of the four themes are shown in the figure below. Each tract receives a separate ranking for each of the four themes, as well as an overall ranking.



Social & Economic Determinants of Health

Income, employment, education level, community safety, housing, and family & social support are all parts of social and economic determinants of health. Social and economic determinants play an important role in the health of each individual in Ashe County, as well as the community as a whole.

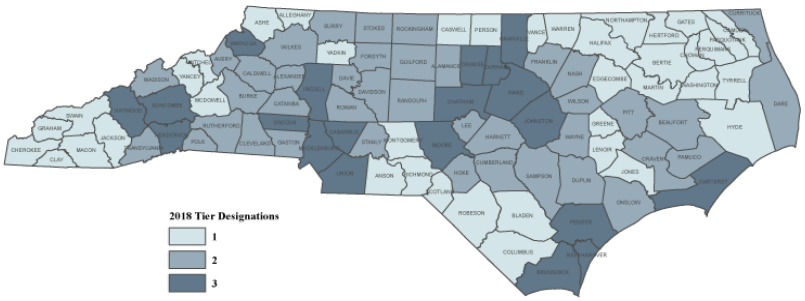
Many inequities exist in the structure of any community's resources. These inequities have a great impact on the health of our community members. Low income, low educational level, and unemployment are all associated with a higher rate of health problems.[27]

[27] NC Center for State Health Statistics, Minority Health Facts (2017)

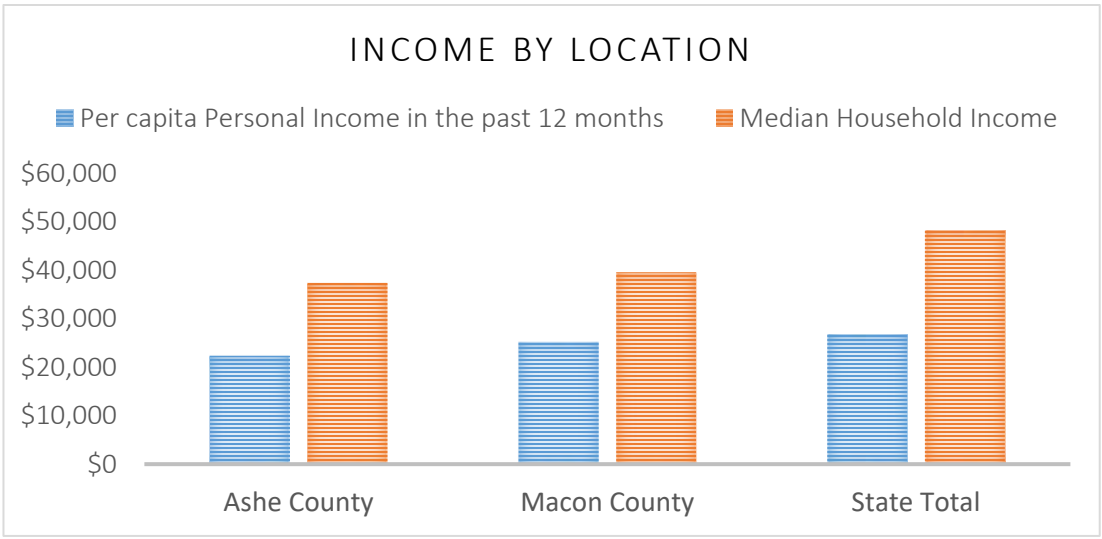
Income

Ashe County remains among the 40 most economically distressed counties in North Carolina.

Each year, the North Carolina Department of Commerce releases Economic Tier designations. Economic tiers are calculated using average unemployment rate, median household income, percentage growth in the population, and adjusted property tax base per capita. Ashe County remains designated as a Tier 1 county this year.[28]

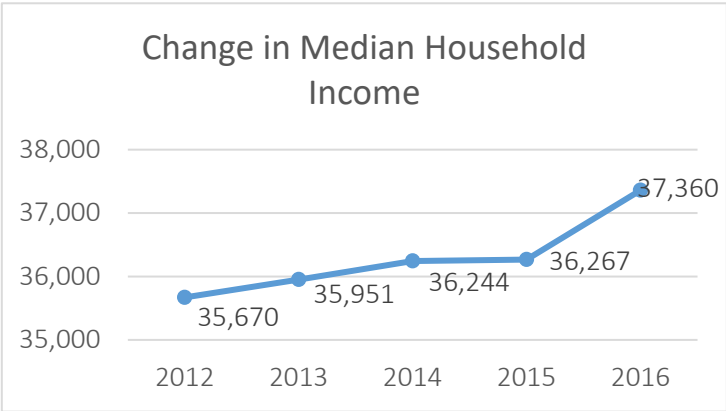


Ashe County's median household income has increased by 4 percent, keeping pace with North Carolina overall.



The median household income in Ashe County was $37,360 from 2012-2016, at $10,896 less than the median household income for North Carolina. This gap in median household income between Ashe County residents and North Carolinans has not changed significantly since the 2009-2013 estimates.[29] This table compares Ashe County, Macon County and North Carolina in the percent change in median household income.

Location	2009-2013	2012-2016	Percent Change
Ashe	$35,951	$37,360	4%
Macon	$37,892	$39,593	4%
State Total	$46,334	$48,256	4%

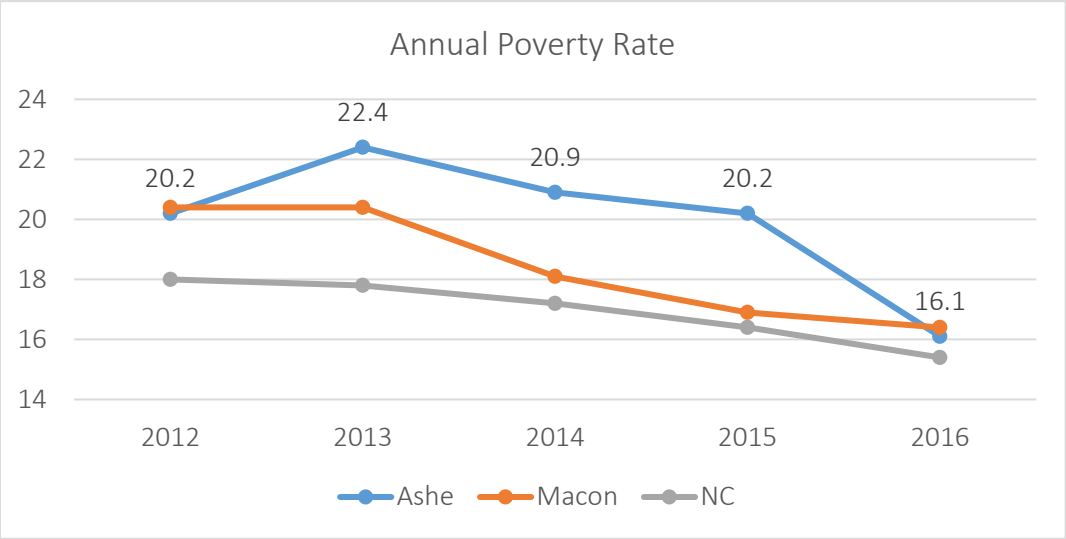


[28] NC Department of Commerce (2018)
[29] NC Department of Commerce (2018)

Poverty

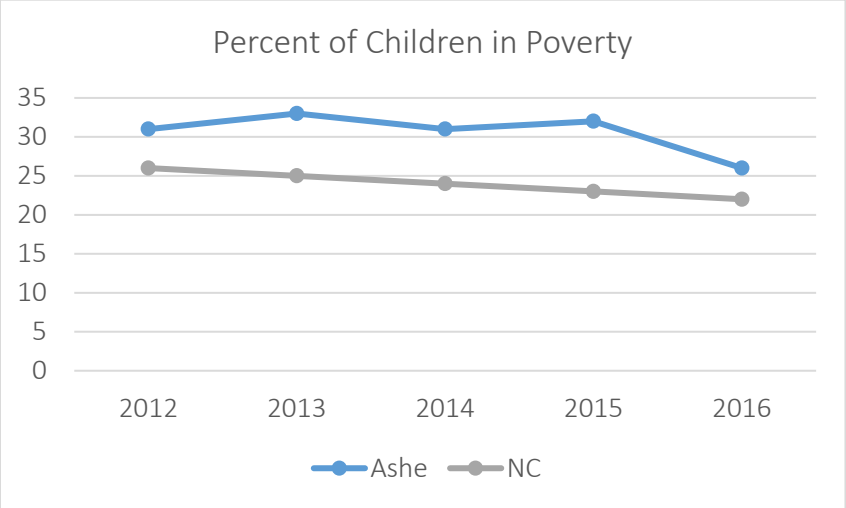
The percent of Ashe County people living in poverty is decreasing at pace with North Carolina.

According to the Federal Poverty Guidelines, a family of four with an income of $24,600 or less is defined as living in poverty. In 2016, 16.1 Ashe County residents were living in poverty, compared to 15.4 percent in North Carolina. From 2012-2016, 1 in 5 Ashe County residents (19.9 percent) were living in poverty compared to 12.4 percent in North Carolina.[30]



More than one in four families in Ashe (27 percent) have an income below the poverty level and have related children in the household under 18 years of age.

The overall percent of children living in poverty in Ashe County has also declined.



The overall percent of children in Ashe County under age 18 in poverty decreased from 32 percent in 2015 to 26 percent in 2016.[31]

The percent of children in poverty for 4 percent higher for children in Ashe County than for children across North Carolina. Continuing to monitor trends is important since these rates are estimates based on the United States Census Bureau's Small Area Income and Poverty Estimates.

[30] American Community Survey (2012-2016 estimates)
[31] Small Area Income and Poverty Estimates (2016)

Poverty by Census Tract

Once we examine Ashe County more closely, we quickly realize that people in wealthier parts of the county are far healthier than those living in lower-income pockets of the county. By identifying where these disparities exist, we can plan better approaches to improving community and health outcomes. According to census tracts within Ashe County:

- 10.3 percent of families in Fleetwood live below the poverty level,
- 16.5 percent of families in Lansing live below the poverty level, and
- 20 percent or more of families in all other census tracts live below the poverty level.[32]

Poverty status is determined for each household using federal thresholds established annually by the Census Bureau in accordance with the Federal Office of Management and Budget.

Racial and Ethnic Disparities in Social and Economic Wellbeing

Social and economic wellbeing are very important indicators of health. Nationwide, minority populations experience health disparities, which are preventable differences in health outcomes that are created by social, economic, and environmental conditions. We can learn from statewide data that significant health disparities still exist between racial and ethnic groups in our communities.

The North Carolina Office of Minority health and Health Disparities and the North Carolina State center for Health Statistics publish a Racial and Ethnic Health Disparities Report Card every 10 years that uses ratios to compare race and ethnic groups in North Carolina. These ratios are a measure in one racial or ethnic group divided by the measure in the white group. The ratios show areas with the greatest health disparities, areas with growing disparities, and disparity areas that are improving.

The table below compares how different racial and ethnic groups in North Carolina are faring when it comes to their social and economic wellbeing. Letter grades ranging from “A” for very good to “F” for failing are given to each racial or ethnic minority group in North Carolina as compared to the measure of the white population of North Carolina.[33] For more information about this report card, see the section on Racial and Ethnic Disparities in North Carolina.

[32] Community Commons (2018)
[33] Racial and Ethnic Health Disparities in North Carolina Report Card (2010)

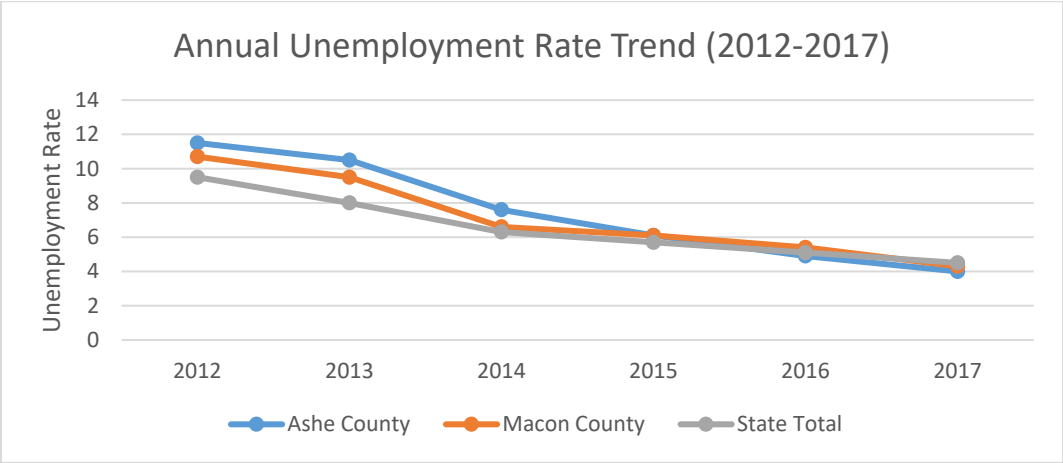
How are Racial and Ethnic Minorities in NC Faring in their Social and Economic Wellbeing Compared to Whites?

Indicators	Baseline Measure	Ratio to Whites	Grade	Updated Measure	Ratio to Whites	Grade
Percent of children under age 18 living below the Federal Poverty Level	2004			2008		
All	21.9			19.9		
White	13.1	1.0		11.3	1.0	
African American/Black	38.2	2.3	D	33.4	3.0	F
American Indian	34.5	2.6	D	28.3	2.5	D
Asian/Pacific Islander	7.4	0.6	A	12.8	1.1	C
Hispanic/Latino	36.8	2.8	D	34.3	3.0	F
Percent of Families Living below the Federal Poverty Level	2004			2008		
All	12.1			10.9		
White	7.5	1.0		6.7	1.0	
African American/Black	25.2	3.4	F	21.3	3.2	F
American Indian	19.4	2.6	D	21.2	3.2	F
Asian/Pacific Islander	6.5	0.9	A	8.0	1.2	C
Hispanic/Latino	25.6	3.4	F	24.8	3.7	F
Percent of single parent families	2004			2008		
All	26.3			25.9		
White	17.2	1.0		17.8	1.0	
African American/Black	54.8	3.2	F	52.8	3.0	F
American Indian	38.9	2.3	D	36.6	2.1	D
Asian/Pacific Islander	17.4	1.0	B	12.7	0.7	A
Hispanic/Latino	39.0	2.3	D	32.9	1.8	C
Median Family Income ($)	2004			2008		
All	47,112			56,588		
White	52,991	1.0		64,879	1.0	
African American/Black	30,463	0.6	D	37,897	0.6	D
American Indian	33,841	0.6	D	40,839	0.6	D
Asian/Pacific Islander	61,592	1.2	A	69,277	1.1	A
Hispanic/Latino	30,589	0.6	D	33,814	0.5	F

Employment

Unemployment in Ashe County has decreased dramatically since 2012.

The unemployment rate in Ashe County has continued to decrease, dropping from 11.5 percent unemployment in 2012 to 4 percent in 2017. Ashe County's unemployment rate is now lower than that of Macon County (4.3 percent) and North Carolina overall (4.5 percent).[34]

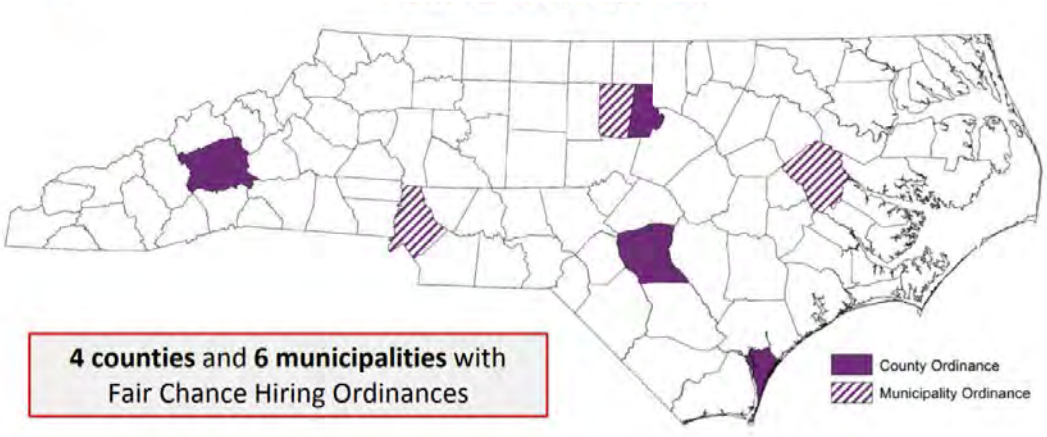


Employment increases our health status, and healthy people are more likely to work.

Employment is an important factor for the health status of our community. Overall, people who are employed are healthier than those who are not employed, regardless of gender, age or disability status.[35] Health also has an impact on a person's desire to work and their likelihood of being hired or keeping a job.[36]

It is important to consider that improving employment opportunities for working-age people can improve health status and decrease healthcare costs in a community. Employment can improve health by increasing social capital, enhancing psychological well-being, providing income, and reducing the negative health impacts of economic hardship.

Counties with Fair Chance Hiring Ordinances* as of January 31, 2018



*Fair Chance Hiring policies, also known as Ban the Box, delay questions regarding a criminal record history until the applicant has first had a chance to show their qualifications and explain their criminal history to the employer.

One way some communities are improving employment opportunities is by removing the conviction history question from job applications and delaying background checks until later in the hiring process. More than 150 cities and counties nationwide have adopted a practice commonly known as "ban the box" so that employers consider a job candidate's qualifications first, without the stigma of a conviction or arrest record.[37] This map shows counties in North Carolina with fair chance hiring ordinances.[38]

[34] NC Office of State Budget Management (2018)
[35] Thomas & Ellis (2013)
[36] The Impact of Employment on the Health Status and Health Care Costs of Working-age People with Disabilities (November 2015)
[37] Ban The Box: US Counties, Cities and States Adopt Fair Hiring Policies (February 2018)
[38] Injury and Violence Prevention Branch (2018)

Racial disparities in unemployment persist in Ashe County for nearly every non-white race.

The unemployment rate for Ashe County residents of Hispanic or Latino origin was more than twice as high as the unemployment rate for non-Hispanic/Latino residents from 2012-2016 (16.6 compared to 7.0). The unemployment disparity for black or African American residents during this time was strikingly higher at 33.3 percent. For individuals of two or more races in Ashe County, the unemployment rate is 17 percent.[39] Social determinants of health such as unemployment are associated with a higher rate of health problems. Efforts to reduce these racial disparities in unemployment are an important part of improving health outcomes in Ashe County.

Top 20 Largest Employers in Ashe County

The table below shows the top 20 largest employers in Ashe County. Three businesses are now among the top 20 largest employers that were not at the time of the 2014-15 report, including Powers Tree Farm & Nursery, Mistletoe Meadows and Wilkes Community College.[40]

The private industry comprises 84.6 percent of all employment industries in Ashe County, followed by government jobs (comprising 16.1 percent), retail trade (comprising 15.9 percent), and healthcare & social assistance (comprising 15.1 percent). Some employers identify with more than one industry. In February of 2018, 3 percent of Ashe County residents worked from home. [41]

Top 20 Largest Employers in Ashe County

Rank	Company	# Employees
1	Ashe County Schools	500-999
2	American Emergency Vehicles	250-499
3	Ashe County Government	250-499
4	Ashe Memorial Hospital	250-499
5	James R Vannoy & Son Construction	250-499
6	General Electric	100-249
7	Walmart	100-249
8	Ashe Services for Aging	100-249
9	United Chemi-Con	100-249
10	Ingles	100-249
11	Skyline Telephone	100-249
12	Suncrest Health Management	100-249
13	Lowes Home Center	50-99
14	McDonald's	50-99
15	**Powers Tree Farm & Nursery**	**50-99**
16	Leviton Manufacturing	50-99
17	**Mistletoe Meadows**	**50-99**
18	Dr. Pepper Bottling Company	50-99
19	**Wilkes Community College**	**50-99**
20	Af Bank	50-99

[39] American Community Survey Estimates (2012-2016)
[40] NC Department of Commerce; Labor & Economic Analysis (2018)
[41] Access NC – NC Commerce County Profile (February 2018)

Food Security

Approximately 14.3 percent of Ashe County households experience food insecurity as of 2015. This includes an estimated 3,870 people in the county. This number declined from the 2013 measure of 16.9 percent.

More than 1 in 5 people in Ashe County who are food insecure do not qualify for food assistance programs.

According to the 2017 Map the Meal Gap, 22 percent of the food insecure households in Ashe County did not qualify for federal food assistance programs whose threshold is 200 percent of poverty, such as SNAP (Supplemental Nutrition Assistance Program). This means that more than 1 in 5 individuals in Ashe County who are food insecure do not qualify for SNAP and other food assistance programs programs.[42]

The average meal in Ashe County costs $2.87, lower than the national average meal cost of $2.94.

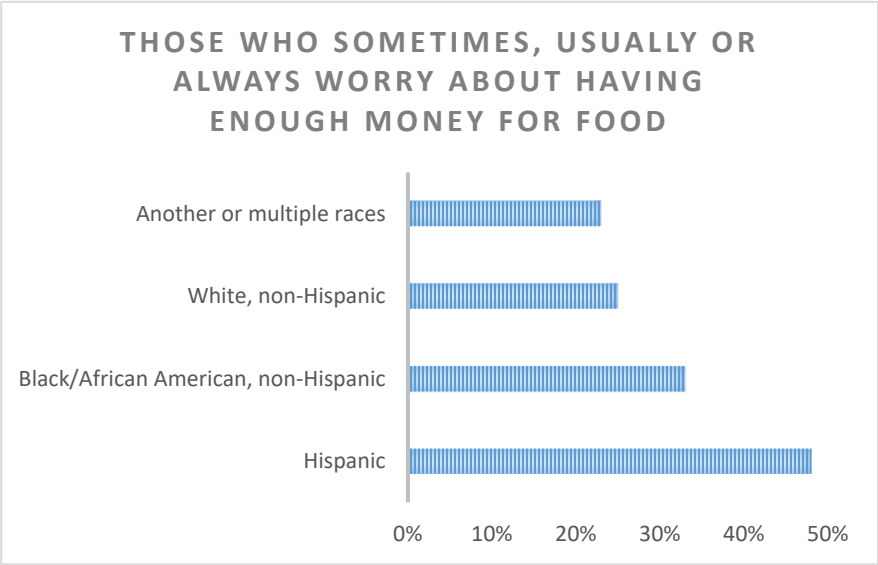
Stress related to Food Choices

Three out of four individuals within AppHealthCare counties report that they rarely or never worry about having enough money to eat nutritious food. This concern is higher, however, for Hispanic individuals in our community: Hispanic individuals are twice as likely to worry about having enough money to eat nutritious food compared to white, non-Hispanic individuals. Overall, 43 percent of Hispanic individuals worry about this choice compared to 21 percent of non-Hispanic, white individuals.[43]

Concerns about Money for Housing or Food

Overall, 64 percent of individuals in Appalachian counties[44] report rarely or never worrying or being stressed about having enough money to pay their rent or mortgage in the past year. This concern is much higher, however, for individuals of color: 61 percent of individuals who are Hispanic, 41 percent of individuals who are black, and 39 percent of people of other or multiple races report always or usually worrying about money for housing, compared to 33 percent of white, non-Hispanic individuals.

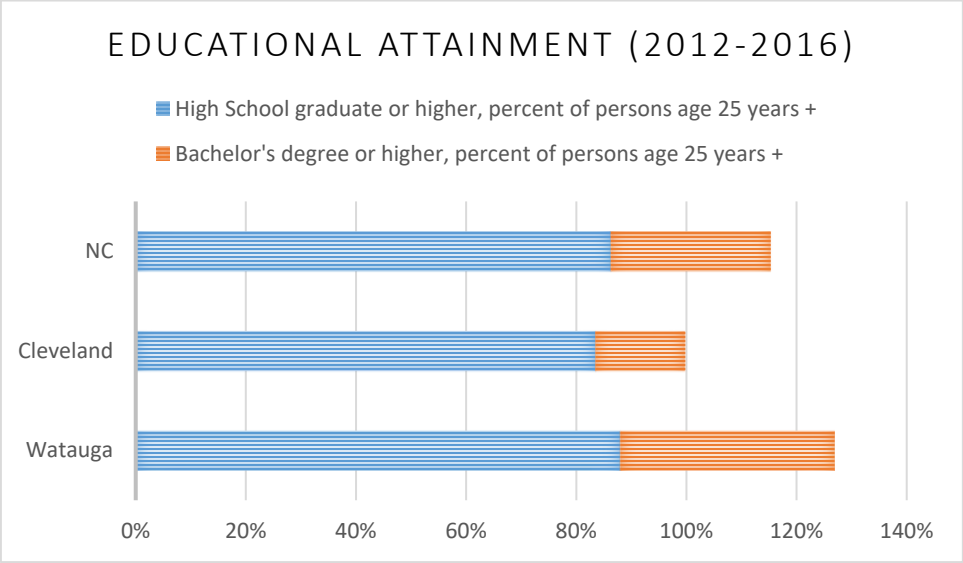
Most people living in Appalachia (72 percent) report that they rarely or never worried or stressed about having enough money to buy nutritious meals in the past year. This rate is different, however, for some individuals according to their race and ethnicity: 48 percent of Hispanic individuals, 33 percent of black, non-Hispanic individuals, 25 percent of white, non-Hispanic individuals, and 23 percent of individuals who reported another or multiple races said they sometimes, usually, or always worry about having enough money for food. It is important to consider these disparities among racial and ethnic minorities when addressing income, housing or food in our community.



[42] Feeding America: Map the Meal Gap (2016)
[43] Behavioral Risk Factor Surveillance System: Alleghany, Ashe, Watauga Counties (2012)
[44] As defined by the Appalachian Regional Commission

Education

Education is a critical component of community health for many reasons. Individuals who graduate from high school or an equivalent education have a better potential of achieving or maintaining a better health status over time.[45] In Ashe, there are an estimated 20,231 residents age 25 and above, and of those, 16.7 percent (approximately 3,377 people) have no high school diploma or equivalency (GED).[46] This rate has decreased by more than 3 percent since the last community health assessment.



Ashe County Schools serves as the public school district in the county, including three elementary schools (Blue Ridge, Mountain View, and Westwood), one middle school (Ashe County Middle School), and one high school (Ashe County High School). There were 534 elementary students, 460 middle school students, and 919 high school students enrolled during the 2016-2017 school year.[47]

90 percent of the students are white/Caucasian.

According to Access NC, 40 percent of high school graduates in Ashe County took the SAT in 2017. The average SAT score (on a new 1600 scale) was 1,100, which is slightly higher than the national average for that year.

During the 2016-17 school year, a total of 2,981 students were enrolled in Kindergarten through 12th grade in Ashe County. That same year, 772 children were enrolled across the county's 13 licensed child care facilities.[48]

More students are being homeschooled in Ashe County and across the state.

An estimated 525 students in Ashe County were homeschooled during the 2016-2017 school year across 341 home schools.[49] North Carolina's homeschooled population is one of the largest in the country. If homeschooled students in North Carolina were grouped in a school district, it would be the third largest district in the state behind Wake County and Charlotte-Mecklenburg.[50] Religious affiliated homeschools in North Carolina still outnumber independent homeschools: 60 percent are classified as religious; 40 percent are independent. Homeschooled students (ages 5-17) have also increased nationwide from 2.2 percent of the overall student population in 2003 to 3.4 percent in 2012.[51]

Parents opt out of the public school system for a variety of reasons. Nationwide, the desire to provide religious or moral instruction and dissatisfaction with public schools are the two most important reasons for homeschooling.[52] Home schools were officially legalized in North Carolina in 1985.

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[45] Freudenberg & Ruglis (2007)
[46] American Community Survey 5-year estimates (2012-2016)
[47] North Carolina School Report Cards (2016-2017)
[48] Access NC County Profile (February 2018)
[49] North Carolina HOME SCHOOL Statistical Summary (2017)
[50] Ed NC: Homeschool students: The third largest "district" in North Carolina (December 2017)
[51] Digest of Education Statistics: Table 206.10 (2013)
[52] National Household Education Survey (2012)

Ashe County individuals with a college degree earn $16,559 more annually than those with an associate's degree but no college degree. Women in Ashe County earn less than their male counterparts.

The table below shows median earnings in the past 12 months (in 2016 inflation-adjusted dollars) by gender identity and educational attainment for the population ages 25 years and older. Women in Ashe County earn less than men who have the same educational attainment by every measure below.

Median Earnings by Educational Attainment	Ashe County	
	Estimate	Margin of Error
Total:	25,324	+/-1,417
Less than high school graduate	16,710	+/-859
High school graduate (includes equivalency)	21,835	+/-1,472
Some college or associate's degree	24,621	+/-2,007
Bachelor's degree	41,180	+/-2,718
Graduate or professional degree	47,015	+/-5,395
Male:	26,841	+/-1,494
Less than high school graduate	18,481	+/-2,500
High school graduate (includes equivalency)	22,454	+/-2,203
Some college or associate's degree	32,254	+/-6,733
Bachelor's degree	41,972	+/-7,660
Graduate or professional degree	69,286	+/-19,311
Female:	23,215	+/-1,883
Less than high school graduate	14,531	+/-5,845
High school graduate (includes equivalency)	21,203	+/-1,661
Some college or associate's degree	20,219	+/-3,123
Bachelor's degree	40,231	+/-3,389
Graduate or professional degree	43,750	+/-6,652

Community Safety

Community safety is a priority for Ashe County respondents of the health opinion survey. 'Low crime and safe neighborhoods' was selected by 35 percent of opinion survey respondents as one of the three most important factors for a healthy community.

The violent crime rate for Ashe County is more than 3 times lower than the state rate.

Crime rates and related data help us better understand community safety and factors. Exposure to violence and its norms can lead to further community violence. The violent crime rate for Ashe County is 106.1 per 100,000, which is more than 3 times lower than the violent crime rate for North Carolina (374.9 per 100,000) during 2016.[53] Violent crime includes homicide, rape, robbery, and aggravated assault. There are 23,000 sex offenders registered in North Carolina, and of those, 39 live in Ashe County.[54]

[53] NC State Bureau of Investigation: Annual Summary Report of Uniform Crime Reporting Data (2016)
[54] NC State Bureau of Investigation: Sex Offender Registry (2018)

Pedestrian Safety

North Carolina is one of the least safe states in the country for walking and bicycling. Each year, more than 3,000 pedestrians and 850 bicyclists are hit by vehicles in North Carolina. About 15 percent of all traffic fatalities that occur on North Carolina roads involve pedestrian or bicycle fatalities.[55] Creating safe places for everyone is an important step toward meeting the national goal of ending traffic deaths on roads.

The rate of pedestrian injuries in Ashe County is 15.5 per 10,000 people, which is almost 3 times lower than the rate for North Carolina overall at 44.2 per 10,000 people.

Fatal and injurious pedestrian crashes (1997-2015)

Location	# Pedestrian Deaths	# Pedestrian Injuries	Pedestrian Injury Rate by 10,000
Alleghany	1	17	16.6
Ashe	4	38	15.5
Watauga	7	221	43.1
NC	3,257	41,111	44.2

Intimate Partner Violence

The term "intimate partner violence" (IPV) describes physical violence, sexual violence, stalking and psychological aggression (including coercive acts) by a current or former intimate partner. An intimate partner is a person with whom one has a close personal relationship.[56]

- In 2015, 20 percent of homicides in NC with known circumstances were associated with IPV.
- Almost half of all female homicides in North Carolina are IPV-related (46.2 percent).[57]
- Female IPV-related homicide victims were most likely to have been killed by a current spouse or partner (61.2 percent), in contrast to an ex-spouse or former partner (18.4 percent).
- IPV-related homicides in North Carolina are more common for non-Hispanic white men and women than they are for Non-Hispanic black men and women.

Domestic Violence

During 2016, there were 323 calls placed and 234 clients served for domestic violence in Ashe County, including 180 female clients and 54 male clients. The majority of clients were children less than 13 years old (38 percent), followed by individuals ages 26-40 years old (comprising 28 percent of all clients served).[58] ASHE (A Safe Home for Everyone) serves victims of domestic violence and sexual assault in Ashe County. Support agencies in neighboring counties include OASIS (Opposing Abuse with Service, Information and Shelter) and DANA (Domestic Abuse is Not Acceptable).

[55] Watch for Me NC: Why Pedestrians and Bicyclists Matter (2018)
[56] CDC, Intimate Partner Violence: Definitions (2018)
[57] Injury and Violence Prevention Branch: Intimate Partner Violence in NC (2015)
[58] NC DOA, Council for Women (2017)

Sexual Assault

During 2016, there were 221 calls placed and 42 clients served for sexual assault in Ashe County. All clients were female, and the age of most clients served was between 26-40 years (33 percent), followed by children under age 18 (29 percent). The most common type of assault was child sex offense, accounting for 31 percent of all sexual assaults reported that year. The agency provided support to victims through information, advocacy, referrals, transportation, hospital, and court services. Offenders were mostly relatives (38 percent) or acquaintances (38 percent).[59]

Firearms

Nearly two-thirds of all violent deaths in N.C. during 2015 were caused by firearms.[60] Firearms were involved in 41.9 percent of all child violent deaths in North Carolina in 2015. This percentage was driven by the high number of firearm related deaths among children ages 15-17.[61]

Firearm-related injuries is not one of the most important health problems in Ashe County for opinion survey respondents. Two out of 729 respondents cited firearm-related injuries as one of the three most important health problems in the county.

Housing

Housing is an important social determinant of physical and mental health and wellbeing. The quality and cost of housing can improve or worsen our health in many ways:

- Affordable housing makes more resources available to pay for healthcare and healthy food, which leads to better health outcomes.
- Affordable, quality housing alleviates overcrowding and limits our exposure to environmental toxins.
- Stable and affordable housing supports mental health by limiting stressors related to financial burden or frequent moves, and can offer an escape from an abusive home environment.
- Affordable and accessible housing linked to services enables older adults and individuals with mobility limitations to remain in their homes longer.[62]

One in five respondents of the community health opinion survey cited affordable housing as one of the three most important factors for a healthy community.

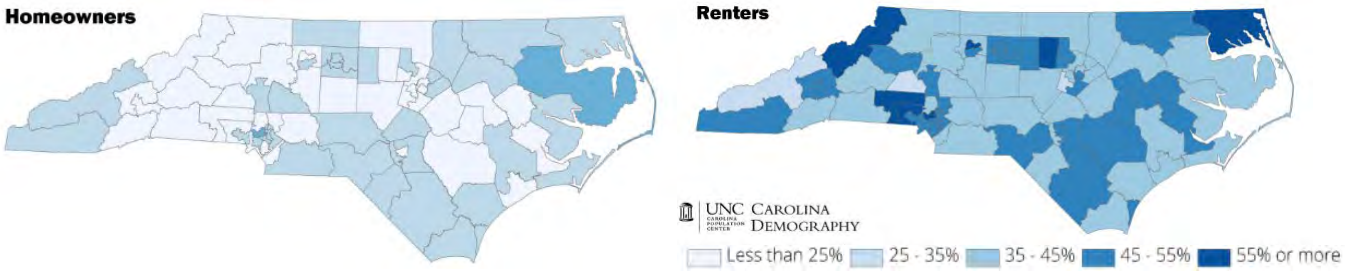
An estimated 16 percent of Ashe County households have at least one of four major housing problems (overcrowding, high housing costs, lack of kitchen or plumbing facilities) compared to 17 percent of households across North Carolina. An estimated 3.1 percent of households (or 374 homes) in Ashe County do not have telephone services available.[63]

Cost-Burdened Families

Families who pay more than 30 percent of their income for housing are considered cost burdened and may have difficulty affording necessities such as food, clothing, transportation and medical care. In Ashe County, 34 percent of households with a mortgage spend more than 30 percent of their household income on the cost of the house. Housing costs are especially burdensome for renters in Ashe County: 53 percent of renters spend more than 30 percent of their household

[59] NC DOA, Council for Women (2017)
[60] Injury and Violence Prevention Branch: Firearm Deaths in NC (2015)
[61] NC Injury and Violence Prevention Branch: Child Violent Death in NC (2015)
[62] Center for Housing Policy: The Impacts of Affordable Housing on Health: A Research Summary (2015)
[63] American Community Survey (2016)

income on rent.[64] The maps show the percentage of cost burdened households in 2012 for each of the 72 Public Use Microdata Areas in the state.[65]



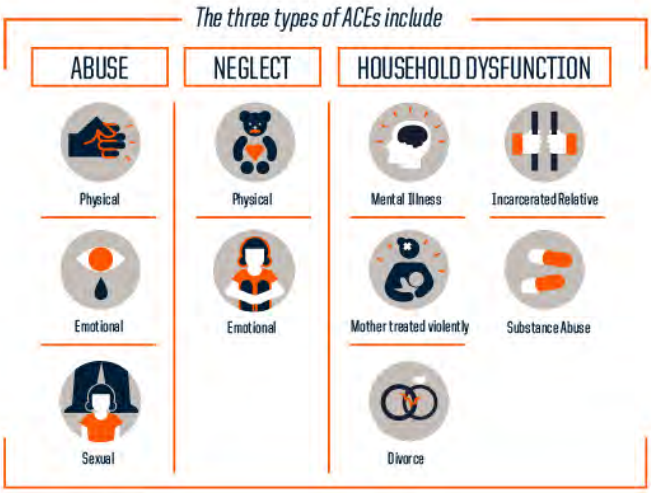
Family & Social Support

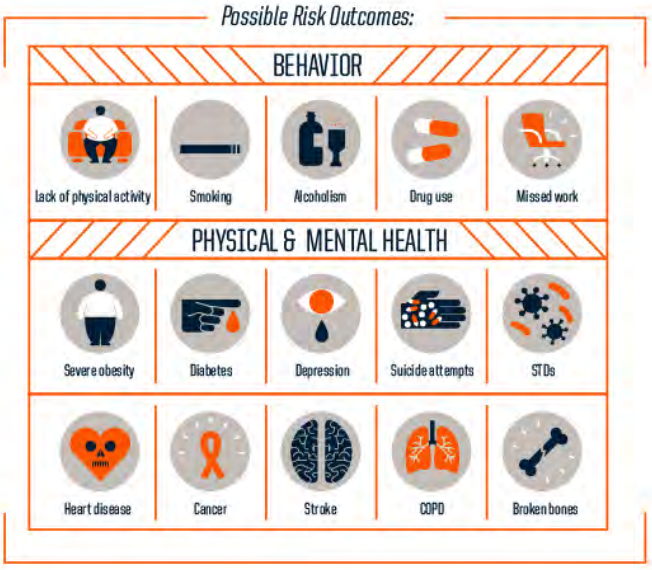
Social connectivity is a very important predictor of health. Social connectivity includes spending time with friends and family, taking part in group activities, or having a sense of community. Having strong social ties supports a person's physical and mental health in many ways, from lowering rates of disease to decreasing stress during major life transitions. One recent study found that those who lacked supportive relationships had a fourfold increased risk of dying six months after open-heart surgery.[66]

Adverse Childhood Experiences

Early childhood experiences have a great impact on health, educational achievement and financial security. Adverse childhood experiences such as abuse, neglect, or poverty can negatively affect brain development and increase a person's risk for physical and behavioral health problems later in life.

Providing children with safe and stable homes, relationships, and environments can protect against the impact of adverse childhood experiences, improve health, and generate increased financial security.[67] Schools also play an important role in addressing childhood trauma. Approximately 11 percent of Ashe High School students reported receiving help from a resource teacher, speech therapist, or other special education teacher at school in 2016.[68]





[64] American Community Survey 5-year estimates (2012-2016)
[65] NC in Focus: Housing costs burden 1.2 million NC households (July 2014)
[66] Whole Health Action Management Peer Support Training Participant Guide (2015)
[67] NC Child Health Report Card (2018)
[68] Youth Risk Behavior Survey: Ashe County High School (2017)

Child Abuse and Neglect

Child abuse and neglect was among the top 10 most important health problems in the county for Ashe County community health opinion survey respondents.

According to NC Child, the percent of children without a repeated substantiated report of abuse and/or neglect within 6 months of the first occurrence is 89 percent. In 2015, 82.8 per 1,000 children were assessed for child abuse or neglect.[69]

The Kids Count Data, which assess child wellbeing in the United States, has not published data on child abuse and neglect at the county level since the last CHA report. The number of substantiated cases of child abuse and neglect in Ashe remained relatively stable from 2006 - 2010, with the majority of reports related to neglect. From 2013-2014, the number of investigative reports related to dependence increased.[70]

Child Health Factors	Ashe	NC
Children living in poor or low-income homes	58%	48.9%
Children assessed for abuse/neglect per 1,000	82.8	56.5
Children in foster care per 1,000	11.6	6.7

Environmental Health

Environmental health includes many important health factors such as the air we breathe, the water we drink, the food we eat, the built environment we live in, and our exposure to communicable diseases. Assessing and monitoring our environmental health saves lives, predicts health, saves money and protects our future.

The Air We Breathe

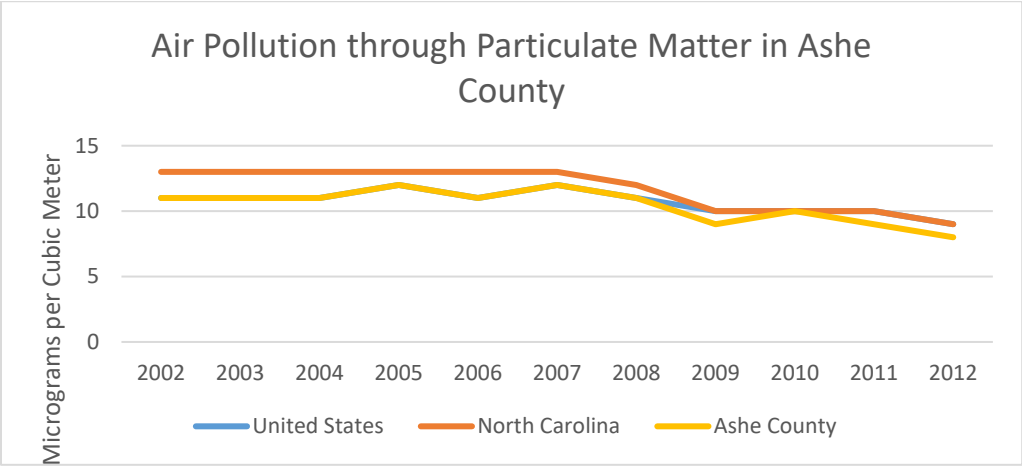
The air quality index for Ashe County is not reported; however, Ashe County is included in the Winston-Salem monitoring region for air quality. The main air pollutant in the summer time for the Winston-Salem region (including Ashe County) is from the ozone. The main air pollutant during the winter months for the region is from particular matter, or PM 2.5.[71]

Air Quality Measures	Ashe County
Annual rate of carbon monoxide poisoning deaths (2015)	59.0 per 100k
Average lead soil level	21.618 parts per million

The average lead soil level for Ashe County is slightly lower at 21.618 parts per million than the state average lead soil level of 22.728 parts per million. The average annual rate of pesticide exposure incidents for the state of North Carolina is 44.5 per 100,000.[72] This rate is not available at the county level.

[69] NC Child County Data Card (2017)
[70] Kids Count Data Center (2010)
[71] Department of Environment and Natural Resources: Ambient Air Quality Report (2011)
[72] Health Grove Environmental Health Statistics (2018)

Air pollution is measured by collecting the particulate matter in a designated area. The graph below shows that the particulate matter in the atmosphere in Ashe County is decreasing. Hospitalization data for asthma rates in Ashe County are unreportable due to small numbers.



The Water We Drink

Local entities test and treat our drinking water, monitor local rivers and streams, and inspect septic systems and wells. There are 11 community water systems in Ashe County, which altogether serve 4,703 residents. Since 2005, there have been 151 total drinking water violations. Drinking water violations occur when a public water system has unresolved serious, multiple, and/or continuing violations as defined by EPA's Drinking Water Enforcement Response Policy. Violations must either return to compliance or be addressed by a formal enforcement action within six months of being designated a serious violator.

Ashe County also has 5 non-community non-transient water systems, which altogether serve 1,522 people. Non-community non-transient water systems are public water systems that regularly supply water to at least 25 of the same people at least six months per year. Some examples are schools, factories, office buildings, and hospitals with their own water systems. Since 2005, there have been 26 total drinking water violations from non-community non-transient water systems.

The Water Protection Program of AppHealthCare is responsible for permitting and inspecting all septic systems within the district. The goal of the program is to protect the public's health through the safe disposal and treatment of wastewater. Prior to building a facility, there must be a permitted plan on how that facility will dispose of the wastewater that it will generate. When a municipal sewer system is not available, the most common alternative is a sub-surface septic system, which will treat and dispose of the wastewater on the site. In North Carolina, this is carried out through a three-tiered permitting process.

Ashe County Permits (CDP FY 15-16) include:

- Improvement Permits: 253
- Authorization to Construct Permits: 199
- Operation Permits: 155
- Compliance Permits: 140
- Well Permits: 181

The Food We Eat

Local entities educate, inspect and investigate farms, manufacturers, restaurants, grocery stores, adult homes, pools, lodging and childcare centers.

- One in six Americans gets sick each year from contaminated food.
- Nationwide, 68 percent of outbreaks happen at restaurants.
- Lost productivity from foodborne illness costs an average of $30 billion per year nationwide.[73]

The Food Protection & Facilities Section at AppHealthCare is a component of the North Carolina Division of Environmental Health. This program is administered by the local Health Departments and mandated by the state of North Carolina. Registered Environmental Health Specialists in this program are responsible for enforcing state statutes and rules governing a number of different types of facilities:

- Restaurants
- Food stands
- Meat markets
- Nursing/rest homes
- Concession stands
- Festivals
- School cafeterias
- School buildings
- Lodging facilities
- Residential facilities
- Local jails/prisons
- Bed & breakfasts
- Hospitals
- Resident and primitive camps

The purpose of the Food Protection & Facilities Section is to ensure the public of safe food and clean facilities through planning and permitting of new and existing establishments, and continuous education of employees.

The table below shows local food and lodging permits for Risk Category 4 Food Service Inspections. These are the highest risk categories for food-borne diseases and therefore are required to be inspected four times per year.[9] The table shows the percentage of food service inspections that were recently completed out of all food services facilities.

Risk Category 4 Food Service Inspections Performed				
County	FY 2015-2016 Total	1st Quarter 2016-2017	2nd Quarter 2016-2017	3rd Quarter 2016-2017
Alleghany	60%	45%	56%	81%
Ashe	31%	45%	71%	87%
Watauga	27%	28%	56%	95%
District	39%	35%	60%	91%

Our Built Environment

Our built environment includes the structures in Ashe county that promote good health behaviors such as well-lit, safe walking trails that connect neighborhoods with shopping centers or affordable farmers markets that offer easy access to fresh fruits and vegetables.

Central Appalachia is a special place in America. The region provides habitat to thousands of plant and animal species, many of which are found only here. According to the World Wildlife Fund, Appalachia contains some of the most diverse plants and animals found in the world's temperate deciduous forests. The region is also the heart of mountaintop removal mining activities.[74]

[73] Foodborne Illness Acquired in the United States—Major Pathogens (2011)
[74] Appalachian Voices: Ecological Impacts of Mountaintop Removal (February 2018)

Air pollution in Appalachia is caused by mining, traffic, agriculture, rapid urbanization, and pollutants transported from outside the region. Many streams in Appalachia have been listed by the EPA as not meeting water quality criteria for pathogens, nutrients, and sediment, which increases the exposure risk to people using that water for agriculture, recreation, and consumption.

Some areas of Appalachia have been cited as exceeding the national average for cancer, heart disease, and other chronic diseases. The link between these diseases and environmental degradation and exposure to pollutants is still being studied, but we do know that our environment impacts health conditions such as infectious disease, cancer, and asthma.[75]

The U.S. Environmental Protection Agency estimates that mountaintop removal "valley fills" are responsible for burying more than 2,000 miles of vital Appalachian headwater streams and are poisoning many more streams. As a result, water downstream of mountaintop removal mines has significantly higher levels of sulfate and selenium, and increases in electrical conductivity, a measure of heavy metals. These changes in water quality can directly kill aquatic species, or disrupt their life cycles so severely that populations dwindle, or even disappear.[76]

Transportation

Transportation is a major barrier to accessing necessary services and care for many individuals in Ashe County. Respondents of the community health opinion survey cited transportation as the second most important factor needed to support older adults in the county.

The average travel time to work in Ashe County is 26.8 minutes.

Ashe County Transportation Authority (ACTA) serves Ashe County residents with one fixed route service between West Jefferson and Jefferson six days per week and transportation by appointment seven days per week. Any resident or visitor to Ashe County can access ACTA services. Call 336-846-2000 for more information.[77]

Access to Healthy Food and Recreation

There are 36 recreational facilities registered in Ashe County. Family Central in Ashe County houses a fitness center, gymnasium, playground, batting cages, jogging path, baseball and soccer fields.

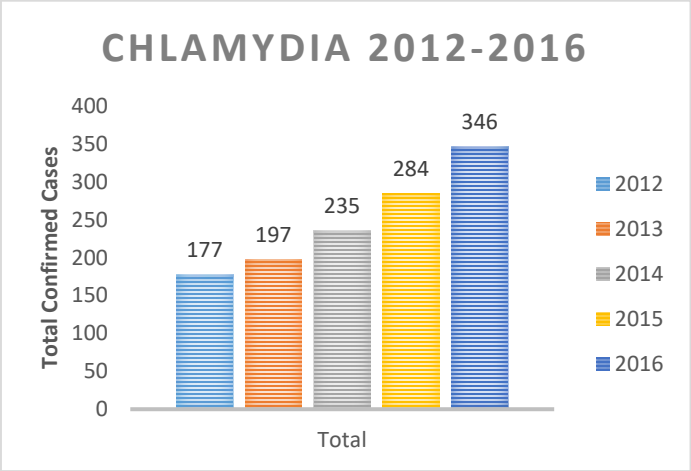
AppHealthCare conducts a Fruit and Vegetable Outlet Inventory in partnership with the North Carolina Division of Public Health periodically. As of 2017, there were 3 produce markets, 3 roadside stands, and 1 farmers market in Ashe County

[75] Program: Environmental Health, M.S.E.H. East Tennessee State University, Acalog ACMS (2018)
[76] Appalachian Voices: Ecological Impacts of Mountaintop Removal (February 2018)
[77] Ashe County Transportation Authority (2018)

with predictable location and hours where fruits and vegetables are sold.[78] The majority of these outlets accept SNAP/EBT and WIC forms of payment.

Communicable Disease Exposure

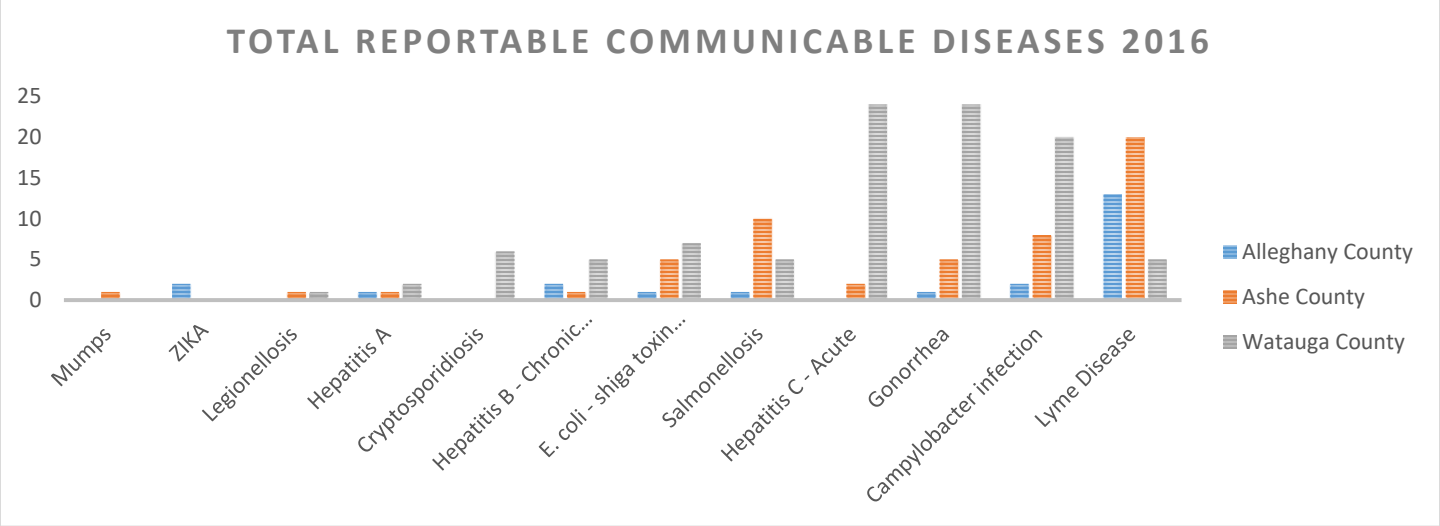
Communicable diseases spread from one person to another through a variety of ways, including contact with blood and bodily fluids, breathing in an airborne virus, or by being bitten by an insect. AppHealthCare performs investigation, follow-up, public information, epidemiological surveillance and testing for communicable diseases. There are 74 communicable diseases in North Carolina that are mandated by law to be reported to the state. The list of reportable diseases varies slightly from state to state. The total number of confirmed communicable diseases in Ashe County in 2017 was 158.



In 2016, 113 sexually transmitted infections were confirmed in Ashe County. The graph shows confirmed cases of chlamydia for Alleghany, Ashe and Watauga Counties from 2012-2016.

The number of confirmed communicable diseases doubled from 2016 to 2017 across AppHealthCare counties.

The table below shows the number of reportable communicable diseases that are confirmed or probable and eligible for entering in the NC Electronic Data Surveillance System. Lyme Disease is the most common communicable disease across the three counties served by AppHealthCare. AppHealthCare investigated 496 communicable disease cases overall in 2016. This number rose to 728 cases in 2017, 22 percent of which were investigated for Ashe County.



Lyme disease and salmonellosis were the most common communicable diseases confirmed in Ashe County in 2016.

The number of acute hepatitis C cases confirmed in Ashe County has increased from zero cases in 2014 and 2015 to 2 cases in 2016. It is difficult to estimate the number of undiagnosed individuals with hepatitis C, but it is probable that hundreds of individuals within Alleghany, Ashe and Watauga Counties have undiagnosed hepatitis C.[79] Most patients with

[78] NC Fruit and Vegetable Outlet Inventory (2017)
[79] Fleischauer, NC DPH Communicable Disease Branch (2018)

acute hepatitis C do not have an acute illness and most do not seek medical care. In addition, many cases of diagnosed acute hepatitis C are not reported.

Rates of acute hepatitis C across North Carolina and the United Stated declined from 2000 to 2011, but began to increase again in 2011 and have steadily increased since then. Acute hepatitis C rates in North Carolina are now more than double the rate across the United States as of 2016, with western North Carolina seeing the highest rates of acute hepatitis C. The increase in hepatitis C has been linked to the opioid epidemic due to opioid injection.[80]

Mortality

Mortality is the event or the frequency of death. Mortality rates are indicators of community health issues, such as access to healthcare and risk factors related to personal behaviors and the built environment. By examining mortality rates, we can identify links between social determinants of health and outcomes.

Leading Causes of Death

The leading causes of death in Ashe County remain largely due to chronic diseases. The table below shows the leading causes of death ranked by the number of deaths caused from 2012-2016. Arrows indicate whether causes of death have increased or decreased since the last community health assessment (2009-2013).[81] Cerebrovascular diseases was not among the 10 leading causes of death from 2009-2013 and is now the 4th leading cause of death in the county.

Leading Causes of Death in Ashe County (2012-2016)				
Rank	Cause	Change	# of deaths	Death rate
1	Cancer	-	377	279.3
2	Diseases of the heart	-	366	271.2
3	Chronic lower respiratory diseases	-	123	91.1
4	**Cerebrovascular disease**	*	**68**	**50.4**
5	Alzheimer's disease	⬆	62	45.9
6	All other unintentional injuries	⇩	52	38.5
7	Influenza & pneumonia	⇩	47	34.8
8	Diabetes mellitus	⇩	34	25.2
9	Chronic liver disease & cirrhosis	⇩	30	22.2
10	Suicide	⇩	24	17.8

[80] CDC: Increase in hepatitis C infections linked to worsening opioid crisis (2018)
[81] State Center for Health Statistics: Leading Causes of Death (2012-2016)

In 2016, 3 out of 4 people in Ashe County died from one of the leading causes of death included in the chart above. Cancer and diseases of the heart remain the most common causes of death in Ashe County, each accounting for 21 percent of deaths in 2016. These rates are comparable to the leading causes of death for North Carolina: Cancer accounted for 21.6 percent of deaths, followed by diseases of the heart (20.2 percent of deaths) statewide.[82]

In 2016, mortality from cerebrovascular diseases was lower in Ashe County (accounting for 4.3 percent of all deaths) than in North Carolina (accounting for 5.5 percent of all deaths). The percent of deaths by other unintentional injuries in Ashe County was nearly half the percent for North Carolina overall (accounting for 4.4 percent of all deaths). That same year, Alzheimer's disease was the primary cause of death for 4.6 percent of deaths in Ashe County, as well as for North Carolina overall. The percent of deaths in Ashe County for diabetes was significantly lower than the state (3.1 percent) in 2016.

Leading Causes of Death by Age

By understanding which age groups are most affected by which cause of death, we can better target prevention efforts. The chart below includes the leading cause of death per age group. It is important to note the number of deaths for each cause of death, which are relatively small. The leading causes of death by age should be interpreted with caution due to small numbers.

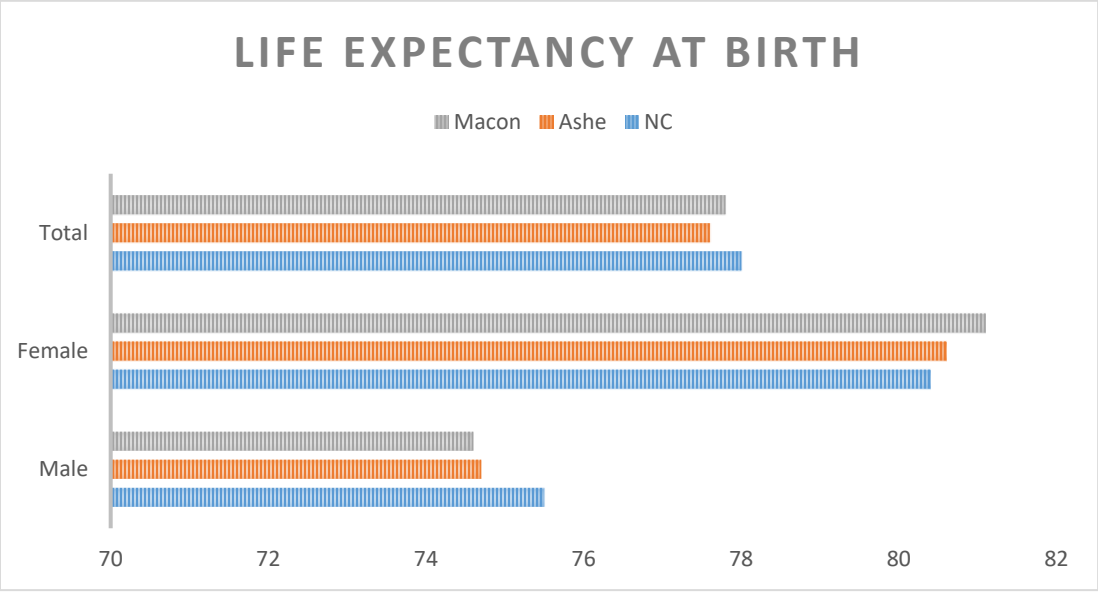
Causes of Death by Age Group: Ranking, Number of Deaths, and Unadjusted Death Rates per 100,000 Population

AGE GROUP:	RANK	CAUSE OF DEATH:	# deaths	Death rate
0-19 years	1	Motor vehicle injuries	4	14.6
	2	Cancer- all sites	3	10.9
		Conditions originating in the perinatal period	3	10.9
		Congenital anomalies (birth defects)	3	10.9
	5	Other unintentional injuries	2	7.3
20-39 years	1	Other unintentional injuries	11	40.0
	2	Suicide	7	25.4
	3	Cancer- all sites	6	21.8
40-64 years	1	Cancer- all sites	91	187.4
	2	Diseases of the heart	62	127.7
	3	Other unintentional injuries	19	39.1
65-84 years	1	Cancer- all sites	230	824.3
	2	Diseases of the heart	158	566.3
	3	Chronic lower respiratory diseases	80	286.7
85+ years	1	Diseases of the heart	143	4027.0
	2	Cancer- all sites	47	1323.6
	3	Alzheimer's disease	35	985.6

[82] State Center for State Health Statistics (2016)

Life Expectancy

The graph below shows the average life expectancy at birth for women and men in Ashe County, Macon County and North Carolina. The average life expectancy at birth in Ashe County is 77.6 years as of 2016.[83] The average life expectancy at birth for women in Ashe County is 80.6 years (compared to 80.4 years for North Carolina overall), and 74.7 years for men (compared to 75.5 years for North Carolina overall).



Years of Potential Life Lost

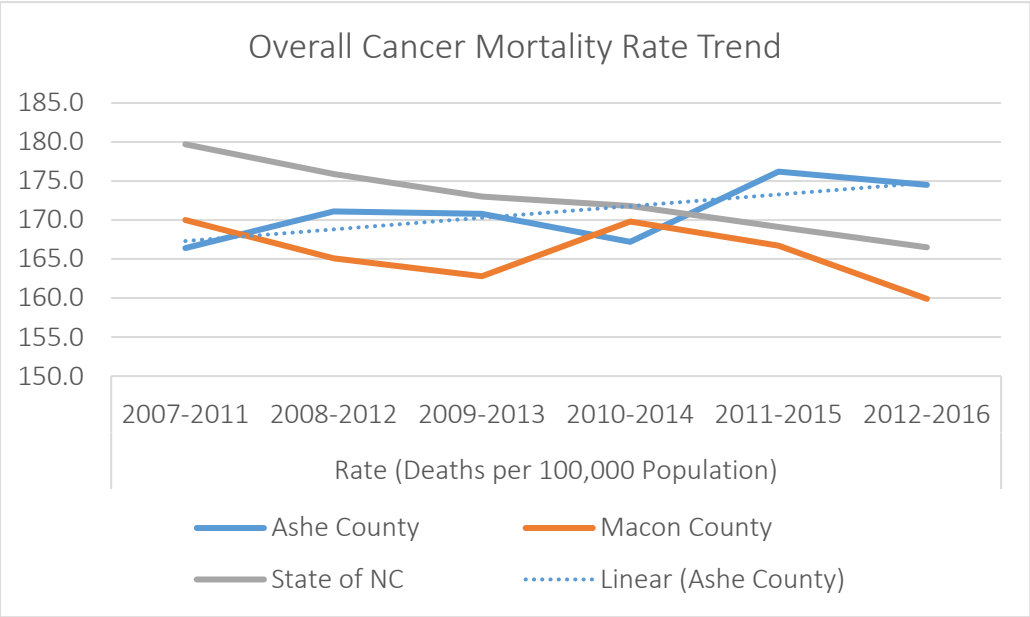
North Carolina Center for State Health Statistics calculates the years of potential life that are lost from the leading causes of death based on life expectancy at birth. Below are the leading causes of death for Ashe County from 2012-2016 and the years of potential life lost during those years.[84]

Cause of death	Number of deaths	Years of potential life lost
Cancer	377	6,018
Diseases of the heart	366	4,589
Chronic lower respiratory diseases	123	1,482
Cerebrovascular disease	68	718
Alzheimer's disease	62	507

[83] NC Center for State Health Statistics (2016)
[84] NC Center for State Health Statistics (2016)

Health Status/Morbidity

Morbidity is the rate of disease in a population. Measuring morbidity rates helps us to find linkages between social determinants of health and health outcomes. By comparing the prevalence of certain chronic diseases to health or social indicators (such as poor diet or socioeconomic status), we can better understand the causes of morbidity and how to address them. The following information describes the disease burden and health problems for Ashe County.



The overall cancer mortality rate has increased in Ashe County and remains higher than that of Macon County and North Carolina overall.

The cancer mortality rate for Ashe County was 174.5 per 100,000 from 2012-2016.

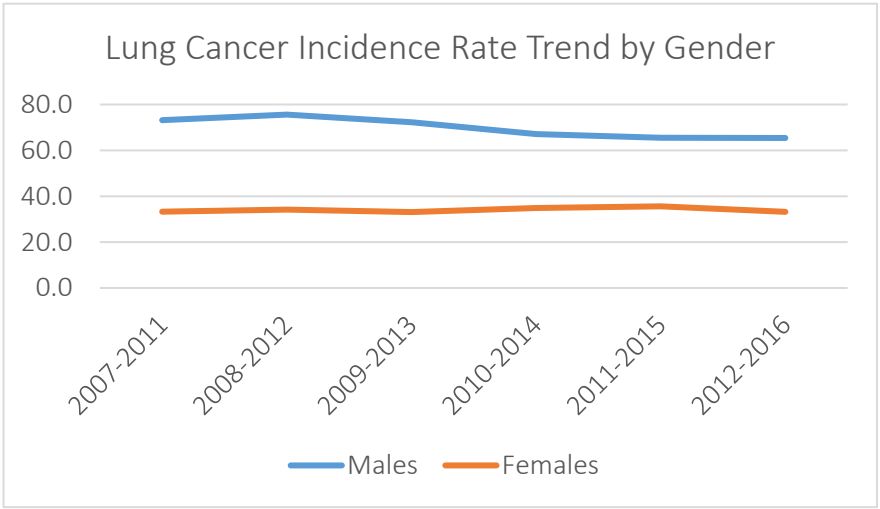
Chronic Disease

Chronic disease is one of the biggest causes of poor health. A chronic disease is long lasting in nature, such as cancer, type II diabetes, heart disease and stroke. Although genetics and other factors contribute to the development of chronic health conditions, individual behaviors play a major role. Poor health habits such as lack of physical activity, poor nutrition, smoking, and substance misuse can worsen these chronic diseases. Cerebrovascular disease, and chronic lower respiratory disease (CLRD)/chronic obstructive pulmonary disease (COPD) mortality all continue to steadily decline for Ashe County residents. Heart disease mortality rates have increased slightly from 2010-2014 to 2012-2016.

Gender Disparities in Health Status

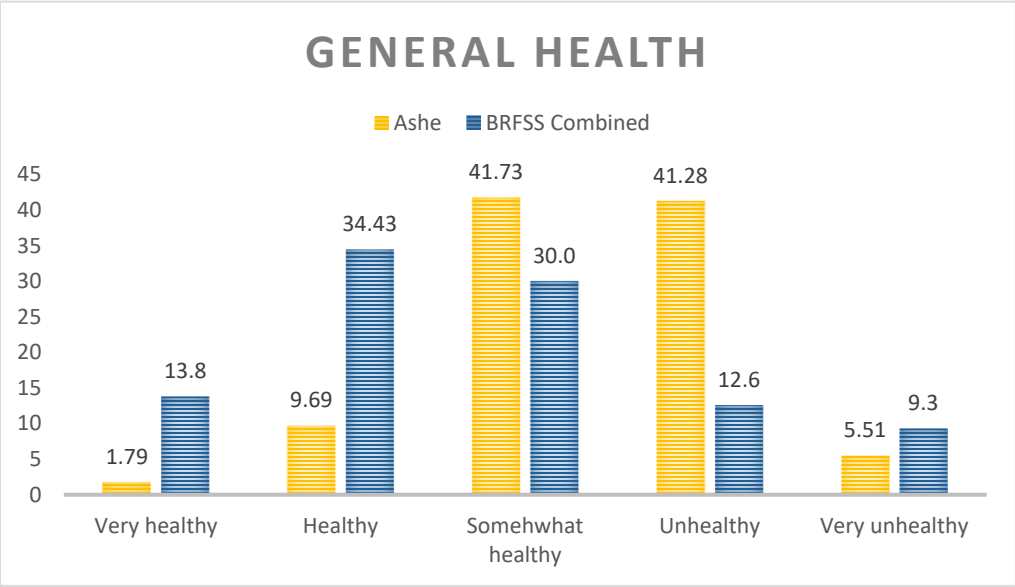
Nearly twice as many men die from lung cancer as women in Ashe County.

Gender disparities persist for many health outcomes between men and women. Lung cancer mortality rates in Ashe County show a significant disparity for men with a rate of 65.4 per 100,000 people compared to a rate of 33.2 per 100,000 for women.[85] The graph shows the rates of lung cancer mortality for men and women in five-year aggregate periods from 2007-2011 to 2011-2015.



[85] NC County Health Data Book (2011-2015)

Self-Rated Health Status



The Behavioral Risk Factor Surveillance System (BRFSS) is the world's largest ongoing telephone health survey system. The graph compares BRFSS data collected from Alleghany, Ashe and Watauga Counties from 2012-2016 to data collected from the Ashe County Community Health Opinion Survey in 2017. Participants of both surveys were asked to rate their general health.

Nearly half (47 percent) of all Ashe County respondents of the community health opinion survey self-reported their personal health as "unhealthy" or "very unhealthy", compared to 22 percent of respondents of the BRFSS across AppHealthCare counties. Only 2 percent of Ashe respondents reported their general health as "very healthy".

Youth Health

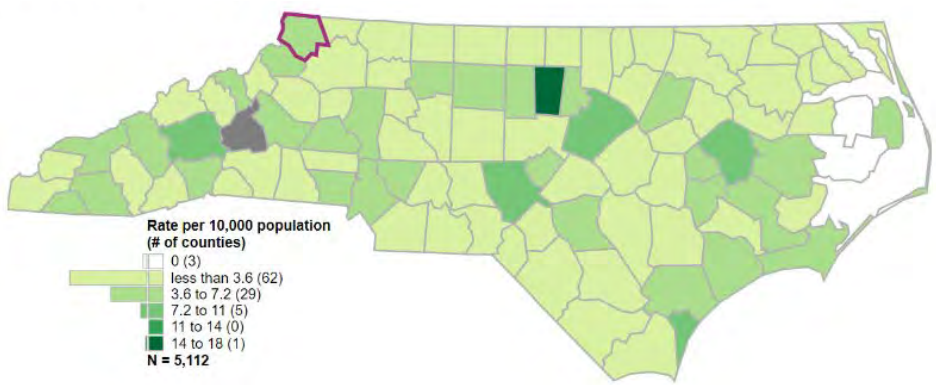
The Youth Risk Behavior Surveillance System monitors health-risk behaviors that contribute to the leading causes of death and disability among youth and adults. The Youth Risk Behavior Survey is conducted every other year at Ashe County Schools for students in grades 6-12.

Data from the 2017 survey are included throughout this report on dietary behaviors, physical activity, tobacco use, alcohol and other drug use, and behaviors that contribute to unintentional injuries and violence. The behavioral patterns that we develop as young individuals help determine our risk for developing chronic diseases later in adulthood.

Oral Health

Dental care is an important part of overall healthcare. One of the factors that impact a person's ability to access preventive services for oral health is the number of dental care providers in the area.

Dentists per 10,000 Population (2016)



The ratio of the population to dentists for Ashe County is 3.7 per 10,000 people. This rate has steadily increased since the 2013 rate of 2.2 per 10,000 people.[86]

Many respondents of the opinion survey reporting dental care as a top health priority for the area.

[86] NC Health Professionals Data System (2016)

Health Behaviors

Our individual behaviors affect our health more than our environment, genetics, or even access to care. Some behaviors protect and improve our health, such as exercising or washing our hands. Other behaviors increase the likelihood of developing a disease or injury, such as smoking or drinking unsafe water.

This section includes individual-level risk factors and protective factors that contribute to our health. To see how Ashe County compares to the state in terms of health behaviors, see the County Health Ranking table in this report.

Substance Use

Substance use includes alcohol use, tobacco use and other drug use, including prescription drugs. Substance misuse is the harmful use of substances (like drugs and alcohol) for non-medical purposes. The term "substance misuse" often refers to illegal drugs, but legal substances such as alcohol, prescription medications can also be misused.

Alcohol and/or drug use is the number one health concern in Ashe County.

The most pressing health concern for respondents of the health opinion survey is consistent with current data trends that show an increase in the prevalence of substance misuse. Nearly 90 percent of respondents cited substance misuse as the most important risky behavior in the community. When asked what the top health problem in the community is, nearly 80 percent again responded with alcohol and/or drug use. This majority opinion parallels the alcohol-poisoning rate and number of alcohol-related visits to the Emergency Department in Ashe County, both of which are higher than state averages.[87]

Approximately 15 percent of Ashe County residents report binge or heavy drinking. Between 2011-2015, 1 in 5 driving deaths (21 percent) involved alcohol in Ashe County, compared to 32 percent of all driving deaths in North Carolina.

Addiction is harmful to our community in many ways.

Beyond the harmful consequences for a person with addiction, substance misuse can cause serious health problems for others. Use of some drugs such as opioids during pregnancy increases the risk of developmental problems for babies. Injection of drugs such as heroin, cocaine and methamphetamine increases the spread of infectious diseases such as Hepatitis C and HIV. The number of acute Hepatitis C cases in Ashe County doubled from 2015 to 2016.

Drug Poisoning and Opioid Use

Deaths due to medication and drug overdoses have been steadily increasing in North Carolina and across the United States since 1999. The number of medication and drug deaths has increased 410 percent, from 363 in 1999 to 1,851 in 2016. The vast majority (85 percent) of these deaths are unintentional.

In 2016, an average of 5 people died each day from drug overdose in North Carolina.

Opioids have contributed to the majority of these deaths. In October 2017, President Trump officially declared the opioid crisis a public health emergency.

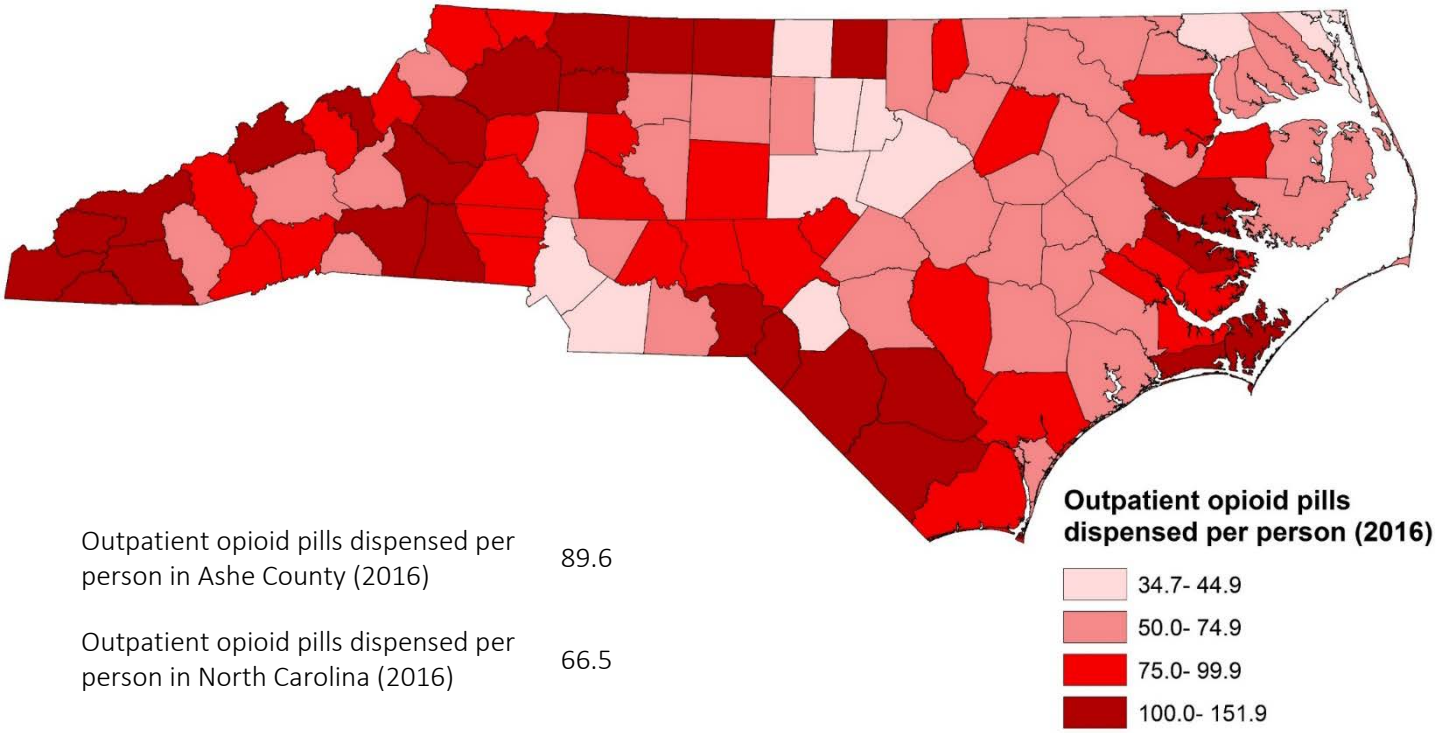
[87] National Poisoning Data System (2015)

Ashe County data is consistent with the trend we see across North Carolina. The rate of annual deaths due to drug poisoning in Ashe County is 17 per 100,000 people (compared to 12.1 deaths in North Carolina from 2012-2016). The leading cause of overdose deaths are from opioid pain medications such as oxycodone and hydrocodone. Opiate poisoning deaths, as well as all medication/drug poisoning deaths, have increased over the last 10 years in Ashe County.[88]

Unintentional Medication & Drug Overdose Deaths by Gender and Age (2012-2016)

	Gender		Age				
	Male	Female	0-17	18-24	25-44	45-64	65+
Ashe County overall population	49%	51%	18%	7%	22%	30%	23%
Unintentional overdose deaths in Ashe	70%	30%	0%	13%	39%	48%	0%
Unintentional overdose deaths across NC	63%	37%	0%	9%	49%	39%	3%

Communities were opioid prescriptions are more prevalent also have higher rates of unintentional poisoning from opioids. The map below shows 2016 data from the North Carolina Controlled Substances Reporting System on the number of outpatient opioid pills dispensed. Rates are per individual resident. There were 89.6 opioid pills dispensed per person in Ashe County compared to 66.5 pills per North Carolina resident in 2016.



Outpatient opioid pills dispensed per person in Ashe County (2016)	89.6
Outpatient opioid pills dispensed per person in North Carolina (2016)	66.5

Naloxone, the opioid reversal drug, is available from over 1,400 pharmacies and 31 health departments in North Carolina. People who are at risk of experiencing an opiate-related overdose, are a family member or friend of such a person, or in the position to assist a person at risk of experiencing an opiate-related overdose, can request naloxone without a

[88] NC Injury and Violence Prevention Branch: All Intents Medication and Drug Poisoning Deaths by County (1999-2016)

prescription under the North Carolina State Health Director's standing order. You can search for naloxone near you at naloxonesaves.org.

Several agencies and community coalitions in Ashe County are focused on addressing the opioid epidemic and substance use overall. One strategy being used to address this issue is proving prescription drug drop boxes where individuals can dispose of unwanted prescription drugs. A drop is available at the Ashe County Sheriff's Office.

Harm Reduction

Harm reduction seeks to reduce the harms associated with drug use and ineffective drug policies in a community. Harm reduction strategies meet people where they are rather than expecting individuals to abruptly reach a goal, such as stopping drug use. Acknowledging the reality that there will always be people using drugs, harm reduction aims to help these people be as safe and healthy as possible, which in turn protects other people who are impacted by drug use.

Harm reduction strategies such as needle exchange programs have been proven to help protect first responders and prevent the spread of disease in the community. Three out of five survey respondents on the health opinion survey indicated they would support a program that would dispose of used needles and provide unused needles to prevent the spread of disease.

Smoking and Tobacco Use

In Ashe County, nearly 1 in 5 individuals smoke (19 percent), compared to 18.7 percent of individuals in Western North Carolina and 9 percent of North Carolinians. The rate of tobacco use among individuals ages 18-44 is the same as the rate for individuals ages 45-64. [89]

Tobacco use remains the single leading cause of preventable death and disability in the United States[90].

Smoking is an addiction, and 7 out of 10 smokers want to quit. The Quitline NC is a resource that provides free counseling to individuals who want to quit using tobacco. The Quitline is promoted in various methods through partnerships with local healthcare providers who can refer patients who are interested that can receive a call from a trained quit-coach. During 2017, the Quitline received 112 calls from Ashe County residents who wanted to quit smoking.

Individuals with a household income of $50,000 or less are twice as likely to smoke as individuals with a household income above $50,000.

North Carolina Tobacco Facts (2018)	
Economic Cost Due to Smoking:	$3,809,676,476
Adult Smoking Rate:	17.90%
Adult Tobacco Use Rate:	21.10%
High School Smoking Rate:	9.30%
High School Tobacco Use Rate:	27.50%
Smoking Attributable Deaths:	14,220

People living below the poverty level and people having lower levels of educational attainment have higher rates of cigarette smoking than the general population. In Western North Carolina, 23.9 percent of individuals with a household income of $50,000 smoke, compared to 11.3 percent of individuals with a household income above $50,000.[91]

[89] Center for State Health Statistics (2018)
[90] Centers for Disease Control and Prevention: Smoking and Tobacco Use: Quick Facts (2016)
[91] Center for State Health Statistics (2018)

Tobacco prevention and control tools are available for healthcare providers, workplaces, and public policy makers at local, state, and national levels. Local governments do have authority to adopt and enforce tobacco free policies in public places that can protect those most vulnerable from exposure and further efforts to reduce the illness and deaths related with diseases linked to tobacco use.

In the American Lung Association's 2018 Annual State of Tobacco Control report, North Carolina received all F's on: Tobacco prevention and cessation funding, smoke-free air, tobacco taxes, and access to cessation services.[92]

The American Lung Association in North Carolina calls for the following actions to be taken by our elected officials:

- Restore funding for tobacco use prevention and cessation programs, including QuitlineNC;
- Increase the state cigarette tax by at least $1.00 per pack; and
- Resist attempts to weaken the smoke-free restaurants and bars law and expand the law to include all public places and private worksites.

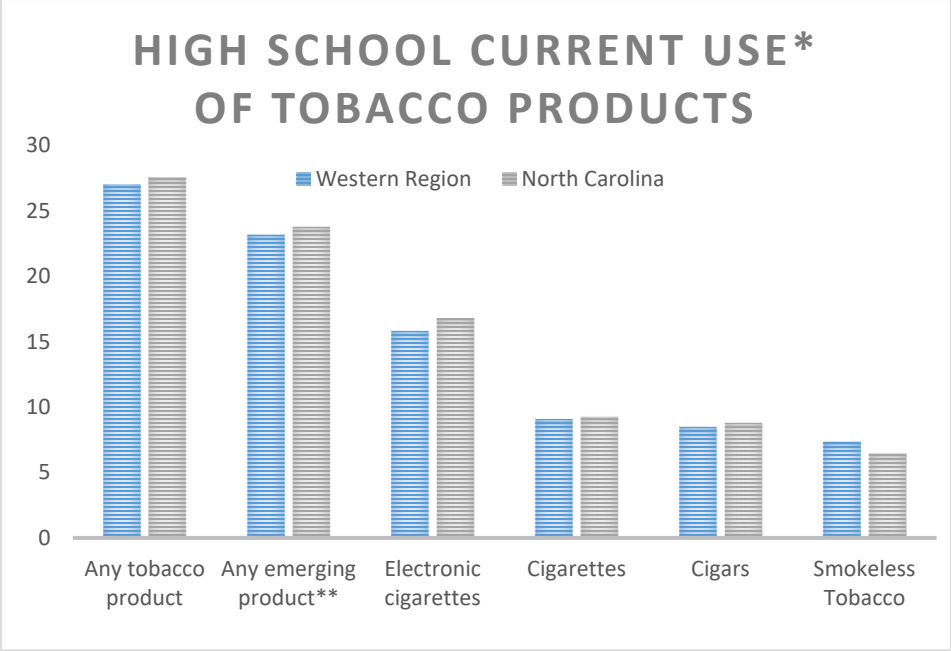
Youth Tobacco Use

More than one in four high school students in Western North Carolina still use tobacco products, setting them up for a lifetime of addiction.[93]

In 2016, 11.3 percent of high school students and 4.3 percent of middle school students in Western North Carolina used e-cigarettes in the past 30 days, compared to 16 percent of high school students and 5.3 percent of middle school students in 2015.[94] Data collection on e-cigarette use is new, so it is currently unknown whether this decrease is a trend.

Overall, 27 percent of high school students in Western North Carolina report using a tobacco product in the last 30 days. Approximately 30 percent of male students currently use a tobacco product, compared to 23 percent of female students.

Tobacco use is highest among white students in Western North Carolina: 29.8 percent of white high school students in Western North Carolina currently use a tobacco product, compared to 28.7 percent of Hispanic or Latino students, and 20.7 percent of Black/African American students.[95]



[92] American Lung Association: NC State Highlights (2018)
[93] NC State of Tobacco Control (2018)
[94] National Youth Tobacco Survey (2015 and 2016)
[95] National Youth Tobacco Survey (2016)
*Current use is defined as using 1 or more days within the past 30 days.
** Emerging tobacco products include electronic cigarettes, hookah or waterpipes, roll-your-own cigarettes, flavored cigarettes, clove cigars, flavored little cigars, and snus.

Physical Activity

Physical activity, access to recreational opportunities, and an understanding of healthy weight management are all important factors for community health. Exercise is a key health behavior that decreases the risk of many chronic diseases.

Three out of five Ashe County residents have access to exercise opportunities.

Fewer residents in Ashe County (63 percent) report having access to exercise opportunities than North Carolinians overall (63 percent).[96] While access to physical activity is accessible for many families, nearly one in five adults in Ashe County (24 percent) report being physically inactive. Nearly half of adults in Western North Carolina reported that they engage in at least 150 minutes (or 2.5 hours) of physical activity per week.[97]

In 2017, 48 percent of Ashe High School students reported trying to lose weight. Even more students report exercising to lose or keep from gaining weight, including 64 percent of high school students and 73 percent of Ashe County middle school students.[98]

Nutrition

Nutrition is one of the key factors important for preventing chronic disease, maintaining a healthy weight, and supporting good health status. Many people in the community are not getting enough of the most important food components for healthy eating: fruits and vegetables.

Almost 9 out of 10 adults in Western North Carolina do not eat at least 5 servings of fruits, vegetables or beans each day.

Only 10.6 percent of adults in Western North Carolina reported consuming fruits, vegetables, or beans five or more times per day in a 2017 survey from the NC Institute of Medicine. Fruits and vegetables may not be purchased due to lack of access, perceived or real lack of affordability, not knowing how to cook or prepare a food, or not having parenting tips needed to deal with picky eaters in the family.

This increases risks for obesity, diabetes, cancer, and heart disease. Among Ashe High School students, 43 percent reported eating less food, fewer calories, or foods lower in fat to lose or keep from gaining weight in the past 30 days.[99]

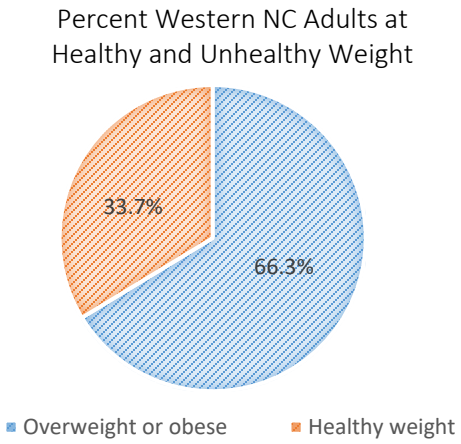
Access to healthy food is important to Ashe County residents for a healthy community.

Ashe County residents surveyed were very mindful of the role that access to healthy and affordable food plays in the health of the community as a whole. Respondents indicated bad eating habits as a top risky behavior, and unhealthy diet as the third most important health problem in the community. Having a healthy diet was also listed as one of the top three factors for having a healthy community. Survey respondents also expressed their desire to see access to and awareness of healthy foods addressed: 54 percent of respondents indicated they would like for food pantries and assistance programs to promote and offer fruits and vegetables.

[96] County Health Rankings (2017)
[97] North Carolina Institute of Medicine (2017)
[98] Youth Risk Behavior Surveillance System: Ashe County Schools (2017)
[99] Youth Risk Behavior Surveillance System: Ashe County High School (2017)

Overweight/Obesity

Obesity is a known risk factor for many chronic diseases. Obesity is linked to heart disease, stroke, diabetes, and cancer and an estimated $147 billion in annual healthcare costs in the US, or an additional $1,429 in medical costs in comparison to those of normal weight.[100]



The percent of overweight and obese adults in Western North Carolina continues to increase.

The percent of individuals in Western North Carolina who are overweight or obese increased from 64 percent in 2013 to 66 percent in 2016.[101] More than 3 out of 5 adults in Western North Carolina are overweight or obese. North Carolina is the 5th most obese state in the nation for youth ages 10-17 years.

Obesity is measured through body mass index, or a calculation of weight relative to height. A body mass index between 25-29.9 kg/m is considered overweight while a BMI of 30.0 or above is obese.

Relationship Between and Obesity and Income

Ashe County individuals with a household income between $25,000-50,000 are 7 times more likely to be overweight or obese than those with a household income above $75,000.

A person's likelihood of being overweight or obese in Alleghany, Ashe and Watauga Counties may be linked to their annual income. Less than half (48 percent) of individuals with a household income of $75,000 or more are overweight or obese in Alleghany, Ashe and Watauga counties. In comparison,

- 68 percent of individuals with a household income of $25,000 - $49,999 are overweight or obese, and
- 64 percent of individuals with a household income of either $15,000-24,999 or $50,000-74,999 are overweight or obese.

The lower an individual's household income is in AppHealthCare counties, the higher the individual's likelihood is of being overweight or obese, except for those with a household income below $15,000: 51 percent of individuals in this income bracket are overweight or obese, which is similar to the highest income category. This may be due to a lack of food access as this population falls below the 2017 Federal Poverty Guidelines. This income disparity in overweight or obese individuals is important to note when addressing weight management in our community.

Weight Management in Children and Youth

According to the National Survey of Children, 19.3 percent of North Carolina youth are obese, compared with 14.8 percent nationally. Overweight adolescents have a 70 percent chance of becoming overweight or obese adults. Among North Carolina children ages 10-17, 20 percent were overweight and 14 percent were obese, compared to 62 percent of students that were at a healthy weight. Male children and youth in North Carolina are more likely to be obese than female children and youth; however, female children and youth in North Carolina are more likely to be overweight than male children and youth.

[100] Center for Disease Control and Prevention (2013)
[101] Behavioral Risk Factor Surveillance System (2013, 2016)

In 2017, more Ashe County High School students described their weight as slightly or very overweight than state and national averages, and this number increased slightly from 2014 to 2017.

During the 2017 school year, 73 percent of Ashe County Middle School students reported exercising to lose or keep from gaining weight in past 30 days, compared to 64 percent of Ashe County High School students.[102]

Motor Vehicle Injuries

There were 1,441 motor vehicle fatalities and 130,137 motor vehicle injuries in North Carolina in 2016. Inattention was the most commonly reported circumstance that contributed to motor vehicle crashes that year.[103]

According to the Youth Risk Behavior Survey conducted at Ashe County High School in 2017, the percentage of students reporting never or rarely wearing a seat belt when riding in a car driven by someone else decreased from 2014 to 2017, now below the state average. More Ashe County High School students (9.6 percent) reported riding in a vehicle driven by someone who had been drinking alcohol in 2017 than in 2014, although this behavior decreased for male and non-white students decreased in 2017 while all other demographic groups increased.

Ashe County High School students reported less risky behaviors related to motor vehicle safety in 2017.

The percentage of Ashe County High School students who reported driving a vehicle after drinking alcohol decreased significantly between 2014 and 2017, from 7.7 percent to 2 percent. The percentage of students who reported texting or emailing while driving also decreased from 37 percent to 31 percent. Among high school students, texting or emailing while driving was particularly high among 11th graders.[104]

Maternal and Child Health

The live birth rate is 7.7 per 1,000 in Ashe County compared to 9.8 per 1,000 in Macon County and 12.7 per 1,000 in North Carolina. Among the 1,147 births in Ashe County from 2012 to 2016, 9.9 percent were delivered at less than 37 weeks, which is considered premature.[105]

Prenatal Care

Initiation of prenatal care among pregnant women in Ashe County is higher than state averages: 80.8 percent of women in Ashe County receive care beginning in the second or third month of pregnancy, compared to 63 percent at the state level. Women in Ashe County also receive more prenatal care visits, with the majority receiving 16 or more prenatal care visits, which is also true for Macon County.

Almost 1 in 5 babies born in Ashe County have a mother who smoked during pregnancy.

Ashe County has a much higher percentage of births to women who smoked during pregnancy (19 percent) when compared to North Carolina (9.8 percent). This rate is slightly lower than the rate for Macon County (19.9 percent).

[102] Youth Risk Behavior Surveillance System: Ashe County High School (2017)
[103] NC DMV: Traffic Crash Facts (2016)
[104] Youth Risk Behavior Surveillance System: Ashe County High School (2017)
[105] State Center for Health Statistics: NC Resident Births Delivered by Gestation (2012-2016)

Low Birth Weight and Preterm Birth

The rate of preterm births in Ashe County is 9.9 percent, slightly lower than the state average (10.1 percent) and Macon County rate (10.8 percent). From 2012-2016, 19 babies (9.1 percent) in Ashe County were born with a low birth weight (<5.5 pounds at birth).

Infant Mortality

The infant mortality rate in Ashe County was 68.1 per 100,000 compared to 58.1 percent for North Carolina from 2012-2016. This rate for 2016 alone was 102.5 however, due to 5 child deaths in 2016.[106]

Teen Pregnancy

North Carolina's teen pregnancy rate fell 7 percent in 2016, marking a record low for the state for the ninth consecutive year. According to new data provided by the North Carolina State Center for Health Statistics, 9,255 North Carolina girls ages 15-19 experienced a pregnancy in 2016. With this new decline, the state's teen pregnancy rate has fallen 73 percent since it peaked in 1990.

In 2016, Ashe County reported 17 pregnancies among 15-19 year old girls. The majority of pregnancies occurred among 18-19 year old girls that year. The percent of repeat pregnancies was 23.5. Overall, the rate of teen pregnancy in the county has decreased by 39.5 percent since 2015.

Factors for Healthy Babies	Ashe	Macon	NC
Live birth rate per 1,000	7.7	10.8	12.7
Women who receive early prenatal care	80.8%	Not available	63%
Births to women who smoked while pregnant	19%	19.9%	9.8%
Preterm birth rate	9.9%	10.8%	10.1%

Behavioral Health

Behavioral health describes the connection between behaviors and the wellbeing of the body, mind and spirit. Behavioral health includes not only our mental health, but how our behaviors—such as eating habits or use of alcohol—impact our wellbeing.

Mental Health Status

One in five adults in North Carolina has a mental health condition.[107] The number of adults with a serious mental illness has increased from 3.5 percent from 2011-2012 to 4.9 percent from 2013-2014. Nearly half of adults in North Carolina with any mental illness report receiving mental health treatment or counseling.

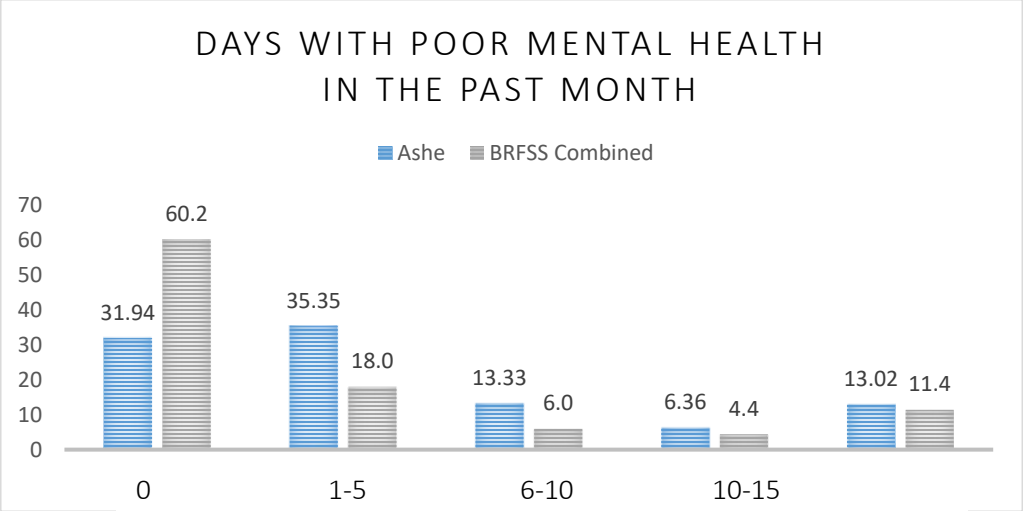
[106] Center for State Health Statistics: NC Resident Child Deaths Ages 0-17 (2012-2016)
[107] NAMI: The State of Mental Health in America (2018)

Among adults served in North Carolina's public mental health system in 2014, the following percentages were not in the labor force:[108]

- 45.0% of individuals ages 18–20
- 13.1% of those ages 21–64
- 43.0% of those ages 65 or older

Ashe County individuals report having more days of poor mental health compared to their neighbors in Alleghany and Ashe Counties. The table below compares responses from Ashe County health opinion survey and responses to the same question asked on the Behavioral Risk Factor Surveillance System survey for Alleghany, Ashe and Watauga Counties.

Individuals were asked: Thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good? Overall, 67 percent of Ashe County respondents reported that they had five or less days of poor mental health in the last 30 days.



Across Alleghany, Ashe and Watauga Counties, poor mental health days were reported less for Hispanic/Latino respondents than for any other racial or ethnic group of respondents: 41 percent of Hispanic/Latino respondents reported having zero poor days of mental health days in the past month, compared to 34 percent of non-Hispanic white respondents.

Poor mental health days were most frequent for Native American and Black/African American respondents. Compared to 9 percent of non-Hispanic white respondents, 33 percent of Native American respondents reported having 16 or more days of poor mental health in the last 30 days, and 23 percent of Black/African American respondents reported having 16 or more days of poor mental health in the last 30 days.

Relationship between Health Status and Sexual Orientation

Some populations experience more frequent mental distress than others. Individuals living in poverty experience mental illness and mental distress more frequently than those who are not burdened by poverty. This mental health disparity also exists for individuals in Appalachian Counties[109] whose sexual orientation is not heterosexual.

Individuals who are not heterosexual are twice as likely to experience frequent mental distress than individuals who are heterosexual.

[108] SAMHSA Behavioral Health Barometer (2015)
[109] As defined by the Appalachian Regional Commission

Frequent mental distress is defined as 14 or more poor mental health days in the last 30 days. One in four individuals (24 percent) who are not heterosexual (such those who are homosexual or bisexual) experience frequent mental distress, compared to 12 percent of individuals who are heterosexual. This disparity is 10 percent higher in Appalachian counties than it is for the state of North Carolina.[110] It is important to consider this health disparity when addressing mental health in our community.

According to the Youth Risk Behavior Survey conducted in 2017 at Ashe County High School:

- During past 12 months, 27 percent of students felt so sad or hopeless almost every day for at least 2 weeks in a row that they stopped doing some usual activities.
- During the past 12 months, 17 percent of students hurt themselves on purpose without intending to kill themselves in the past 12 months.

Access to Mental Health Screening, Providers and Treatment

Access to counseling, referral services, case management and crisis management continues to improve in Ashe County. Daymark Recovery Services offers Mobile Crisis Management services that provide a comprehensive crisis intervention in the least restrictive environment with a team perspective to meet any individual's needs.[111] See the Community Resources in the County appendix for a complete list of mental health providers and treatment options in Ashe County.

In February of 2017, Vaya Health equipped the Alleghany Public Library with a MindKare Kiosk. The kiosk is a program that offers a quick, anonymous screening assessment for treatable conditions like depression and anxiety, as well as information about treatment resources in the area. Vaya Health is a public managed care organization (MCO) that oversees Medicaid, federal, state and local funding for services and supports related to mental health, substance use and intellectual/ developmental disability (IDD) needs.[112]

Trauma

Trauma is a threat to an individual or their loved one's life or their psychic or bodily integrity. Traumatic stress affects everyone differently, but it has a broad range of effects on brain function, structure and memory.

Trauma is a common experience for American adults and children, and it is especially common in the lives of people with mental and substance use disorders. For this reason, the need to address trauma is seen as an important part of effective behavioral health care and a critical part of the healing and recovery process.[113]

Data from the most recent National Survey of Adolescents indicate that one in four children and adolescents in the United States experiences at least one potentially traumatic event before the age of 16. See the Adverse Childhood Experiences section for more information on how trauma can impact a person's health.

Trauma-informed care has become a standard practice in healthcare, mental health care and schools in many communities. In order to address trauma in our community, it is important to consider what can be done to prevent trauma in the first place.

A strong connection exists between trauma and substance use.

[110] Behavioral Risk Factor Surveillance System (2012)
[111] Daymark Recovery Services (2018)
[112] Vaya Health website: About (2018)
[113] SAMHSA: Trauma and Violence (2018)

Trauma increases the risk of developing substance misuse, and substance misuse increases the likelihood that individuals will experience trauma.[114] Building resilience in a community is a key strategy for addressing trauma and substance use.

Suicide

The rate of suicide in Ashe County has decreased since the last Community Health Assessment from 18.2 per 100,000 people (2009-2013) to 17.8 per 100,000 people (2012-2016). The suicide rate also continues to decline when viewed by 5-year aggregate trends from 2001-2005 to 2012-2016.

Suicide is the 2nd leading cause of death for individuals between ages 20-39 years and the 6th leading cause of death for individuals between ages 40-64 years.[115] There was 1 suicide death among those ages 0-19 years between 2012-2016. [116]

According to the Youth Risk Behavior Survey conducted in 2017 at Ashe County High School, 14.2 percent of students seriously considered attempting suicide in the past 12 months, and 10.1 percent of students made a plan about how to attempt suicide in the past 12 months. Approximately 6.1 percent of students attempted suicide in the past 12 months. Each of these rates has decreased since the last survey was conducted in 2014.

Integrated care

Seeking primary healthcare is often the first step to accessing behavior healthcare. Primary care providers are now moving toward a system of integrated care where both general and behavioral healthcare are provided. Integrating mental health, substance misuse, and primary care services produces have been shown to produce the best outcomes for people with multiple healthcare needs.[117]

People with mental and substance misuse disorders may die decades earlier than those without mental health or substance use disorders. This is mostly due to untreated and preventable chronic illnesses like hypertension, diabetes, obesity, and cardiovascular disease. Poor health habits such as lack of physical activity, poor nutrition, smoking, and substance misuse can worsen these chronic diseases.

Healthcare Resources & Access

Health Insurance

Health insurance coverage is an important indicator of health in our communities and is important for accessing healthcare resources. In Ashe County, 17 percent individuals had no health insurance coverage in 2015. From 2012-2016, less than half (48.8 percent) of individuals who were unemployed had health insurance.[118] The uninsured rate for individuals in Ashe County has improved since the last Community Health Assessment rate of 18 percent.[119]

Half of individuals who are unemployed in Ashe County have health insurance.

The rate of unemployed and uninsured individuals in Ashe County is higher than the North Carolina rate at 46 percent and for the United States overall at 37 percent.

[114] National Child Traumatic Stress Network: Making the Connection: Trauma and Substance Abuse (2008)
[115] Center for State Health Statistics: Ten Leading Causes of Death by County of Residence and Age Group (2012-2016)
[116] County Health Data Book (2018)
[117] SAMHSA: What is Integrated Care? (2018)
[118] American Community Survey 5-year estimates (2012-2016)
[119] American Community Survey 5-year estimates (2009-2013)

Children ages 0-18 years in Ashe County have an uninsured rate of 6.7 percent, which is greater than the rate of 5.5 percent for the state of North Carolina. Almost 3 in 5 families in Ashe have an income below the poverty level and have related children of the householder under 18 years of age (21.7 percent). This has an impact on those children who are eligible for North Carolina Medicaid and Health Choice.

- Medicaid provides health coverage to eligible low-income adults, children, pregnant women, elderly adults and people with disabilities. Individuals at 138 percent or more of the Federal Poverty Guidelines are eligible for Medicaid. According to the 2017 Federal Poverty Guidelines, a family of two with a household income of $22,411 or less qualifies for Medicaid.
- The North Carolina Health Choice (NCHC) is a health insurance program for children of families who make too much to qualify for Medicaid, but too little to afford private insurance.

Ashe County Health Insurance Estimates (2014)

Age Group	Data Type	Data
19 years or younger	Number	407
	Percent	7.8%
Ages 18-64 years	Number	3,732
	Percent	23.7%
Total	Number	4,139

Another measure to mention are those of the Small Area Health Insurance Estimates, which show that children (ages 0-18 years) have a lower percentage of uninsured than the 19-64 age group.[120] This is due partly to NC Health Choice.

In 2014, 7.8 percent of Ashe County residents under age 18 (or 407 individuals) were uninsured, which is slightly more than that of North Carolina. It is important to note that the rates can appear slightly different depending on when and how the data were collected. These measures were all connected within relation to the US Census Bureau and are the most recent measures that capture the outlook of the population and health insurance coverage.

Access to Clinical Care and Barriers to Care

The available health resources in the community have great influence on access to healthcare services. Understanding access to primary healthcare services in our community is important since we know that having a primary medical home and access to wellness screenings and medical care to prevent, treat, or manage disease helps support better health outcomes. Having a medical home and access to care also lowers healthcare costs in the community overall.

Respondents from the health opinion survey believe that access to healthcare is the most important factor for a "healthy community." Among opinion survey respondents, 76 percent have a medical home, a place where they receive medical care on a regular basis. This means that more than 1 in 4 respondents do not have a medical home within Ashe or a surrounding county.

When addressing healthcare concerns, our community is not just limited to primary medical services. Healthcare also includes dental care, mental health care and pharmacy services, just to name a few.

Report Area	Primary Care Physicians	Ratio of population to primary care physician
Ashe County	13	2,0987:1
Macon County	26	1,303:1
North Carolina	6,737	1,040:1

The table below shows the access to primary care in ratio of population to primary care physicians. Ashe County has a much smaller ratio than that of North Carolina and its peer county, Macon County. The American Medical Association defines primary care providers as the following provider groups: General Family Medicine, General Practice, General Internal Medicine, and General Pediatrics.

[120] Small Area Health Insurance Estimates (2014)

Pharmacy Access

Ashe County has a ratio of 8.4 pharmacists per 10,000 population with a total of 23 pharmacists reported in 2016.[121] Many of the pharmacies located in Ashe County have a special price list that includes up to 50 or more medications at a discounted rate. This affords individuals the opportunity to receive a prescription at a reduced cost if they do not have prescription insurance coverage or if their insurance copays are greater than the discounted price. Individuals should check with their pharmacy provider to determine whether their medication is covered on these special price lists or if their pharmacy participates, as every provider differs.

Inpatient Hospitalization

From October 2014 to September 2015, Ashe Memorial Hospital saw 1,421 inpatient care cases. The top three reasons for discharge of those who sought short term acute care included: diseases and disorders of the respiratory system (22.4 percent), diseases and disorders of the digestive system (14.5 percent), and diseases and disorders of the circulatory system (10.3 percent).[122]

One in five patients seen for inpatient care at Ashe Memorial Hospital in 2015 had Medicaid.

Nearly 6 percent of individuals seen for inpatient care that same year were uninsured. The average length of stay at Ashe Memorial Hospital during the 2015 fiscal year was 3.2 days, including normal newborns.

The top three diagnoses for Emergency Department visits to Ashe Memorial Hospital are open wounds (41 percent), epistaxis, or nosebleeds (3 percent) and arm cellulitis (2 percent).

The Emergency Department at Ashe County saw a total of 641 visits during the 2015 fiscal year, which nearly doubled from the year before with 366 patients seen. Among all visits in 2015, 18 percent were by children ages 1-17, 36 percent were by individuals ages 18-44 years, and 20 percent were by individuals ages 45-64 years, and 20 percent were by individuals ages 65-84 years. Ashe Memorial Hospital also served individuals from outside of North Carolina, including individuals from South Carolina, Virginia, Georgia, Tennessee and others not specified.[123] Because Ashe County is in close proximity to Virginia and Tennessee, our community serves a diverse group of individuals.

Discharge Data from Ashe Memorial Hospital (2015)

Location	Average Patient Charges	Patient Payer Type	Data Type	Data
Ashe Memorial Hospital	$1,729	Commercial/HMO	Number	203
			Percent	31.7
		Medicaid	Number	129
			Percent	20.1
		Medicare	Number	143
			Percent	22.3
		Other government	Number	32
			Percent	5
		Uninsured	Number	131
			Percent	20.4

[121] NC Health Professionals Data System (2016)
[122] UNC: Short Term Care Acute Hospital Discharge Data (2015)
[123] NC Hospital Discharge Data (2017)

Satisfaction with Care

According to opinion survey data, 65 percent of Ashe County residents would choose their local hospital for typical outpatient and inpatient services. More than half of survey respondents (60 percent) indicated that they or someone they know has had to travel out of county for care because it is not offered in Ashe County.

The Innovative Approaches Initiative in Ashe County collects data from families of Children or Youth with Special health Care Needs (CYSHCN) on their experience with healthcare providers. Families of CYSHCN who were surveyed in 2016 agreed or strongly agreed (82 percent) that they were treated like a partner in their child's healthcare decisions by their child's primary care provider. Respondents also agreed or strongly agreed (78 percent) that they were treated with respect by their child's health care providers.[124] Satisfaction with healthcare services can be difficult to measure, but data from this special population that seeks healthcare often can give a picture of general satisfaction with healthcare services.

Community Assets that Support Health

There are many assets in the county that support health. The health of the economy and education system is an important part of having a healthier population, and the reverse is also true. Below are some assets in Ashe County that help support health, although though this list is not exhaustive. For more information about community assets that support health, see Appendix 3: Community Resource Guide.

Access to outdoor recreation and parks

Parks and recreation are not only important for promoting physical activity for all ages; they are also good for improving quality of life and can be used as economic tools to attract business sectors. Recreation plans that are updated routinely are important for garnering additional resources through grants or other opportunities that can also boost tourism like fishing, biking, or hiking.

Access to healthy foods

Healthy foods are an important asset that not everyone has easy access to or can afford. Providing multiple locations where more healthy foods are available through farmer's markets, community stores that sell healthy foods, community produce box programs, and restaurants that feature healthy menu items all support the easy access of healthy foods. So are healthy foods and beverages available at faith, work, schools, and childcare settings. Supporting locally grown or produced products means shortening the food supply chain and increasing economic wealth for community residents, another key ingredient for healthy living. Policies like farmland preservation and farmer's market land use protection provides important policy to support these efforts.

Access to indoor recreation opportunities

Due to the seasonal climate in the North Carolina mountains, indoor recreation opportunities are especially important. Providing safe places for indoor physical activity is an important component of providing support for healthy behaviors like walking or taking an exercise class, which can offer additional social support. These types of opportunities should include low cost and free options for community members who would otherwise be unable to afford them. Though these assets may not be considered community healthcare assets, they could serve as sources for healthcare needs.

Active transportation options

Rural communities are dispersed sparsely and often transportation options are limited to cars alone. However, communities can adopt street designs that make downtown areas more attractive and safer for physical activity to both boost physical activity, but also boost economic development. Active living plans that incorporate connectivity of greenways, bikeways, and sidewalks or multi-use paths offer interconnection opportunities that make it possible to move for function rather than only health reasons.

[124] Innovative Approaches Family Survey (2015-2017)

Smart growth and complete streets
Smart growth incorporates a set of principles of design and growth that is managed and supports the culture the community would like to maintain over time. Most often this is a design principle incorporated into Comprehensive plans of Counties and Municipalities. Complete streets policies allow for street design plans and maintenance efforts to incorporate needs of all users, not just cars. Complete streets support active transportation.

Clean water, air, sanitation, and safe food in permitted establishments
Public health permitting supports maintenance critical to maintaining sanitation and safe food, clean water, and air. Public health staff members support the clean water, smoke-free air in restaurants and bars, and safe food handling in a variety of establishments that serve those most vulnerable including preschool and school aged children and hospital patients.

Healthcare coverage and services
Providing healthcare coverage is often synonymous with having a primary healthcare provider. A practitioner knowing about your healthcare needs and being able to coordinate those needs with other specialists or supportive therapies means that care is coordinated, costs are often reduced, and better healthcare outcomes are achieved.
Access to the local hospital means special healthcare needs that are urgent or require special inpatient care can be provided without the strain of travel to another community. In addition, hospitals and hospital systems are often among the largest employers in the county, which provide important economic benefit to the community.

Higher education institution
Ashe County is in close proximity to Appalachian State University, which not only supports the county's economy but provides opportunities for community partnerships in research, education, prevention services and more. The BCBS Institute for Health and Human Services at Appalachian State provides clinical services, training opportunities, and other resources to the community. Numerous programs and departments on campus such as the Public Health program, Department of Social Work, and the Department of Nutrition and Healthcare Management collaborate with local health care providers, social service agencies and nonprofit organizations to improve community health.

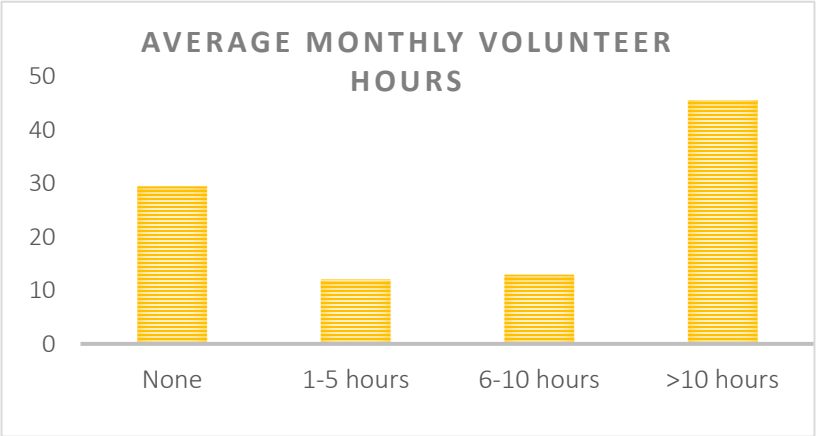
Services that meet the needs of special groups in the population
Special services that meet the needs of special groups that require consideration include special social services like those offered at the Department of Social Services, but they may also include innovative partnerships that address complex healthcare or developmental delay issues. They may also be groups aimed at addressing poverty and homelessness or organizations that serve the community members who are food insecure. Finally, this may include ensuring that services available to the general public include special considerations for those who speak a language other than English at home.

Faith community resources
Faith community resources can be very important in communities, and may help address important health needs including social support or respite services for caregivers. Faith communities often have programs that support substance misuse like Alcoholics Anonymous or they may have services that seek to engage special populations like youth. These services are important for the community connectedness and social support mechanisms can help provide important fabric to initiate and support health promotion programs.

Nonprofit organizations, volunteer groups and civic organizations
Non-profit organizations are an important part of addressing community needs, supporting prevention efforts, and serving community members by providing services that may otherwise be unavailable. Volunteer groups and civic organizations engaged in community efforts are important in acknowledging and promoting important community concerns and also can be helpful in addressing important priorities. First responders are volunteers and offer quick response to neighbors in need during emergencies before emergency medical services (EMS) arrive. These organizations, such as volunteer fire departments, along with county and municipal public safety, are important for community safety and social support.

Volunteering has been proven to improve health. Older volunteers are the most likely to receive physical and mental health benefits from volunteer activities.

This chart shows the average number of volunteer hours per month reported by respondents of the community health opinion survey. The majority of Ashe County respondents volunteer more than 10 hours per month in the community.



Health Resources in Ashe County

In response to the three selected health priorities, the following resource directories are included as appendices:

- Regional behavioral health resource directory: accurate as of December 1, 2017
- Fruit and vegetable outlet inventory: accurate as of August 1, 2017

In addition to the resources above, Ashe County residents have access to two comprehensive resource directories:

BlueCross BlueShield of NC Institute for Health and Human Services Community Resource Directory
This guide is a comprehensive listing of human service providers in the High Country, including Alleghany, Ashe, Avery, Wilkes and Watauga Counties. Information includes services provided, website and contact information, fees charged, hours and locations, languages spoken and other useful information for the general public and service providers. For more information about the Community Resource Directory, see http://ihhs.appstate.edu/about/directory.

North Carolina 2-1-1 System
Have you ever wondered how to find help or a community service for yourself or someone in need? There are about 30,000 nonprofits in North Carolina. Finding the one you need can be difficult. The first step in finding help is knowing who to call. 9-1-1 is for emergencies, 4-1-1 is for directory assistance and 2-1-1 is for finding community health and human service resources.

From a cell phone, dial 2-1-1 or 1-888-892-1162 anytime (24 hours a day, 365 days per year) to link to vital services in your community. This service is free and multilingual. For more information about the NC 211 System, see http://www.unitedwaync.org/nc-2-1-1.

To find out how to add your organization to the directory or learn about local resources contact the High Country United Way http://www.highcountryunitedway.org/ or for more information, contact at 828-265-2111.

Next Steps for Community Health Improvement Planning

The findings in this document lead us to action. We will address the above health priorities with consideration to our community context and through the planning and implementation of evidence-based interventions (where they exist). Community input will be solicited through listening sessions in a variety of community locations. One specific session will be focused on asset mapping so that community collaborators already engaged in related work can participate in identifying assets that support health and potential gaps that may exist. Community members will learn key facts about their community's health and will suggestion solutions or provide input about proposed solutions that employ evidence-based strategies.

This process will take place in the spring/summer of 2018. Results from community listening sessions will lead the CHA Planning Team toward the development of a comprehensive community health improvement plan that will be used for the next three years to implement and measure results.

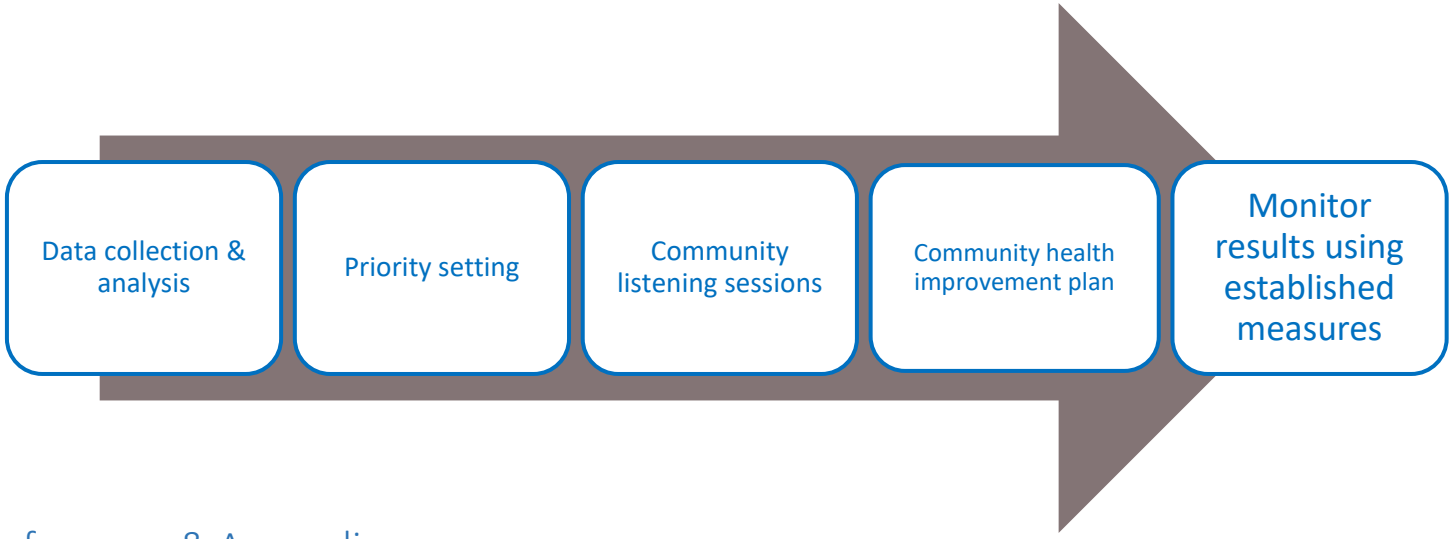
This report will be released in a variety of platforms with special consideration to community members who do not have access to the Internet. Community health improvement plans will be disseminated to further engage community members in addressing our community's health priorities.

Healthy NC 2020

Local public health efforts are linked up to state and national efforts working toward the same goals over time. AppHealthCare builds upon Healthy People 2020 national strategies and Healthy NC 2020 for statewide strategies. Learn more about Healthy NC 2020 here: http://publichealth.nc.gov/hnc2020/foesummary.htm

The Healthy NC 2020 plan will serve as a guide for future development of action plans to lead community health improvement for the county. There are objectives to utilize as a guide for local objectives.

Using evidence to inform the work moving forward will be important as will ensuring that approaches used fit the community needs and cultural context. Community partnerships are critical to this important work since improving the health of the public involves multiple stakeholders in public, private, non-profit, and community based members.



References & Appendices

Contact AppHealthCare at http://www.apphealthcare.com/contact-us/ to receive additional information about data used to inform this report.

Appendix 1: Community Opinion Survey Data & Survey Instruments

Appendix 2: Secondary Data & References

Appendix 3: Community Resource Guide

2017 Community Health Opinion Survey
ASHE COUNTY

Thank you for taking this short opinion survey. Your opinion is important and will be used to plan programs and projects that impact community health. None of your answers will be linked back to you in any way. You must be at least age 18 or older to take this survey and live some or all of the time in this county. Please note, we are asking only full time and part time residents to complete the survey.

If you have already taken the survey on paper or online, please do not take it again. If you would like to know more about the chance to win a gift card, please continue to the end of the survey where you can find out how to enter the drawing.

This survey is co-sponsored by AppHealthCare (Appalachian District Health Department), Ashe Memorial Hospital, Ashe Health Alliance, and other community agencies.

Are you a full or part-time resident in this county? If not, we thank you for your interest, but are only surveying residents. If so, choose one:

☐ Full Time ☐ Part Time ☐ Neither

1. **How would you rate our community as a "healthy community"?**

☐ Very unhealthy ☐ Unhealthy ☐ Somewhat healthy ☐ Healthy ☐ Very healthy

2. **How would you rate your own personal health?**

☐ Very unhealthy ☐ Unhealthy ☐ Somewhat healthy ☐ Healthy ☐ Very healthy

3. **How many hours per month do you volunteer your time to community service (schools, organizations, church, hospital, etc.)?**

☐ None ☐ 1-5 hours ☐ 6-10 hours ☐ More than 10 hours

4. **What do you think are the <u>three most important factors for a "healthy community"?</u> (Those factors which most improve the quality of life in a community.)**

☐ Good place to raise children
☐ Low crime / safe neighborhoods
☐ Low level of child abuse
☐ Parks and recreation
☐ Clean environment
☐ Affordable housing
☐ Religious or spiritual values
☐ Healthy and safe intimate relationships
☐ Availability of healthy and affordable food
☐ Good jobs and healthy economy
☐ Good schools
☐ Access to health care (ex: family doctor)
☐ Strong family life
☐ Arts and cultural events
☐ Excellent race relations
☐ Healthy behaviors and lifestyles
☐ Low adult death and disease rates
☐ Low infant deaths

☐ Other (please specify): _____

5. **What do you think are the <u>3 most important "health problems"</u> in our community? (Those problems that have the greatest impact on overall community health.) Choose only 3.**

☐ Alcohol and/or drug use

☐ Aging problems (ex: arthritis, hearing/vision loss, etc.)

☐ Cancers

☐ Firearm-related injuries

☐ Intimate partner violence (physical, sexual, or psychological harm by a partner or spouse)

☐ Diabetes

☐ Rape/sexual assault

☐ Sexually Transmitted Infections (STIs)

☐ Homicide

☐ Other (please specify):

_____

☐ Child abuse/neglect

☐ Dental problems

☐ Heart disease and stroke

☐ High blood pressure

☐ HIV/AIDS

☐ Mental health problems

☐ Respiratory/lung disease

☐ Suicide

☐ Motor vehicle crash injuries

☐ Teenage pregnancy

6. **What do you think are the 3 most important "risky behaviors" in our community? (Those behaviors that have the greatest impact on overall community health.) Choose only 3.**

☐ Alcohol and/or drug use

☐ Being overweight

☐ Poor eating habits

☐ Not getting "shots" to prevent disease (ex: vaccines)

☐ Not using seat belts/child safety seats

☐ Dropping out of school

☐ Lack of exercise

☐ Racism

☐ Tobacco use

☐ Not using birth control

☐ Unsafe sex

☐ Other (please specify): _____

7. **What do you believe is <u>most important</u> to promote healthy eating in the county? Choose all that apply.**

☐ Healthy foods and drinks are at my community/convenience store

☐ Restaurants offer and promote healthy foods

☐ Community, neighborhood, and/or school gardens

☐ Food pantries and assistance programs promote and offer fruits and vegetables

☐ Better understanding of how to cook healthy food

☐ Locally grown and raised food is easy to get

☐ Healthy foods and drinks are offered and promoted at schools, colleges, and universities

☐ I do not believe that promoting healthy eating is important in my county

☐ Other (please specify): _____

8. **Would you support a program that would give clean needles to drug users so they don't spread disease?**

☐ Yes ☐ No ☐ Other (please specify): _____

9. **If there were programs on healthy intimate relationships offered in your community, would you want your (or other) children to attend?**

☐ Yes ☐ No ☐ Other (please specify): _____

10. **If you could make one thing happen to improve health in the county, what would it be?**

_____

11. **What do you believe is most needed to support older adults living in the county? Choose all that apply.**

☐ Transportation

☐ Assistance for buying food

☐ Home delivered meal programs

☐ Medication assistance programs

☐ Meal programs offered at senior center

☐ Abuse prevention programs

☐ Long term care

☐ Retirement neighborhoods

☐ Health and wellness opportunities

☐ Other (please specify):

_____

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

☐ 0 days
☐ 1-5 days
☐ 6-10 days
☐ 11-15 days
☐ 16 days or more

13. Do you have a Medical Home where you receive medical care like a wellness physical or check-up on a regular basis?

☐ Yes ☐ No ☐ If no, why not? _____

14. Is your Medical Home in your County?

☐ Yes ☐ No ☐ If no, why not? _____

15. Is your local hospital your first choice for usual inpatient and outpatient services?

☐ Yes ☐ No ☐ If no, why not? _____

15. Have you or someone you know needed specialty care that is not offered in the County?

☐ Yes ☐ No ☐ If yes, what kind of specialty was it? _____

16. If you partake in drug use (including both illegal drugs and non-medical use of prescription drugs), where are you more likely to engage in this behavior?

☐ At home
☐ At work
☐ At parties
☐ I do not participate in illegal drug use

☐ Other (please specify): _____

Thank you. Almost finished! Please complete this last section so we know if the survey reflects the makeup of our community. None of this information will be linked back to you personally in any way.

17. What is your age?

☐ 18-25
☐ 26-39
☐ 40-54
☐ 55-64
☐ 65 or over

18. What is your gender identity?

☐ Male
☐ Female
☐ Transgender
☐ Do not identify as female, male, or transgender

19. What is your primary language?

☐ English ☐ Spanish ☐ Other: _____

20. What race/ethnic group do you most identify with?

☐ African American/Black
☐ Asian/Pacific Islander
☐ Hispanic/Latino
☐ White/Caucasian
☐ Native American
☐ Other: _____

21. What is your marital status?

☐ Married / co-habitating
☐ Not married / single

22. Where/how did you get this survey?

☐ Email
☐ Facebook
☐ Doctor office or hospital
☐ Workplace
☐ Community event
☐ Other (please specify): _____

23. What type of health insurance do you have?

☐ None
☐ Insurance through my or my spouse's work
☐ Private plan I buy on my own
☐ Medicaid
☐ Medicare
☐ Insurance through healthcare.gov

24. What is your household income?

☐ Less than $20,000
☐ $20,000 to $29,999
☐ $30,000 to $49,000
☐ Over $50,000
☐ Prefer not to say

25. What is the highest level of school you have completed?

☐ Some high school, no diploma
☐ High school diploma or GED
☐ Associate's degree or vocational training
☐ Some college, no degree
☐ Bachelor's degree
☐ Graduate's degree
☐ Other (please specify): _____

26. What is your zipcode?

_____

Thank you! Your input is so important. The results of this survey will be posted online or available electronically on request at www.apphealth.com on March 1, 2018.

If you would like to be involved in choosing health priorities based on the survey results, please contact Maria Julian at maria.julian@apphealthcare.com or 828-264-4995 ext. 3120.

If you would like to be entered into a drawing for $100.00, please fill out and detach the following page.

Drawing for $100.00

To enter the drawing, please fill out and detach this page.

Please note that this is optional. It will not be tied to your survey results in any way. We will not sell or give your contact information to anyone else for any purpose.

Name:

_____

Email address (if you have one):

_____

Telephone where you can be reached:

_____

EVALUACIÓN DE LA SALUD COMUNITARIA

ASHE COUNTY

Gracias por tomar esta breve encuesta de opinión. Su opinión es importante y se utilizará para planificar programas y proyectos que afectan la salud de la comunidad. Ninguna de sus respuestas será vinculada a usted de ninguna manera. Debe tener al menos 18 años o más para realizar esta encuesta y vivir parte o todo el tiempo en este condado. Tenga en cuenta que sólo pedimos a los residentes a tiempo completo ya tiempo parcial que completen la encuesta.

Si ya ha tomado la encuesta en papel o en línea, por favor no la tome de nuevo. Si desea saber más sobre la oportunidad de ganar una tarjeta de regalo, continúe hasta el final de la encuesta donde puede averiguar cómo ingresar al dibujo.

Esta encuesta es copatrocinada por AppHealthCare (Departamento de Salud del Distrito Apalache), Ashe Memorial Hospital, Ashe Health Alliance y otras agencias comunitarias.

¿Es usted un residente a tiempo completo o parcial en este condado? Si no es así, le agradecemos su interés, pero solo estamos estudiando a los residentes. Si es así, elija uno:

☐ Tiempo completo ☐Medio tiempo ☐Ninguno

1. **¿Cómo calificaría nuestra comunidad como una "comunidad saludable"?**

☐Muy poco saludable ☐Poco saludable ☐Algo saludable ☐Saludable ☐Muy saludable

2. **¿Cómo calificaría su propia salud personal?**

☐Muy poco saludable ☐Poco saludable ☐Algo saludable ☐Saludable ☐Muy saludable

3. **¿Cuántas horas al mes usted ofrece voluntariamente su tiempo al servicio comunitario (escuelas, organizaciones, iglesia, hospital, etc.)?**

☐Zero ☐1-5 horas ☐6-10 horas ☐Mas de 10 horas

4. **¿Cuáles cree que son los tres factores más importantes para una "comunidad saludable"? (Los factores que más mejoran la calidad de vida en una comunidad.)**

☐Un buen lugar para criar a los niños

☐Bajo crimen / barrios seguros

☐Nivel bajo de maltrato infantil

☐Parques y Recreación

☐Ambiente limpio

☐Vivienda asequible

☐Valores religiosos o espirituales

☐Relaciones íntimas sanas y seguras

☐Disponibilidad de alimentos saludables y asequibles

☐Buen trabajo y economía saludable

☐Buenas escuelas

☐Acceso a la atención médica (por ejemplo, médico de cabecera)

☐Vida familiar fuerte

☐Arte y eventos culturales

☐Excelentes relaciones raciales

☐Conductas saludables y estilos de vida

☐Bajas tasas de muerte y enfermedad en adultos

☐Baja mortalidad infantil

☐Otra (especifique): _____

5. **¿Cuáles cree que son los tres "problemas de salud" más importantes de nuestra comunidad? (Los problemas que tienen el mayor impacto en la salud de la comunidad en general.) Elija sólo 3.**

☐Uso de alcohol y / o drogas

☐Problemas de envejecimiento (por ejemplo, Artritis, pérdida de la audición / visión, etc.)

☐Cánceres

☐Lesiones relacionadas con armas de fuego

☐La violencia de pareja (daño físico, sexual o psicológico por parte de una pareja o cónyuge)

☐Diabetes

☐Violación / agresión sexual

☐Infecciones de transmisión sexual (ITS)

☐Homicidio

☐Abuso / abandono de niños

☐Problemas dentales

☐Enfermedad cardíaca y accidente cerebrovascular

☐Alta presion sanguinea

☐VIH / SIDA

☐Problemas de salud mental

☐Enfermedad respiratoria / pulmonary

☐Suicidio

☐Lesiones por choque de vehículos de motor

☐Embarazo en la adolescencia

☐Otra (especifique):

_____

6. **¿Cuáles cree que son los tres "comportamientos de riesgo" más importantes de nuestra comunidad? (Los comportamientos que tienen el mayor impacto en la salud de la comunidad en general.) Elija sólo 3.**

☐Uso de alcohol y / o drogas

☐Falta de ejercicio

☐Tener sobrepeso

☐Los malos hábitos alimenticios

☐Abandonar la escuela

☐Sexo no seguro

☐Racismo

☐No usar anticonceptivos

☐El consumo de tabaco

☐No usar cinturones de seguridad / asientos de seguridad para niños

☐No obtener "inyecciones" para prevenir la enfermedad (por ejemplo: vacunas)

☐Otra (especifique): _____

7. **¿Qué crees que es más importante para promover la alimentación saludable en el condado? Elija todas * las que apliquen.**

☐Los alimentos y bebidas saludables están en mi comunidad / tienda de conveniencia

☐Despensas de alimentos y programas de asistencia promueven y ofrecen frutas y verduras

☐Jardines comunitarios, vecinales y / o escolares

☐Los restaurantes ofrecen y promueven alimentos saludables

☐Mejor comprensión de cómo cocinar alimentos saludables

☐Se ofrecen y promueven alimentos y bebidas saludables en escuelas, colegios y universidades

☐Los alimentos cultivados y criados localmente son fáciles de obtener

☐No creo que la promoción de una alimentación saludable sea importante en mi condado

☐Otra (especifique): _____

8. **¿Apoyaría un programa que eliminaría agujas usadas y proporcionaría agujas sin usar para prevenir la propagación de la enfermedad?**

☐Si ☐No ☐Otra (especifique): _____

9. **Si hubiera programas sobre relaciones íntimas saludables que se ofrecen en su comunidad, ¿desearía que asistieran sus hijos (u otros)?**

☐Si ☐No ☐Otra (especifique): _____

10. **Si usted pudiera hacer que una cosa suceda para mejorar la salud en el condado, ¿cuál sería?**

_____

11. ¿Qué cree que es más necesario para apoyar a los adultos mayores que viven en el condado? Elija todas las que apliquen.

☐Transporte

☐Programas de comidas a domicilio

☐Programas de comidas ofrecidos en el centro de la tercera edad

☐Asistencia para la compra de alimentos

☐Programas de prevención del abuso

☐Programas de asistencia médica

☐Oportunidades de salud y bienestar

☐Cuidado a largo plazo

☐Barrios de retiro

☐Otra (especifique): _____

12. Pensando en su salud mental, que incluye estrés, depresión y problemas con las emociones, ¿durante cuántos días durante los últimos 30 días su salud mental no fue buena?

☐0 dias

☐1-5 dias

☐6-10 dias

☐11-15 dias

☐16 dias o mas

13. ¿Tiene un Hogar Médico donde recibe atención médica como un examen físico de bienestar o un chequeo regular?

☐Si ☐No ☐Si no, ¿por qué no? _____

14. ¿Es su hogar médico en su condado?

☐Si ☐No ☐Si no, ¿por qué no? _____

15. ¿Es su hospital local su primera opción para los servicios de hospitalización y ambulatorios habituales?

☐Si ☐No ☐Si no, ¿por qué no? _____

16. **¿Usted o alguien que usted conoce necesita cuidado especializado que no se ofrece en el Condado?**

☐Si ☐No ☐En caso afirmativo, ¿qué tipo de especialidad era? _____

17. **Si participa en el consumo de drogas (inclyendo drogas ilegales y uso no médico de medicamentos recetados), ¿dónde es más probable que participe en este comportamiento?**

☐En casa

☐En trabajo

☐En fiestas

☐No participo en el uso de drogas ilegales

☐Otra (especifique): _____

Gracias. ¡Casi terminado! Por favor complete esta última sección para saber si la encuesta refleja la composición de nuestra comunidad. Ninguna de esta información será vinculada de nuevo a usted personalmente de ninguna manera.

18. **¿Cual es su edad?**

☐18-25

☐26-39

☐40-54

☐55-64

☐65 +

19. **¿Cuál es su identidad de género?**

☐Hombre

☐Mujer

☐Transgénero

☐No se identifique como mujer, varón o transexual

20. **¿Cual es tu idioma principal?**

☐Inglés ☐Español ☐Otro: _____

21. ¿Con qué raza / grupo étnico te identificas más?

☐Afroamericano / Negro

☐Asia / Islas del Pacífico

☐Hispano / Latino

☐Blanco / caucásico

☐Nativo americano

☐Otro: _____

22. ¿Cuál es tu estado civil?

☐Casado / co-habitante

☐No casado / soltero

23. ¿Dónde / cómo recibió esta encuesta?

☐Email

☐Facebook

☐Oficina del doctor o hospital

☐Lugar de trabajo

☐Evento comunitario

☐Otra (especifique): _____

24. ¿Qué tipo de seguro de salud tiene?

☐Ninguna

☐Seguro a través del trabajo de mi o de mi esposo / a

☐Plan privado que compro por mi cuenta

☐Medicaid

☐Medicare

☐Seguro a través de healthcare.gov

25. ¿Cuál es su ingreso familiar?

☐Menos de $20,000

☐$20,000 - $29,999

☐$30,000 - $49,999

☐Mas de $50,000

☐Prefiero no decirlo

26. ¿Cuál es el nivel más alto de escuela que has completado?

☐Algún bachillerato, sin diploma

☐Algún colegio, sin grados

☐Diploma de escuela secundaria o GED

☐Licenciatura

☐Grado de asociado o formación profesional

☐Diploma de graduación

☐Otra (especifique): _____

27. Codigo postal?

_____

Gracias por su tiempo para tomar esta encuesta. Su entrada es tan importante. Los resultados de esta encuesta se publicarán en línea o estarán disponibles electrónicamente a solicitud en www.apphealthcare.com y en www.ashememorial.org antes del 1 de marzo de 2018.

Si desea participar en la selección de las prioridades de salud basadas en los resultados de la encuesta, comuníquese con María Julián al maria.julian@apphealth.com o al 828-264-4995 ext. 3120.

Si desea ingresar al dibujo por $ 100, complete y desprenda la siguiente página.

Sorteo para $100.00

Para ingresar al dibujo, rellene y desprenda esta página.

Tenga en cuenta que es opcional. No estará vinculado a los resultados de su encuesta de ninguna manera. No venderemos ni daremos su información de contacto a nadie más para ningún propósito.

Nombre:

_____

Correo electronico:

_____

Numero de telefono:

_____

CHOS Q12: Thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?

Days	Watauga		Ashe		Alleghany		BRFSS Combined (3 counties, 2012-2016)
	n	%	n	%	n	%	%
0	255	34.6	206	31.94	104	40.94	60.2
1-5	330	44.7	228	35.35	98	38.58	18.0
6-10	61	8.3	86	13.33	27	10.63	6.0
11-15	37	5.0	41	6.36	13	5.12	4.4
16+	55	7.5	84	13.02	12	4.72	11.4

CHOS Q13: Do you have a Medical Home where you receive medical care like a wellness physical or check-up on a regular basis?
BRFSS - Q 3.2: Do you have one person you think of as your personal doctor or health care provider?

	Watauga		Ashe		Alleghany		BRFSS Combined (3 counties, 2012-2016)
	n	%	n	%	n	%	%
Yes	576	78.3	493	75.96	211	83.07	72.5
No	160	21.7	156	24.04	43	16.93	27.5

CHOS Q2: How would you rate your personal health?
BRFSS Q1.1 (2017): Would you say that in general your health is—

	Watauga		Ashe		Alleghany		BRFSS Combined (3 counties, 2012-2016)	
	n	%	n	%	n	%	%	
Very healthy	93	11.8	12	1.79	3	1.12	13.8	Excellent
Healthy	394	50.0	65	9.69	18	6.72	34.43	Very good
Somehwhat healthy	251	31.9	280	41.73	97	36.19	30.0	Good
Unhealthy	34	4.31	277	41.28	122	45.52	12.6	Fair
Very unhealthy	16	2.03	37	5.51	28	10.45	9.3	Poor

CHOS Q5. What do you think are the 3 most important "health problems" in our community?

	Watauga		Ashe		Alleghany	
	n	%	n	%	n	%
Alcohol and/or drug use	519	58.98	505	69.27	185	65.37
Mental health problems	321	36.48	186	25.51	47	16.61
Diet	305	34.66	114	15.64	37	13.07
Cancers	186	21.14	282	38.68	130	45.94
Diabetes	165	18.75	112	15.36	77	27.21
Heart disease and stroke	122	13.86	124	17.01	50	17.67
Aging problems	119	13.52	108	14.81	57	20.14
Child abuse/neglect	97	11.02	108	14.81	37	13.07
High blood pressure	79	8.98	70	9.6	28	9.89
Dental problems	69	7.84	60	8.23	22	7.77
Intimate partner violence	62	7.05	51	7	14	4.95
Suicide	48	5.45	131	17.97	33	11.66
Motor vehicle crash injuries	38	4.32	19	2.61	3	1.06
Respiratory/lung disease	31	3.52	37	5.08	25	8.83
Teenage pregnancy	31	3.52	33	4.53	26	9.19
Rape/sexual assault	25	2.84	13	1.78	2	0.71
Sexually transmitted infections	20	2.27	10	1.37	5	1.77
Firearm-related injuries	11	1.25	8	1.1	1	0.35
HIV/AIDS	8	0.91	6	0.82	1	0.35
Homicide	3	0.34	10	1.37	1	0.35
Other	46	5.22	17	2.33	15	5.3

Top 3 issues by race/ethnicity (listing only top 3 for each group)

Watauga	African American/Black	Hispanic/Latino (n=32)	White/Caucasian (n=670)	Other (n=19)
	%	%	%	%
Alcohol and/or drug use	63.6	81.3	67.6	73.7
Mental health problems	45.5	21.9	43.9	26.3

Diet	36.4	18.8	41.3	31.6
Diabetes	36.4	37.5	20.8	21.1
Dental problems	0	21.9	8.8	5.3

Ashe	American/Black (n=1)	Hispanic/Latino (n=21)	White/Caucasian (n=603)	Other (n=17)
	%	%	%	%
Alcohol and/or drug use	NR	85.71	76.45	76.47
Cancer	NR	38.10	43.12	23.53
Mental health problems	NR	19.05	28.69	23.53
Diabetes	NR	33.33	15.92	23.53
Dental problems	NR	33.33	7.63	29.41

Alleghany	American/Black (n=1)	Hispanic/Latino (n=11)	White/Caucasian (n=232)	Other (n=7)
	%	%	%	%
Alcohol and/or drug use	NR	72.73	71.12	NR
Cancer	NR	18.18	51.72	NR
Diabetes	NR	54.55	28.45	NR
Dental problems	NR	27.27	8.19	NR

CHOS Q3 How many hours per month do you volunteer your time to community service (schools, organizations, church,

	Watauga		Ashe		Alleghany	
	n	%	n	%	n	%
None	278	35.28	198	29.46	86	31.97
1-5 hours	321	40.74	81	12.05	35	13.01
6-10 hours	97	12.31	87	12.95	40	14.87
>10 hours	92	11.68	306	45.54	108	40.15

Appendix 2: Secondary Data & References

Major Source Descriptions of Secondary Indicators

- American Community Survey data estimates: The Census Bureau collects American Community Survey (ACS) data from a sample of the population in the United States and Puerto Rico. American Community Survey 1-, 3-, and 5-year estimates are period estimates, which means they represent the characteristics of the population and housing over a specific data collection period. Data are combined to produce 12 months, 36 months or 60 months of data. These are called 1-year, 3-year and 5-year data.
- Behavioral Risk Factor Surveillance System: BRFSS is the world's largest ongoing telephone health survey system. BRFSS tracks health conditions and risk behaviors in the United States annually. Data are collected monthly in all 50 states, the District of Columbia, Puerto Rico, the U.S. Virgin Islands, and Guam.
- County Health Data Book - The project staff of the North Carolina Community Health Assessment Initiative (NC-CHAI) created the County Health Data Book to provide communities with quantitative data to support community health assessments. The County Health Data Book includes a wide range of health-related county and state data. Data Books are updated yearly.
- Injury and Violence Prevention Branch Surveillance Unit, North Carolina Division of Public Health: The IVP branch maintains statewide injury and violence related surveillance by providing emergency department, hospital discharge, and mortality data to monitor the incidence of and risk factors for fatal and nonfatal injury.
- National Center for Education Statistics: NCES is the primary federal entity for collecting and analyzing data related to education in the U.S. and other nations. NCES is located within the U.S. Department of Education and the Institute of Education Sciences. Data are updated annually.
- North Carolina Central Cancer Registry: CCR collects, processes, and analyzes data on all cancer cases diagnosed among North Carolinans. The CCR provides cancer surveillance, monitoring the incidence of cancer among the various populations in North Carolina.
- North Carolina State Data Center, LINC system: LINC provides county level data on Population and Housing, Statistics and Health, Social and Human Services, Law Enforcement, Courts, and Corrections, Recreation, and Resources, Energy and Utilities and more. LINC is managed by the North Carolina office of State Data Center.
- US Census - The U.S. Census counts every resident in the United States and takes place every 10 years. The data collected by the decennial census determine the number of seats each state has in the U.S. House of Representatives and is also used to distribute billions in federal funds to local communities. The 2010 Census represented the most massive participation movement ever witnessed in our country. Approximately 74 percent of the households returned their census forms by mail. The remaining households were counted by census workers walking neighborhoods throughout the United States.

Table: Comparison of Opinion Survey Sample to County Population

Demographic Characteristics Sources:

- Male & female data: http://www.schs.state.nc.us/data/vital/volume1/2015/watauga.html (July 2016)
- Race & ethnicity data: www.census.gov (July 2016)
- 65 and older: www.census.gov (July 2016)
- 40-54, 55-64, other race, education level data: www.factfinder.census.gov
- 18-25, 26-39 age groups: https://ncosbm.s3.amazonaws.com/s3fs-public/demog/countytotals_singleage_2015.html (July 2015 estimates)
- Highest education level: www.factfinder.census.gov (2011-2015 ACS Survey Estimates)
- Household income: www.factfinder.census.gov (2015 ACS Estimates)
- Overall population: https://www.census.gov/quickfacts/fact/table/US/PST045217 (2016 estimates)

Heart Disease

Heart Disease Discharge Rate Trend (Single Years, 2006-2014)

Location	Rate (Discharges per 1,000 Population)								
	2006	2007	2008	2009	2010	2011	2012	2013	2014
Ashe Cou	14.9	17.2	14.1	13.7	13.8	13.5	12.2	9.3	13.7
Macon C	14.5	13.0	12.1	12.2	12.6	12.6	12.2	11.3	11.2
State of N	12.7	12.2	11.8	11.4	11.3	10.9	10.7	10.3	10.1

Source: NC State Center for Health Statistics, County-level Data, County Health Data Books (2008-2017), Morbidity, Inpatient Hospital Utilization and Charges by Principal Diagnosis and County of Residence; http://www.schs.state.nc.us/SCHS/data/databook/

Note: Bold type indicates a likely unstable rate based on a small (fewer than 20) number of cases.

Heart Disease Mortality, by Race/Ethnicity and Sex (Single Five-Year Aggregate Period, 2012 2016)

Location	Deaths, Number and Rate (Deaths per 100,000 Population)															
	White, Non-Hispanic		African American,		American Indian, Non-Hispanic		Other Races, Non-Hispanic		Hispanic		Male		Female		Overall	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Ashe Cou	362	171.5	**2**	**N/A**	**0**	**N/A**	**1**	**N/A**	**1**	**N/A**	186	199.0	180	140.6	366	167.8
Macon C	477	161.7	**4**	**N/A**	**2**	**N/A**	**0**	**N/A**	**2**	**N/A**	275	213.2	210	114,8	485	159.3
State of N	69,179	159.0	18,081	187.1	904	182.0	516	76.0	713	56.6	47,497	205.7	41,896	127.1	89,393	161.3

Source: NC State Center for Health Statistics, County Health Data Book (2018), Mortality, 2012-2016 Race/Ethnicity Specific and Sex-Specific Age-Adjusted Death Rates by County; http://www.schs.state.nc.us/SCHS/data/databook/

Note: The use of "n/a" in lieu of a numeral indicates a likely unstable rate based on a small (fewer than 20) number of cases.

Overall Heart Disease Mortality Rate Trend (Five-Year Aggregate Periods, 2001-2005 through 2012-2016)

Location	Rate (Deaths per 100,000 Population)											
	2001-2005	2002-2006	2003-2007	2004-2008	2005-2009	2006-2010	2007-2011	2008-2012	2009-2013	2010-2014	2011-2015	2012-2016
Ashe Cou	201.7	207.5	199.6	197.7	198.4	184.7	174.4	174.7	167.4	163.9	167.9	167.8
Macon C	202.1	197.4	195.4	190.5	191.2	181.7	174.0	168.3	167.6	163.7	157.5	159.3

State of N	226.8	217.9	210.7	202.2	191.7	184.9	179.3	174.4	170.0	165.9	163.7	161.3

Source: NC State Center for Health Statistics, County Health Data Books (2007-2018), Mortality, Race-Specific and Sex-Specific Age-Adjusted Death Rates by County;

Note: The use of **bold type** or the use of "n/a" in lieu of a numeral indicates a likely unstable rate based on a small (fewer than 20) number of cases.

Paste for Ashe Chart

	2001-2005	2002-2006	2003-2007	2004-2008	2005-2009	2006-2010	2007-2011	2008-2012	2009-2013	2010-2014	2011-2015	2012-2016
Males	251.3	261.8	250.8	249.0	249.6	237.9	230.5	222.1	210.7	211.8	207.7	199.0
Females	160.0	165.4	162.9	161.1	162.7	147.7	133.8	139.3	127.8	123.2	133.7	140.6

Source: NC State Center for Health Statistics, County Health Data Books (2007-2018), Mortality, Race-Specific and Sex-Specific Age-Adjusted Death Rates by County; http://www.schs.state.nc.us/SCHS/data/databook/

Total Cancer

Malignant Neoplasms Discharge Rate Trend (Single Years, 2006-2014)

Location	Rate (Discharges per 1,000 Population)								
	2006	2007	2008	2009	2010	2011	2012	2013	2014
Ashe Cou	4.3	4.0	5.3	4.6	4.1	4.6	3.8	3.4	0.7
Macon C	4.1	4.7	4.2	4.0	4.6	4.1	4.0	3.1	4.1
State of N	3.9	3.9	3.6	3.4	3.3	3.2	3.0	2.9	2.8

Source: NC State Center for Health Statistics, County-level Data, County Health Data Books (2008-2017), Morbidity, Inpatient Hospital Utilization and

Note: Bold type indicates a likely unstable rate based on a small (fewer than 20) number of cases.

Total Cancer Mortality, by Race/Ethnicity and Sex (Single Five-Year Aggregate Period, 2012-2016)

Location	Deaths, Number and Rate (Deaths per 100,000 Population)															
	White, Non-Hispanic		African American,		American Indian, Non-Hispanic		Other Races, Non-Hispanic		Hispanic		Male		Female		Overall	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Ashe Cou	365	172.9	**3**	**N/A**	**0**	**N/A**	**2**	**N/A**	**7**	**N/A**	219	225.6	158	135.5	377	174.5
Macon C	481	162.4	**4**	**N/A**	**0**	**N/A**	**1**	**N/A**	**5**	**N/A**	271	193.0	220	133.0	491	159.9
State of N	72,841	165.0	19,500	190.7	880.0	158.7	848	104.4	1,094	72.9	50,707	205.2	44,456	138.9	95,163	166.5

Source: NC State Center for Health Statistics, County Health Data Book (2018), Mortality, 2012-2016 Race/Ethnicity-Specific and Sex-Specific Age-Adjusted Death Rates by County; http://www.schs.state.nc.us/SCHS/data/databook/

Note: The use of "n/a" in lieu of a numeral indicates a likely unstable rate based on a small (fewer than 20) number of cases.

Overall Total Cancer Mortality Rate Trend (Five-Year Aggregate Periods, 2001-2005 through 2012-2016)

Location	Rate (Deaths per 100,000 Population)											
	2001-2005	2002-2006	2003-2007	2004-2008	2005-2009	2006-2010	2007-2011	2008-2012	2009-2013	2010-2014	2011-2015	2012-2016
Ashe Cou	181.7	186.3	178.2	169.4	175.9	171.0	166.4	171.1	170.8	167.2	176.2	174.5
Macon C	180.2	177.6	177.5	180.1	164.1	165.7	170.0	165.1	162.8	169.8	166.7	159.9

State of N	197.7	196.4	194.9	192.5	185.6	183.1	179.7	175.9	173.0	171.8	169.1	166.5

Source: NC State Center for Health Statistics, County Health Data Books (2007-2018), Mortality, Race-Specific and Sex-Specific Age-Adjusted Death Rates by County; http://www.schs.state.nc.us/SCHS/data/databook/

Lung Cancer

Trachea, Bronchus, Lung Neoplasms Discharge Rate Trend (Single Years, 2006-2013)

Location	Rate (Discharges per 1,000 Population)								
	2006	2007	2008	2009	2010	2011	2012	2013	2014
Ashe Cou	**0.5**	0.2	1.1	**0.6**	**0.5**	0.4	**0.6**	0.9	0.7
Macon C	0.7	0.6	0.8	0.6	**0.4**	0.7	0.8	0.8	0.6
State of N	0.6	0.6	0.5	0.5	0.5	0.4	0.4	0.4	0.4

Source: NC State Center for Health Statistics, County-level Data, County Health Data Books (2008-2017), Morbidity, Inpatient Hospital Utilization and Charges by Principal

Note: Bold type indicates a likely unstable rate based on a small (fewer than 20) number of cases.

Lung Cancer Mortality, by Race/Ethnicity and Sex (Single Five-Year Aggregate Period, 2012-2016)

Location	Deaths, Number and Rate (Deaths per 100,000 Population)															
	White, Non-Hispanic		African American,		American Indian, Non-Hispanic		Other Races, Non-Hispanic		Hispanic		Male		Female		Overall	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Ashe Cou	103	47.8	**2**	**N/A**	**0**	**N/A**	**2**	**N/A**	**0**	**N/A**	65	65.4	42	33.2	107	48.0
Macon C	142	45.7	**2**	**N/A**	**0**	**N/A**	**0**	**N/A**	**0**	**N/A**	78	52.6	66	39.1	144	45.0
State of N	22,139	49.1	4,838	46.3	289	51.2	181	23.5	168	13.1	15,805	62.1	11,810	36.5	27,615	47.5

Source: NC State Center for Health Statistics, County Health Data Book (2018), Mortality, 2012-2016 Race/Ethnicity Specific and Sex-Specific Age-Adjusted Death Rates by County, http://www.ashe.state.nc.us/SCHS/data/databook/

Note: The use of "n/a" in lieu of a numeral indicates a likely unstable rate based on a small (fewer than 20) number of cases.

Lung Cancer Mortality Rate Trend (Five-Year Aggregate Periods, 2001-2005 through 2012-2016)

Location	Rate (Deaths per 100,000 Population)											
	2001-2005	2002-2006	2003-2007	2004-2008	2005-2009	2006-2010	2007-2011	2008-2012	2009-2013	2010-2014	2011-2015	2012-2016
Ashe Cou	60.4	53.4	50.9	47.7	50.9	46.5	51.6	53.0	51.6	50.4	49.6	48.0
Macon C	51.1	47.6	48.4	49.9	49.7	52.7	57.6	55.8	58.6	56.6	50.2	45.0
State of N	59.9	59.8	59.6	59.1	57.0	55.9	54.5	52.8	51.6	50.6	48.9	47.5

Source: NC State Center for Health Statistics, County Health Data Books (2007-2018), Mortality, Race-Specific and Sex-Specific Age-Adjusted Death Rates by County"

Paste for Ashe County

	2001-2005	2002-2006	2003-2007	2004-2008	2005-2009	2006-2010	2007-2011	2008-2012	2009-2013	2010-2014	2011-2015	2012-2016
Males	89.1	78.5	76.1	70.4	73.1	68.4	73.2	75.6	72.3	67.1	65.5	65.4
Females	37.7	34.6	31.3	30.5	33.8	28.7	33.3	34.2	33.1	34.9	35.6	33.2

Lung Cancer Incidence Rate Trend (Five-Year Aggregate Periods, 1996-2000 through 2012-2016)

Location	Rate (New cases per 100,000 Population)															
	1996-2000	1997-2001	1998-2002	1999-2003	2000-2004	2001-2005	2002-2006	2003-2007	2004-2008	2005-2009	2006-2010	2007-2011	2008-2012	2009-2013	2010-2014	2011-2015	2012-2016
Ashe Cou	[redacted]						68.8	71.7	73.9	75.4	68.5	70.0	55.7	70.3	63.9	66.7	62.6
Macon C	[redacted]						57.4	70.6	71.2	73.3	75.6	77.1	83.1	74.9	72.6	69.6	63.3
State of N	[redacted]						75.0	75.8	76.3	75.9	74.8	73.4	71.9	71.5	70.0	69.3	66.3

Source: NC State Center for Health Statistics, Health Data, Cancer, Cancer Data Available from SCHS, Annual Reports, NC Cancer Incidence Rates for All Counties by Specified Site (Years as Noted); http://www.schs.state.us.nc/SCHS/CCR/reports.html

Prostate Cancer

Prostate Neoplasm Discharge Rate Trend (Single Years, 2006-2014)

Location	Rate (Discharges per 1,000 Population)								
	2006	2007	2008	2009	2010	2011	2012	2013	2014
Ashe County	**0.2**	**0.3**	**0.2**	**0.4**	**0.1**	**0.3**	**0.2**	**0.0**	**0.3**
Macon County	**0.2**	**0.4**	**0.3**	**0.2**	**0.2**	**0.4**	**0.0**	**0.2**	**0.3**
State of NC	0.3	0.4	0.3	0.3	0.3	0.3	0.2	0.2	0.2

Source: NC State Center for Health Statistics, County-level Data, County Health Data Books (2008-2017), Morbidity, Inpatient Hospital Utilization and Charges by Principal Diagnosis and County of Residence; http://www.schs.state.nc.us/SCHS/data/databook/

Prostate Cancer Mortality, by Race/Ethnicity and Sex (Single Five-Year Aggregate Period, 2012-2016)

Location	Deaths, Number and Rate (Deaths per 100,000 Male Population)											
	White, Non-Hispanic		African American, Non-Hispanic		American Indian, Non-Hispanic		Other Races, Non-Hispanic		Hispanic		Overall	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Ashe County	20	21.0	**0**	**N/A**	**0**	**N/A**	**0**	**N/A**	**0**	**N/A**	20	20.4
Macon County	31	22.1	**0**	**N/A**	**0**	**N/A**	**0**	**N/A**	**0**	**N/A**	31	21.5
State of NC	3,050	17.2	1,260	39.1	51.0	28.5	**15**	**N/A**	34	6.8	4,410	20.1

Source: NC State Center for Health Statistics, County Health Data Book (2018), Mortality, 2011-2015 Race/Ethnicity-Specific and Sex-Specific Age-Adjusted Death Rates by County; http://www.schs.state.nc.us/SCHS/data/databook/

Note: The use of **bold type** or the use of "n/a" in lieu of a numeral indicates a likely unstable rate based on a small (fewer than 20) number of cases.

Prostate Cancer Mortality Rate Trend (Five-Year Aggregate Periods, 2001-2005 through 2012-2016)

Location	Overall Rate (Deaths per 100,000 Male Population)											
	2001-2005	2002-2006	2003-2007	2004-2008	2005-2009	2006-2010	2007-2011	2008-2012	2009-2013	2010-2014	2011-2015	2012-2016
Ashe County	28.7	31.8	**23.0**	**21.2**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**23.2**	20.4
Macon County	25.2	24.7	26.7	30.8	10.3	23.7	23.4	21.2	14.9	18.4	19.6	21.5
State of NC	29.9	29.1	28.3	27.3	25.7	25.5	24.3	23.4	22.1	21.4	20.5	20.1
Source:	a	a	a	a	b	b	b	b	a	a	a	a

a - NC State Center for Health Statistics, County Health Data Books (2007-2018), Mortality, Race-Specific and Sex-Specific Age-Adjusted Death Rates by County; http://www.schs.state.nc.us/SCHS/data/databook/

b - NC State Center for Health Statistics, Statistics and Reports, Vital Statistics, NC Vital Statistics Volume II: Leading Causes of Death, 2009, 2010, 2011, 2012 and 2013; http://www.schs.state.nc.us/data/vital.cfm#vitalvol2

Note: The use of **bold type** or the use of "n/a" in lieu of a numeral indicates a likely unstable rate based on a small (fewer than 20) number of cases.

Prostate Cancer Incidence Rate Trend (Five-Year Aggregate Periods, 1996-2000 through 2012-2016)

Location	Rate (New cases per 100,000 Population)															
	1996-2000	1997-2001	1998-2002	1999-2003	2000-2004	2001-2005	2002-2006	2003-2007	2004-2008	2005-2009	2006-2010	2007-2011	2008-2012	2009-2013	2010-2014	2011-2015	2012-2016
Ashe County							156.4	156.0	149.4	146.9	118.9	120.2	112.4	91.0	71.6	77.2	78.2
Macon County							104.8	124.2	120.0	116.6	123.6	120.1	118.7	108.9	109.6	99.8	86.0
State of NC							153.2	153.8	158.8	158.3	153.7	150.6	139.4	134.3	125.0	120.9	109.4

Breast Cancer

Breast Neoplasm Discharge Rate Trend (Single Years, 2006-2014)

Location	Rate (Discharges per 1,000 Population)							
	2006	2007	2008	2009	2010	2011	2013	2014
Ashe Co	**0.3**	**0.1**	**0.1**	**0.2**	**0.0**	**0.2**	**0.0**	**0.2**
Macon C	**0.3**	**0.3**	**0.2**	**0.5**	**0.3**	**0.1**	0.1	**0.1**
State of N	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1

Source: NC State Center for Health Statistics, County-level Data, County Health Data Books (2008-2017), Morbidity, Inpatient Hospital Utilization and Charges by Principal Diagnosis and County of Residence; http://www.schs.state.nc.us/SCHS/data/databook/

Note: Bold type indicates a likely unstable rate based on a small (fewer than 20) number of cases.

Breast Cancer Mortality, by Race/Ethnicity and Sex (Single Five-Year Aggregate Period, 2012-2016)

Location	Deaths, Number and Rate (Deaths per 100,000 Female Population)															
	White, Non-Hispanic		African American, Non-Hispanic		American Indian, Non-Hispanic		Other Races, Non-Hispanic		Hispanic		Male		Female		Overall	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Ashe Co	25	25.8	**0**	**N/A**	**0**	**N/A**	**0**	**N/A**	**1**	**N/A**	**0**	**N/A**	26	27.1	26	27.1
Macon C	34	22.6	**0**	**N/A**	**0**	**N/A**	**0**	**N/A**	**0**	**N/A**	**0**	**N/A**	34	21.8	34	21.8
State of N	4,607	19.4	1,728	28.3	64	20.2	70	13.2	94	9.9	**0**	**N/A**	6,563	20.9	6,563	20.9

Source: NC State Center for Health Statistics, County Health Data Book (2018), Mortality, 2012-2016 Race/Ethnicity Specific and Sex-Specific Age-Adjusted Death Rates by County; http://www.schs.state.nc.us/SCHS/data/databook/

Note: The use of "n/a" in lieu of a numeral indicates a likely unstable rate based on a small (fewer than 20) number of cases.

Breast Cancer Mortality Rate Trend (Five-Year Aggregate Periods, 2001-2005 through 2012-2016)

Location	Rate (Deaths per 100,000 Female Population)											
	2001-2005	2002-2006	2003-2007	2004-2008	2005-2009	2006-2010	2007-2011	2008-2012	2009-2013	2010-2014	2011-2015	2012-2016
Ashe Co	**16.2**	**19.7**	**17.2**	20.0	**N/A**	18.8	**N/A**	18,5	22.9	26.1	28.6	27.1

Macon C	24.6	22.6	22.5	23.2	13.6	28.9	29.2	29.8	29.7	24.2	20.9	21.8
State of N	25.7	25.5	25.2	24.8	23.5	23.2	22.8	22.2	21.7	21.6	21.3	20.9
Source:	a	a	a	a	a	a	a	a	a	a	a	a

a - NC State Center for Health Statistics, County Health Data Books (2007-2018), Mortality, Race-Specific and Sex-Specific Age-Adjusted Death Rates by County

Breast Cancer Incidence Rate Trend (Five-Year Aggregate Periods, 1996-2000 through 2012-2016)

Location	Rate (New cases per 100,000 Population)															
	1996-2000	1997-2001	1998-2002	1999-2003	2000-2004	2001-2005	2002-2006	2003-2007	2004-2008	2005-2009	2006-2010	2007-2011	2008-2012	2009-2013	2010-2014	2011-2015	2012-2016
Ashe Co	[redacted]						105.7	104.2	107.5	119.2	119.0	119.6	129.9	137.3	138.6	154.1	151.7
Macon C							120.9	148.4	149.1	147.3	160.5	172.0	142.6	163.2	145.8	147.0	140.6
State of N							147.2	149.6	151.9	154.5	155.9	157.4	157	158.9	158.4	160.2	157.5

Source: NC State Center for Health Statistics, Health Data, Cancer, Cancer Data Available from SCHS, Annual Reports, NC Cancer Incidence Rates for All Counties by Specified Site (Years as Noted); http://www.schs.state.us.nc/SCHS/CCR/reports.html

Colon Cancer

Colon, Rectum, Anus Cancer Discharge Rate Trend (Single Years, 2006-2014)

Location	Rate (Discharges per 1,000 Population)								
	2006	2007	2008	2009	2010	2011	2012	2013	2014
Ashe Cou	**0.6**	**0.6**	**0.5**	**0.3**	**0.5**	**0.6**	**0.3**	**0.3**	0.7
Macon C	**0.4**	0.7	**0.3**	0.7	0.7	0.9	**0.4**	**0.3**	0.7
State of N	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4

Source: NC State Center for Health Statistics, County-level Data, County Health Data Books (2008-2017), Morbidity - Inpatient Hospital Utilization and Charges by Principal

Note: Bold type indicates a likely unstable rate based on a small (fewer than 20) number of cases.

Colon, Rectum, Anus Cancer Mortality, by Race/Ethnicity and Sex (Single Five-Year Aggregate Period, 2012-2016)

Location	Deaths, Number and Rate (Deaths per 100,000 Population)															
	White, Non-Hispanic		African American,		American Indian, Non-Hispanic		Other Races, Non-Hispanic		Hispanic		Male		Female		Overall	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Ashe Cou	33	16.8	**0**	**N/A**	**0**	**N/A**	**0**	**N/A**	**0**	**N/A**	21	23.2	**12**	**N/A**	33	16.1
Macon C	49	19.0	**0**	**N/A**	**0**	**N/A**	**0**	**N/A**	**0**	**N/A**	25	19.7	24	16.4	49	18.1
State of N	5,787	13.3	1,918	18.9	74.0	13.1	67	8.0	80	5.0	4,139	16.8	3,787	11.8	7,926	14.0

Source: NC State Center for Health Statistics, County Health Data Book (2018), Mortality, 2012-2016 Race/Ethnicity Specific and Sex-Specific Age-Adjusted Death Rates by County; http://www.schs.state.nc.us/SCHS/data/databook/

Note: The use of "n/a" in lieu of a numeral indicates a likely unstable rate based on a small (fewer than 20) number of cases.

Colon, Rectum, Anus Cancer Mortality Rate Trend (Five-Year Aggregate Periods, 2001-2005 through 2012-2016)

Location	Rate (Deaths per 100,000 Population)											
	2001-2005	2002-2006	2003-2007	2004-2008	2005-2009	2006-2010	2007-2012	2008-2012	2009-2013	2010-2014	2011-2015	2012-2016
Ashe Cou	18.5	19.9	17.1	17.1	14.9	14.0	11.8	12.9	11.2	10.7	13.8	16.1
Macon C	18.9	17.7	19.3	18.1	13.6	12.6	12.7	11.2	12.5	13.8	16.6	18.1
State of N	18.6	18.2	17.8	17.3	16.5	16.0	15.5	14.9	14.5	14.3	14.2	14.0

Source: a a a a a a a a a a a a

a -NC State Center for Health Statistics, County Health Data Books (2007-2018), Mortality, Race-Specific and Sex-Specific Age-Adjusted Death Rates by County; http://www.schs.state.nc.us/SCHS/data/databook/

	2001-2005	2002-2006	2003-2007	2004-2008	2005-2009	2006-2010	2007-2011	2008-2012	2009-2013	2010-2014	2011-2015	2012-2016
Males	**23.1**	24.7	**23.2**	24.2	**N/A**	**N/A**	**N/A**	**N/A**	**NA**	**N/A**	**N/A**	23.2
Females	**14.4**	**15.4**	**11.9**	**11.1**	**N/A**	**N/A**	**N/A**	**N/A**	**NA**	**N/A**	**N/A**	**N/A**

Colon, Rectum, Anus Cancer Incidence Rate Trend (Five-Year Aggregate Periods, 1996-2000 through 2012-2016)

Location	Rate (New cases per 100,000 Population)															
	1996-2000	1997-2001	1998-2002	1999-2003	2000-2004	2001-2005	2002-2006	2003-2007	2004-2008	2005-2009	2006-2010	2007-2011	2008-2012	2009-2013	2010-2014	2011-2015	2012-2016
Ashe Cou	[redacted]						39.6	39.9	37.1	37.2	38.9	39.9	34.6	38.1	40.6	41.9	38.7
Macon Co							48.5	49.7	41.3	41.4	39.5	42.1	55.7	45.8	46.6	45.3	40.7
							48.4	47.4	46.8	45.5	43.4	41.5	39.8	38.9	37.7	37.5	36.1

Source: NC State Center for Health Statistics, Health Data, Cancer, Cancer Data Available from SCHS, Annual Reports, NC Cancer Incidence Rates for All Counties by Specified Site (Years as Noted);
http://www.schs.state.nc.us/SCHS/CCR/reports.html

Chronic Lower Respiratory Disease (CLRD)/Chronic Obstructive Pulmonary Disease (COPD)

CLRD/COPD Discharge Rate Trend (Single Years, 2006-2014)

Location	Rate (Discharges per 1,000 Population)								
	2006	2007	2008	2009	2010	2011	2012	2013	2014
Ashe Cou	4.5	5.1	3.5	3.8	4.3	4.1	2.6	1.4	3.6
Macon C	1.9	2.5	2.1	2.7	3.0	3.2	2.4	2.5	1.6
State of N	3.2	3.1	3.4	3.4	3.2	3.2	2.1	1.9	1.8

Source: NC State Center for Health Statistics, County-level Data, County Health Data Books (2017), Morbidity, Inpatient Hospital Utilization and Charges by Principal Diagnosis and

Note: Bold type indicates a likely unstable rate based on a small (fewer than 20) number of cases.

Note: Data before 2011 did not exclude Asthma as a separate topic.

CLRD/COPD Mortality, by Race/Ethnicity and Sex (Single Five-Year Aggregate Period, 2012-2016)

Location	Deaths, Number and Rate (Deaths per 100,000 Population)															
	White, Non-Hispanic		African American, Non-Hispanic		American Indian, Non-Hispanic		Other Races, Non-Hispanic		Hispanic		Male		Female		Overall	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Ashe Cou	120	53.6	**3**	**N/A**	**0**	**N/A**	**0**	**N/A**	**0**	**N/A**	60	63.1	63	48.2	123	53.4
Macon C	162	51.4	**1**	**N/A**	**0**	**N/A**	**0**	**N/A**	**0**	**N/A**	86	60.1	77	42.7	163	50.3
State of N	22,361	50.7	2,645	27.6	211	43.8	81	12.5	87	8.6	11,876	51.5	13,509	41.8	23,385	45.6

Source: NC State Center for Health Statistics, County Health Data Book (2018), Mortality, 2012-2016 Race/Ethnicity Specific and Sex-Specific Age-Adjusted Death Rates by County; http://www.schs.state.nc.us/SCHS/data/databook/

Note: The use of "n/a" in lieu of a numeral indicates a likely unstable rate based on a small (fewer than 20) number of cases.

CLRD/COPD Mortality Rate Trend (Five-Year Aggregate Periods, 2001-2005 through 2012-2016)

Location	Rate (Deaths per 100,000 Population)											
	2001-2005	2002-2006	2003-2007	2004-2008	2005-2009	2006-2010	2007-2011	2008-2012	2009-2013	2010-2014	2011-2015	2012-2016
Ashe Cou	65.3	59.1	65.8	57.2	58.9	59.3	62.3	52.7	60.8	60.3	54.8	53.4
Macon C	42.4	41.6	38.8	36.7	37.2	37.0	43.3	46.8	49.8	50.6	50.6	50.3
State of N	46.9	47.1	47.5	47.8	47.0	46.4	46.6	46.6	46.1	46.0	45.9	45.6

Diabetes Mellitus

Diabetes Discharge Rate Trend (Single Years, 2006-2014)

Location	Rate (Discharges per 1,000 Population)								
	2006	2007	2008	2009	2010	2011	2012	2013	2014
Ashe Cou	1.6	1.5	1.7	1.2	1.5	1.7	2.1	1.2	1.8
Macon Co	0.7	1.6	1.2	1.4	1.7	2.7	2.6	1.9	1.7
State of N	1.8	1.9	1.8	1.8	1.9	2.0	1.9	1.9	1.9

Source: NC State Center for Health Statistics, County-level Data, County Health Data Books (2008-2017), Morbidity, Inpatient Hospital Utilization and Charges by Principal Diagnosis and County of Residence; http://www.schs.state.nc.us/SCHS/data/databook/

Diabetes Mortality, by Race/Ethnicity and Sex (Single Five-Year Aggregate Period, 2012-2016)

Location	Deaths, Number and Rate (Deaths per 100,000 Population)															
	White, Non-Hispanic		African American, Non-Hispanic		American Indian, Non-Hispanic		Other Races, Non-Hispanic		Hispanic		Male		Female		Overall	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Ashe Cou	34	17.0	**0**	**N/A**	**0**	**N/A**	**0**	**N/A**	**0**	**N/A**	**17**	**N/A**	**17**	**N/A**	34	16.3
Macon Co	66	22.7	**1**	**N/A**	**1**	**N/A**	**1**	**N/A**	**0**	**N/A**	34	26.1	35	20.4	69	23.1
State of N	8,212	18.8	4,334	44.0	232.0	45.0	102	14.3	162	11.3	6,893	27.9	6,149	19.1	13,042	23.0

Source: NC State Center for Health Statistics, County Health Data Book (2018), Mortality, 2012-2016 Race/Ethnicity Specific and Sex-Specific Age-Adjusted Death Rates by County; http://www.schs.state.nc.us/SCHS/data/databook/

Note: The use of "n/a" in lieu of a numeral indicates a likely unstable rate based on a small (fewer than 20) number of cases.

Diabetes Mortality Rate Trend (Five-Year Aggregate Periods, 2001-2005 through 2012-2016)

Location	Rate (Deaths per 100,000 Population)											
	2001-2005	2002-2006	2003-2007	2004-2008	2005-2009	2006-2010	2007-2011	2008-2012	2009-2013	2010-2014	2011-2015	2012-2016
Ashe Cou	24.4	21.6	20.1	17.7	20.4	17.4	19.2	18.7	19.2	18.5	18.6	16.3
Macon Co	28.2	28.1	23.0	22.1	15.8	13.0	12.7	16.8	18.8	21.7	23.3	23.1
State of N	27.6	27.1	26.4	25.2	23.6	22.5	22.0	21.8	21.7	22.1	22.8	23.0

Cerebrovascular Disease

Cerebrovascular Disease Discharge Rate Trend (Single Years, 2006-2014)

Location	Rate (Discharges per 1,000 Population)								
	2006	2007	2008	2009	2010	2011	2012	2013	2014
Ashe Cou	3.3	3.5	3.1	3.4	3.6	3.4	3.0	2.4	3.4
Macon Co	3.0	2.7	2.7	3.3	2.7	3.3	2.9	3.4	2.6
State of N	3.1	3.1	3.0	3.1	3.1	3.0	3.0	2.9	2.8

Source: NC State Center for Health Statistics, County-level Data, County Health Data Books (2008-2017), Morbidity, Inpatient Hospital Utilization and Charges by Principal Diagnosis and County of Residence; http://www.schs.state.nc.us/SCHS/data/databook/

Note: Bold type indicates a likely unstable rate based on a small (fewer than 20) number of cases.

Cerebrovascular Disease Mortality, by Race/Ethnicity and Sex (Single Five-Year Aggregate Period, 2012-2016)

Location	Deaths, Number and Rate (Deaths per 100,000 Population)															
	White, Non-Hispanic		African American,		American Indian, Non-Hispanic		Other Races, Non-Hispanic		Hispanic		Male		Female		Overall	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Ashe Cou	68	31.1	**0**	**N/A**	**0**	**N/A**	**0**	**N/A**	**0**	**N/A**	29	29.9	39	29.3	68	30.4
Macon Co	100	32.8	**1**	**N/A**	**0**	**N/A**	**0**	**N/A**	**3**	**N/A**	47	36.6	57	32.0	104	34.5
State of N	17,639	40.6	5,204	56.0	181.0	39.5	227	36.4	267	21.7	9,768	44.0	13,746	41.7	23,514	43.1

Source: NC State Center for Health Statistics, County Health Data Book (2018), Mortality, 2012-2016 Race/Ethnicity Specific and Sex-Specific Age-Adjusted Death Rates by County; http://www.schs.state.nc.us/SCHS/data/databook/

Note: The use of "n/a" in lieu of a numeral indicates a likely unstable rate based on a small (fewer than 20) number of cases.

Cerebrovascular Disease Mortality Rate Trend (Five-Year Aggregate Periods, 2001-2005 through 2012-2016)

Location	Rate (Deaths per 100,000 Population)											
	2001-2005	2002-2006	2003-2007	2004-2008	2005-2009	2006-2010	2007-2011	2008-2012	2009-2013	2010-2014	2011-2015	2012-2016
Ashe Cou	58.0	53.3	57.5	50.2	51.1	50.8	54.3	41.2	41.3	37.6	33.7	30.4
Macon Co	49.1	47.3	46.1	46.4	42.7	41.0	39.8	39.7	38.6	37.3	36.6	34.5

NC Hospital Discharges with a Primary Diagnosis of Asthma, Numbers and Rates per 100,000 (2008-2014)
(By County of Residence)

Location	Discharges, Number and Rate (Discharges per 100,000 Population)																									
	2008				2009				2010				2011				2012				2013				2014			
	All Ages		Age 0-14		All Ages		Age 0-14		All Ages		Age 0-14		All Ages		Age 0-14		All Ages		Age 0-14		All Ages		Age 0-14		All Ages		Age 0-15	
	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate
Ashe County	21	79.8	**8**	**191.6**	22	83.0	**8**	**190.2**	16	58.6	**8**	**181.1**	21	77.4	**2**	**46.7**	17	62.7	**2**	**48.1**	17	62.6	**1**	**23.9**	19	70.0	**5**	**121.7**
Macon County	24	70.1	**3**	**55.2**	29	84.1	**9**	**168.8**	25	73.7	**7**	**131.0**	27	79.2	**1**	**18.6**	21	62.0	**5**	**93.5**	16	47.3	**3**	**57.9**	20	59.0	**6**	**114.9**
State of NC	10,644	115.4	2,778	151.9	10,986	117.1	3,228	175.0	10,470	109.8	3,152	166.0	9,880	102.3	3,004	157.3	9,786	100.3	3,128	163.7	9,021	91.6	2,841	148.9	9,035	90.9	2,754	144.6

Source: NC State Center for Health Statistics, County-level Data, County Health Data Book (2010-2016), Morbidity, Asthma Hospital Discharges (Total and Age 0-14) per 100,000 Population (years and counties as noted); http://www.schs.state.nc.us/SCHS/data/databook

Note: Bold type indicates a likely unstable rate based on a small (fewer than 10) number of cases.

Appendix 3: Community Resources

Behavioral Health Resources near Alleghany, Ashe and Watauga Counties: Updated December 2017							
Contact	**Agency**	**Specialty Areas/Notes**	**Phone**	**Address**	**City**	**Zip Code**	**Website**
Adam Kahn	Shaw Psychiatric, PLLC		828-278-9763	5112B HOWARDS CREEK RD	Boone	28607	
Andrea Marsh		Sliding Scale; Avg cost: $40-100; Specializes in addiction, substance use, anxiety, personality; group, individual, and couples; Orientation: CBT, DBT, MBT, Person-centered	828-436-0076	719-A Greenway Rd, Suite 302	Boone	28607	
Angela Hagaman	ETSU/Frontier Health - Crisis Stabilization Unit	Substance Use, In-patient crisis and alcohol and drug treatment	Crisis Hotline: (877) 928-9062	P.O. Box 9054 Gray, TN 37615	Johnson City	37614	https://www.frontierhealth.org/
Anne-Marie Suddreth		Avg cost: $50-100; Mood disorders, trauma, ADHD, OCD, relationships, sexual abuse, self-esteem, sleep; Orientation: CBT & Humanistic	828-263-4324	178 Hwy. 105 Ext. Suite 105	Boone	28607	
Ashley McKinney	Mentor Behavioral Healthcare	CBT, DBT, Triple P Parenting; Accepts most insurance	828-268-2172	249 Wilson Drive	Boone	28607	https://www.facebook.com/MentorBHC/
Beth Lyons		Specializes in Eating disorders, depression, relationship issues; Orientation: CBT, MBT, Interpersonal *out of network for insurance, must file insurance individually; Avg cost: $130-150	901-531-9892	895 State Farm Rd, Suite 504	Boone	28607	http://www.bethlyonsphd.com/
Bob Hill		Avg cost: $100-150; Depression, Relationship Problems, Anxiety, Trauma, Bipolar Disorder, ADHD; Insurance: BCBC, Tricare	828-262-2723	140 Appalachian Street, Suite A	Boone	26807	
Carlene Cox	Blue Haven Counseling	Individual, couples, family, and group therapy for a wide variety of problems; Substance misuse treatment; most major insurance (Medicaid, Medicare, Tricare)	828-263-9228	1675 Blowing Rock Road, Ste 400	Boone	28607	
Carol Pulley		Provide individual, couples, and family therapy to clients face-to-face or on line via iTherapy private video meeting room; CBT for depression, anxiety & anxiety-related disorders, ADHD, Alzheimer's and Dementia, Personality Disorders, low self-esteem, women's issues, eating disorders, self-destructive behaviors, life stresses, transitions; Insurance: Blue Cross Blue Shield, Medcost, Cigna, Aetna and North Carolina Medicaid (provides information to file the claim)	828-964-8790	189 Samaritans Ridge Road	Elkin	28621	https://itherapy.com/counselor/carol-pulley/#tab-1-6
Carolyn Holder	Circle of Life Living Center	Directly bill BCBSNC, fees are ~same as copay or a little bit more, Sliding Scale starting at $60; Grief resulting from death, anxiety, depression, relationship issues, Loss and Transition, Self Care for the Caregiver, Expressive Arts	828-268-1247	184 Realty Row, Suite 4	Boone	28607	http://www.carolynholder.com/about.html
Catherine Seiler			828-265-4846	171 Poplar Summit Rd	Boone	28607	
Dale Kirkley	App State Counseling, Avery Drug Treatment Court Program, Private Practice	Part time counselor at ASU, case manager for ADTCP through Meditation and Restorative Justice	828-964-1986, (ASU counseling center) 828-262-3148	ASU: 614 Howard Street; PP:184 Realty Row Ste 4	Boone	28607	
Denise Lovin	ASU MHA	counseling, individual therapy, eating disorders; lead therapy process groups; supervises masters and doctoral's students, project director for the SAMHSA and supervises the campuse suicide	(828) 964-2618 or 828-262-3180 (ASU Counseling Center)		Boone	28607	
Denise Martz		Eating Disorders, PTSD, Anxiety, Depression, Pain	828-262-2715	Office of Wilcox Emporium	Boone	28607	
Elaine Whitman	Pathways Counseling and Wellness	Sliding scale; creative and expressive therapies, dream work, trauma, loss and grief, neurological disorders, women's issues	828-898-4145	5170 NC Highway	Banner Elk	898-4145	www.pathwaysscw.com
Fowler Cooper		Christian Counseling, ADHD, Mood Disorders, Relationship, Career, grief, eating Disorders, Family, Substance Use Spirituality, Men's Issues, rape recovery	828-264-9222, 828-773-1069	895 State Farm Road suite 210	Boone	28607	
Gordon Cappelletty	Crossroads Counseling Center	Neuropsychology testing, Autism Spectrum testing, Psych Evaluations, and Sex Offender Evaluations	828-327-6633	255 18th Street SE	Hickory	28602	http://crossroadscounseling.org/our-staff/gordon-cappelletty-phd/
Griff Gilbert	Comprehensive Assessment & Treatment Services	Mood Disorders, Relationships, Sex Offender Eval, Grief, parenting, Work and Career, CBT, Stress, Addiction, Sexual Abuse/Trauma, Forensic Eval	828-449-8877, 828-773-4543	140 Appalachian St., Ste E	Boone	28607	http://www.griffgilbert.com/GriffGilbertLCSWBCD.en.html
Hank Schneider	Mentor Behavioral Healthcare	tests of intelligence, academic achievement, memory functioning, sensori-motor function, and screens for disorders; multidisciplinary & developmental disabilities evaluations, cognitive behavioral interventions; trauma-informed treatment for children & sex offender treatment and evaluations for adolescents, adults	828-268-2172	249 Wilson Drive #5	Boone	28607	https://www.facebook.com/MentorBHC/
Holli Sink	Children's Advocacy Center of the Blue Ridge	TF-CBT	(828)963-9777	719 Greenway Rd Suite 203	Boone	28607	http://www.cacbr.org/home

Ida E. McNeil-Isaacs	Psychotherapy Associates of Boone	depression, anxiety, trauma, grieving, women's struggles, addictive issues and life transitions	828-265-0190	895 State Farm Rd., suite 104	Boone	28607	http://www.psychotherapyassociatesofboone.com/ida-e-mcniel-isaacs/
Ingrid W. Kraus		PTSD, Depression, Women's Issues, Bereavement, Marital, Transitions, Child and Adult Sexual Abuse, Rape	828-265-0190	895 State Farm Road Ste 104	Boone	28607	
Jackie Belhumeur		Specializes in Eating disorders, anxiety, depression, sexuality, and problems related to major life changes. As well as insomnia, substance use, chronic pain, cancer, cardio-vascular disease. Orientation: CBT, IPT, ACT	828-278-9250	1064 Meadow View Drive Suit 4	Boone	28607	http://www.jbpsych.com/
Joan Zimmerman	High Country Counseling	sliding scale; marriage and family therapist	828-449-8049	324 Hwy 105 Ext Suite 13	Boone	449-8049	http://www.highcountrycounseling.org/OurTherapists.en.html
Jon Winek	Marriage & Family Therapy Center	sliding scale; marriage and family; Family/couples, mood disorders, ACOA	(828) 358-1454	895 State Farm Road, Suite 103	Boone	28607	
Joseph Dickson	180 Behavioral Health, PLLC	Does not file Insurance; Initial Evaluation-1hr 30mins $125; Individual therapy 45-60 mins $75; Brief Individual therapy 20-30 mins $37.50; family therapy 45-60 mins $100; Brief Family	828-263-4480	719-A Greenway Rd, Suite 103	Boone	28607	http://180behavioralhealth.com/
Joshua Broman-Fulks		BCBS accepted; CBT; ADHD, stress mgmt, phobias, panic disorder, anxiety, trauma, social phobia, disability evals	828-406-1760	222 Birch St	Boone	28607	
Kelly Wiley		Marriage and family therapy	828-262-9700	895 State Farm Road Ste 103	Boone	28607	
Kurt Michael		Assessment -Neuro Psych, ADHD, Mood & Anxiety disorders, substance use	828-264-5385	134 Doctors Drive	Boone	28607	
Lauren Renkert	Psychotherapy Associates of Boone	Adjustment Disorders, Mild depression & Anxiety, Grief & bereavement, identity & phase of life issue	828-265-0190	895 State Farm Rd., suite 104	Boone	28607	http://www.psychotherapyassociatesofboone.com/lauren-e-renkert/
Laurie Percival-Oates		Sliding Scale based on income-$35-$85 per hour; Individual, Couple and Family Therapy; Alcohol & Substance Use Counseling	828-265-0102	577 George Wilson Road	Boone	28607	
Lucyna Sonek		Sliding Scale; Avg cost: $60-110 ; Specializes in ADHD and personality disorders -Orientation: CBT, gestalt, MBT *Accepts Medicaid	828-527-0143	240 Hwy 105 Ext. Suite 201 A	Boone	28607	
Lynn Coward		Depression, Anxiety, PTSD, Adjustment Disorders, Grief, Family, Couples, Pregnancy, Academic	828-262-9700	895 State Farm Road	Boone	28607	
Lyric Fitzgibbon		Anxiety Disorders, Trauma, Depression, Self-harming Behaviors, and Behavioral Issues	828-263-4480	719-a Greenway Rd	Boone	28607	http://lyricfitzgibbonlpc.webs.com/
Marjory Holder	Psychotherapy Associates of Boone	Sliding Scale; individuals, couples, families, communication, conflict, parenting, school and behavior issues, ADHD, identity, and stage-of-life transitions.	828-265-0190	895 State Farm Rd., suite 104	Boone	28607	http://www.psychotherapyassociatesofboone.com/marjory-e-holder/
Mary Mckinney		Marriage and Family, Expressive Therapies, PTSD, Mood Disorders, Eating Disorders, Grief, Sexuality, Spirituality	828-268-0155	805 State Farm Rd., Suite 304	Boone	28607	http://mckinneymft.com/index_files/Page541.htm
Mike Vannoy	Vannoy Counseling Services, PLLC	Avg. Cost: $100-150; accepts BCBS; Generalist, Addictions	(828) 471-6810	938-B West King Street	Boone	28607	
Miki Gordan		EMDR,Trauma, chronic pain, life coaching, women's issues, parenting, children and families, play therapy, expressive arts therapy, christian counseling and life coaching	828-898-4145	5170 Hwy 105 S #1	Banner Elk		
Murray G. Hawkinson	Psychotherapy Associates of Boone	Mood Disorders, Anxiety Disorders, ADHD, Relational Problems, Anxiety Disorders	828-265-0190	895 State Farm Rd., suite 104	Boone	28607	http://www.psychotherapyassociatesofboone.com/murray-g-hawkinson/
Nancy Richards		Christian; Depression, Anxiety, Grief, Christian Counseling, NO EVALS	828-266-9690	875 State Farm Rd suite 210	Boone	28607	http://www.boonechristianpsychologist.com/
Phillip L. Cole	Blue Mountain Center for Integrative Health	Work on sliding scale $120 - $70; Accepts all insurance and Medicare	828-265-1455	1064 Meadowview Dr	Boone	28607	http://bluemountaincenternc.com/contact.php
Robert Atwell	Pain Management Clinic of Boone	OCD, Panix-Anxiety, ADHD, Bipolr, Personality Disorder, Schizophrenia	828-265-4370	152 Southgate Drv Suite 3A	Boone	28607	
Ron Hood		Depression, Anxiety, OCD, Stress/PTSD, Developmental Life Changes/Adjustment Disorders, Relational Conflict Resolution, Behavior disorders, Addictive Disorders	(828) 264-4323	805 State Farm Road Suite B3	Boone	28607	
Sue Vannoy	Vannoy Counseling Services, PLLC	BCBS; Avg Cost: $100; Specializes in marriage and family therapy; Orientation: family origins	(828) 386-6087	938 B W King Street	Boone	28607	

Suzette Patterson	High Country Counseling	Avg Cost: $40-$100; Specializes in relationships, sexual assault, sexual orientation/gender identity, and parenting; Orientation: CBT and MBCT	828-319-2206	324 Hwy 105 Ext	Boone	28607	
Toby Stoetzer	Crossnore School & Children's Home	trauma-focused for children, CBT, DBT, Equine Therapy, individual and family counseling, and group therapy	305-321-1159	719 Greenway Rd	Boone	28607	
Will Canu		ADHD evals & tx, Relationship, Anxiety, Mood Disorders, Sleep Disorders	828-773-6534	895 State Farm Road Suite 210	Boone	28607	
	New River Behavioral Healthcare	Youth with Serious Emotional Disturbance, Transition-Age 18-25, Adults with Serious Mental Illness, Persons with Mental Health and Substance Abuse Disorders, Persons with Post-Traumatic Stress Disorder, Veterans, Persons with Traumatic Brain Injury, Lesbian, Gay, Bisexual, or Transgendered Clients, and Forensic Clients	828-264-8759	132 Poplar Grove Rd Connector Ste B	Boone	28607	
	Passages II Structured Outpatient Program	Daily group therapy, crisis stabilization, Anxiety and panic attacks, Depression, Bipolar disorder, Post-traumatic stress disorder (PTSD), Trauma, Grief and loss	828-268-9450	Watauga Medical Center - 336 Deerfield Rd	Boone	28607	
David B. Jarrett	Sevenhill Associates PA	Psychiatry	(336) 659-7878	1365 Westgate Center Dr, Winston-Salem, NC 27103	Winston-Salem	27103	
Christie Williamson		Psychiatry	(803) 327-2012	166 Dotson St, Rock Hill, SC 29732	Rock Hill	29732	
Christopher B. Aiken	Mood Treatment Center	Psychiatry	(336) 722-7266	1615 Polo Rd, Winston-Salem, NC 27106	Winston-Salem	27106	
Hayne McMeekin		Psychiatry	(803) 548-4669	1700 1st Baxter Crossing # 203, Fort Mill, SC 29708	Fort Mill	29708	
Raymond H. Andrew		Psychiatry	(336) 723-2303	1066 W 4th St, Winston-Salem, NC 27101	Winston-Salem	27101	
Rupinder Kaur		Psychiatry	(336) 645-9555	706 Green Valley Rd #506, Greensboro, NC 27408	Greensboro	27408	
Appalachian Regional Behavioral Health	Outpatient from hospital	Psychiatry	(828) 268-9454				
Appalachian Regional Psychiatry		Psychiatry	(828) 737-7889				
Daymark Recovery Services		Psychiatry	(828) 264-8759				
Allen B. Stefane		Psychiatry	(704) 529-4101	6911 Shannon Willow Rd, Charlotte, NC 28226	Charlotte	28226	
Andrew Krystal		Psychiatry	(919) 620-4467	2100 Erwin Rd, Durham, NC 27705	Durham	27705	
Anthony C. Patterson	Anthony C. Patterson, MD	Psychiatry	(704) 553-8336	5950 Fairview Rd #322, Charlotte, NC 28210	Charlotte	28210	
Antonio Cusi		Psychiatry	(910) 429-1114	1200 Fairmont Ct, Fayetteville, NC 28304	Fayetteville	28304	
Atul N. Kantesaria		Psychiatry	(910) 323-0601	109 Bradford Ave, Fayetteville, NC 28301	Fayetteville	28301	
Brian Mika		Psychiatry	(877) 752-3551	#C, 200 S Herlong Ave, Rock Hill, SC 29732	Rock Hill	29732	
Bryan H. Harrelson	Bryan H. Harrelson, MD	Psychiatry	(704) 342-8390	1919 South Blvd #100, Charlotte, NC 28203	Charlotte	28203	
C. THOMAS Gualtieri		Psychiatry	(919) 933-2000	1829 E Franklin St, Chapel Hill, NC 27514	Durham	27514	
Carol A. Martin	Martin Carol MD	Psychiatry	(919) 462-1440	1220 SE Maynard Rd # 102, Cary, NC 27511	Cary	27511	
Catherine Munson		Psychiatry	(803) 327-3555	1590 Constitution Blvd #01, Rock Hill, SC 29732	Rock Hill	29732	
Daniel S. Johnson		Psychiatry	(828) 708-7001	100 Central Ave, Asheville, NC 28801	Asheville	28801	
Daphne A. Rosenblitt		Psychiatry	(919) 489-4275	3721 University Dr, Durham, NC 27707	Durham	27707	
David L. FULLER		Psychiatry	(336) 852-4051	612 Pasteur Dr # 200, Greensboro, NC 27403	Greensboro	27403	
David Paulson		Psychiatry	(803) 980-7800	1590 Constitution Blvd # 1, Rock Hill, SC 29732	Rock Hill	29732	
Elizabeth A. Coleman		Psychiatry	(910) 254-2022	313 Walnut St, Wilmington, NC 28401	Wilmington	28401	
Elizabeth S. Rollins	Pisgah Institute	Psychiatry	(828) 254-9494	158 Zillicoa St Asheville, NC 28801	Asheville	28801	
Eric J. Lespes		Psychiatry	(910) 822-7057	2300 Ramsey St, Fayetteville, NC 28301	Fayetteville	28301	

Frank S. Highley		Psychiatry	(704) 362-0866	429 S Sharon Amity Rd # A, Charlotte, NC 28211	Charlotte	28211	
Gail Y. Kase	Pisgah Institute	Psychiatry	(828) 254-9494	158 Zillicoa St Asheville, NC 28801	Asheville	28801	
George H. Dornblazer	George H Dornblazer Md Pa	Psychiatry	(704) 342-2577	447 S Sharon Amity Rd #245, Charlotte, NC 28211	Charlotte		
Gina M. Hartmeier	Tega Cay Psychiatric Associates	Psychiatry	(803) 329-9894	1721 Ebenezer Road, #225 Rock Hill, SC 29732	Rock Hill	29732	
Ian M. Lev	Centerview Psychiatric Associates	Psychiatry	(919) 859-1014	5540 Centerview Dr # 423, Raleigh, NC 27606	Raleigh	27606	
Irving A. Lugo		Psychiatry	(336) 288-6440	2006 New Garden Rd #202, Greensboro, NC 27410	Greensboro	27410	
James E. Lee Jr.		Psychiatry	(803) 329-1915	452 Lakeshore Pkwy #105, Rock Hill, SC 29730	Rock Hill	29730	
James T. Pawlowski		Psychiatry	(910) 251-1976	2311 Canterwood Dr, Wilmington, NC 28401	Wilmington	28401	
Jane Rosen-Grandon	Rosen-Grandon Associates, Inc.	Psychiatry	(336) 292-2116	3106 Edgewater Dr, Greensboro, NC 27403	Greensboro	27403	
Jill Heath		Psychiatry	(828) 350-8149	223 E Chestnut St # 4, Asheville, NC 28801	Asheville	28801	
John Lesica		Psychiatry	(910) 323-0601	109 Bradford Ave, Fayetteville, NC 28301	Fayetteville	28301	
Katayoun Tabrizi		Psychiatry	(919) 403-1013	3001 Academy Rd, Durham, NC 27707	Durham	27707	
Katherine G. Wu	Hrc Behavioral Health	Psychiatry	(919) 785-0384	4201 Lake Boone Trail # 201, Raleigh, NC 27607	Raleigh	27607	
Kellie M. Tolin		Psychiatry	(919) 322-2413	1500 Sunday Dr #200, Raleigh, NC 27607	Raleigh	27607	
Kenneth L. Crosby		Psychiatry	(919) 433-0170	433 W Main St, Durham, NC 27701	Durham	27701	
Kenneth L. Leetz	Biltmore Associates-Psychiatry	Psychiatry	(828) 274-8035	80 Peachtree Rd, Asheville, NC 28803	Asheville	28803	
Keshavpal G. Reddy		Psychiatry	(336) 632-3505	3511 W Market St #100, Greensboro, NC 27403	Greensboro	27403	
Lawrence H. Greenberg	Lawrence H. Greenberg, M.D.	Psychiatry	(919) 469-9888	2000 Regency Pkwy # 204, Cary, NC 27518	Cary	27518	
Lawrence M. Raines	Lawrence M Raines III MD	Psychiatry	(919) 462-1558	1220 SE Maynard Rd Ste 204 Cary, NC 27511	Cary	27518	
Leonard L. Cruz	Family Life & Learning Center: Cruz Leonard	Psychiatry	(828) 274-1415	932 Hendersonville Rd # 101, Asheville, NC 28803	Asheville	28803	
Linda D. Francis		Psychiatry	(910) 763-5533	1515 Medical Center Dr, Wilmington, NC 28401	Wilmington	28401	
Linda M. Howes Graham		Psychiatry	(910) 254-4065	4715 Market St, Wilmington, NC 28405	Wilmington	28405	
Lori A. Schweickert	3-C Family Services: Schweickert Lori A MD	Psychiatry	(919) 677-0101	1901 N Harrison Ave # 100, Cary, NC 27513	Cary	27513	
Marcus Pelucio	Pelucio Marcus Aldo MD	Psychiatry	(704) 362-2663	3303 Latrobe Dr, Charlotte, NC 28211	Charlotte	28211	
Mark C. Chandler	Triangle Neuropsychiatry	Psychiatry	(919) 401-6212	3713 University Dr # B, Durham, NC 27707	Durham	27707	
Matthew J. Conner		Psychiatry	(919) 286-3453	115 N Duke St, Durham, NC 27701	Durham	27701	
Michael E. Dewitt		Psychiatry	(336) 607-8523	725 N Highland Ave, Winston-Salem, NC 27101	Winston-Salem	27101	
Michael N. Zarzar		Psychiatry	(919) 845-1555	5711 Six Forks Rd #200, Raleigh, NC 27609	Raleigh	27609	
Moira F. Artigues	Artigues F Moria MD	Psychiatry	(919) 678-0002	1020 Southhill Dr # 380, Cary, NC 27513	Cary	27513	
Morton Meltzer	Medex Urgent Care	Psychiatry	(910) 221-3030	420 Owen Dr, Fayetteville, NC 28304	Fayetteville	28304	
Nancy S. Gaby	Bethesda Clinic PA	Psychiatry	(336) 765-9750	3000 Bethesda Pl # 101, Winston-Salem, NC 27103	Winston-Salem	27103	
Nathan R. Strahl		Psychiatry	(919) 493-8399	3326 Durham-Chapel Hill Blvd, Durham, NC 27707	Durham	27707	
Oghenesume D. Umugbe		Psychiatry	(336) 716-5512	Medical Center Boulevard, Winston Salem, NC 27157	Winston-Salem	27157	
Paolo Mannelli	Paolo Mannelli MD	Psychiatry	(919) 238-0008	2000 Regency Pkwy #280, Cary, NC 27518	Cary	27518	
Paul A. Buongiorno		Psychiatry	(910) 762-8400	1402 S 17th St, Wilmington, NC 28401	Wilmington	28401	
Prasanthi Myneni		Psychiatry	(910) 488-2120	2300 Ramsey St, Fayetteville, NC 28301	Fayetteville	28301	

Punitha I. Rathnam	Act Medical Group Pa	Psychiatry	(910) 791-6767	311 Judges Rd, Wilmington, NC 28405	Wilmington	28405	
Raj Thotakura	Winston Psychiatric Associates	Psychiatry	(336) 765-6577	125 Ashleybrook Square, Winston-Salem, NC 27103	Winston-Salem	27103	
Rebecca L. Moretz, MD		Psychiatry	(828) 268-9454	950 State Farm Rd #200, Boone, NC 28607	Boone	28607	
Robert H. Weinstein	Delta Behavioral Health	Psychiatry	(910) 343-6890	1606 Physicians Dr # 104, Wilmington, NC 28401	Wilmington	28401	
Roy D. Book		Psychiatry	(336) 389-1413	810 Warren St, Greensboro, NC 27403	Greensboro	27403	
Savitha R. Upadhya	Alpha Psychiatric Associates	Psychiatry	(919) 439-6120	401 Keisler Dr #100, Cary, NC 27518	Cary	27518	
SCOTT L. Cunningham	Crossroads Psychiatric Group	Psychiatry	(336) 292-1510	600 Green Valley Rd #204, Greensboro, NC 27408	Greensboro	27408	
Scott N. Lurie		Psychiatry	(704) 376-6577	1132 Greenwood Cliff Rd, Charlotte, NC 28204	Charlotte	28204	
Seth E. Tabb	Family Psychiatry & Psychology Associates	Psychiatry	(919) 233-4131	1400 Crescent Grn Ste 120 Cary, NC 27518	Cary	27518	
Shaheda F. Maroof		Psychiatry	(919) 783-8377	4041 Ed Dr #108, Raleigh, NC 27612	Raleigh	27612	
Shane Boosey	Shane Boosey, MD	Psychiatry	(919) 428-0885	1616 Evans Rd #202, Cary, NC 27513	Cary	27513	
Sheldon Chase		Psychiatry	(919) 828-9937	859 Washington St Ste A, Raleigh, NC 27605	Raleigh	27605	
Signi P. Goldman	COGNITIVE BEHAVIORAL THERAPY CENTER OF WESTERN	Psychiatry	828 350 1177	1085 Tunnel Road, Unit 7A Asheville, NC 28805	Asheville	28805	
Stephen I. Kramer		Psychiatry	(336) 716-4081	300 S Hawthorne Rd, Winston-Salem, NC 27103	Winston-Salem	27103	
Steven M. Sutherland	Sutherland Steven M MD	Psychiatry	(704) 362-2663	3303 Latrobe Dr, Charlotte, NC 28211	Charlotte	28211	
SURYA K. Challa		Psychiatry	(336) 765-3337	1365 Westgate Center Dr, Winston-Salem, NC 27103	Winston-Salem	27103	
Tammy Chen		Psychiatry	(803) 328-8255	2424 India Hook Rd Suite 120 Rock Hill, SC 29732	Rock Hill	29732	
V. ALAN Lombardi	Lombardi V Alan MD	Psychiatry	(704) 549-8797	8920 University Executive Park Dr #104, Charlotte, NC 28262	Charlotte	28262	
Vida B. Robertson		Psychiatry	(828) 243-2071	2 Wall St, Asheville, NC 28801	Asheville	28801	
Waheed K. Bajwa	Cary Behavioral Health	Psychiatry	(919) 466-7540	160 NE Maynard Rd Ste 200 Cary, NC 27513	Cary	27513	
Walter Dietzgen		Psychiatry	(910) 313-3232	2425 S 17th St, Wilmington, NC 28403	Wilmington	28403	
William A. Willis		Psychiatry	(910) 223-9801	2850 Village Dr #103, Fayetteville, NC 28304	Fayetteville	28304	
William J. Simons	TMS of Asheville	Psychiatry	(828) 676-2960	4 Herman Avenue Extension, Suite 4C	Asheville	28803	
William Koff		Psychiatry	(910) 791-5719	5010 Randall Pkwy, Wilmington, NC 28403	Wilmington	28403	
M. Louise Craig		Psychiatry	(828) 264-9007	895 State Farm Rd Suite 508 Boone, NC 28607	Boone	28607	
Marshall Stein, M.D	Psychotherapy Associates: Stein Marshall DO	Psychiatry	(828) 265-0190	895 State Farm Rd, Boone, NC 28607	Boone	28607	
Phyllis Sage Atwell, M.D		Psychiatry	(828) 265-4370	152 Southgate Dr #3a, Boone, NC 28607	Boone	28607	
	Tomorrow's Promise, PC	Psychiatry	(828) 386-4117	379 New Market Blvd #2b, Boone, NC 28607	Boone	28607	
Bradley	High Country Family Medicine	Physician		200 Hospital Ave. Suite 7	Jefferson	28640	
Davant III	Blocking Rock Medical Clinic PA	Physician	(828) 295-3116	366 Chestnut Drive	Blowing Rock		
Davis, Jr.	Blocking Rock Medical Clinic PA	Physician					
Kurtz	High Country Family Medicine	Physician		200 Hospital Ave. Suite 7	Jefferson	28640	
Adams	Blue Ridge Pediatric & Adolesent Medicine	Physician	(828) 262-0100	579 Greenway Road, Suite 200	Boone	28607	
Bowman	Northwest Children and & Adolescents Clinic	Physician		134 Doctors Drive	Boone	28607	
Cambell	High Country Family Medicine	Physician					
Cline	Total Health Integrative Services	Physician	(828) 262-3733	381 Deerfield Road	Boone	28607	

Criminger		Physician		240 Hwy 105 Ext	Boone	28607	
Dailey	Appalachian Family Practice	Physician	(828) 262-1011	1879 Old 421 South	Boone	28607	
Dailey	Appalachian Family Practice	Physician	(828) 262-1011	1879 Old 421 South	Boone	28607	
Damico	Total Health Integrative Services	Physician		177 New Vale Road	Newland	28657	
Devirgillis	Total Health Integrative Services	Physician					
Dodds	Northwest Children and & Adolescents Clinic	Physician		134 Doctors Drive	Boone	28607	
Earwood	Elk River Medical Associates PA Banner Elk	Physician		150 Park Ave	Banner Elk	28604	
Egidio		Physician		3101 Tynecastle Highway	Banner Elk	28604	
Ellison	Northwest Children and & Adolescents Clinic	Physician		134 Doctors Drive	Boone	28607	
Horn	Northwest Children and & Adolescents Clinic	Physician		134 Doctors Drive	Boone	28607	
Kurtz	High Country Family Medicine	Physician		200 Hospital Ave. Suite 7	Jefferson	28640	
Lada	Appalachian Regional Adult & Pediatric Medicine	Physician		400 Shadowline Dr., Suite 104	Boone	28607	
Liesegang	Blocking Rock Medical Clinic PA	Physician					
Lonas	Blue Ridge Pediatric & Adolesent Medicine	Physician	(828) 262-0100	579 Greenway Road, Suite 200	Boone	28607	
Lonas	Boone Pediatric Center	Physician		345 Deerfield Rd Ste A	Boone	28607	
Lubkemann	Boone Pediatric Center	Physician		346 Deerfield Rd Ste A	Boone	28607	
Maas	Linville Family Medicine	Physician		Sloop Medical Plz. Suite 235	Linville	28646	
Mcanallen	Primedical Healthcare PA	Physician		240 Hwy. 105 Ext., Ste. 100	Boone	28607	
Michael	Northwest Children and & Adolescents Clinic	Physician		134 Doctors Dr	Boone	28607	
Middlebrook	Blue Ridge Pediatric & Adolesent Medicine	Physician	(828) 262-0100	579 Greenway Road, Suite 200	Boone	28607	
Morehouse	Appalachian Regional Adult & Pediatric Medicine	Physician		400 Shadowline Dr., Suite 104	Boone	28607	
Neel	Northwest Children and & Adolescents Clinic	Physician		134 Doctors Drive	Boone	28607	
Perz	Total Health Integrative Services	Physician	(828) 733-2255	177 New Vale Road	Newland	28657	
Placentra	Primedical Healthcare PA	Physician	(828) 264-7311	240 Hwy. 105 Ext., Ste. 100	Boone	28607	
Presley	Total Health Integrative Services	Physician					
Rushing	Northwest Children and & Adolescents Clinic	Physician		134 Doctors Drive	Boone	28607	
Smith	Sloop Primary Care	Physician		436 Hospital Dr	Linville	28646	
Snow	Boone Pediatric Center	Physician		347 Deerfield Rd Ste A	Boone	28607	
St. Clair	Blue Ridge Pediatric & Adolesent Medicine	Physician	(828) 262-0100	579 Greenway Road, Suite 200	Boone	28607	
Zimmerman	Blue Ridge Pediatric & Adolesent Medicine	Physician	(828) 262-0100	579 Greenway Road, Suite 200	Boone	28607	
	Total Health Integrative Services	Physician	(336) 846-1791	405 S. Jefferson Ave.	W. Jefferson		
	Clark Family and Obstetric Care	Physician		436 Hospital Dr	Linville	28646	
	Mountain Family Medicine	Physician	828-828-1800	178 NC-105 Ext #202	Boone	28607	
	Mountain Laurel Family Practice	Physician	828-355-9624	222 Longvue Rd	Boone	28607	

Appendix 3: Community Resources

Outlet Name	Outlet Type	Address	City	County	Phone Number	Outlet Hours	Accept SNAP	Handicapped parking	Stable (3 ft wide) pathway
Alleghany Farmer's Market	Farmers' Market	East Whitehead & Grayson Street	Sparta	Alleghany	336-372-5473	Saturday, 9am-12pm, May-October, Tuesday, 3:30pm-6pm, June-October	No	Yes	Yes
Hawk's Produce & Plants	Produce Market	34 Hawk's Produce Lane	Sparta	Alleghany	336-372-2706	Monday-Saturday, 9am-7pm	No		
Becca's Backwoods Bean: Farmers Market Pantry	Produce Market	21 North Main Street	Sparta	Alleghany	336-372-7888	Monday-Sunday, 7am-6pm, Open Year-Round	No	Yes	Yes
Ashe Farmers' Market	Farmers' Market	108 BackStreet	West Jefferson	Ashe	336-877-5052	Saturday, 8am-1pm, April-October, Wednesday, 4pm-6pm, July-September	Yes	Yes	Yes
Bob's Girl Produce	Roadside Stand	711 South Jefferson Avenue	West Jefferson	Ashe	828-406-6536	Monday-Saturday, 10am-7pm, Sunday, 12pm-5pm	No	Yes	Yes
MM Farms	Roadside Stand	12119 US Highway 221	Fleetwood	Ashe	336-877-7786	Monday-Friday, 9am-6pm, May-October	No		
Rose Mountain Butcher Shoppe	Produce Market	106 North Jefferson Avenue	West Jefferson	Ashe	336-864-3004	Tuesday-Saturday, 10am-5pm, Open Year-Round	No		
Used to be Buster's	Produce Market	2265 NC Highway 16 North	Jefferson	Ashe	336-982-4757	Tuesday-Friday, 10am-5:30pm, Saturday, 9am-4pm, Open Year-Round	No	Yes	Yes
Welch's Produce	Produce Market	1158 US Highway 221	Jefferson	Ashe	336-246-2566	Monday-Friday 9am-6pm, Saturday 8am-5pm, May-October	No		Yes
Fruits, Veggies and More	Produce Market	362 West King Street	Boone	Watauga		Monday-Saturday, 10am-6pm, Open Year-Round	No	Yes	Yes
J & M Produce	Produce Market	117 Shore Drive	Blowing Rock	Watauga	828-386-6309	Monday-Sunday, 10am-6pm, April-October	No	Yes	Yes
Jim's Produce	Produce Market	7808 Old Highway 421 South	Deep Gap	Watauga	828-264-5788	Monday-Sunday, 9am-6pm, May-November	No	Yes	Yes
Watauga Farmers' Market	Farmers' Market	591 Horn in the West Drive	Boone	Watauga	828-355-4918	Saturday, 8am-12pm, April-November	Yes	Yes	Yes
Hunt Mountain Apple House	Produce Market	9807 Highway 105 South	Banner Elk	Watauga	828-963-5333	Wednesday-Sunday, 11am-6pm, April-October	No	Yes	Yes
Maw's Produce	Produce Market	7918 Highway 105 South	Foscoe	Watauga	828-898-6084	Tuesday-Sunday, 9am-6pm, May-October	No		Yes
Shore Family Farms Fresh Produce	Roadside Stand	5053 Highway 105	Vilas	Watauga	828-964-5161	Monday-Saturday, 9am-5pm, May-October	No		Yes
The Tomato Shack	Produce Market	4634 Highway 105	Boone	Watauga		Saturday-Sunday, 10am-5:30pm, Year-Round	No		
Blowing Rock Farmers Market	Farmers' Market	Park Avenue	Blowing Rock	Watauga	800-295-7851	Thursday, 4pm-6pm, May-October	No	Yes	Yes
King Street Market	Farmers' Market	126 Poplar Grove Connector	Boone	Watauga	919-624-5301	Tuesday, 4pm-7pm, May-October	Yes	Yes	Yes

The North Carolina Fruit and Vegetable Outlet Inventory (NC FVOI) identifies farmers' markets, produce stands and road-side stands with predictable location and hours where fruits and vegetables are sold. (Note: The NC FVOI does not include CSAs or pick-your-own farms.) The information collected through the survey is used to support efforts to increase the number of fruit and vegetable outlets across the state. NC FVOI data has been used for mapping, evaluation and the creation of directories that identify where fresh fruits and vegetables are sold outside of retail stores in North Carolina. For more information, visit http://www.communityclinicalconnections.com/What_We_Do/NC_Fruit_and_Veg/index.html.