2020 Community Health Report Alleghany County

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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 Alleghany 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 composed of multi-disciplinary stakeholders and community leaders from Alleghany, Ashe and Watauga Counties met virtually and via email in the winter of 2020 to guide implementation of the community health assessment timeline and ensure the process engaged the community in an inclusive and respectful manner. This report comprises the results of this first phase of the process.

The second phase is being conducted in the fall of 2021 through the development of Community Health Action Plans. See the Community Health Assessment Process section for more information about this collaborative process.

The sectors that contributed to the community health assessment process by offering their time, expertise, and outreach include the following: public health agencies, hospitals/healthcare systems, behavioral healthcare providers, dental health providers, first responders/law enforcement, pharmacies, community organizations, local government entities, businesses, higher education institutions, public school systems, media/communications outlets, and public community members.

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

- Alleghany Wellness Coalition
- Ashe Health Alliance
- Watauga Compassionate Community Initiative
- North Carolina Institute of Public Health
- Ashe Memorial Hospital
- Appalachian Regional Healthcare System
- Alleghany Health
- AppHealthCare designated staff
- AppHealthCare Board of Health members

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.

2020 Community Health Priorities Selected

The three health priorities below highlight key areas that community coalitions within Alleghany County will focus on and work to improve from the 2020 CHA Report:

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

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

Family and Social Supports
Increased community and social supports in places where people live, learn, work, play, and pray.

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

Next Steps for Community Health Improvement Planning

The findings in this document lead us to action. We will address the 2020 selected 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 suggest solutions or provide input about proposed solutions that employ evidence-based strategies.

This will take place following the second phase of the assessment process. 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

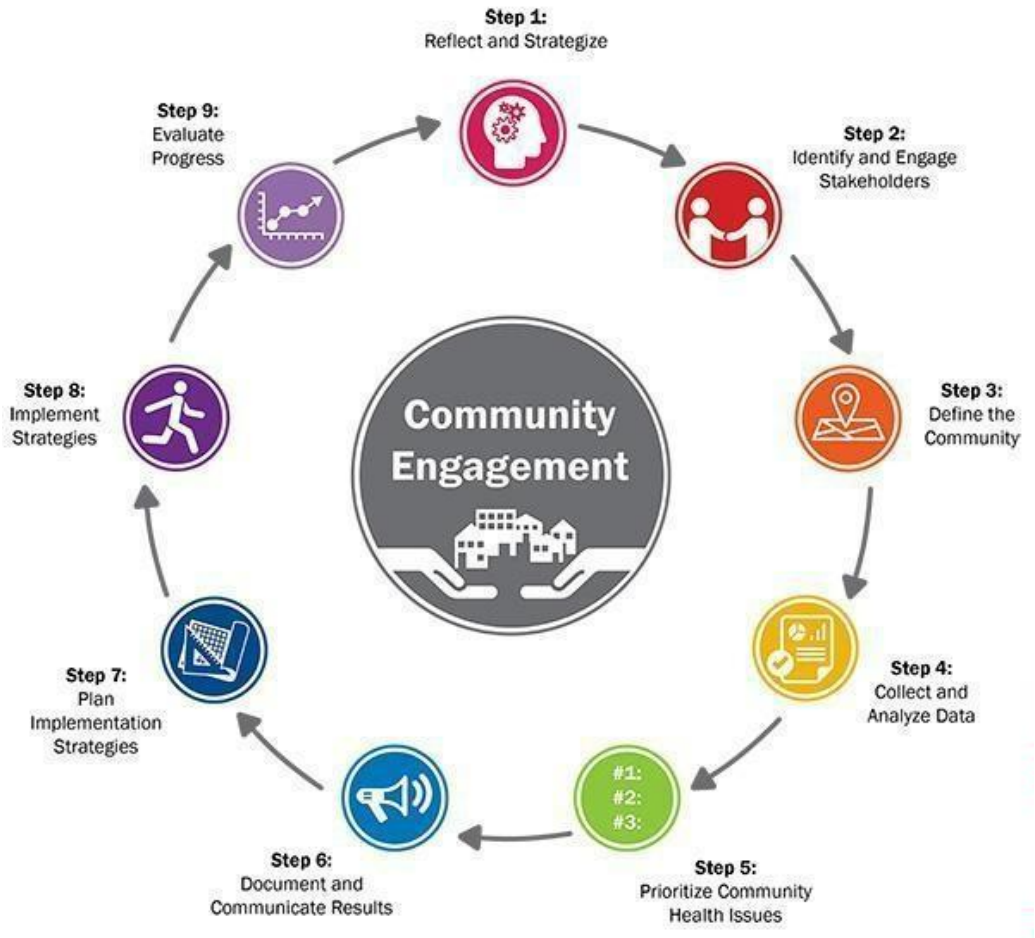
Introduction & Background

Community Health Assessment (CHA) is an important part of identifying, understanding and addressing the main health problems in Alleghany 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. Our 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 agency 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 its June 2021 meeting, the Appalachian District Board of Health will adopt a timeline for completing the Community Health Assessment (CHA) and provide feedback or edits. A CHA Planning Committee composed of multi-disciplinary stakeholders and community leaders from Alleghany, Ashe and Watauga Counties will meet in June 2021 to guide implementation of the CHA timeline and ensure the process engages 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 2020 Alleghany County Community Health Opinion Survey.

The sectors that contributed to the Community Health Opinion Survey by offering their time, expertise, and outreach include the following: public health agencies, hospitals/healthcare systems, behavioral healthcare providers, dental health providers, first responders/law enforcement, pharmacies, community organizations, local government entities, businesses, higher education institutions, public school systems, media/communications outlets, and public community members.

The Community Health Opinion Survey was conducted from January 19th through March 1st, 2021. The opinion survey was promoted and distributed to various community locations and events. It was also distributed electronically by website posting, social media and email listservs to various area employers.

The survey was available and promoted online and in paper form in English and in Spanish. Respondents of the Community Health Opinion Survey include 185 Alleghany County residents.

AppHealthCare staff planned and monitored survey distribution to track whether the survey sample was representative of county demographics. The table below displays the demographic characteristics of the survey sample, including gender identity, race/ethnicity, age, and household income. The opinion survey sample does not represent the overall county population. Opinion survey respondents were disproportionately comprised of females, individuals who identify as white, and older adults. The opinion survey lacked proportional responses from men, individuals who do not identify as white, and younger adults. Many survey respondents chose not to answer the demographic questions in the survey.

Opinion Survey Sample Demographics

Demographic characteristic		Percent of survey respondents
Gender identity	Male	24.7%
	Female	75.3%
	Transgender	0.0%
	Do not identify as M/F/T	0.0%
Race/ethnicity	American Indian or Alaskan Native	0.0%
	Asian	0.0%
	Black or African American	0.0%
	Native Hawaiian or Other Pacific Islander	0.0%
	White	99.4%
	Other	0.6%
Age	< 20 years	0.0%
	20-29 years	5.5%
	30-39 years	12.6%
	40-49 years	10.2%
	50-59 years	14.2%
	60-69 years	33.9%
	70-79 years	21.3%
	80-89 years	0.8%
	90-99 years	1.6%
Household income*	Less than $25,000	9.3%
	$25,000 to $34,999	10.9%
	$35,000 to $49,999	17.1%
	$50,000 to $74,999	32.6%
	$75,000 to $99,999	7.8%

	$100,000 to $149,999	16.3%
	$150,000 or more	6.2%
Total number of survey respondents		185

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. Due to barriers with the COVID-19 pandemic, many of the surveys were conducted at vaccine clinics during the period of time 65+ individuals were eligible which affected our average age range in this survey.

Community Health Priority Setting

The Alleghany Wellness Coalition met in August 2021 to review primary and secondary data reports. Members of the initiative reviewed a presentation of primary and secondary community health data to guide the selection of community health priorities. Members were given criteria for selecting priorities (as described in the health priorities section) and then voted 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.

Community Health Opinions and Concerns/Key Findings

In this section, topics from the 2020 Community Health Opinion Survey will be highlighted. High level takeaways and themes can be seen below:

Food Insecurity

12% of survey respondents ran out of food and lacked financial resources to obtain more food.
18% of survey respondents were worried that they would run out of food at some point.

COVID-19 Topics

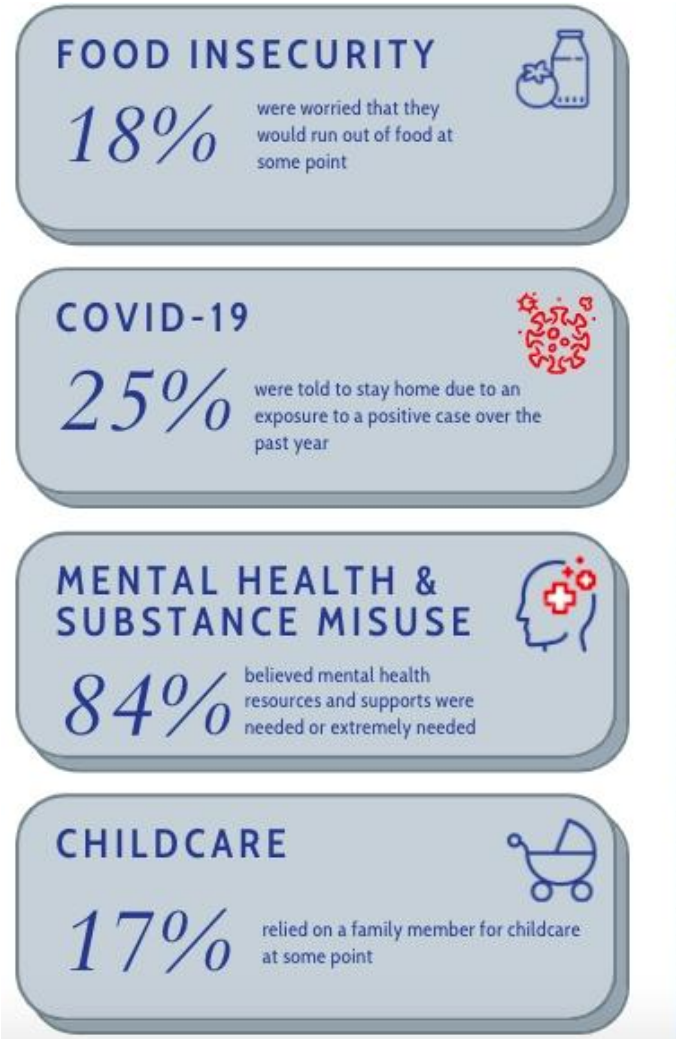
27% of survey respondents were unlikely to get the COVID-19 vaccine

Mental Health & Substance Misuse Services

85% of survey respondents reported substance addiction treatment and recovery services were needed or extremely needed.
43% reported syringe exchange services were needed or extremely needed.
84% believed mental health resources and supports were needed or extremely needed.

Childcare

17% of survey respondents relied on a family member for childcare at some point.



Other Community Concerns

In the open ended question "Please share any other resources that you feel may be needed or any other additional comments you would like us to know" survey respondents answered with a range of topics. The Word Cloud below shows responses from Alleghany County residents. The larger the text in the graphic correlates with the number of times the word or phase was mentioned.

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 provides 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 others 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.

[3] NC Center for State Health Statistics (2018)

About the Peer County: Hyde County, NC

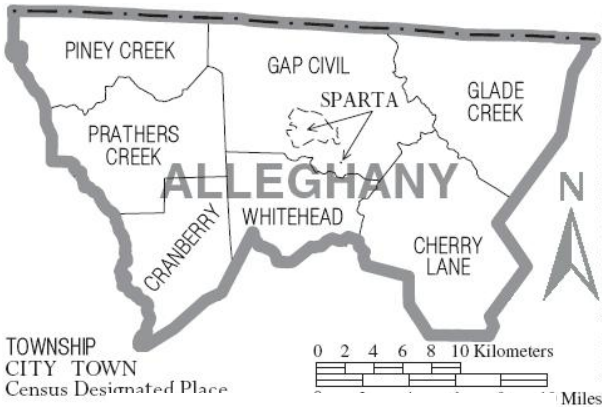
The North Carolina Division of Public Health has grouped communities into peer subgroups in order to assist counties in drawing comparisons of statistics at the county level. This report makes comparisons between Alleghany County and Hyde County in order to better understand how the county's statistics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

Alleghany County is included in Group Q along with Graham, Martin, Northampton, and Washington Counties. Population size and age distribution, population density, and percentage of people in poverty are considered to group these counties.[4]

Alleghany County Demographics

Alleghany County, North Carolina sits in the northwestern corner of the state, bordering Ashe County, and Surry County, and Virginia. Alleghany sits in the Blue Ridge Mountains with a vast array of outdoor recreation and cultural attractions. The county seat is Sparta, located in the heart of the county.

Alleghany County communities include the townships in the table below, according to the most recent census in 2010:[5]



Alleghany County Map: US Census

Township	Number of persons	% county Population	Median age
Cherry Lane	1,670	15.2	45.6
Cranberry	153	1.4	71.1
Gap Civil	4,380	39.8	46.3
Glade Creek	1,977	17.9	51.9
Piney Creek	848	7.7	54.1
Prathers Creek	949	8.6	43.9
Whitehead	1,031	9.4	56.9

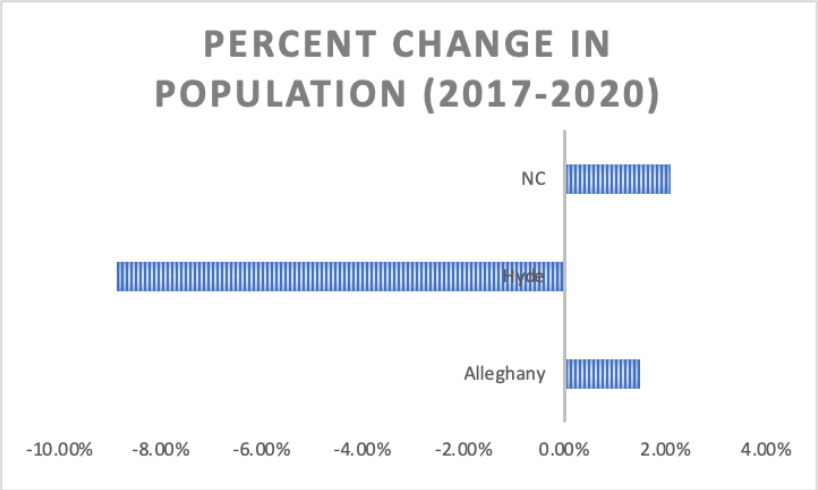
[4] North Carolina Division of Public Health (2017)
[5] US Census Bureau (2010)

Population

Alleghany County's population has increased.

The population of Alleghany County is 11,008[6] with a slightly uneven distribution of males and females. 51 percent of Alleghany's population consists of females and 49 percent consists of males.

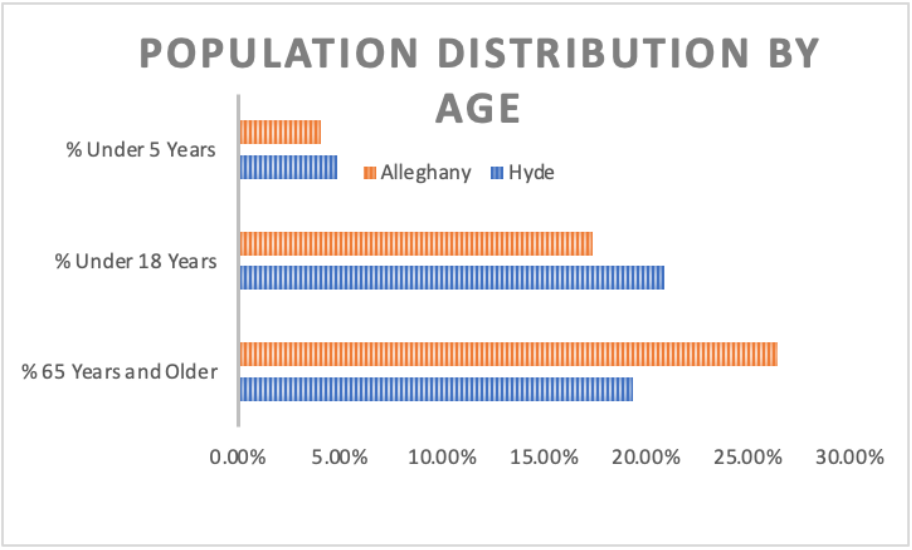
Alleghany's population increased by 3.2 percent from 2010 to 2020, compared to a population increase of 11.5 percent for the state. The population is projected to be 11,948 people by 2030.[7]



Our community is aging.

	2017 CHA	2020 CHA	**Change**
Population	10,848	11,008	**1.5% increase**
Median age	48.5 years	50.1	**3.2% increase**

The average Alleghany County resident is 50.1 years old, 1.6 years older than the average resident three years ago. The median age for the county is 50.1 years, compared to 39.1 years for North Carolina overall.



This graph compares the population distribution by age in Alleghany and Hyde Counties. Approximately 21 percent of individuals in Alleghany County are less than 18 years old, comparable to that of Hyde County.[8]

The majority of residents in Alleghany County (95.4 percent) identify as white, non-Hispanic compared to 68.1 percent of people across North Carolina. The percentage of African American, non-Hispanic residents in Alleghany County is much lower at 2.4 percent than North Carolina overall (21.5 percent).

[6] US Census Bureau (2019)
[7] NC Office of State Budget and Management (2019)
[8] American Community Survey 5-year estimates (2015-2019)

The percentage of Hispanic or Latino residents in Alleghany County remains at 9.7 percent, compared to 9.8 percent in North Carolina, 3.7 percent in Watauga County, and 5.0 percent in Ashe County. Approximately 0.5 percent of the population identifies as 2 or more races.[9]

Approximately 1,066 Alleghany County residents are Hispanic or Latino. Among those, 65.5 percent are Mexican, 3.4 percent are Puerto Rican, 11.5 percent are Cuban, and 19.6 percent are from some other country of origin. Asian residents represent 0.5 percent of the population.

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, 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.[10] While racial and ethnic minority populations in Alleghany 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.[11] 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.

[9] American Community Survey 5-year estimates (2015-2019)
[10] Centers for Disease Control and Prevention (2018)
[11] NC Center for State Health Statistics: Minority Health (2018)

County Health Ranking

Alleghany County was ranked #46 among the 100 NC counties for overall health outcomes in the 2021 County Health Rankings (where 1 is “best”). The County Health Rankings provide a snapshot of the factors that affect health in Alleghany 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.[12] 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 Alleghany County compares to North Carolina state averages for each County Health Ranking factor. Metrics that are shaded in green indicate where Alleghany County measures at least 1 percent better than the state average. Metrics shaded in yellow indicate where Alleghany County measures within 1 percent of the state average. Metrics shaded in red indicate where Alleghany County measures at least 1 percent worse than the state average.

[12] County Health Rankings & Roadmaps (2020)

2021 County Health Rankings, North Carolina, Alleghany County

Metric	Alleghany	N.C.	Compared to Other N.C. Counties
Length of Life			
Premature Death (yrs. life lost)	9,100	7,600	-
Quality of Life			
Poor or Fair Health	25%	18%	-
Poor Physical Health Days/Month	4.8	3.6	-
Poor Mental Health Days/Month	5.2	4.1	-
Low Birthweight	9%	9%	=
Health Behaviors			
Adult Smoking	25%	18%	-
Adult Obesity	30%	32%	+
Food Environment Index	7.1	6.8	+
Physical Inactivity	25%	23%	-
Access to Exercise Opportunities	27%	74%	-
Excessive Drinking	17%	18%	=
Alcohol-Impaired Driving Deaths	25%	28%	+
Sexually Transmitted Infections/100K	326.4	647.8	+
Teen Births per 1,000	41	22	-
Clinical Care			
Uninsured (under age 65)	18%	13%	-
Primary Care Physicians Ratio	930:1	1,400:1	+
Dentists Ratio	5,570:1	1,720:1	-
Mental Health Providers Ratio	430:1	390:1	-
Preventable Hospital Days	5,359	4,539	-
Flu Vaccinations	54%	52%	+
Mammography Screening	39%	46%	-
Social & Economic Factors			
High School Graduation	77%	88%	-
Some College	45%	67%	-
Unemployment Rate	4.8%	3.9%	-
Children in Poverty	26%	19%	-
Income Inequality Ratio	4.6	4.7	=
Children in Single-Parent Household	24%	28%	+
Social Associations per 100K	12.5	11.5	+
Violent Crime per 100K	140	351	+
Injury Deaths per 100K	105	77	-
Physical Environment			
Air Pollution – Particulate Matter	7.7	8.5	+
Drinking Water Violations	No		
Severe Housing Problems	12%	15%	+
Driving Alone to Work	82%	81%	=
Long Commute – Driving Alone	31%	34%	+

Legend

Areas of strength

Metrics in which Alleghany County's outcome is >1% better than the North Carolina average are indicated with a +, and those within 1% are indicated by a =.

Opportunities for improvement

Metrics where the outcome in Alleghany is >1% worse than the North Carolina average are indicated by a -.

About the Data

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

More information about the County Health Rankings, as well as measurement definitions and years of data, can be found at www.countyhealthrankings.org/.

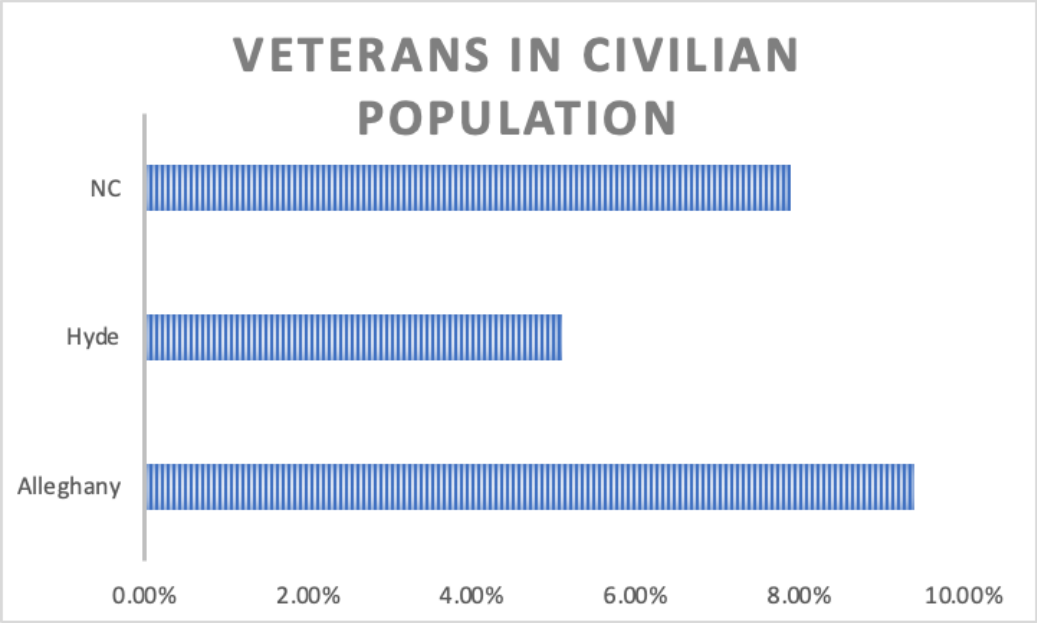
Special Populations to Consider

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.[13]

Nearly 1 in 10 people living in Alleghany County (9.4 percent) are a veteran. This rate is higher than the state percentage of 7.9 percent. Approximately 32.1 percent of veterans in Alleghany County are more than 65 years of age; 19.3 percent are between ages 18-34 years.



The percent of veterans living in poverty in Alleghany County has decreased by 56 percent in the last 3 years.

Among those in the civilian population where poverty status is determined, an estimated 20 percent of veterans are living below the poverty level in 2019, which is significantly higher than the rate in 2016 of 8.2 percent. Among Alleghany County veterans for whom poverty status is determined, 22.6 percent have some type of disability.[14]

Individuals with a Disability or Special Healthcare Need

The percentage of Alleghany County residents with a disability under 65 years of age is 22.8 percent, higher than that of Hyde County (14.3 percent) and North Carolina (15.2 percent).[15]

[13] American Association of Retired Persons
[14] American Community Survey (2019)
[15] American Community Survey (2019)

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

Nearly all North Carolinians with disabilities live in households (94 percent), 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.

Nationally,

- 7.7 percent of children ages 0-17 report having a disability.
- 10.6 percent of adults ages 18 to 64 have a disability.
- 35.2 percent of adults 65 and older have a disability.[16]

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.[17]

An estimated 232,918 individuals with intellectual or developmental disabilities live in North Carolina. Of those individuals with an I/DD, 74 percent live with a family caregiver, 19 percent live alone or with a roommate, and 7 percent live in a supervised residential setting.[18]

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

- Children and older adults
- LGBTQ+ population
- People without health insurance or who are underinsured
- low income and/or homeless individuals
- 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
- Single parents

[16] Disability Statistics Annual Report (2017)
[17] PHE Preparedness Planning: Access and Functional Needs
[18] University of Colorado: The State of States in Developmental Disabilities (2017)

Social Vulnerability and Emergency Preparedness

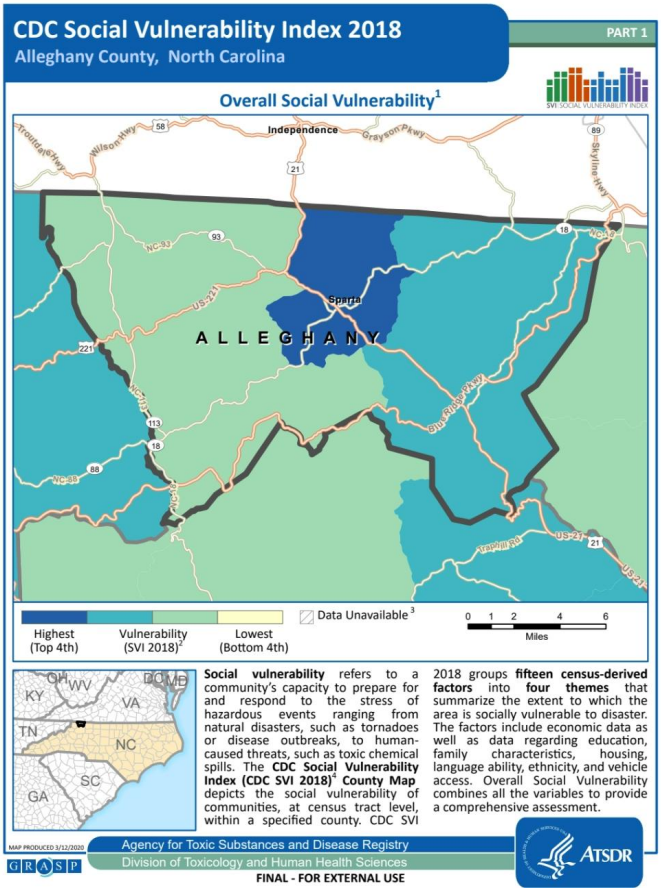
Every community must prepare for hazardous events, from a natural disaster like a tornado or disease outbreak to a human-made event like a harmful chemical spill. A number of factors (including poverty, lack of access to transportation, and crowded housing) may weaken a community's ability to prevent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

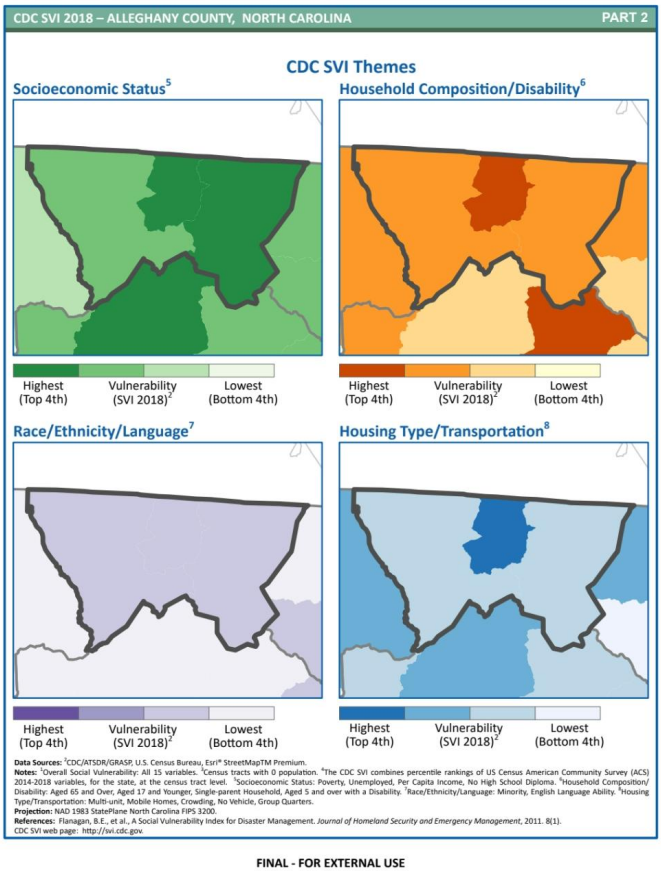
Previous research has shown that populations with higher levels of social vulnerability are more likely to experience negative consequences in the event of a disaster. These individuals may have additional needs before, during and after an emergency. A person can have an access and/or functional need with or without having a disability. Individuals in need of additional assistance before, during or after an emergency response may include:[19]

- People with physical, mobility, sensory, intellectual, developmental, cognitive or mental health disabilities
- 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 experiencing homelessness

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 factors, 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.

[19] PHE Preparedness Planning: Access and Functional Needs





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 Alleghany 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.[20]

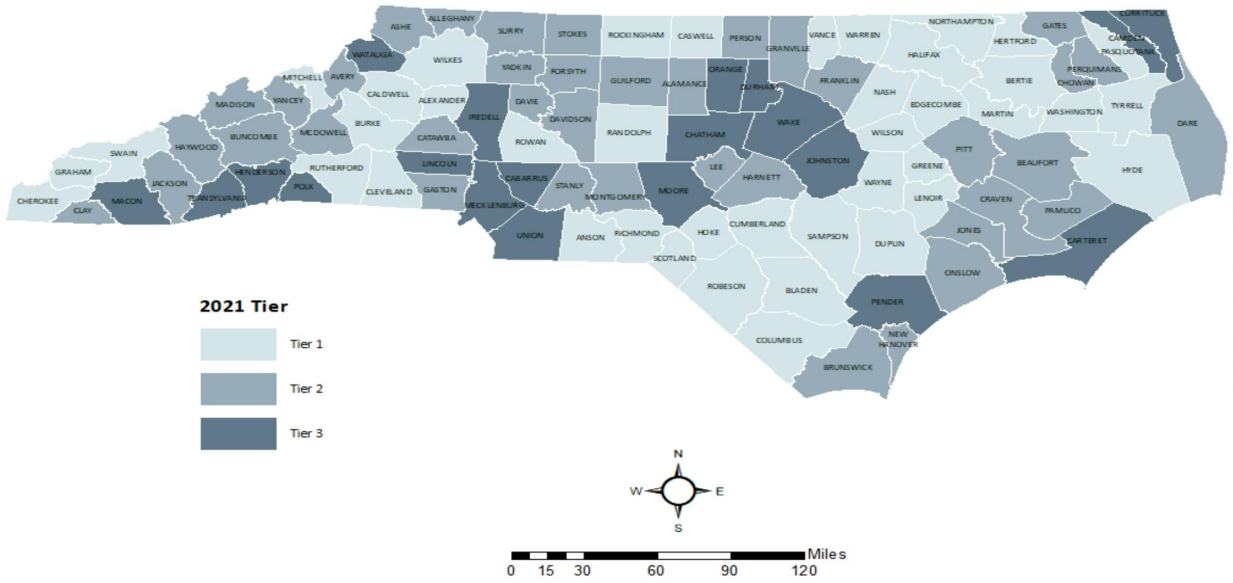
Income

Alleghany County has improved their ranking and is now among the 40 counties who are not as economically distressed as those in Tier 1 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. Alleghany County has improved their ranking from 2017 and is now considered a Tier 2 county.[21]

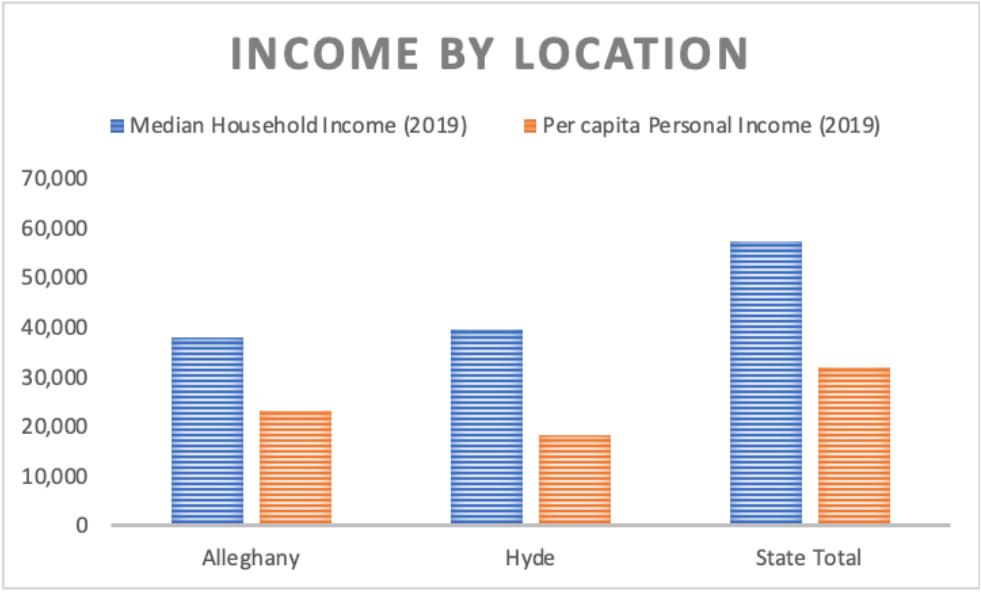
[20] NC Center for State Health Statistics, Minority Health Facts (2017)
[21] NC Department of Commerce (2020)

2021 County Tier Designations



Alleghany County's median household income has increased by 3.5 percent, which is less than half of the percentage for North Carolina overall.

The median household income in Alleghany County was $37,830 for 2019, at $19,511 less than the median household income for North Carolina. This gap in median household income between Alleghany County residents and North Carolinians has increased since the 2012-2016 estimates.[22] This table compares Alleghany County, Hyde County and North Carolina in the percent change in median household income.



[22] NC Department of Commerce (2018)

Location	2012-2016	2018	Percent Change
Alleghany	$38,352	$39,735	3.5
Hyde	$37,741	$40,653	7.2
State Total	$48,256	$53,922	10.5

Poverty

The percentage of Alleghany County people living in poverty is not 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 2019, 16.9 percent of Alleghany County residents were living in poverty, compared to 13.6 percent in North Carolina.[23]

Almost two out of four families in Alleghany (40.9 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 Alleghany County has increased.

The overall percent of children in Alleghany County under age 18 in poverty increased from 34.7 percent in 2016 to 39.4 percent in 2019. This rate remains significantly higher than the state.[24]

Continuing to monitor trends is important since these rates are estimates based on the United States Census Bureau's American Community Survey Estimates.

Poverty by Census Tract

Once we examine Alleghany 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 Alleghany County:

- 4.3 percent of families in Piney Creek, Prathers Creek, Cranberry and Whitehead live below the poverty level,
- 20.1 percent of families in Glade Creek and Cherry Lane live below the poverty level, and
- 21.1 percent of families in Sparta and Gap Civil live below the poverty level.[25]

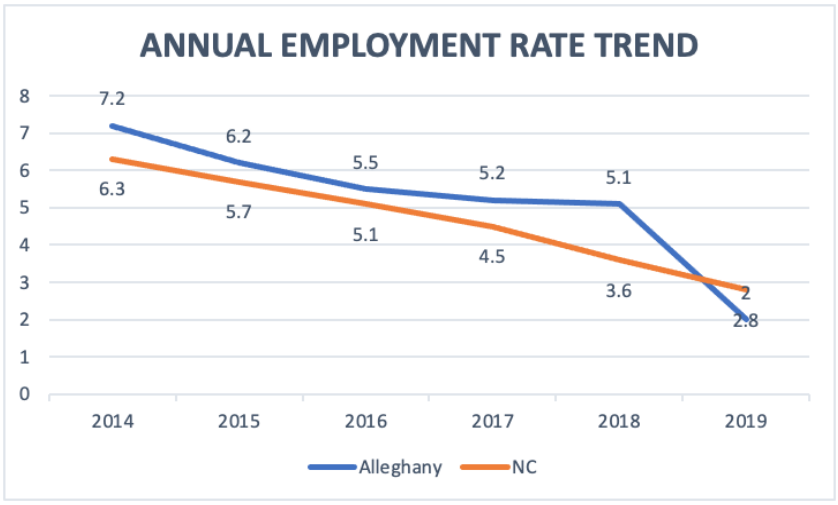
Poverty status is determined for each household using federal thresholds established annually by the Census Bureau in accordance with the Federal Office of Management and Budget.

[23] Small Area Income and Poverty Estimates (2019)
[24] American Community Survey (2019)
[25] Community Commons (2018)

Employment

Unemployment in Alleghany County has decreased dramatically since 2012.

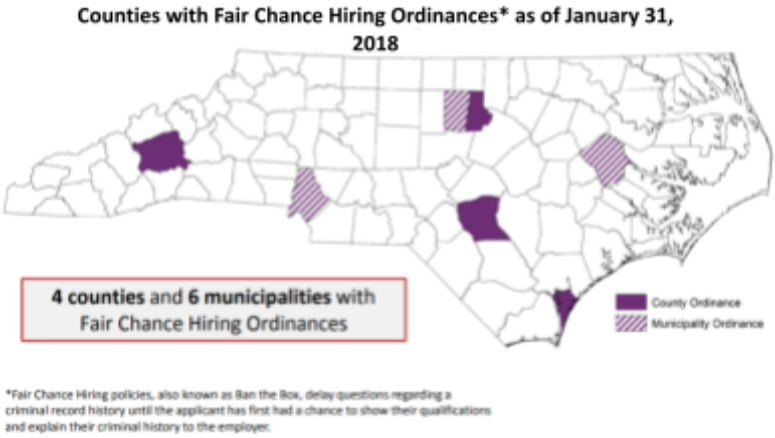
The unemployment rate in Alleghany County has continued to decrease, dropping from 5.2 percent in 2017 to 2.0 percent in 2019. The county's unemployment rate is now comparable to the rate of North Carolina overall (4.5 percent).[26]



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.[27] Health also has an impact on a person's desire to work and their likelihood of being hired or keeping a job.[28]

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.



*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.[29] The map above shows counties in North Carolina with fair chance hiring ordinances.[30]

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

The unemployment rate for Alleghany 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 (15.5 compared to 5.8). The unemployment disparity for black or African American residents during this time was 5.5 percent, which is slightly better than the

[26] NC Office of State Budget Management (2018)
[27] Thomas & Ellis
[28] The Impact of Employment on the Health Status and Health Care Costs of Working-age People with Disabilities
[29] Ban The Box: US Counties, Cities and States Adopt Fair Hiring Policies (February 2018)
[30] Injury and Violence Prevention Branch (2018)

unemployment rate for non-Hispanic, white individuals (5.8 percent). For individuals of some other race in Alleghany County, the unemployment rate is strikingly high at 33.3 percent.[31]

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 Alleghany County.

Top 20 Largest Employers in Alleghany County

The table below shows the top 20 largest employers in Alleghany County as of 2019.[32]

The private industry comprises 80.7 percent of all employment industries in Alleghany County, followed by government jobs (comprising 19.3 percent) and manufacturing (comprising 19.0 percent). Some employers identify with more than one industry.[33]

Top 20 Largest Employers in Alleghany County

Rank	Company	# Employees
1	Alleghany County Board of Education	250-499
2	Parkdale Mills Inc	100-249
3	Alleghany County	100-249
4	Bottomley Enterprises Inc	100-249
5	APEC	100-249
6	Alleghany Memorial Hospital	100-249
7	Roaring Gap Club Inc	50-99
8	Atlantic Building Components LLC	50-99
9	NAPCO	50-99
10	Tri-State Components	50-99
11	Food Lion	50-99
12	YMCA of High Point	50-99
13	Genesis Administrative Services	50-99
14	High Meadows Golf & Country Club	Less than 50
15	Medical Services of America Inc	Less than 50
16	US Postal Service	Less than 50
17	The Pines of Alleghany	Less than 50
18	Parker Sales & Service Inc	Less than 50
19	Haven Home Care Inc	Less than 50
20	Burger King	Less than 50

[31] American Community Survey Estimates (2015-2019)
[32] NC Department of Commerce; Labor & Economic Analysis (2018)
[33] Access NC – NC Commerce County Profile (2018)

Food Security

According to Feeding America, 18.0 percent of Alleghany County households experience food insecurity as of 2018. This includes an estimated 1,970 people in the county. This number has increased slightly since the 2017 Community Health Assessment which was 13.1 percent of people who were food insecure.[34]

According to the 2018 Map the Meal Gap, 10 percent of the food insecure households in Alleghany 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 1 in 10 individuals in Alleghany County who are food insecure do not qualify for SNAP and other food assistance programs.

The average meal in Alleghany County costs $2.77, lower than the national average meal cost of $3.09.[35]

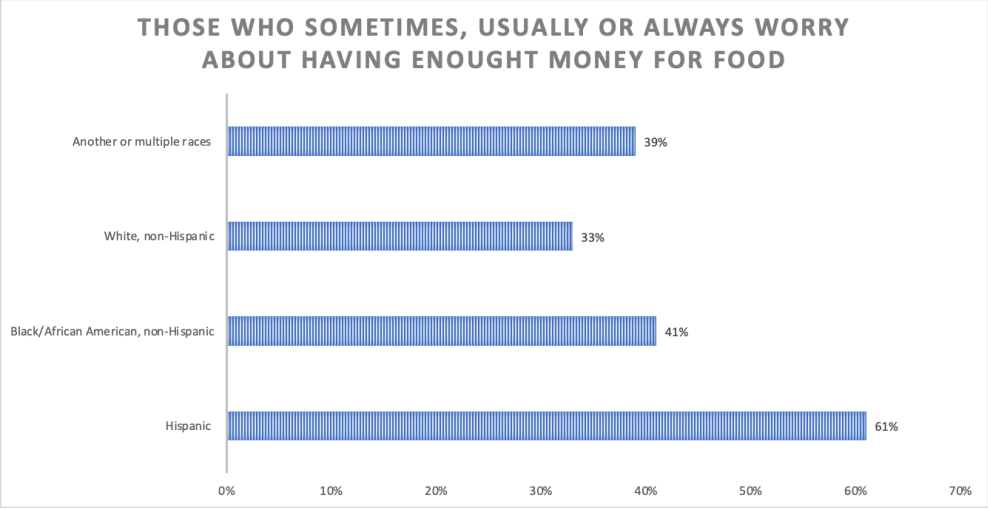
Stress related to Food Choices

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.[36]

Concerns about Money for Housing or Food

Overall, 64 percent of individuals in Appalachian counties[37] 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.

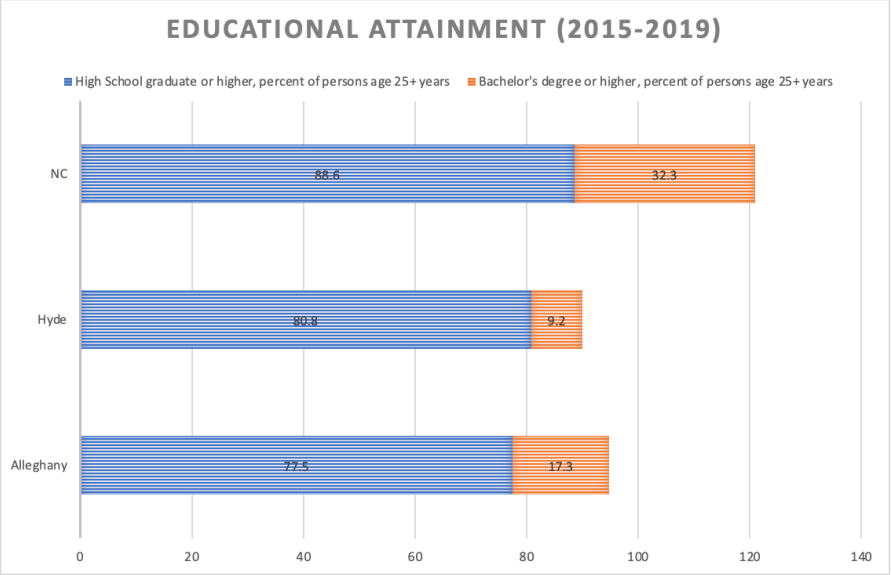


[34] Map the Meal Gap (2018)
[35] Feeding America: Map the Meal Gap (2018)
[36] Behavioral Risk Factor Surveillance System: Alleghany, Ashe, Watauga Counties (2018)
[37] As defined by the Appalachian Regional Commission

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.[38] In Alleghany, there are an estimated 8,421 residents aged 25 and above, and of those, 15.1 percent (approximately 1,268 people) have no high school diploma or equivalency (GED).[39] This rate has decreased slightly in the last 3 years.

Alleghany County Schools serves as the public school district in the county, including three elementary schools (Glade Creek, Piney Creek, and Sparta), and one high school (Alleghany County High School). During the 2019-2020 school year, 1,358 students were enrolled in Alleghany County Schools.[40] In addition to Alleghany County Schools, Blue Ridge Christian School also offers education for pre-Kindergarten through 8th grade students.



According to Access NC, 23.2 percent of high school graduates in Alleghany County took the SAT in 2019. The average SAT score (on a new 1600 scale) was 1,046, which is comparable to the national average for that year.

During the 2019-2020 school year, a total of 1,358 students were enrolled in Kindergarten through 12th grade in Alleghany County. That same year, 163 children were enrolled across the county's 7 licensed child care facilities.[41]

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

An estimated 118 students in Alleghany County were homeschooled during the 2019-2020 school year across 80 home schools.[42] 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.[43] Religious affiliated homeschools in North Carolina still outnumber independent homeschools: 56.5 percent are classified as religious; 43.5 percent are independent.

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.[44] Home schools were officially legalized in North Carolina in 1985.

[38] Freudenberg & Ruglis
[39] American Community Survey 5-year estimates (2015-2019)
[40] North Carolina School Report Cards (2019-2020)
[41] Access NC County Profile (2019-2020)
[42] North Carolina HOMESCHOOL Statistical Summary (2020)
[43] Ed NC: Homeschool students: The third largest "district" in North Carolina (December 2017)
[44] National Household Education Survey

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

The table below shows median earnings in the past 12 months by gender identity and educational attainment for the population ages 25 years and older. Women in Alleghany County earn significantly less than men who have the same educational attainment by every measure below.

Median Earnings by Educational Attainment	Alleghany County	
	Estimate	Margin of Error
Total:	22,022	+/-1,483
Less than high school graduate	16,888	+/-3,314
High school graduate (includes equivalency)	21,704	+/-1,797
Some college or associate's degree	22,210	+/-1,933
Bachelor's degree	39,426	+/-5,983
Graduate or professional degree	52,813	+/-9,957
Male:	26,268	+/-5,299
Less than high school graduate	18,597	+/-1,225
High school graduate (includes equivalency)	27,620	+/-7,987
Some college or associate's degree	26,591	+/-6,834
Bachelor's degree	47,188	+/-13,821
Graduate or professional degree	90,917	+/-38,758
Female:	20,043	+/-1,931
Less than high school graduate	9,670	+/-3,244
High school graduate (includes equivalency)	19,347	+/-4,112
Some college or associate's degree	17,448	+/-5,962
Bachelor's degree	33,750	+/-11,068
Graduate or professional degree	50,700	+/-16,669

Community Safety

Community safety is a priority for Alleghany County respondents of the health opinion survey. 'Low crime and safe neighborhoods' was selected by 45 percent of opinion survey respondents as one of the three most important factors for a healthy community.

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 Alleghany County is 197.4 per 100,000, which is nearly two times lower than the violent crime rate for North Carolina (407.7 per 100,000) during 2019.[45] Violent crime includes homicide, rape, robbery, and aggravated assault. There are 23,000 sex offenders registered in North Carolina, and of those, 28 live in Alleghany County.[46]

[45] NC State Bureau of Investigation: Annual Summary Report of Uniform Crime Reporting Data (2019)
[46] 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.[47] 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 Alleghany County is 16.6 per 10,000 people, which is 2.7 times lower than the rate for North Carolina overall at 44.2 per 10,000 people.

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.[48]

- In 2017, 18 percent of homicides in NC with known circumstances were associated with IPV.
- Half of all female homicides in North Carolina are IPV-related (50.4 percent).[49]
- Female IPV-related homicide victims were most likely to have been killed by a current spouse or partner (70.1 percent), in contrast to an ex-spouse or former partner (14.9 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 2020, there were 48,310 calls placed and 34,245 clients served for domestic violence in North Carolina, including 83 percent female clients and 13 percent male clients. The majority of clients were between 25-59 years old, followed by individuals ages 18-24 years old.[50] DANA (Domestic Abuse is Not Acceptable) serves victims of domestic violence and sexual assault in Alleghany County. Support agencies in neighboring counties include OASIS (Opposing Abuse with Service, Information and Shelter) and ASHE (A Safe Home for Everyone).

Sexual Assault

From July 2019 to June 2020, there were 104,299 calls placed and 59,239 clients served for sexual assault in North Carolina. The majority of all clients were female, and the age of most clients served was between 25-59 years, followed by individuals ages 0-17 years old. The agency provided support to victims through information, advocacy, referrals, transportation, hospital, and court services. Offenders were mostly acquaintances (25.7 percent) or relatives (25.4 percent).[51]

[47] Watch for Me NC: Why Pedestrians and Bicyclists Matter (2018)
[48] CDC, Intimate Partner Violence: Definitions (2018)
[49] Injury and Violence Prevention Branch: Intimate Partner Violence in NC (2017)
[50] NC DOA, Council for Women (2020)
[51] NC DOA, Council for Women (2020)

Firearms

Nearly two-thirds (62.5 percent) of all violent deaths in North Carolina during 2018 were caused by firearms.[52] Firearms were involved in 41.0 percent of all child violent deaths in North Carolina in 2017. This percentage was driven by the high number of firearm-related deaths among children ages 15-17.

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.[53]

An estimated 13 percent of Alleghany 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 1.3 percent of households or (62 homes) in Alleghany County do not have telephone services available.[54]

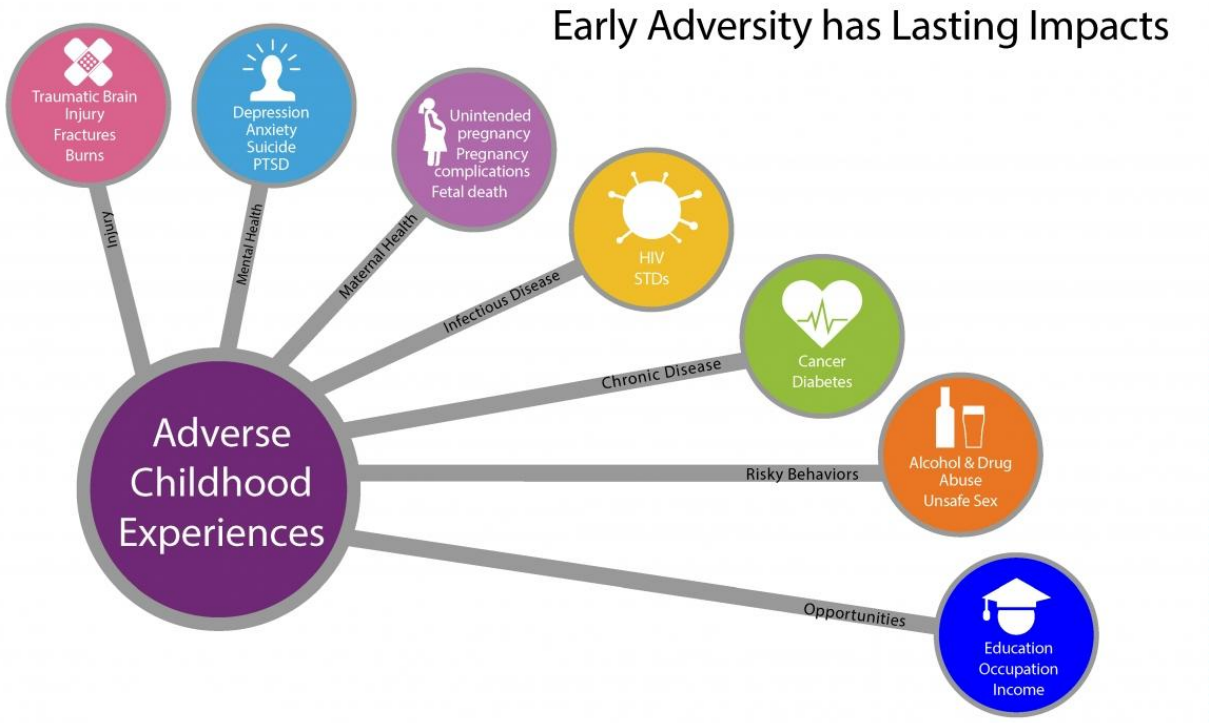
Cost-Burdened Families

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 Alleghany County, 40 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 Alleghany County: 53 percent of renters spend more than 30 percent of their household income on rent.[55]

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.[56]

[52] Injury and Violence Prevention Branch: Firearm Deaths in NC (2018)
[53] Center for Housing Policy: The Impacts of Affordable Housing on Health: A Research Summary
[54] American Community Survey (2019)
[55] American Community Survey 5-year estimates (2015-2019)
[56] Whole Health Action Management Peer Support Training Participant Guide



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.[57] Schools also play an important role in addressing childhood trauma.

Child Abuse and Neglect

According to NC Child, 57.2 per 1,000 children in Alleghany County were assessed for child abuse or neglect in 2019.[58]

Child Health Factors	Alleghany	NC
Children living in poor or low-income homes	66%	45.9%
Children assessed for abuse/neglect per 1,000	57.2	52.2

Environmental Health

[57] NC Child Health Report Card (2018)
[58] NC Child County Data Card (2019)

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 Alleghany County is not reported; however, Alleghany 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 Alleghany County) is from the ozone. The main air pollutant during the winter months for the region is from particular matter, or PM 2.5.[59]

Air Quality Measures	Alleghany County
Annual rate of carbon monoxide poisoning deaths	59.0 per 100k
Average lead soil level	22.214 parts per million

The average lead soil level for Alleghany County is slightly lower 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.[60]

Air pollution is measured by collecting the particulate matter in a designated area.

The Water We Drink

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.

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 subsurface 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.

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, 64 percent of outbreaks happen at restaurants.[61]
- Lost productivity from foodborne illness costs an average of $110 billion per year nationwide.[62]

[59] Department of Environment and Natural Resources: Ambient Air Quality Report (2020)
[60] Health Grove Environmental Health Statistics (2018)
[61] Foodborne Disease Outbreak Surveillance System (2019)
[62] Foodborne Illness Acquired in the United States—Major Pathogens (2018)

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.

Our Built Environment

Our built environment includes the structures in Alleghany 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.[63]

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

[63] Appalachian Voices: Ecological Impacts of Mountaintop Removal (February 2018)

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.[64]

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 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.[65]

Transportation

Transportation is a major barrier to accessing necessary services and care for many individuals in Alleghany County.

The average travel time to work in Alleghany County is 24.3 minutes.[66]

Alleghany In Motion (AIM) is the public transportation authority in Alleghany County. All transportation services are provided by request, including subscription routes for local health and human service agencies. AIM provides transportation to destinations beyond the county for elderly or disabled transportation, general public transportation, and medical transportation such as approved Medicaid appointments. Call 336-372-TRIP (8747) for more information.[67]

Access to Healthy Food and Recreation

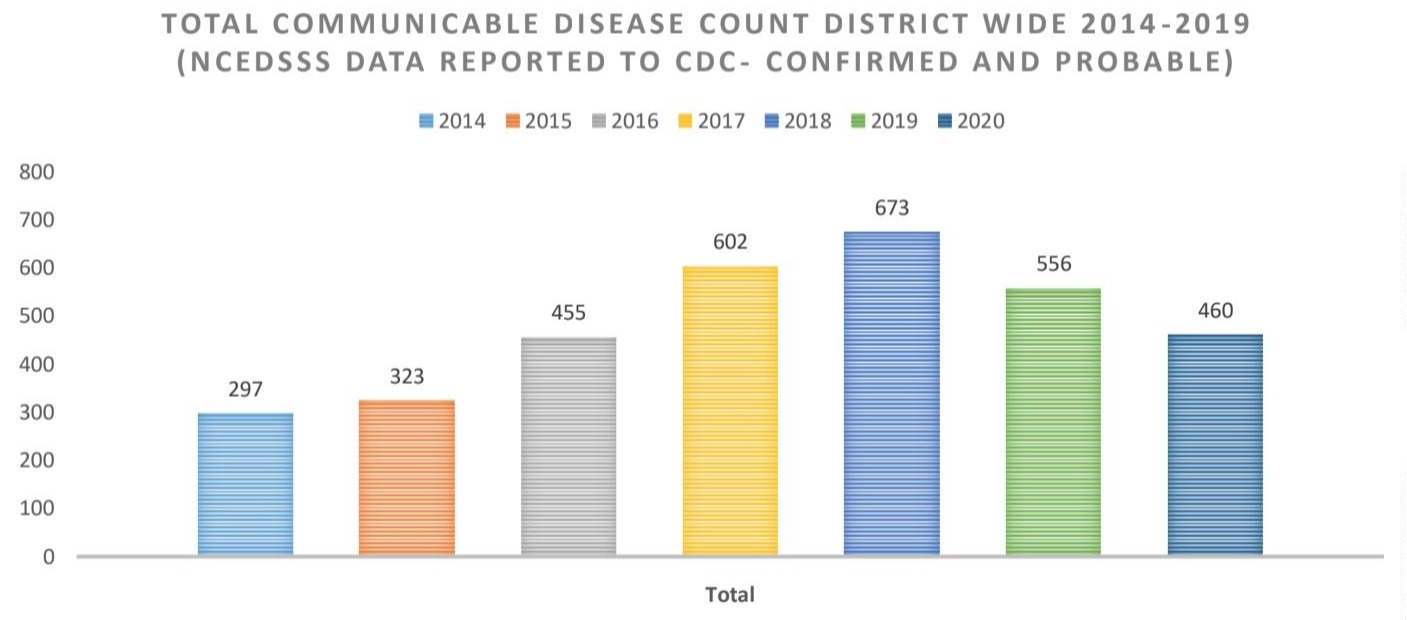
AppHealthCare conducts a Fruit and Vegetable Outlet Inventory in partnership with the North Carolina Division of Public Health periodically. As of 2018, there were 2 produce markets and 1 farmers market in Alleghany County with predictable location and hours where fruits and vegetables are sold.[68] These outlets currently do not accept SNAP/EBT or WIC forms of payment.

Parks and recreation opportunities are a vital part of community health. There are 5 recreational facilities registered in Alleghany County.

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 75 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.

[64] Program: Environmental Health, M.S.E.H. East Tennessee State University, Acalog ACMS (2018)
[65] Appalachian Voices: Ecological Impacts of Mountaintop Removal (2018)
[66] North Carolina Access Profile (February 2021)
[67] Alleghany County Government
[68] NC Fruit and Vegetable Outlet Inventory (2018)



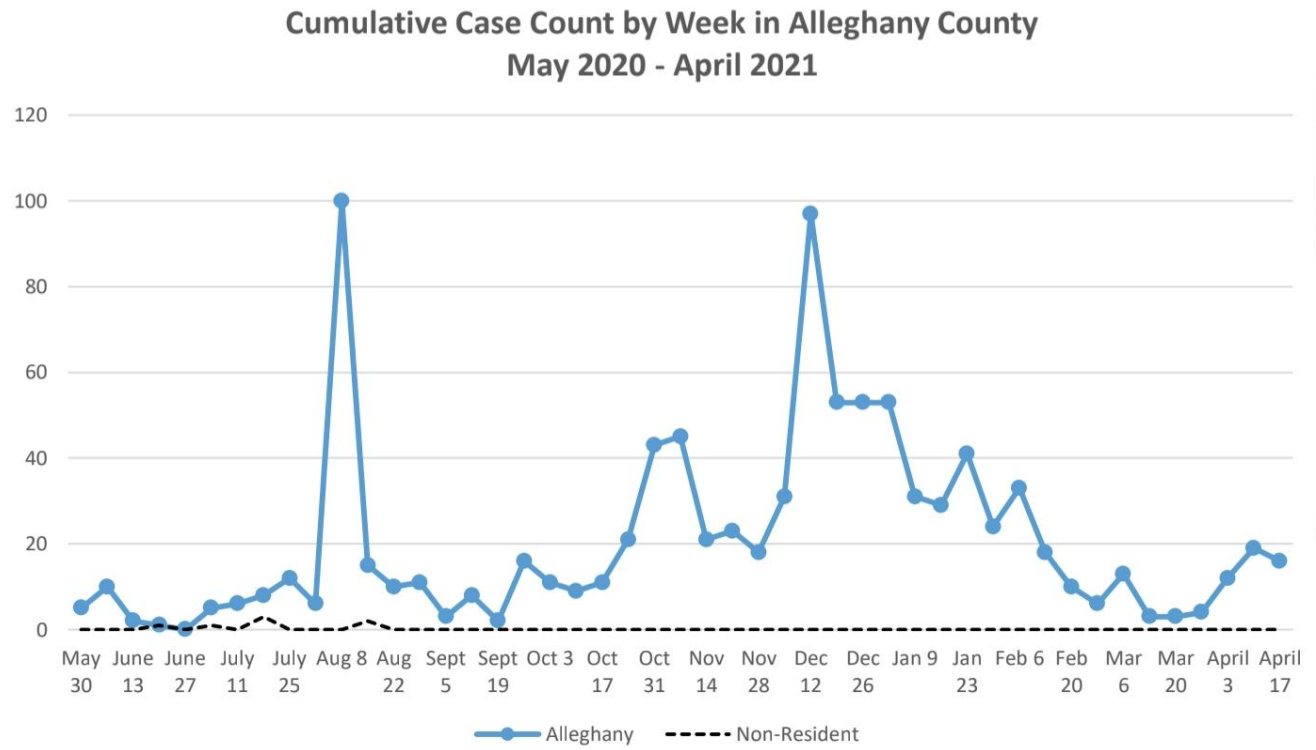
Sexually Transmitted Infections/Diseases

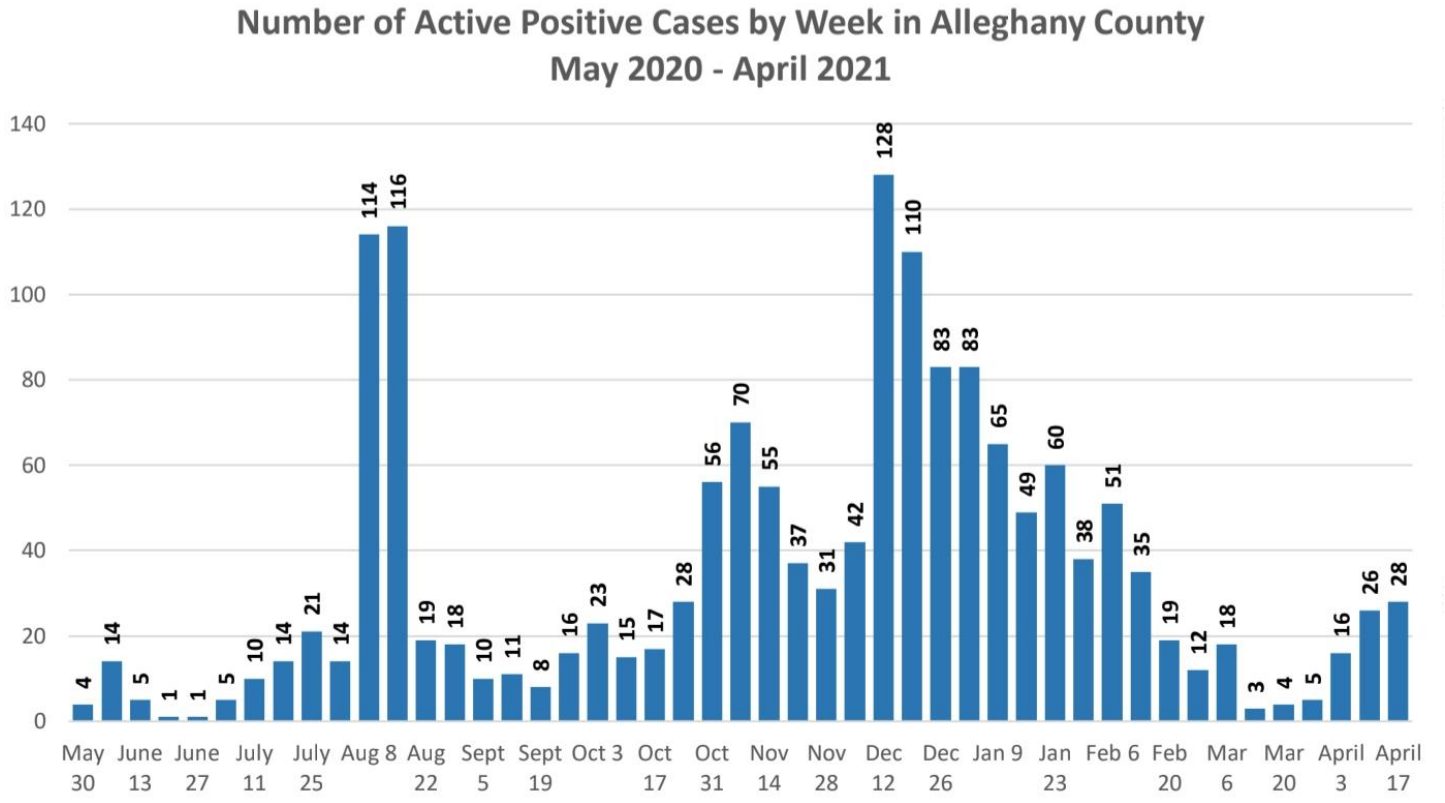
Sexually Transmitted Infection/Disease continue to be on the rise, specifically, Chlamydia. Chlamydia is a bacterial infection that can infect both men and women. It is one of the most common STDs and is spread through vaginal, anal, and oral sex. It can be easily cured with antibiotic medicine but if left untreated can lead to major health problems. It can cause difficulty in a woman's reproductive system making it harder to become pregnant. There are no symptoms that come with having the disease, but one may notice abnormal discharge from the vagina or penis, a burning sensation when they urinate, and for men, pain or swelling of the testicles. While abstinence is the only completely effective prevention strategy, monogamy and condoms can reduce the transmission of the disease. Chlamydia is the most commonly reported STD in the United States with an estimated 3 million infections annually. From 1997 to 2017, the rate of reported chlamydial infections increased from 206 to 509 cases per 100,000 population. Rates of the disease have continued to increase over the last twenty years with higher rates among females due to recommendations of screening for ages 14-25 and no screening recommendation for men. In 2018, the average number of people reported in the U.S. with chlamydia was 657.3 females and 330.5 males per 100,000 population. North Carolina is ranked 45 of 50 states as the highest prevalence of chlamydia with 577.6 per 100,000 population.[69]

COVID-19

COVID-19 is a communicable disease caused by a new coronavirus first identified in Wuhan, China, in December of 2019. COVID-19 affects people in different ways, ranging from mild symptoms to severe illness or even death. The tables below show some of the cumulative data resulting from COVID-19 over the past 12 months.

[69] State of the Community's Health (2019)

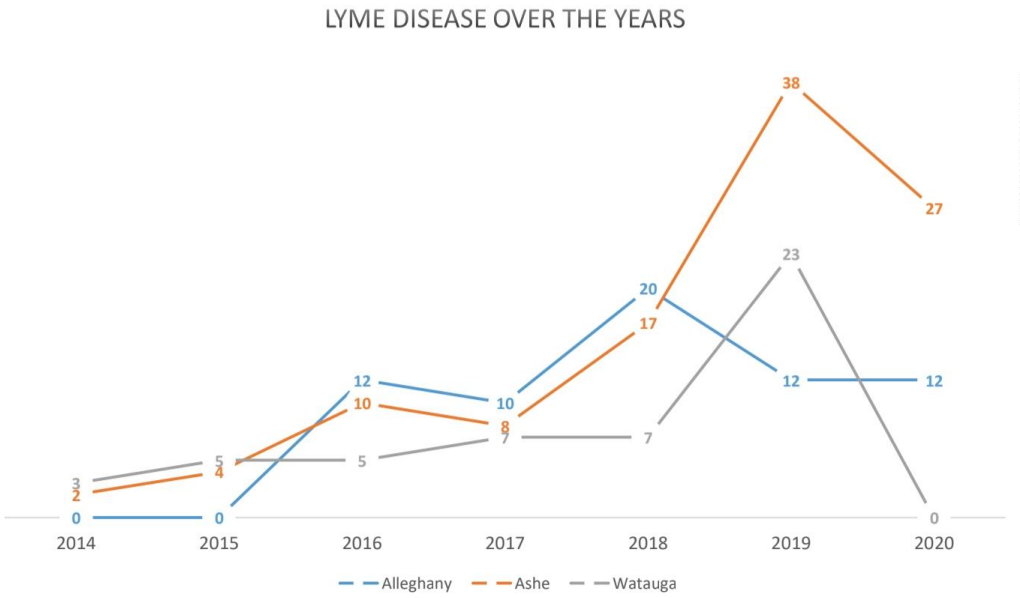




Lyme Disease

Lyme disease is caused by the bacterium Borrelia Burgdoferi and is transmitted to humans through the bite of an infected blacklegged tick. Typical symptoms include fever, headache, fatigue, and a characteristic skin rash. If left

untreated, infection can spread to joints, the heart, and the nervous system.[70] According to the data from NC Electronic Disease Surveillance System (NC EDSS), there has been a decrease in human Lyme disease cases over the past couple of years across Alleghany, Ashe, and Watauga counties. In Alleghany County in 2019, there were 12 cases compared to 20 reported cases in 2018.



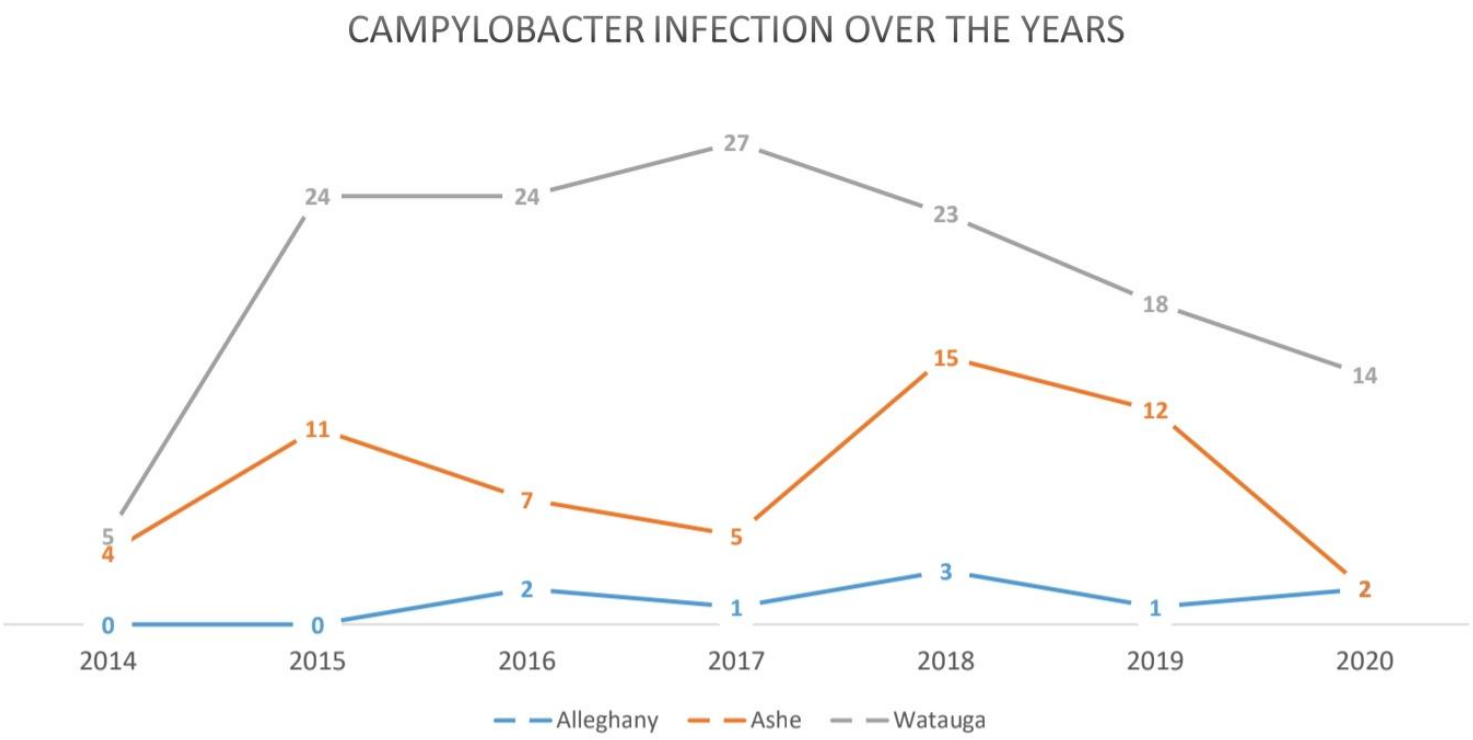
Hepatitis C

Hepatitis C (HCV) is a liver infection caused by the Hepatitis C virus. This is most commonly transmitted through injection drug use, birth, and receipt of blood. Most people with chronic Hepatitis C virus infection do not have any symptoms or have general, or common symptoms such as chronic fatigue and depression. Hepatitis C can range from a mild illness lasting a few weeks to a serious, lifelong illness. Hepatitis C is often described as "acute," meaning a new infection or "chronic," meaning lifelong infection. Acute Hepatitis C occurs within the first six months after someone is exposed to the Hepatitis C virus. Hepatitis C can be a short-term illness, but for most people, acute infection leads to chronic infection. Left untreated, chronic Hepatitis C can cause serious health problems, including liver damage, cirrhosis, liver cancer, and even death.[71] In 2020 there were 13 cases of chronic Hepatitis C compared to 25 cases in 2018 in Alleghany County.

Campylobacter infection

Campylobacter infection otherwise known as campylobacter is the most common bacterial cause of diarrheal illness in the United States. Food and water can become contaminated in several different ways. In animals Campylobacter can be carried in the liver, intestines, and other organs which can then be transferred to other edible parts of the animal once it is slaughtered. Food can also be contaminated by a cow having an infection in their udder or when milk is contaminated with manure. People who become infected with Campylobacter may experience symptoms such as bloody diarrhea, fever, and stomach cramps. In people with weakened immune systems such as AIDS or receiving chemotherapy the bacteria occasionally will spread into the bloodstream and can cause life-threatening infection.[72]

[70] State of the Community's Health (2019)
[71] State of the Community's Health (2019)
[72] Centers for Disease Control and Prevention (2019)



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 Alleghany County remain largely due to chronic diseases. The table below shows the leading causes of death ranked by the number of deaths caused from 2014-2018. Arrows indicate whether causes of death have increased or decreased since the last community health assessment (2012-2016).[73]

Leading Causes of Death in Alleghany County (2014-2018)				
Rank	Cause	Change	# of deaths	Death rate
1	Cancer	↑	141	257.0
2	Heart disease	↑	151	275.2

[73] State Center for Health Statistics: Leading Causes of Death (2014-2018)

3	Alzheimer's disease	↑	50	91.1
4	Chronic lower respiratory diseases	↑	45	82.0
5	Diabetes mellitus	↓	23	41.9
5	Cerebrovascular disease	↑	30	54.7
7	All other unintentional injuries	↑	27	38.6
8	Nephritis & nephrosis	↑	22	40.1
9	Suicide	↑	17	31.0
10	Influenza & pneumonia	↑	15	27.3

The same 10 leading causes of death from 2012-2016 remain on the list above for 2014-2018. Nephritis, nephrotic syndrome and nephrosis (kidney disease) was the 13th leading cause of death from 2009-2013 but is now the 8th leading cause of death in the county.

Leading Causes of Death by Age

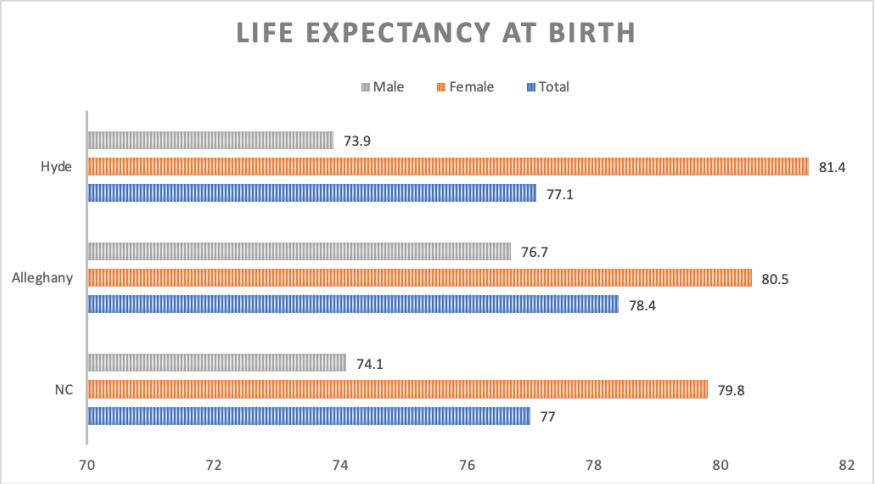
By understanding which age groups are most affected by which cause of death, we can better target prevention efforts. The chart below includes the leading cause of death per age group in North Carolina.

Causes of Death by Age Group: Ranking, Number of Deaths, and Unadjusted Death Rates per 100,000 Population			**# deaths**	**Death rate**
AGE GROUP:	**RANK**	**CAUSE OF DEATH:**		
0-19 years	1	Conditions originating in the perinatal period	36	17.1
	2	Congenital anomalies (birth defects)	13	6.2
		Motor Vehicle injuries	10	4.8
20-39 years	1	Other Unintentional injuries	66	33.6
	2	Motor Vehicle Injuries	33	16.8
	3	Suicide	30	15.3
40-64 years	1	Cancer- All Sites	505	191.0
	2	Diseases of the Heart	344	130.1
	3	Other Unintentional Injuries	117	44.2
65-84 years	1	Cancer- All Sites	876	766.7

	2	Diseases of the Heart	693	606.6
	3	Chronic lower respiratory diseases	298	260.8
85+ years	1	Diseases of the heart	563	3168.3
	2	Cancer - All Sites	321	1806.4
	3	Alzheimer's disease	279	1570.1

Life Expectancy

The graph to the right shows the average life expectancy at birth for women and men in Alleghany County, Hyde County and North Carolina. The average life expectancy at birth in Alleghany County is 78.4 years as of 2018.[74] The average life expectancy at birth for women in Alleghany is 80.5 years (compared to 79.8 years for North Carolina overall), and 76.7 years for men (compared to 74.1 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 Alleghany County from 2014-2018 and the years of potential life lost during those years.[75]

Cause of death	Number of deaths	Years of potential life lost

[74] NC Center for State Health Statistics (2018)
[75] NC Center for State Health Statistics (2018)

Diseases of the heart	151	2,068
Cancer	141	2,286
Alzheimer's disease	50	480
Chronic lower respiratory diseases	45	713
Cerebrovascular disease	30	420
All Other Unintentional Injuries	27	761

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 Alleghany County.

The mortality rate from lung disease in Alleghany decreased slightly from 44.2 per 100,000 people from 2012-2016 to 38.1 per 100,000 people from 2015-2019.

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.

Mortality from cancer, heart disease, and chronic lower respiratory disease (CLRD)/chronic obstructive pulmonary disease (COPD) all continue to steadily decline for Alleghany County residents.

Gender Disparities in Health Status

Cancer mortality has increased for women, while it has decreased for men.

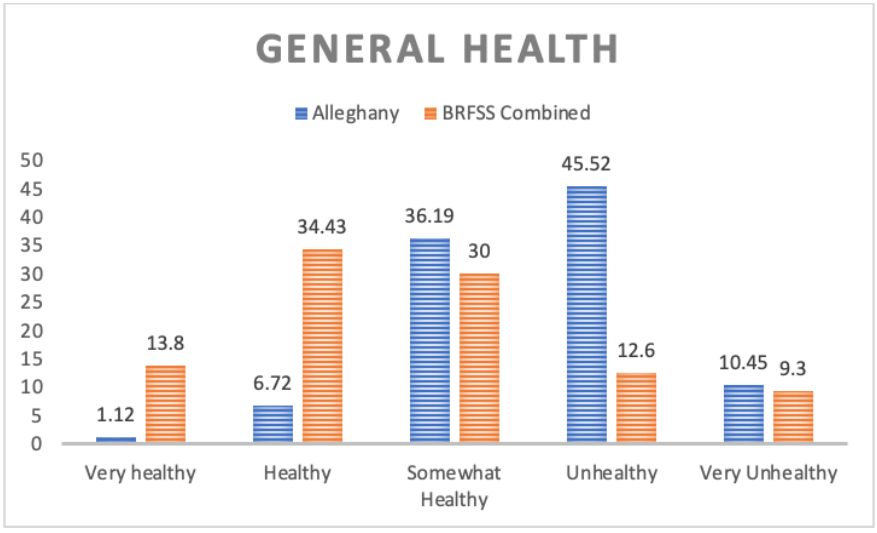
Gender disparities persist for many health outcomes between men and women. The gap between some mortality rates for men and women in Alleghany County has decreased for different reasons.

The closing gender gap in cancer mortality is due to the increase in cancer mortality for women and decrease in mortality for men.

The gender disparity in lung disease mortality in Alleghany decreased since the 2012-2016 estimates. Men in Alleghany County were more than twice as likely to die from lung disease between 2007-2011; however, the lung cancer mortality

rate for men from the most recent study was 48.2 per 100,000 compared to 44.9 per 100,000 for women. Overall, the rate of lung cancer mortality has increased slightly for women and has decreased significantly for men.[76]

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 Alleghany County Community Health Opinion Survey in 2017. Participants of both surveys were asked to rate their general health.

More than half (56 percent) of all Alleghany County respondents of the opinion survey self-reported their personal health as "unhealthy" or "very unhealthy", compared to 22 percent of respondents of the BRFSS across AppHealthCare counties. Approximately 1 percent of Alleghany respondents reported their general health as "very healthy".

Youth Health

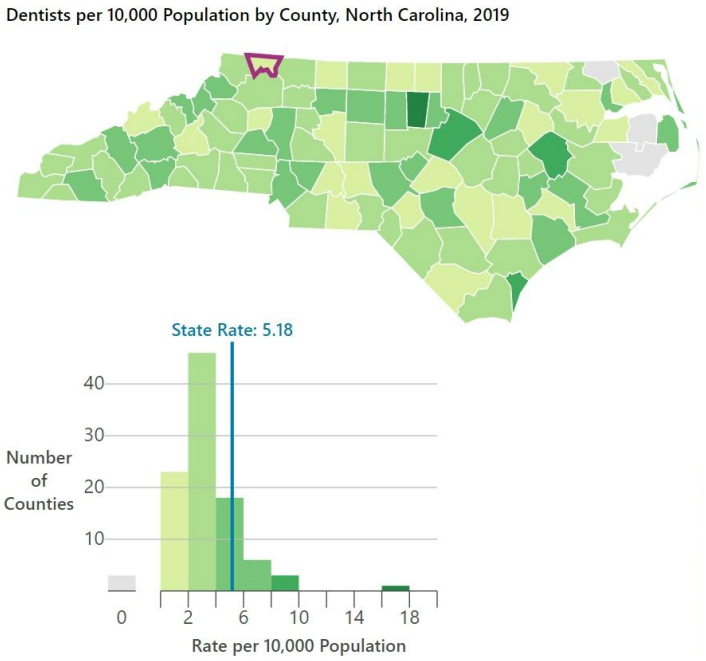
The Youth Risk Behavior Surveillance System monitors health-risk behaviors that contribute to the leading causes of death and disability among youth and adults. The Youth Risk Behavior Survey is conducted every 2-3 years at Alleghany County Schools for students in grades 6-12.

Data from the 2021 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.

The ratio of the population to dentists for Alleghany County is 1.74 per 10,000 people. This rate has decreased since the 2017 rate of 2.7 per 10,000 people.[77]



[76] NC County Health Data Book (2018)
[77] NC Health Professionals Data System (2019)

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 Alleghany 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.

Approximately 17 percent of Alleghany County residents report binge or heavy drinking.[78] This rate has decreased from the 2017 rate of 14 percent.

Addiction is harmful to our community in many ways.

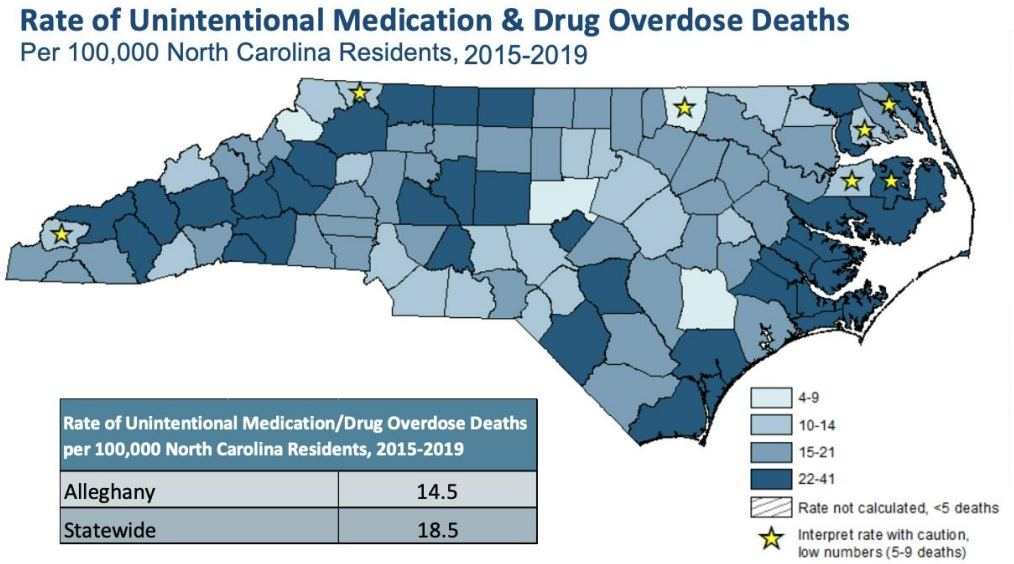
Beyond the harmful consequences for a person with addiction, substance misuse can cause serious health problems for others. Use of some drugs such as opioids during pregnancy increases the risk of developmental problems for babies. Injection of drugs such as heroin, cocaine and methamphetamine increases the spread of infectious diseases such as Hepatitis C and HIV.

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 473 percent, from 363 in 1999 to 2,081 in 2018. The vast majority (81 percent) of these deaths are unintentional. The map below shows the rate of unintentional medication and drug overdose deaths from 2014-2018.

In 2018, 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. The map below shows the rate of unintentional opioid deaths from 2014-18.



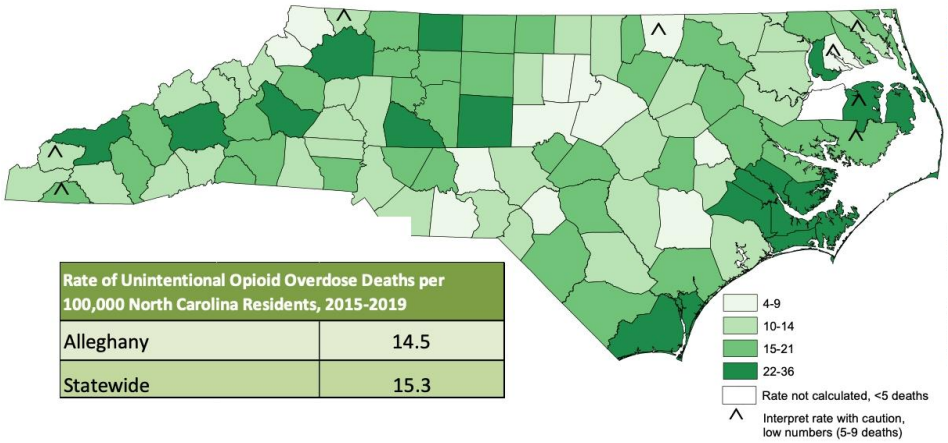
Rate of Unintentional Medication/Drug Overdose Deaths per 100,000 North Carolina Residents, 2015-2019	
Alleghany	14.5
Statewide	18.5

[78] County Health Ranking (2021)

Alleghany County rates for opioid poisoning are consistent with the trend we see across North Carolina. The rate of annual deaths due to drug poisoning in Alleghany County is 14.5 per 100,000 people (compared to 16.7 deaths in North Carolina from 2014-2018).

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 Alleghany County.[79]

Rate of Unintentional Opioid Overdose Deaths
Per 100,000 North Carolina Residents, 2015-2019



Rate of Unintentional Opioid Overdose Deaths per 100,000 North Carolina Residents, 2015-2019	
Alleghany	14.5
Statewide	15.3

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 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 Alleghany County are focused on addressing the opioid epidemic and substance use overall. One strategy being used to address this issue is providing prescription drug drop boxes where individuals can dispose of unwanted prescription drugs. A drop is available at the Alleghany 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 syringe service programs have been proven to help protect first responders and prevent the spread of disease in the community. In Alleghany County, 43% of survey respondents reported that syringe exchange services were needed or extremely needed.

Smoking and Tobacco Use

According to the latest statistics available, 1 in 4 individuals (25 percent) in Alleghany County are current smokers, slightly higher than the rate of adults in Cleveland County (24 percent) and higher than the percentage in North Carolina (18 percent).[80] This percentage for Alleghany County is above the estimated number of adults that smoke in the United States (14%).

[79] NC Injury and Violence Prevention Branch: All Intents Medication and Drug Poisoning Deaths by County (1999-2019)
[80] County Health Rankings & Roadmaps (2021)

North Carolina Tobacco Facts (2019)	
Economic Cost Due to Smoking:	$3,809,676,476
Adult Smoking Rate:	17.40%
Adult Tobacco Use Rate:	21.10%
High School Smoking Rate:	8.30%
High School Tobacco Use Rate:	28.80%
Smoking Attributable Deaths:	14,220

Tobacco use remains the single leading cause of preventable death and disability in the United States[81].

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.

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.

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.[82]

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 2020 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.[83]

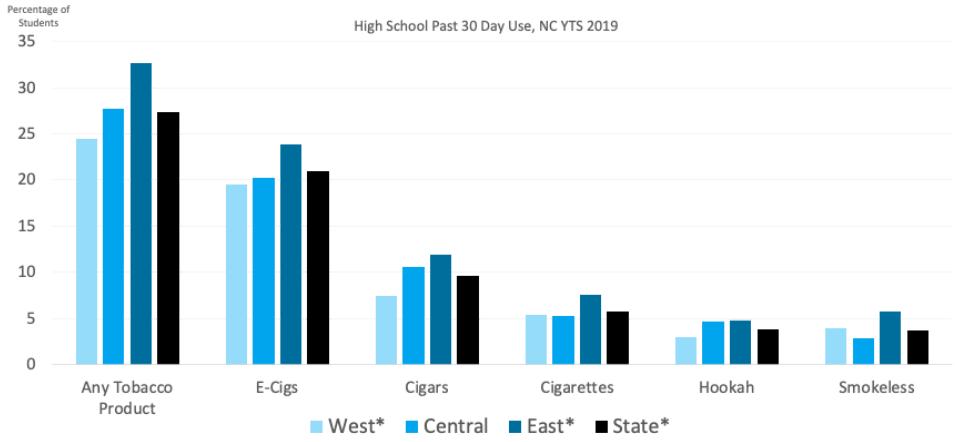
The American Lung Association in North Carolina calls for the following actions to be taken by our elected officials:

- Restore funding for tobacco use prevention and cessation programs, including QuitlineNC;
- Increase the state cigarette tax by at least $1.00 per pack; and

[81] Centers for Disease Control and Prevention: Smoking and Tobacco Use: Quick Facts (2019)
[82] Center for State Health Statistics (2018)
[83] American Lung Association: NC State Highlights (2020)

- 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



Almost one in four high school students in Western North Carolina still use tobacco products, setting them up for a lifetime of addiction.[84]

In 2019, 19.5 percent of high school students and 6.4 percent of middle school students in Western North Carolina used e-cigarettes in the past 30 days, compared to 11.3 percent of high school students and 4.3 percent of middle school students in 2016. Current e-cigarette use has increased from 2011-2019 by 510% for middle school students and 1,129.4% for high school students.[85]

Overall, 31.7 percent of high school students in Western North Carolina report using a tobacco product in the last 30 days, compared to 28.8% in North Carolina.[86]

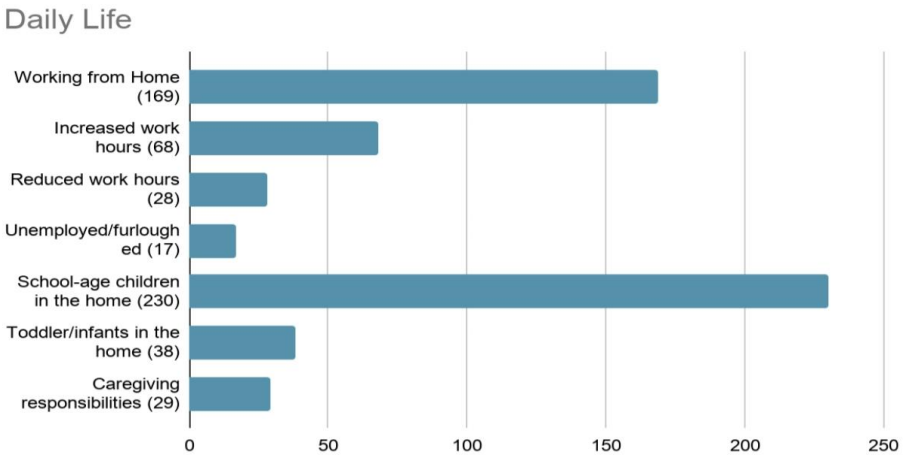
According to the 2019 North Carolina Youth Tobacco Survey, tobacco use is highest among white students in North Carolina: 44 percent of white high school students in North Carolina currently use a tobacco product, compared to 32.5 percent of Hispanic or Latino students, and 33.2 percent of Black/African American students.[87]

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.

More residents in Alleghany County (27 percent) report having access to exercise opportunities than North Carolinians overall (74 percent). While access to physical activity is accessible for some families, more than 1 in 4 Alleghany County residents (26 percent) report being physically inactive. [88] Slightly more than 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.[89]

In 2017, 49 percent of Alleghany High School students reported trying to lose weight, an increase of 4 percent since 2015. Half of Alleghany middle school students reported trying to lose weight in 2017. [90]



[84] North Carolina Youth Tobacco Survey (2019)
[85] North Carolina Youth Tobacco Survey (2019)
[86] NCIOM Watauga County Profile (2017)
[87] NC Youth Tobacco Survey (2019)
*Current use is defined as using 1 or more days within the past 30 days.
** Emerging tobacco products include electronic cigarettes, hookah or water pipes, roll-your-own cigarettes, flavored cigarettes, clove cigars, flavored little cigars, and snus.
[88] County Health Rankings (2020)
[89] North Carolina Institute of Medicine (2020)
[90] Youth Risk Behavior Surveillance System: Alleghany County Schools (2017)

Physical Activity during COVID-19

During the COVID-19 pandemic adults and children experienced a change in the landscape of their physical activity. Adults fared better during COVID-19 as they found ways to maintain or increase physical activity, while children's physical activity suffered.

Adults surveys indicated how many days over the past 30 days they considered their physical health to not be good. 43.5 percent of respondents said they experienced zero days where they considered their physical health to not be good, 25.9 percent said 1-2 days and 13.5 said they experienced 3-5 days where their physical health was not good.

Adults spent more time using parks/trails before compared to during COVID-19, however 55% of the adult participants achieved at least 30 minutes of PA per day at parks/trails. Children spent less time in parks/trails, recreational sports, fitness facilities, and physical education during COVID-19. In fact, half of the responding adults with children (50.7%) reported location changes in their child(ren)'s physical activity. The chart above shows the situations describing survey respondents' daily life during the pandemic.[91]

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

Only 19 percent of adults in Western North Carolina reported consuming fruits, vegetables, or beans five or more times per day in the most recent 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 food, or not having parenting tips needed to deal with picky eaters in the family.

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.[93]

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 66 percent in 2016 to 68.4 percent in 2019.[94] More than 3 out of 5 adults in Western North Carolina are overweight or obese. North Carolina is ranked 18th among the 50 states and D.C. for obesity in youths ages 10-17.

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.

[91] Physical Activity and COVID-19 in rural North Carolina (2020)
[93] Center for Disease Control and Prevention (2021)
[94] Behavioral Risk Factor Surveillance System (2019)

Relationship Between and Obesity and Income

Alleghany 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 2021 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 State of Childhood Obesity, 16.1 percent of North Carolina youth are obese, compared with 14.5 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 16 percent were obese, compared to 64 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.

Motor Vehicle Injuries

There were 1,470 motor vehicle fatalities and 125,232 motor vehicle injuries in North Carolina in 2019. Failure to reduce speed was the most commonly reported circumstance that contributed to motor vehicle crashes that year.[96]

[96] NC DMV: Traffic Crash Facts (2019)

Maternal and Child Health

The live birth rate is 8.9 per 1,000 in Alleghany County compared to 7.2 per 1,000 in Hyde County and 11.8 per 1,000 in North Carolina. Among the 491 births for Alleghany women from 2014 to 2018, 9.8 percent were delivered at less than 37 weeks, which is considered premature.[99]

Prenatal Care

Initiation of prenatal care among pregnant women in Alleghany County is higher than state averages: 75 percent of women in Alleghany County receive care beginning in the second or third month of pregnancy, compared to 63 percent at the state level. The majority of pregnant women in Alleghany County receive 14 prenatal care visits, compared to an average of 8 prenatal care visits in Hyde County.

More than 1 in 5 babies born in Alleghany County have a mother who smoked during pregnancy.

Alleghany County has a much higher percentage of births to women who smoked during pregnancy (20.8 percent) when compared to North Carolina (9.0 percent). This rate is much higher than the rate for Hyde County (9.8 percent).

Low Birth Weight and Preterm Birth

The rate of preterm births in Alleghany County is 9.8 percent, slightly lower than the state average (10.2 percent) but significantly higher than Hyde County (6.2 percent). From 2014-2018, 38 babies (7.7 percent) in Alleghany County were born with a low birth weight (<5.5 pounds at birth).

Infant Mortality

The infant mortality rate in Alleghany County (6.4 per 1,000 live births) was nearly that of the state rate (7.0 percent per 1,000) from 2015-2019. This rate of infant mortality for 2018 alone was one.[100]

Teen Pregnancy

North Carolina's teen pregnancy rate fell 9 percent in 2016-2018, 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, 8,130 North Carolina girls ages 15-19 experienced a pregnancy in 2019. With this new decline, the state's teen pregnancy rate has fallen 73 percent since it peaked in 1990.

Out of all NC county ratings, Alleghany ranks 22th in teen pregnancies (with 100 being the lowest rate).[101]

[99] State Center for Health Statistics: NC Resident Births Delivered by Gestation (2014-2018)
[100] Center for State Health Statistics: NC Resident Child Deaths Ages 0-17 (2015-2019, 2018)
[101] County Health Rankings & Roadmaps (2021)

Factors for Healthy Babies	Alleghany	Hyde	NC
Women who receive early prenatal care	75%	Not available	63%
Births to women who smoked while pregnant	20.8%	9.8%	9.0%
Preterm birth rate	9.8%	10.2	6.2%

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

Almost one in five adults (18.77 percent) in North Carolina has a mental health condition. More than half of adults in North Carolina (54.6 percent) with any mental illness report not receiving mental health treatment or counseling of any kind. One out of every three adults in North Carolina with mental illness are uninsured.[102]

Among adults served in North Carolina's public mental health system in 2015, the following percentages were not in the labor force:[103]

- 44.0% of individuals ages 18–20
- 12.6% of those ages 21–64
- 44.0% of those ages 65 or older

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[104] 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.[105]

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.[106] It is important to consider this health disparity when addressing mental health in our community.

According to the Youth Risk Behavior Survey conducted in 2021 at Alleghany County High School, 24 percent of students felt so sad or hopeless almost every day for at least 2 weeks in a row (within the past year) that they stopped doing some usual activities. This percentage is lower than the North Carolina average (26 percent) and the national average (30 percent).

[102] Mental Health America 2020 Adult Data
[103] SAMHSA Behavioral Health Barometer (2017)
[104] As defined by the Appalachian Regional Commission
[105] American Psychiatric Association (2017)
[106] Behavioral Risk Factor Surveillance System (2012)

During this same time period, 15 percent of students reported that they hurt themselves on purpose without intending to kill themselves (in the past year). This percentage increased from the 2015 amount of 13 percent.[107]

Access to Mental Health Screening, Providers and Treatment

Access to counseling, referral services, case management and crisis management continues to improve in Alleghany 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.[108]

In June 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.[109]

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.[110]

Data from the most recent National Survey of Children's Health for 2018 indicates that one in three children and adolescents in the United States experiences at least one potentially traumatic event before the age of 18. The top three traumatic events in children's lifetime can be seen in the table below[111]:

Traumatic Events Description	Percentage of Traumatic Events
Parents/Guardians divorced or separated	23.4%
Lived with anyone with an alcohol or substance misuse problem	8.0%
Parent/Guardian served time in jail	7.4%

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.

[107] Youth Risk Behavior Surveillance System: Alleghany County High School (2021)
[108] Daymark Recovery Services (2018)
[109] Vaya Health website: About (2018)
[110] SAMHSA: Trauma and Violence (2018)
[111] National Survey of Children's Health (2018)

Trauma increases the risk of developing substance misuse, and substance misuse increases the likelihood that individuals will experience trauma.[112] Building resilience in a community is a key strategy for addressing trauma and substance use.

Suicide

The rate of suicide in Alleghany County has increased since the last Community Health Assessment from 22.1 per 100,000 people (2012-2016) to 31.0 per 100,000 people (2014-2018).

Suicide is the second leading cause of death for individuals ages 19 years or younger and for individuals ages 20-39. This statistic should be considered with caution due to very small numbers.

According to the Youth Risk Behavior Survey conducted in 2021 at Alleghany County High School, 10.7 percent of students seriously considered attempting suicide in the past 12 months, and 7.4 percent of students made a plan about how to attempt suicide in the past 12 months. Approximately 4.8 percent of students attempted suicide in the past 12 months. Each of these rates has increased since the last survey was conducted in 2015.[113]

Integrated care

Seeking primary healthcare is often the first step to accessing behavioral 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 has been shown to produce the best outcomes for people with multiple healthcare needs.[114]

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 Alleghany County, 11.3 percent of individuals had no health insurance coverage in 2019. From 2015-2019, 9.9 percent of individuals who were unemployed had health insurance.[115] The uninsured rate for individuals in Alleghany County has improved since the last Community Health Assessment rate of 19.8 percent.[116]

Less than half of individuals who are unemployed in Alleghany County have health insurance.

The rate of individuals who are unemployed and uninsured in Alleghany County (90.1 percent) is significantly higher than the North Carolina rate (39.4 percent) and for the United States overall (28.3 percent).

Children ages 0-18 years in Alleghany County have an uninsured rate of 0.9 percent, which is less than the rate of 5.8 percent for the state of North Carolina. Approximately 1 in 2 families in Alleghany have an income below the poverty level and have related children of the household who are under 18 years of age (40.9 percent). Among those same

[112] National Child Traumatic Stress Network: Making the Connection: Trauma and Substance Abuse
[113] Youth Risk Behavior Surveillance System: Alleghany County High School (2021)
[114] SAMHSA: What is Integrated Care? (2018)
[115] American Community Survey 5-year estimates (2015-2019)
[116] American Community Survey 5-year estimates (2012-2016)

families, more than half (53.1 percent) have children under the age of 5. 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 2021 Federal Poverty Guidelines, a family of two with a household income of $17,420 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.

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.[117] This is due partly to NC Health Choice.

In 2019, 0.9 percent of Alleghany County residents under age 18 (or 18 individuals) were uninsured, which is slightly less 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.

Report Area	Primary Care Physicians	Ratio of population to primary care physician
Alleghany County	5	930:1
Hyde County	1	5,230:1
North Carolina	7,420	1,400:1

Respondents from the health opinion survey believe that access to healthcare is the most important factor for a “healthy community.” Among opinion survey respondents, 86 percent have a medical home, a place where they receive medical care on a regular basis.

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.

The table shows the access to primary care in ratio of population to primary care physicians. Alleghany County has a higher ratio than that of North Carolina and its peer county, Hyde 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.

Pharmacy Access

[117] Small Area Health Insurance Estimates (2017)

Alleghany County has a ratio of 4.45 pharmacists per 10,000 population with a total of 5 pharmacists reported in 2017.[118] Many of the pharmacies located in Alleghany 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.

Community Assets that Support Health

There are many assets in Alleghany 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 Alleghany County that help support health, although this list is not exhaustive.

Business development
Economic development is an important part of improving community health. The Blue Ridge Business Development Center (BDC) in Spartaoffers support to small business owners and overall economic development for the county. The Blue Ridge BDC offers free Internet access and computer training for all citizens, business consulting services, entrepreneurial training, and supports entrepreneurs and current business owners to grow their businesses.[119]

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 provide 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

[118] NC Health Professionals Data System (2017)
[119] Blue Ridge Business Development Center website (2018)

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 for health reasons.

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 the 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 opportunities
The Wilkes Community College Alleghany Center is an active partner in the county's economic development. The center provides traditional curriculum and continuing education courses, including a variety of industrial training, job skills development, and more. The Basic Skills program assists adults who want to improve their literacy skills, earn an adult high school diploma, or prepare for the Adult High School Equivalency exam. The center is co-located with the Blue Ridge Business Development Center and the Alleghany County Public Library. The Blue Ridge BDC offers support to small business owners and is focused on economic development for the county.

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 such as Alleghany CARES 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. Health Resources in Alleghany County

In addition to the resources above, Alleghany 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.

NCCARE360
NCCARE360 is the first statewide network that unites health care and human services organizations with a shared technology that enables a coordinated, community-oriented approach, person-centered approach for delivering care in North Carolina. NCCARE360 helps providers electronically connect those with identified needs to community resources and allow for feedback and follow up. This solution ensures accountability for services delivered, provides a "no wrong door" approach, closes the loop on every referral made, and reports outcomes of that connection. NCCARE360 is available in all 100 counties across North Carolina. For more information about NCCARE360, see https://nccare360.org/.

Next Steps for Community Health Improvement Planning

The findings in this document lead us to action. Now that local coalitions have selected three health priorities (Substance Use & Misuse Prevention, Mental/Behavioral Health, Family & Social Supports) with consideration to our community context, we will continue to partner with community stakeholders and coalitions to plan and implement appropriate evidence-based interventions (where they exist). Prior to implementing an intervention, we will focus 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. Throughout this process, community members will learn key facts about their community's health and will suggest solutions or provide input about proposed solutions that employ evidence-based strategies.

This process will take place throughout the fall of 2021. The selection of CHA priorities 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 on 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 2030

Local public health efforts are linked up to state and national efforts working toward the same goals over time. AppHealthCare builds upon Healthy People 2030 national strategies and Healthy NC 2030 for statewide strategies. Learn more about Healthy NC 2030 here: https://schs.dph.ncdhhs.gov/units/ldas/hnc.htm

The Healthy NC 2030 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.

2020 CHA Survey

Everyone should have the opportunity for health. Some things like not having enough food or reliable transportation or a safe place to live can make it hard to be healthy. The purpose of this survey is to collect an accurate snapshot of community needs in our area.

1. **Are you 18 or older?**

   Yes/No (If no, they cannot complete survey)

2. **What county do you live in? If "other" end survey**

   Watauga, Ashe, Alleghany, Other

3. **Are you a full or part-time resident in this county? If so, choose one.**

   □ Full Time

   □ Part Time

	Always	Frequently	Occasionally	Never
Within the past 12 months and considering the impacts of the COVID-19 pandemic, ...				
Food				
1. Have you worried that your food would run out before you got money to buy more?				
2. Did the food you bought just not last and you didn't have money to get more?				
Housing/ Utilities				
3. Have you ever stayed: outside, in a car, in a tent, in an overnight shelter, or temporarily in someone else's home (i.e. couch-surfing) because you didn't have anywhere else to stay?				
4. Have you worried about losing your housing?				
5. Have you been unable to pay for utilities (heat, electricity) when it was really needed?				
Transportation				
6. Has a lack of transportation kept you from medical appointments or from doing things needed for daily living?				
Interpersonal Safety				
7. Have you felt physically or emotionally unsafe where you currently live?	**Yes**	**No**		

8. Have you been humiliated or emotionally abused by anyone?	**Yes**	**No**		
Childcare (PROVIDE HEADER OF WITHIN THE PAST 12 MONTHS…)				
9. Have you lost or been without childcare?	**Yes**	**No**		
10. Have you lost or left a job due to lack of childcare?	**Yes**	**No**		
11. Are you a family member who has had to watch children because of the lack of access to childcare?	**Yes**	**No**		
COVID-19				
12. Have you ever been told to stay home due to a positive COVID-19 test? (isolate)	**Yes**	**No**		
13. Have you ever been told to stay home due to an exposure to a positive COVID-19 case? (quarantine)	**Yes**	**No**		
14. Are you likely to get a COVID-19 vaccine if one were to become available?	**Yes**	**No**		
15. "If not, what would help you get the COVID-19 vaccine?"	Multiple Choice: (select all that apply) 1) My doctor said I should get it 2) A family member got it 3) State or CDC guidance 4) Research proving the vaccination works 5) If the vaccine is free 6) Knowing that side effects are not severe 7) Having a resource to call for questions about the vaccine 8) I do not plan to get the vaccine			
Accessibility of Community Resources **How needed are the following resources in your community:**	**Extremely Needed**	**Needed**	**Somewhat Needed**	**Not at all needed**
16. Mental health resources and support				
17. Programs that give drug users clean needles to prevent the spread of disease				
18. Programs that provide treatment and recovery for individuals with drug and alcohol addiction				

19. Please share any remaining comments that you would like for us to know:

Demographics

20. What is your age?

_____ ☐ Prefer not to answer

21. What is your gender identity?

☐ Male

☐ Female

☐ Transgender

☐ Do not identify as female, male, or transgender

☐ Prefer not to answer

22. What is your primary language?

☐ English ☐ Spanish ☐ Other: _____

☐ Prefer not to answer

23. What is your race? (select all that apply:)

☐ African American/Black

☐ Asian/Pacific Islander

☐ Hispanic/Latino/Latina

☐ White

☐ Native American/Alaska Native

☐ Other: _____

☐ Prefer not to answer

24. What is your ethnicity?

☐ Hispanic or Latinx or Spanish Origin

☐ Not Hispanic or Latinx or Spanish Origin

☐ Prefer not to answer

25. What was your total household income during the past 12 months?

Less than $25,000

$25,000 to $34,999

$35,000 to $49,999

$50,000 to $74,999

$75,000 to $99,999

$100,000 to $149,999

$150,000 or more

Prefer not to answer