

# Lincoln County Community Health Assessment

# 2019



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## Acknowledgements

The Lincoln County Health Department in collaboration with the Lincoln County Partnership for Health and Lincoln County Board of Health worked together to determine priorities and gather necessary data to complete the 2019 Community Health Assessment. Lincoln County Health Department Community Health Staff would like to thank members of the Partnership for Health and Board of Health for their work and support during this process.

2019 Partnership for Health Committee		
Name	Organization	Role
Lena Jones	Lincoln County Health Department	Health Operations Manager
Sherry Reinhardt	Lincoln County Child Advocacy Center	Director
John Davis	Lincoln County Parks and Recreation	Director
Tony Carpenter	Department of Social Services	Director
Kasa Khang	Gaston Family Health Services	Community Resource Advocate
Darlene Hollar	Transportation	Administrative Support Assistant
Kristal Ford	Transportation	Transportation Manager
Kim Campbell	Lincoln County EMS	Deputy Director
Kathy Vinzant	United Way	Executive Director
Karen Anzola	Partnership for Children	Program Manager
Prissy Helms	NC Oral Health Section	Public Health Dental Hygienist
Marisa Brooks	Lincoln County Health Department	Care Coordination for Children
Wanda Clary	Atrium Health	Faith Community Health Ministry Coordinator
Rusty Saine	Lincoln County Schools	Director of Accountability
Krista Phillips	Lincoln County Health Department	Sr. PHN-QA/QI
Rebecca Grobe	YMCA	Sr. Director of Healthy Living
Alisha Dameron	YMCA	Membership/Community
Kenneth Gehrig	Partners Behavioral Health Management	Community Engagement Specialist
Casey Pruitt	Partners Behavioral Health Management	Family Lead
Shikeena Pope	Partners Behavioral Health Management	SAMHSA Grant, Social Marketing Lead
Jeanne Patterson	Partners Behavioral Health Management	System of Care Child Liaison
Katie Munger	Ollie Harris Behavioral Health Center	Site Director
Jennifer Greene	Partners Behavioral Health Management	Integrated Care Project Manager
Jordan Frye	Atrium Health	Community Relations
Jay Flynn	Denver Fire Department	Fire Chief
John Dancoff	Lincoln Economic Development Assoc.	Existing Business Manager
Zach Troutman	NC Cooperative Extension	Family and Consumer Sciences Agent
Patrick Fletcher	Keever Pharmacy	Pharmacy Manager
Sue Gauthier	Lincoln County Child Advocacy Center	Volunteer Coordinator/Court Advocate
Kellie Hardin	Lincoln County Health Department	Community Health Manager
Maggie Dollar	Lincoln County Health Department	Director
Laney Avery	Lincoln County Health Department	Public Health Educator

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## Lincoln County 2019 CHA Executive Summary

### Vision Statement

The Lincoln County Community Health Assessment (CHA) was completed in collaboration with the Lincoln County Partnership for Health. The Lincoln County Partnership for Health believes in a vision of encouraging health and wellness for all through education, awareness, and prevention by means of active community collaboration.

### Purpose and Process

The Lincoln County Partnership for Health reviewed data sources including primary and secondary data to identify topic areas that should be prioritized due to the impact these areas have on the health of Lincoln County. The priorities were approved for use by the Lincoln County Board of Health. A draft of the 2019 CHA was then reviewed and feedback was provided by the Partnership for Health on January 9, 2020. Changes and edits were made to the document based on recommendations.

Throughout the CHA document it is noted when gaps in health status is influenced by socioeconomic status, physical location, and demographic factors. We found a correlation between the health outcomes of individuals who live, work, and play in Lincoln County when analyzing the data using a Socio-Ecological Model lens. The Socio-Ecological Model illustrates that social policies, cultural values and expectations that contribute to a sense of community, organizational constraints, and interpersonal relationships influence the health and wellness of a community and can impact decision making regarding personal behaviors.

### Socio-Ecological Model



Source: ResearchGate

The Lincoln County Partnership for Health is vital to the Community Health Assessment process by providing data specific to their organizations, reviewing and editing the Community Health Opinion Survey, encouraging their partner organizations to participate in the survey completion and collection process, setting priorities, reviewing the CHA document and providing feedback prior to submittal, and creating Community Health Improvement Plans once the 2019 CHA document receives approval. For a list of the partners included in the Community Health Assessment process, please see the table below.

Partnerships	Number of Partners
Public Health Agency	2
Government Agencies	3
Hospital/Health Care System	1
Healthcare Providers	1
Behavioral Healthcare Providers	2
Dental Health Providers	0
EMS Provider	1
Pharmacy	1
Community Organizations	7
Businesses	0
Public School System	1
Media/Communication Outlets	0
Public Members	0

## Community History and Demographics

Lincoln County was originally formed in 1779 from a larger county, Tryon County. Once a larger county itself, parts of Lincoln County were later annexed to become part of Cleveland County, Catawba County, and Gaston County. Today, Lincoln County is uniquely comprised of rich farmlands in the western part of the county, one municipality in the center of historic downtown Lincolnton, and the entire eastern border of the county is surrounded by Lake Norman (LEDA, 2016). Lincoln County is the home of many historical landmarks and you can find placards noting these locations throughout the county.

During the twentieth century new businesses and factories moved into Lincoln County helping to grow the economy for residents and stabilizing commerce. During this time, the downtown area of Lincoln County was vibrant and prosperous. Today, there are new economic revitalization programs proposed to help bolster downtown Lincolnton's commerce. In the eastern end of the county, Trilogy of Lake Norman is the largest residential subdivision for single family and multi-family homes (LEDA, May 2016). Lincolnton is attracting new restaurants and businesses that will support economic growth within the county (North Carolina History Project Encyclopedia: Lincoln County (1779) and Lincoln County Historical Association: Historic Sites of Lincoln County).

Lincoln County has an estimated total population of 83,770 (2018 US Census estimates). This estimate represents a 3.4% increase in the total population when compared to 2015 census data (81,035). According to 2018 US Census Bureau data, non-Hispanic whites make up 91.5% of the total population of Lincoln County, followed by non-Hispanic blacks who make up 5.7%, and 2.8% of some other race. Additionally, 7.2% of our total population identifies as Hispanic ethnicity.

## Key Findings

Lifespan (maximum time a person can live) and quality of life are the factors used to determine our health outcomes. Increased morbidity affects our pre-quantified life expectancies (actual time a person lives) that are calculated based on each individual's year of birth and demographic influences. This pre-calculated measure can be affected negatively or positively at many different times during one's lifetime. The calculated life expectancies for individuals born between 2016 and 2018 in Lincoln County is 77.4 years, which is higher than our neighboring counties of Catawba (76.6 years) and Gaston (75.7 years), and the state (77.0 years). Statistically, white non-Hispanic females have longer calculated life expectancies than their male and black, non-Hispanic counterparts. Quality of life is largely impacted by the numbers of self-reported poor physical health and poor mental health days that plague individuals. 2019 County Health Rankings and Roadmaps data reported Lincoln County residents experienced 3.5 poor physical health and 3.9 poor mental health days within the 30 days prior to the survey. Additionally, 15% of Lincoln County residents reported poor or fair health compared to 18% statewide.

The Socio-Ecological Model relates to the three chosen priorities by examining each level to identify factors that influence substance use, emergency preparedness, and health services. Individual, family, social, and community factors can predict substance use patterns among community members. The paper written by Fawcett et al. (1994) states that improved educational opportunities, better parent communication, and the ability to understand the risks of substance use leads to improved refusal skills. Additionally, each level of the Socio-Ecological Model interact to determine an individual's ability to prioritize personal preparedness, and this prioritization can increase the likelihood that individuals, families, and communities are better equipped to recover from disaster. The organizational environment in Lincoln County shows a need for additional medical providers. The Lincoln County medical provider to person ratio for primary care is 2,080:1, for dentists is 2,350:1, and for mental health providers is 2,110:1. Research shows lower medical provider to person ratio improves access to health care by reducing driving distance, reducing time away from work, and improving patient follow-up adherence.



## Populations at Risk

Populations found to be vulnerable based on available data include:

- Individuals impacted by demographic and socioeconomic factors including race, age, gender, educational attainment, household income, and social support.
- Individuals impacted by substance use disorders.
- Individuals impacted by access to care issues caused by patient to provider ratios and utilization of available health insurance options.
- Individuals impacted by past traumas or adverse childhood experiences (ACEs), as they relate to overall health status.

## Process Used to Identify Priorities

Data specific to Lincoln County was not available for many health indicators. To supplement the regional and multi-county data that was available, the Lincoln County Health Department developed a community health opinion survey by modifying the survey provided for use by the NC Health and Human Services Public Health Division. The survey was reviewed and edited by the Lincoln County Partnership for Health before being finalized.

The 2019 Community Health Opinion Survey was made available in English and Spanish. Primary data was collected using a 32 question survey utilizing a convenience sampling technique within Lincoln County. A total of 1,073 surveys were collected for analysis using Survey Monkey.

The 2019 Community Health Assessment (CHA) priorities were chosen very carefully, considering primary and secondary data sources on September 23, 2019. The priorities were chosen by the Lincoln County Partnership for Health. The Partnership for Health used primary data gathered from the 2019 Community Health Opinion Survey, secondary data gathered from a variety of available sources, and their own professional knowledge to suggest potential CHA priorities. The Partnership for Health chose substance use, emergency preparedness, and health services as the three top priorities impacting the health outcomes of Lincoln County residents. The chosen 2019 CHA priorities received final approval by the Lincoln County Board of Health on November 5, 2019.

## Next Steps

Upon approval of the 2019 Community Health Assessment, the Lincoln County Partnership for Health will reconvene to develop Community Health Improvement Plans and next steps. The Lincoln County Partnership for Health will work in subgroups to focus on specific priorities and strategies that are listed in the 2019 Community Health Assessment document. The 2019 priorities were chosen in collaboration with the Lincoln County Partnership for Health and the Lincoln County Board of Health, and will be addressed as a collaborative unit.

## 2019 Community Health Assessment Priorities

Priority	Strategy	Implementation Goal
Substance Use	Education	Provide targeted education strategies to: <ul style="list-style-type: none"> <li>• All community members beginning in middle school, especially students involved in sports and extra curricular activities.</li> <li>• Pre- and post- partum parents and caregivers.</li> </ul>
	Prevention	Provide targeted prevention strategies to: <ul style="list-style-type: none"> <li>• All community members beginning in middle school, especially students involved in sports and extra curricular activities.</li> <li>• Pre- and post- partum parents and caregivers.</li> </ul>
Emergency Preparedness	Education	Provide education and resources to all community members regarding emergency planning and preparedness.
	Awareness	Promote county information and resources regarding emergency planning and preparedness.
Health Services	Education	Provide education regarding recommended well-care visits and age appropriate preventative health and wellness screenings to all community members.
		Provide education and resources regarding healthy eating and physical activity to all community members, to assist in improving healthy decision making.
	Awareness	Promote county specific resources that address primary care, mental health, and oral health needs to improve access to care.

# Chapter 1: Background and Introduction

## What is a Community Health Assessment?

A community health assessment (CHA) is a systematic analysis of the health status of a given population that is used to identify priority health concerns in a community. The goal of this assessment is to develop priorities to address local health and community needs. The CHA is a required document that must be submitted for accreditation by local health departments. As part of the accreditation process, local health departments must provide evidence of collaboration among citizens and stakeholders to educate the public about current health trends of the community. The CHA is utilized by local health departments, agencies, and organizations to guide strategic planning, obtain grant funding, and form collaborative partnerships to provide a holistic health approach to citizens.

Every three years local health departments, in conjunction with community and state partners, conduct a CHA. The purpose of the 2019 Lincoln County CHA is to evaluate the health status of Lincoln County, North Carolina, identify the top three county specific health priorities, identify community resources to address the health priorities, and develop strategies to address resource gaps within the county.

The CHA document completes phase 6 of an 8 phase process to address the health needs of a community. The eight phases of the CHA process include **(1)** establishing a CHA team, **(2)** collecting primary data, **(3)** collecting secondary data, **(4)** interpreting and analyzing county data, **(5)** setting health priorities, **(6)** creating the CHA document, **(7)** disseminating the CHA document to the public, and **(8)** developing Community Health Improvement Plans based on the determined CHA priorities to guide community health work for 2020-2022 (NC DHHS).



## Data Collection and Methodology

Data specific to Lincoln County is not available for many health indicators. To supplement regional and multi-county data, the Lincoln County Health Department developed a community health opinion survey by modifying the survey provided for use by the NC Health and Human Services Public Health Division. The survey was reviewed and edited by the Lincoln County Partnership for Health before being finalized.

The 2019 Community Health Opinion Survey was made available in English and Spanish. Primary data was collected from the 32 question survey utilizing a convenience sampling technique within Lincoln County. Between May and August 2019, paper surveys and survey collection boxes were located at the Lincoln County Health Department, Charles R. Jonas Library, Florence S. Shanklin Library, West Lincoln Branch Library, James W. Warren Citizens Center, Lincoln County Environmental Health, Lincoln County Senior Services, Lincoln County Department of Social Services, Denver Fire Department, and Kever Pharmacy. QR codes were made available in all locations above to encourage residents with QR reader applications to take the survey. Web-links to the online survey were also available on the Lincoln County Government and Lincoln County Health Department websites. Local advertisements were placed in three local, online, and print newspapers between May and August 2019 to encourage community participation. Lincoln County Partnership for Health members distributed survey Web-links to all county childcare locations, Lincoln County School System employees, and Atrium's Healthcare System Lincoln employees. Paper surveys were also made available at Lincoln County festivals and events that took place between May and August 2019. A total of 1,073 surveys were collected for analysis using Survey Monkey.

The Socio-Ecological Model can be used to address various public health related issues. This specific model was used to identify factors that influence Lincoln County in each of the three chosen priorities: substance use, emergency preparedness, and health services. We know that many factors can predict substance use patterns among individuals. In regards to emergency preparedness, each level of the Socio-Ecological Model interact to determine an individual's ability to prioritize personal preparedness. Additionally, the organizational environment in Lincoln County shows a need for additional medical providers. Research shows that by having a lower medical provider to person ratio, access to health care is improved.

## Socio-Ecological Model Framework



Source: ResearchGate



## Chapter 2: Brief County Description

### Community History

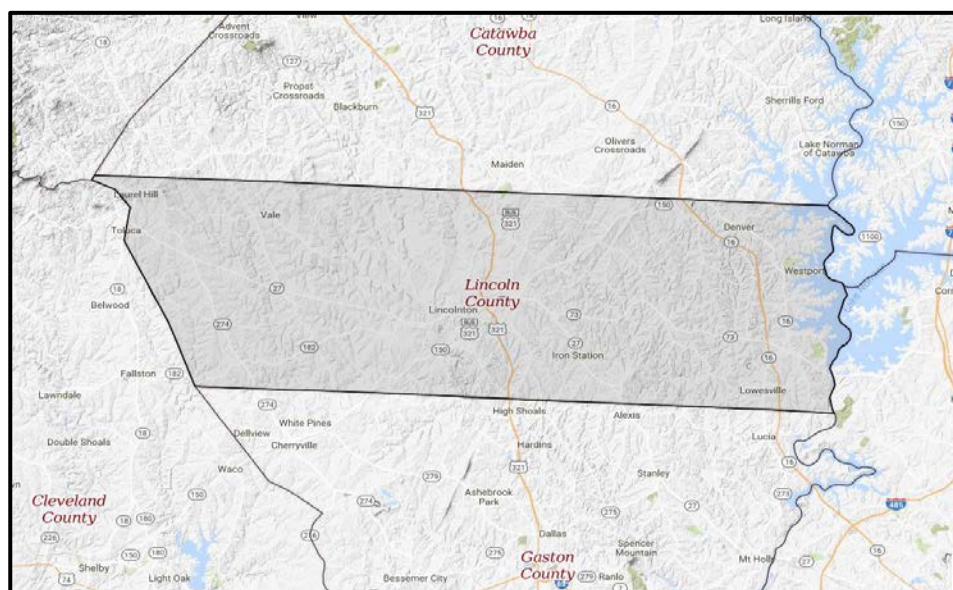
Lincoln County was originally formed in 1779 from a larger county, Tryon County. The county was still larger than it is today because then it contained parts of Cleveland County, Catawba County, and Gaston County. The county received its name in honor of General Benjamin Lincoln who fought in the American Revolution. Lincolnton was later established as the county seat. In the 1800's the county saw a population boom. A cotton mill was built close to the county and soon Lincoln County became the leader in the iron works industry in the state. Later in history, parts of Lincoln County were combined with or wholly taken from the once Lincoln County to form the above mentioned counties as they are today. Due to this annexation, the iron industry dwindled and many mills and large sections of farmland were no longer part of Lincoln County. Today, Lincoln County is the home of many historical landmarks, you can find placards noting these locations throughout the county. During the twentieth century, new businesses and factories moved into Lincoln County helping to grow the economy for residents and stabilizing commerce. The downtown area of Lincoln County was vibrant and prosperous through most of the twentieth century. Currently, there are new economic revitalization programs projected to help bolster downtown Lincolnton's recovery. Lincolnton is attracting new restaurants and businesses that will support economic growth within the county. (North Carolina History Project Encyclopedia: Lincoln County (1779) and Lincoln County Historical Association: Historic Sites of Lincoln County).

### Community Geography, Location & Demographics



Downtown Lincolnton, NC

Lincoln County is located in southwestern North Carolina and is considered part of the Piedmont Region. The county is 30 miles long and 10 miles wide. Lincoln County is bordered by Lake Norman and the Catawba River in the east, Cleveland County in the west, Catawba County in the north, and Gaston County in the south. Lake Norman, the largest man-made lake in North Carolina, was created between 1959 and 1964 due to the construction of the Cowans Ford Dam. Since the county is so long there are stark differences between the east and the west ends, creating diversity within the county. The eastern end is home to bigger businesses, water activities, and contains a larger percentage of Lincoln County's population than the western end, which is home to spacious farmland and luscious green parks. Highway 321 and Highway 16 are the only major highways that run through Lincoln County. (Lincoln County Historical Association: Historic Sites of Lincoln County).



Source: Maptechnica

Lincoln County's population estimate as of July 2018 was 83,770, representing a 3.4% increase in total population from July 2015. Males and Females represent an equal portion of the total population. As of July 2018, whites accounted for a significant proportion of the total population at 91.5%, compared to blacks at 5.7%, American Indian and Alaska Natives at 0.5%, Asians at 0.7%, and those of two or more races at 1.6%. Additionally, individuals of Hispanic ethnicity represented about 7.2% of the total population in Lincoln County.

## Chapter 3: Health Data Collection Process

### Process Used to Identify the Health Priorities

The 2019 Community Health Assessment (CHA) priorities were chosen very carefully, considering primary and secondary data sources on September 23, 2019. The priorities were chosen by the Lincoln County Partnership for Health. The Partnership for Health committee used primary data gathered from the 2019 Community Health Opinion Survey (CHO), secondary data gathered from a variety of available sources, and their own professional knowledge to suggest potential CHA priorities. Potential 2019 CHA priorities included management of mental health, substance use, screening for chronic disease, public safety, and healthy lifestyles. Each suggested priority was ranked utilizing the **Hanlon Method for priority setting** using the criteria of **(1)** magnitude, **(2)** seriousness of the consequences, and **(3)** feasibility of correcting on a 1 to 10 rating scale. The 2019 CHA priorities were selected from the suggested priorities that received the highest numerical rank. The Partnership for Health decided to combine management of mental health and screening for chronic disease to make a stronger priority deemed health services. The three chosen priorities for the 2019 CHA were determined to be substance use, emergency preparedness, and health services in no particular order. **(See Appendix H for details on the Hanlon Method)**

The three chosen priorities selected by the Lincoln County Partnership for Health were presented by the Lincoln County Public Health Educator to the Lincoln County Board of Health on November 5, 2019 for final approval. The proposed priorities were approved unanimously.

### Process Used to Identify Secondary Data Sources

A comprehensive data search was conducted to locate and analyze county, regional, statewide, and national data. Data sources used included the NC Department of Health and Human Services, State Center for Health Statistics, US Census Bureau, Centers for Disease Control and Prevention, Lincoln County specific websites, and various non-profit websites. A complete list of data sources can be found in the Works Cited section of the document.

- NC BRFSS Region 4 is composed of 10 counties including Alexander, Cabarrus, Catawba, Gaston, Iredell, Lincoln, Mecklenburg, Rowan, Stanly, and Union counties.
- NC BRFSS Piedmont Region and Lincoln County Region (LCR) is composed of 35 counties including Alamance, Alexander, Anson, Cabarrus, Caswell, Catawba, Chatham, Cleveland, Davidson, Davie, Durham, Forsyth, Franklin, Gaston, Granville, Guilford, Iredell, Lee, Lincoln, Mecklenburg, Montgomery, Moore, Orange, Person, Randolph, Richmond, Rockingham, Rowan, Stanly, Stokes, Union, Vance, Wake, Warren, and Yadkin counties.



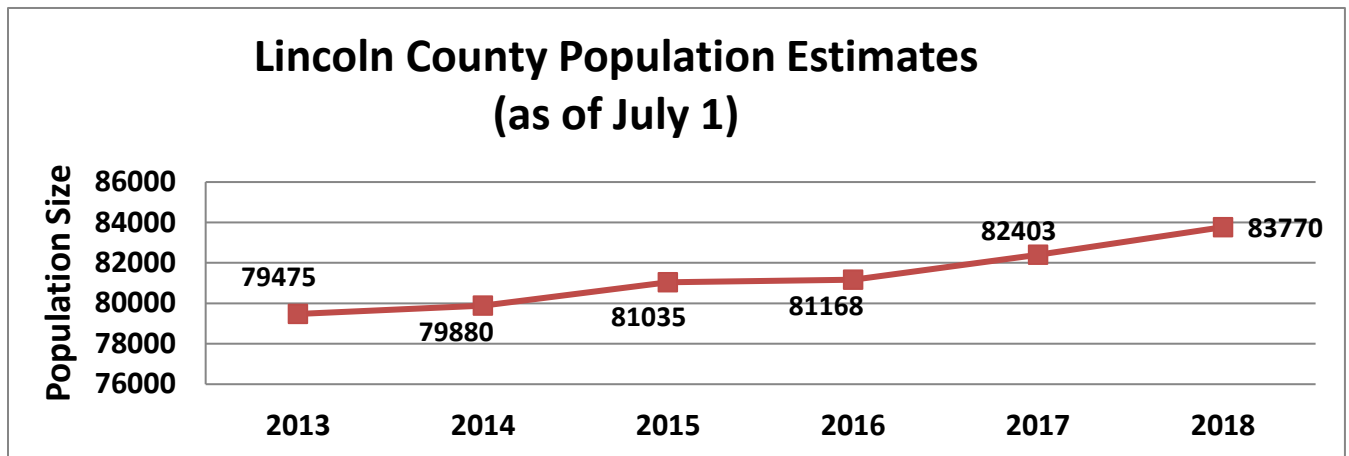
## Chapter 4: Comprehensive Data Results

**2019 Community Health Opinion Survey data is found throughout the document and denoted for your convenience in RED, with the exception of the appendices portion.**

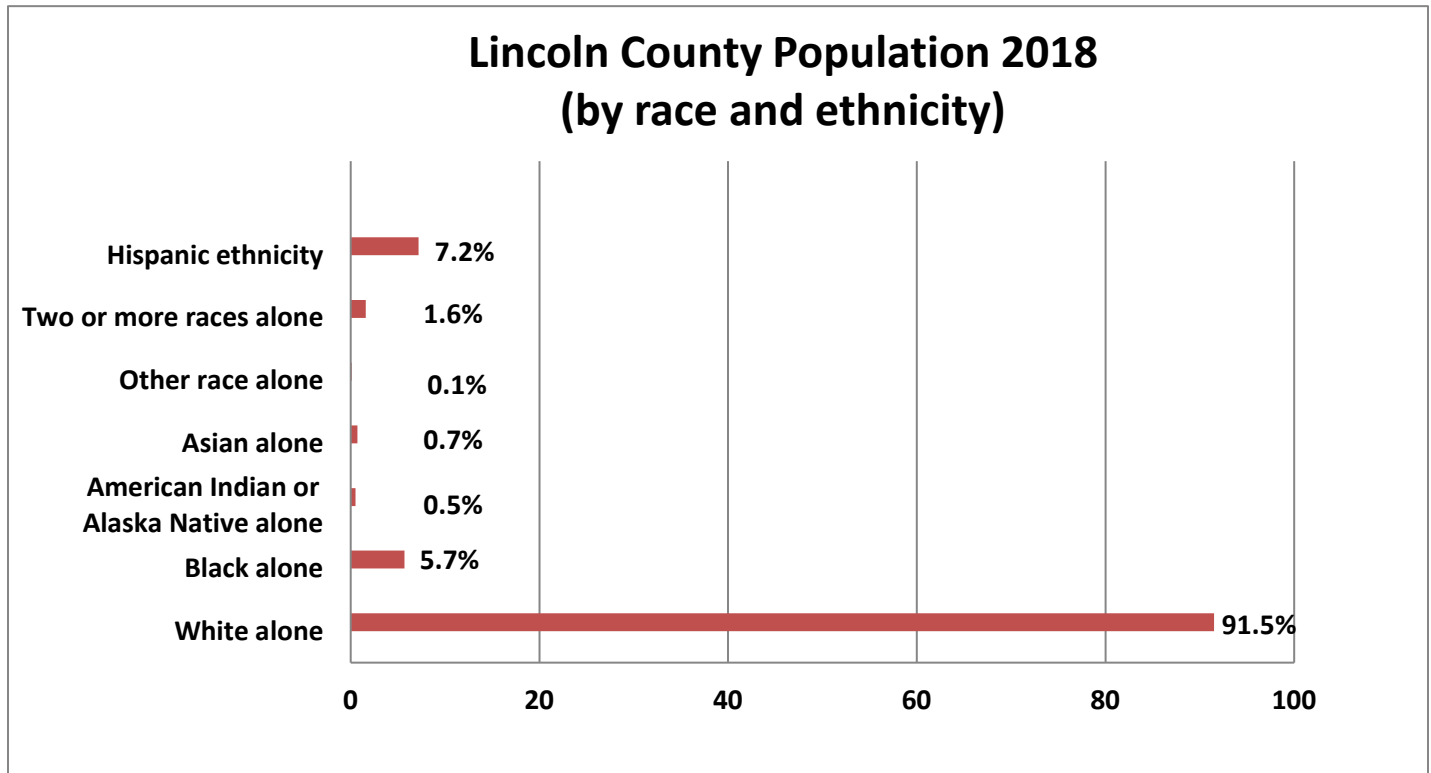
### Social and Economic Factors

#### Population Size

According to the US Census Bureau, the population estimate for Lincoln County, NC was 83,770 people as of July 2018. This estimate represents a 7.4% increase in the total population when compared to 2010 census data (77,985). Catawba County and Gaston County showed a 2.5% and 8.1% increase in population size, respectively, during this same time frame.



Source: US Census Bureau, Population Division Quick Facts



Source: US Census Bureau, 2018 Census

## Income

According to the 2014 - 2018 American Community Survey 5-Year estimates, Lincoln County's median **household income** was \$53,318 and the average household income was \$73,030. According to the American Community Survey, the largest percentage of households report income between \$50,000 and \$74,999 compared to other income brackets. **27% of the 2019 Community Health Opinion (CHO) Survey respondents reported a total household income of \$100,000 or more. Only about 16% reported total household income between \$50,000 and \$74,999.** The percentage of Lincoln County households in the \$50,000 to \$74,999 income bracket has increased every year from 2016 to 2018. **26.3% of 2019 CHO Survey respondents reported a 2019 total household income of less than \$50,000 while 41.5% of respondents reported a total household income of \$75,000 or more.** Economists speculate that the American middle class is waning because the jobs that could support a middle-class lifestyle are disappearing.

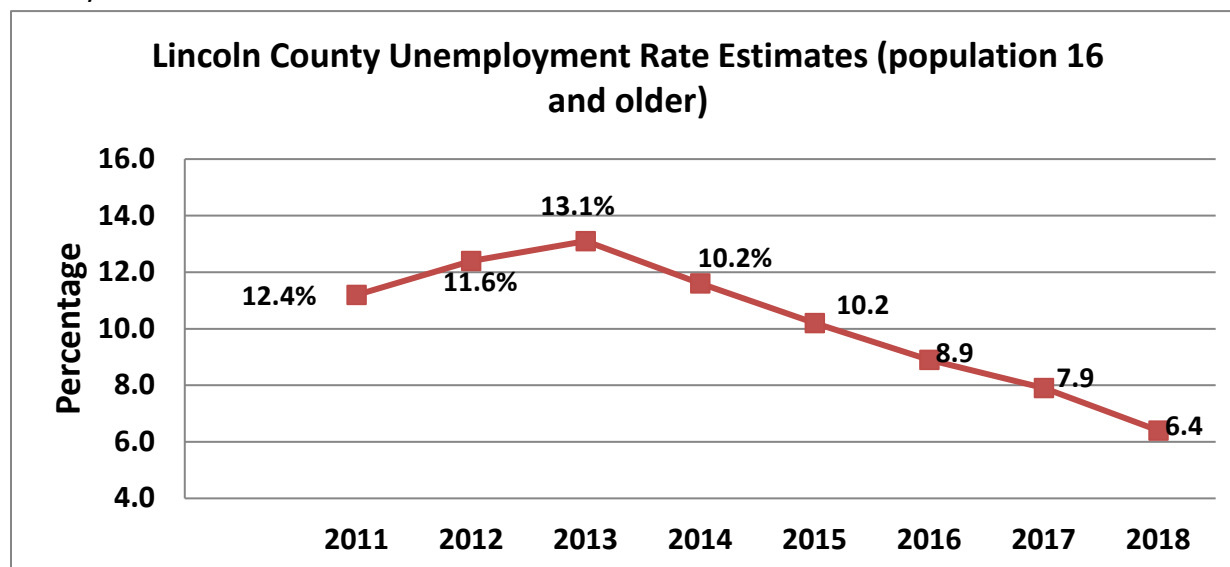
## Poverty

According to US Census Bureau 1-year estimates, 10.1% of Lincoln County residents were considered to be below **poverty level** which is lower than Catawba County's poverty rate (13.5%) and lower than Gaston County's poverty rate (14.2%) in 2018. Considering 5-year

estimates in 2018, Lincoln County residents identifying as Black or African American alone were more likely than any other race to be below poverty level at 27.7%, compared to 12.8% of whites, 0.2% of Asians, 27.6% of Hispanics, and 24.9% of two or more races. According to NC County Health Rankings & Roadmaps, 15% of Lincoln County children younger than 18 years old were considered to be below poverty level in 2019. The **percentage of children in poverty** has been decreasing in Lincoln County every year since 2014 (NC County Health Rankings & Roadmaps). Additionally, 43% of children were eligible for free or reduced lunch in Lincoln County according to the 2019 County Health Rankings Report.

## Employment

In 2018 it was estimated that 61.6% of Lincoln County residents 16 years and older participated in the labor force, compared to North Carolina at 62.4%. The percentage of Lincoln County residents in the above mentioned age range that participates in the labor force has decreased every year since 2011 (66.5%). However, the **unemployment rate** for the same age group has continued to decrease since 2013. Lincoln County's unemployment rate (6.4%) is less than the two counties that account for the largest percentage of our land border at 7.0% for Catawba County and 6.7% for Gaston County in 2018, according to the American Community Survey.



Source: US Census Bureau, 2011-2018 American Community Survey 5-Year Estimates

According to the US Census Bureau, 83.9% of males and 69.3% of females participated in the labor force in 2018. When broken down by race, 61.2% of whites, 61.6% of blacks, 68.6% of American Indian and Alaska Native alone, 66.8% of Asian alone, 75.3% of some other race alone, and 58.1% of individuals identifying with two or more races participated in the labor

force in 2018. 71.2% of individuals of Hispanic or Latino origin (of any race) living in Lincoln County participated in the labor force in 2018. 50.1% of 2019 CHO Survey respondents indicated that they are employed full-time, 8.6% indicated they are employed part-time, 3.1% indicated that they are unemployed, and 28.4% indicated that they are retired.

When considering the Lincoln County **civilian employed population** 16 years and older contributing to the labor force in 2018, 31.6% worked in management, business, science and arts (financial, computers, engineering, legal, education, healthcare practitioner and health technologists occupations), 14.2% worked in service (healthcare support, fire prevention, law enforcement, food preparation, building and ground cleaning, personal care and service occupations), 26.3% worked in sales and office (sales and administrative support occupations), 9.8% worked in natural resources, construction, and maintenance (farming, fishing, forestry, construction, extraction, installation and repair occupations), and 18.0% worked in production, transportation, and material moving occupations. Lincoln County civilian women aged 16 years and older were more likely to work in (1) management, business, science and arts occupations, (2) service occupations, and (3) sales and office occupations than their male counterparts who were more likely to work in (4) natural resources, construction, and maintenance occupations, and (5) production, transportation, and material moving occupations, according to the US Census Bureau. 31.1% of 2019 CHO Survey respondents either disagreed or strongly disagreed when asked if they believe there is plenty of economic opportunity in Lincoln County.

According to the US Census Bureau, the 2018 average **commute time** (to work) for people aged ≥16 in Lincoln County was 29.2 minutes, compared to 22.8 minutes in Catawba County, 27.9 minutes in Gaston County, and 27.1 minutes nationally. The longer average commute time to work for Lincoln County residents could be attributed to lesser job availability and lesser economic opportunities within the County when compared to Catawba County, Gaston County, and nationally.

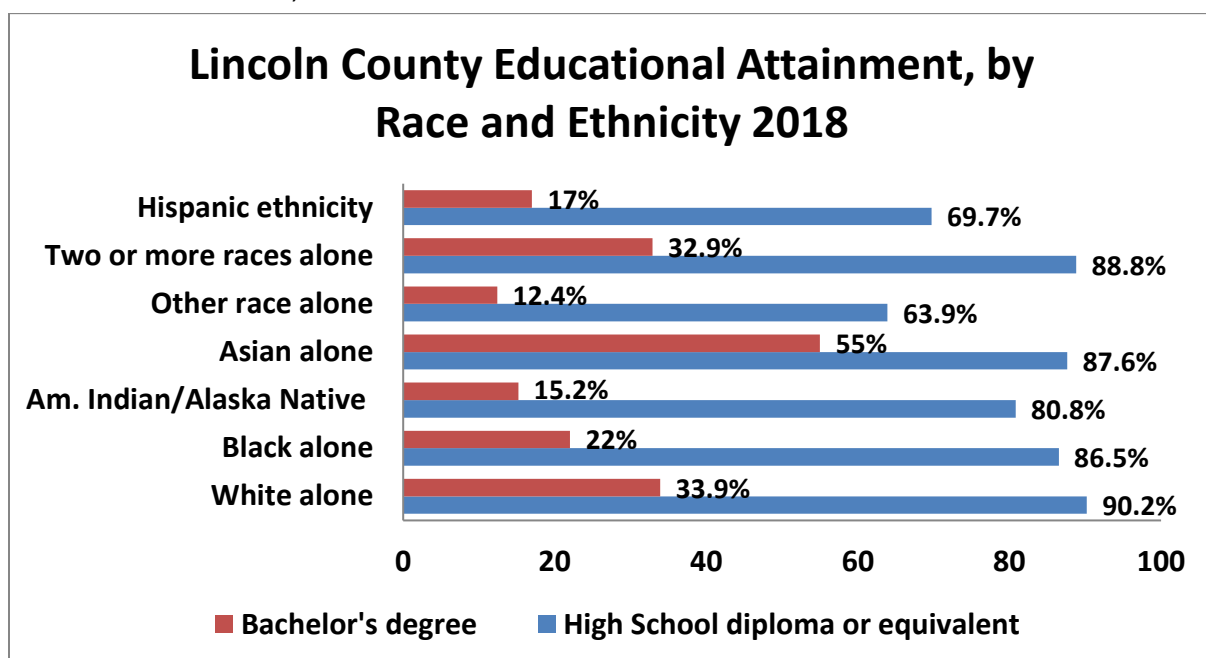
## Disability

According to the 2014 - 2018 American Community Survey 5-Year estimates, 3.8% of Lincoln County residents have difficulty hearing compared to 7% of the 2018 BRFSS Region 4 respondents who said they are deaf or have serious difficulty hearing. Additionally, 13.3% of the 2018 BRFSS Region 4 respondents report that they have serious difficulty walking or climbing stairs. Females were more likely to report having difficulty walking or climbing stairs than their male counterparts at 16.2% and 10.1%, respectively. Physical, mental, or emotional conditions can affect one's ability to live independently. Likewise, 5% of Lincoln County residents report that they are unable to live on their own due to disability. Additionally, when

2018 BRFSS Region 4 survey participants were asked about dressing and bathing, 3.3% responded that they do have difficulty dressing or bathing themselves.

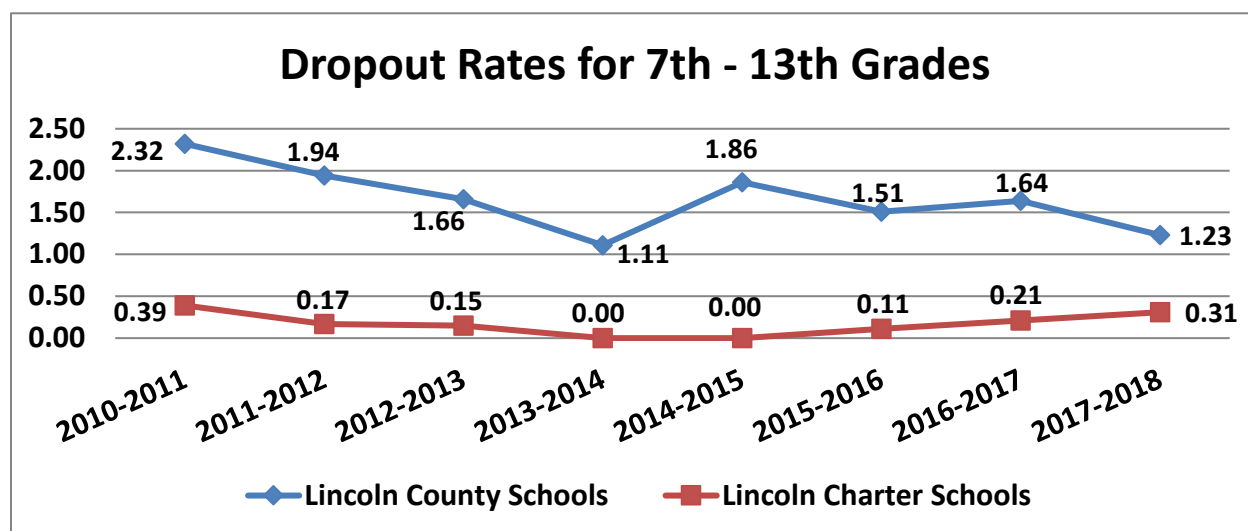
## Education

According to 2018 US Census Bureau estimates, 89.1% of Lincoln County residents aged ≥25 have at least a high school diploma and 25.5% have at least a bachelor's degree. The 2019 CHO Survey indicated that 96.8% of respondents hold a high school diploma or GED and 51.6% hold a Bachelor's Degree or higher. The Lincoln County Schools Superintendent Report indicates that the district four-year graduation rate of 89.9% is higher than the state's graduation rate of 86.3%, in 2017.



Source: US Census Bureau, 2011-2018 American Community Survey 5-Year Estimates

For the 2017-2018 school year, Lincoln County Schools reported 67 total dropouts while Lincoln Charter Schools reported 3 total dropouts for students between 7<sup>th</sup> and 13<sup>th</sup> grades. **Dropout rates** are computed taking the number of students who dropped out and dividing that number by the total number of students in those particular grades. Early college programs are considered grade 13. Dropout rates for Lincoln County Schools and Lincoln Charter Schools have remained mostly consistent between 2012 and 2018.



Source: Public Schools of North Carolina Annual Dropout Reports

Currently, **Lincoln County boasts 14 elementary schools, four middle and four high schools, two public charter schools, one school of technology, four private schools, and one college campus** (LEDA, 2018).

**Educational attainment** is a powerful predictor of health and wellness. Higher academic achievement plays a role in increasing economic opportunity which attributes to higher socioeconomic status. **Socioeconomic status** is a combined total of an individual's or family's social standing as it relates to income, education, occupation, and access to resources. A combination of these things contributes to the distribution of finite wealth (American Psychological Association). A higher socioeconomic status affects many aspects of health and wellness including health and general literacy making it easier to understand health information and interpret important data. When examining our county using a Socio-Ecological Model lens, the emphasis we place on education becomes an important indicator for health.

## Emerging Innovation

Out of the 23,000 employees who work in Lincoln County, almost 5,000 of them work in manufacturing, which accounts for roughly 22 percent of people working in the county. There

are 115 industries operating in Lincoln County (LEDA, 2019). Through a partnership with Lincoln County Schools, the Lincoln Economic Development Association, select local industries, and an Ohio based company (Edge Factor), students are informed of different post-secondary education choices available to pursue careers in Science, Technology, Engineering, Math Education (STEM) and manufacturing (LEDA, 2017).

## Housing

Of the occupied housing units (36,768) in Lincoln County in 2018, 77.5% were **owner-occupied** and 22.5% were **renter-occupied** with an **average household** size of 2.5. Between 2013 and 2017, 90.1% of persons aged ≥1 reported living in the same home for at least the one year prior to the US Census Bureau Survey. The largest percentage (56%) of total housing units in Lincoln County contains 3 bedrooms followed by 2 bedroom homes at 22%. According to the 2019 County Health Rankings and Roadmaps, 25% of Lincoln County's children live in **single-parent households** compared to the state at 35%.

The median monthly combined **mortgage rate** including owner costs (i.e. mortgage, second mortgages, home equity loans, real estate taxes, homeowners insurance, condo fees, mobile home costs, and utilities) for home-owners in Lincoln County is \$1,187 while the median monthly **rent rate** including utilities is \$698, according to the 2018 US Census Bureau Survey.

## Community Safety

**Injury and violence** occurrences largely impact how individuals view the overall safety of their environments in which they live, work, and play. **80% of 2019 CHO Survey respondents indicated they agreed or strongly agreed when asked if they believe Lincoln County is a safe place to live.** Community safety accounts for violent acts and unintentional injuries caused by accidents. **Violent crimes** are person to person offenses between a victim(s) and the perpetrator(s) and include acts such as murder, rape, robbery, and assault. These types of crimes can affect one's lifelong mental and physical health. Lincoln County reported 85 violent crimes in 2016 with a violent crime rate of 150 per 100,000 people, which is lower than NC's rate and the rates reported in our neighboring counties of Catawba and Gaston. NC, Catawba County and Gaston County reported violent crime rates of 375, 280 and 473 per 100,000 people, respectively, during the same timeframe.

According to the 2018 NC Department of Public Safety's Report on Domestic Violence Related Homicides, Lincoln County reported 4 total **domestic violence** related homicides between 2012 and 2018 with one taking place in 2012, 2013, 2014, and 2016. Domestic violence mortality rates and violent crime rates are generally low in Lincoln County.

According to the 2018 North Carolina vital statistics data, **unintentional injuries** were the 5<sup>th</sup> leading cause of death for North Carolina residents. The age-adjusted unintentional injury death rate, including motor vehicle accidents, for Lincoln County was 55.9 per 100,000 people between 2014 and 2018, while the age-adjusted unintentional injury death rate, excluding motor vehicle accidents, was 38.3 per 100,000 persons for the same timeframe. Catawba and Gaston Counties reported aged-adjusted unintentional injury death rates, excluding motor vehicle accidents, at 40.5 and 42.1 per 100,000 persons for the same time period, respectively.

Per the NC State Center for Health Statistics, between 2014 and 2018, Lincoln County reported an age-adjusted **unintentional poisoning** mortality rate of 18.8 per 100,000 population compared to NC, Catawba, and Gaston Counties at 18.5, 21.7, and 23.1, respectively.

**Traumatic brain injuries** often occur as a result of a fall when one suffers a major blow to the head. Immediate or delayed symptoms may include confusion, blurry vision, and difficulty concentrating (Mayo Clinic). According to 2018 BRFSS survey results, 11.7% of North Carolina respondents reported that they had one fall in the last 12 months, and 12.8% reported that they had two or more falls in the same time frame. Of the respondents that reported falling, 39.5% said that they were injured by at least one fall. According to 2018 BRFSS survey results, 24.1% of Region 4 respondents indicated that they have been knocked out or lost consciousness from a previous head or neck injury. Among the respondents who said yes, they have been knocked out or lost consciousness in their lifetime, 82.8% reported that the longest time they were knocked out or lost consciousness was less than 30 minutes, followed by 13.8% who said they were knocked out between 30 minutes and 24 hours. A majority of respondents who reported ever being knocked out were between the ages of 0 and 17 years old (55.7%).

## Social Support

Adequate Social support is important for a person's overall health and wellness because it can positively impact a person's **quality of life**. Factors contributing to social support are highlighted as important indicators of health throughout the Socio-Ecological Model. Thus, social support can take on different forms including emotional (i.e. friendships, community ties, faith community), physical (i.e. monetary, providing services, material goods), and informational (i.e. guidance, advice, valued information). Social support can affect stress levels and self-esteem, immune function, blood pressure levels, and obesity rates. Sufficient social support can produce individuals that are more resilient when faced with factors negatively affecting health and wellness. **55% of 2019 CHO Survey respondents indicated they agreed or**



strongly agreed when asked if they believe there is plenty of help for people during times of need in Lincoln County. Additionally, 77% and 67.2% of respondents indicated they agreed or strongly agreed when asked if Lincoln County is a good place to raise children and if Lincoln County is a good place to grow old, respectively.

## Health Data Results

### Morbidity

**Lifespan** (maximum time a person can live) and **quality of life** are the factors used to determine our health outcomes. Increased morbidity affects our pre-quantified **life expectancies** (actual time a person lives) that are calculated based on each individual's year of birth and demographic influences. This pre-calculated measure can be affected negatively or positively at many different times during one's lifetime. Quality of life refers to an individual's overall wellness as it affects their ability to function comfortably and how they feel overall. Mental and physical health plays a role in determining one's quality of life. Factors that can negatively impact life expectancy and lead to decreased quality of life include damaging physical environment changes (i.e. air pollution, water pollution, deforestation, destruction of natural resources), harmful built environment changes (i.e. decreased green space, decreased walkability, increased numbers of fast-food restaurants in a given location), low birth weight, and consequential health behaviors (i.e. lack of exercise, obesity, failure to receive preventative health and wellness screenings, substance use, unhealthy eating habits, stress).

2019 County Health Rankings & Roadmaps				
Measures	Lincoln County	Top U.S. Performers	North Carolina	Rank (of 100 counties)
<b>Health Behaviors</b>				<b>32</b>
Adult smoking	18%	14%	18%	
Adult obesity	31%	26%	30%	
Food environment index	8.2	8.7	6.6	
Physical inactivity	22%	19%	23%	
Access to exercise opportunities	75%	91%	73%	
Excessive drinking	17%	13%	17%	

Life Expectancy for Individuals Born between 2016-2018	Total Population	Gender		Race	
		Male	Female	White	Black
North Carolina	77.0	74.1	79.8	77.9	74.5
Lincoln County	77.4	75.1	79.7	77.7	75.7
Catawba County	76.6	73.9	79.4	77.2	73.4
Gaston County	75.7	72.9	78.4	75.9	74.6

Source: NC SCHS, 2018 NC and 2016-2018 County Life Expectancies at Birth Report

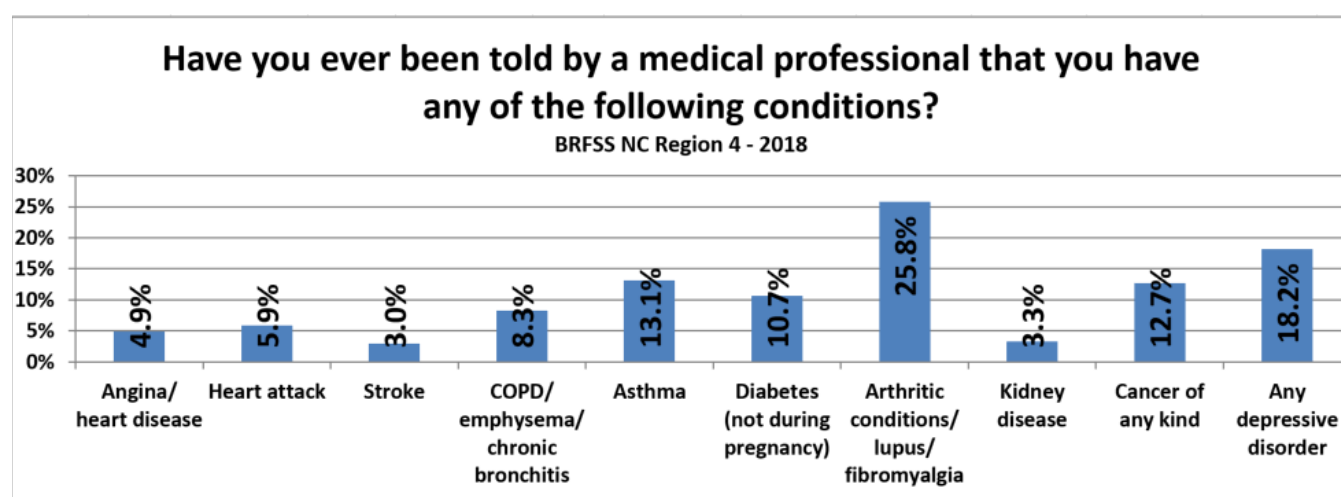
2019 County Health Rankings & Roadmaps					
Measures	Lincoln County	2019 CHO Survey Results	Top U.S. Performers	North Carolina	Rank (of 100 counties)
<b>Quality of Life (Morbidity)</b>					<b>15</b>
Poor or fair health	15%	11.2%	12%	18%	
Poor physical health days (past 30 days)	3.5		3.0	3.6	
Poor mental health days (at least 1 day in past 30 days)	3.9	53.1%	3.1	3.9	
Insufficient sleep	31%		27%	34%	
Low birthweight	8%		6%	9%	

### Chronic Disease

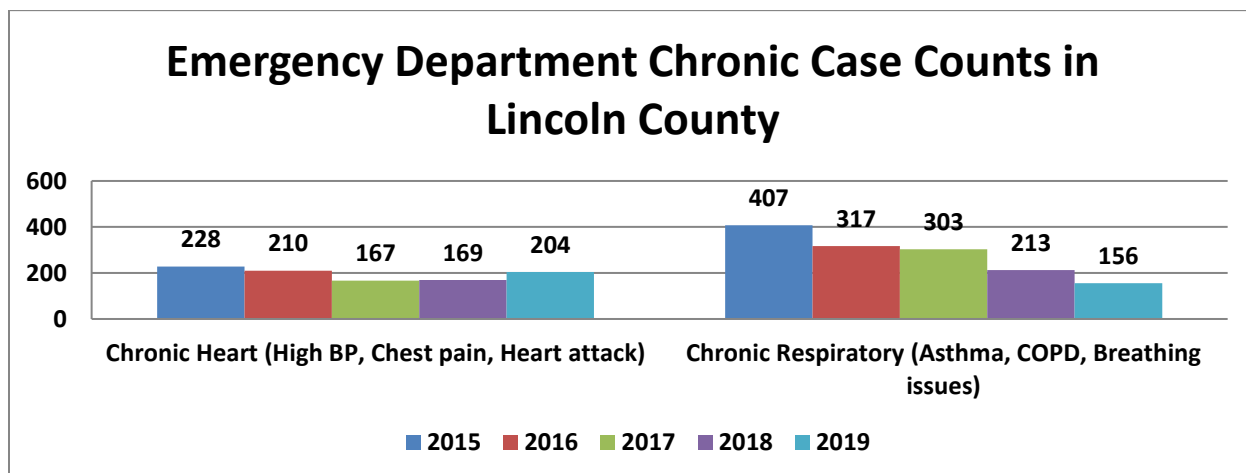
Chronic Disease morbidity is an important public health issue because the presence of chronic disease(s) can greatly impact quality of life and financially burden individuals, families, communities, and the healthcare system nationwide. Prevention of chronic disease is vital because an estimated 54.1% of individuals living in NC reported living with at least one chronic disease condition in 2018, which is an increase from 2017 and 2016 from 52.7% and 51.2%, respectively. Furthermore, 27.8% of individuals residing in NC reported living with two or more chronic disease conditions in 2018, which is an increase from 2017 and 2016 at 26.9% and 25.7%, respectively (NC BRFSS, 2016-2018). Comparably, numbers have increased for individuals who lived in BRFSS NC Region 4 between 2016 and 2018. BRFSS NC Region 4 respondents reported living with at least one chronic disease condition at 48.1% and two or more chronic disease conditions at 21.3% in 2016, increasing to 50.4% and 24.3% in 2017, and 50.5% and 24.8% in 2018, respectively (NC BRFSS, 2016-2018).

According to the 2019 County Health Rankings and Roadmaps, 31% of Lincoln County adults are obese. North Carolina's obesity rate does not fall far below at 30%. **Obesity** is caused by excessive calorie intake and inadequate physical activity, and is often times associated with some preventable chronic diseases, such as heart disease, stroke, diabetes, and cancer (CDC). 23% of BRFSS NC Region 4 respondents reported no participation in any physical activities or exercises during the past month. Additionally, only 17% of Region 4 respondents reported consuming fruits, vegetables, or beans at least five times per day.

In addition to an unhealthy lifestyle resulting in obesity, unhealthy eating habits, lack of physical activity, and smoking can also contribute to high **cholesterol** and **hypertension** (high blood pressure). The human body needs cholesterol to make hormones, vitamin D, and substances to help digest food, but your body makes all the cholesterol it needs. Having too much cholesterol can lead to atherosclerosis and artery disease (Medline Plus). According to 2018 BRFSS, 71.7% of Region 4 respondents reported having their blood cholesterol checked in the past 12 months. However, 8.4% of Region 4 respondents said they have never had their blood cholesterol checked, compared to North Carolina at 9.3%. Furthermore, approximately 30% of NC BRFSS Region 4 respondents reported that they have been told by a doctor, nurse, or other health professional that their blood cholesterol and blood pressure was high. Of the respondents who reported they have been told they have high cholesterol, 52.2% said they are currently taking medicine prescribed by a doctor to lower cholesterol levels. Of the respondents who reported having high blood pressure, 75.5% said they are currently taking medicine to regulate blood pressure.



Source: 2018 NC BRFSS Region 4



Source: 2015-2019 NC DETECT County-Level Chronic Syndrome Charts

Approximately 30% of 2018 Region 4 BRFSS survey respondents said they suffer from **chronic pain** that occurs constantly or flares up often. The cause of chronic pain most reported in 2018 was arthritis (34.4%), followed by back pain (18.4%), then accident or injury chronic pain (9.4%). A majority of respondents who reported chronic pain were in the 45-64 age group. When 2018 NC BRFSS survey participants were asked about severity of pain on a scale of 0 to 10, with 0 meaning no pain at all and 10 meaning the worst pain imaginable, 55.1% of Region 4 respondents ranked their pain between 0 and 5 (mild pain), followed by severe pain (8-10) at 26% of the time, and 18.9% ranked their pain between 6 and 7 (moderate pain). A majority of respondents who indicated they suffer from chronic pain have talked to a doctor, nurse, or other health professional about their pain and are using some form of medication to cope with their pain.

### Other Respiratory Health Considerations

According to the State Center for Health Statistics, **tuberculosis (TB)** counts have remained fairly consistent in Lincoln County between 2014 and 2018. There were no cases of tuberculosis in Lincoln County between 2014 and 2018, except for in 2016, when one case was reported. In North Carolina, there were 196 reported TB cases in 2018 and North Carolina ranked 24 in TB counts in 2018.

### Mortality

Mortality refers to the number of deaths in a certain population within a given unit of time. **Health outcomes** within any given county are largely impacted by premature death scores. **Premature death scores** are considered the age-adjusted total number of years of potential life lost before age 75 per 100,000 persons.

2019 County Health Rankings & Roadmaps				
Measures	Lincoln County	Top U.S. Performers	North Carolina	Rank (of 100 counties)
Health Outcomes				17
Length of Life				31
Premature Death	7,700	5,400	7,600	

According to the 2014-2018 Years of Potential Life Lost Death Report, cancer of all sites had the largest impact on years of potential life lost at 13,999 total years for Lincoln County residents, followed by heart disease at 11,650 total years. When examining gender separately, men displayed a greater number of years of potential lost life than women for both cancer of all sites and heart disease between 2014 and 2018. **(See Appendix A, Table 1 for more details on years of potential life lost)**

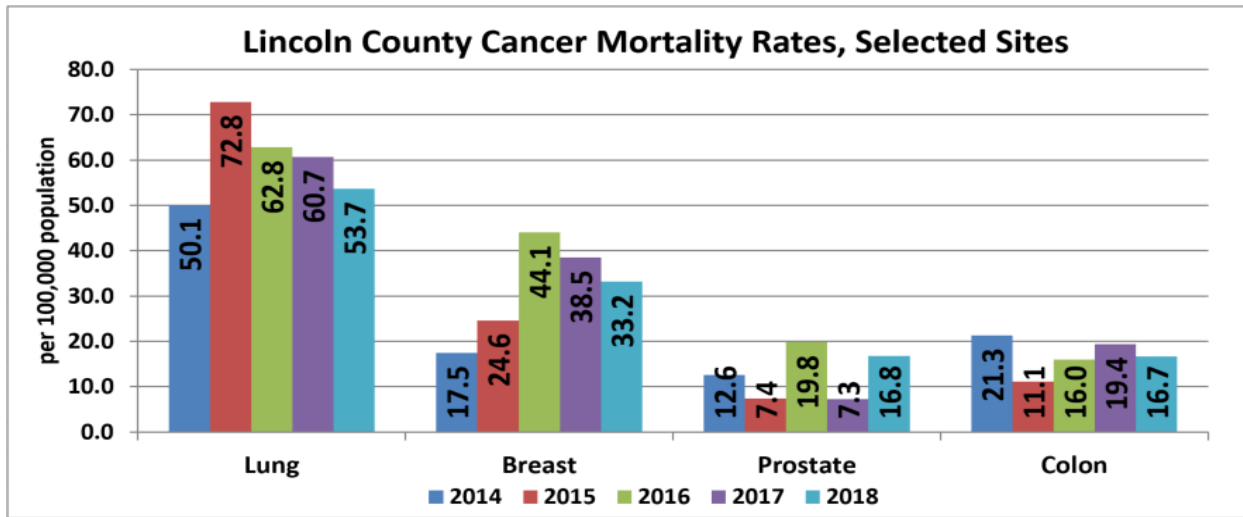
## Leading Causes of Death

2014-2018 Age-Adjusted Death Rates/100,000 for Selected Counties and NC								
Cause of Death	North Carolina		Lincoln County		Catawba County		Gaston County	
	Rank	Rate	Rank	Rate	Rank	Rate	Rank	Rate
Cancer (all sites)	1	161.3	1	211.2	2	165.6	2	177.0
Diseases of the Heart	2	158.0	2	206.0	1	166.4	1	184.3
Chronic Lower Respiratory Diseases	3	44.7	3	72.4	3	68.3	3	70.7
Cerebrovascular Disease	4	43.0	4	49.6	5	42.2	5	44.5
Alzheimer's Disease	6	35.7	5	40.3	4	62.5	4	50.6
Unintentional Injuries (not motor vehicle)	5	37.0	6	38.3	6	40.5	6	42.1
Diabetes Mellitus	7	23.7	7	31.9	8	21.6	7	30.5
Nephritis, Nephrotic Syndrome, and Nephrosis	9	16.4	8	22.8	9	21.2	12	13.9
Unintentional Motor Vehicle Injuries	10	14.5	9	18.9	11	15.1	10	17.3
Pneumonia and Influenza	8	17.4	10	17.2	7	23.4	8	27.9
Septicemia	12	12.8	11	13.3	13	13.8	9	24.4
Suicide	11	13.5	12	12.0	10	17.5	11	17.1
Chronic Liver Disease and Cirrhosis	13	10.4	13	8.6	12	14.5	13	13.4

Source: NC SCHS County-Level Leading Causes of Death

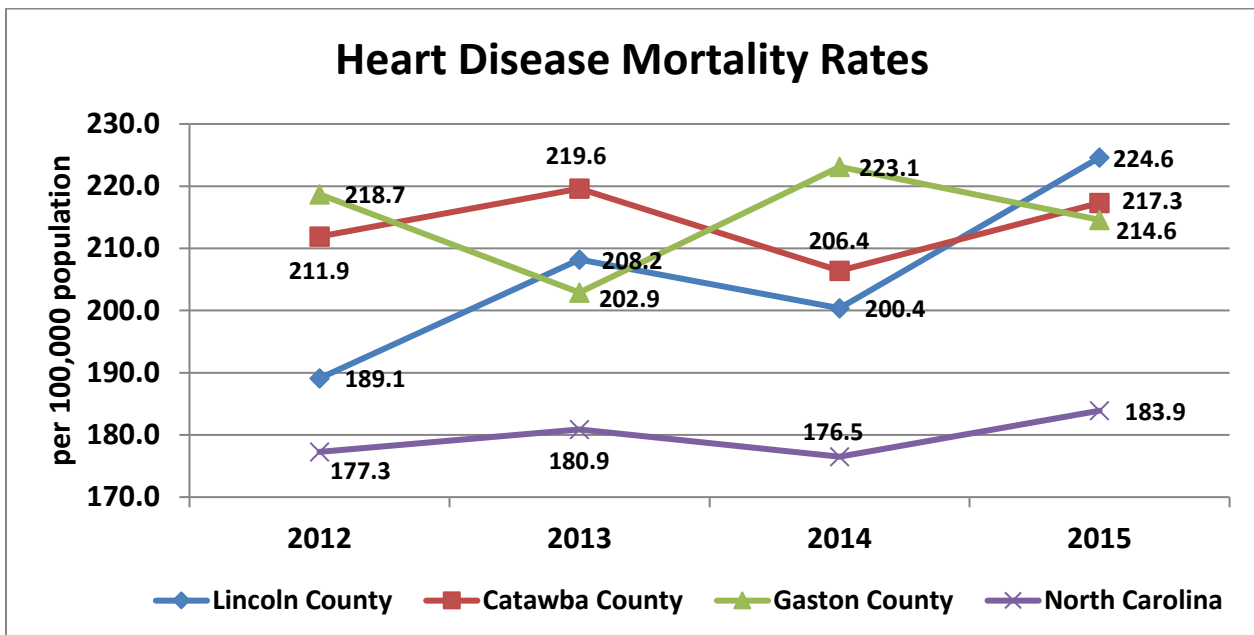
**Cancer was the number one leading cause of death** in Lincoln County for 2014-2018 combined. Per the State Center for Health Statistics, **trachea, bronchus, and lung cancers combined were the leading causes of cancer deaths in Lincoln County** at 45.7 per 100,000 people for 2014-2018 combined. This number increased to 52.6 when only considering men and dropped to 41.5 when only considering women, highlighting a disparity gap between genders. Catawba County, Gaston County, and NC's death rate for trachea, bronchus, and lung

cancers during the same time period were 44.2, 56.8, and 44.1, respectively. These numbers indicate a need for more research and **preventative health services** surrounding lung health.



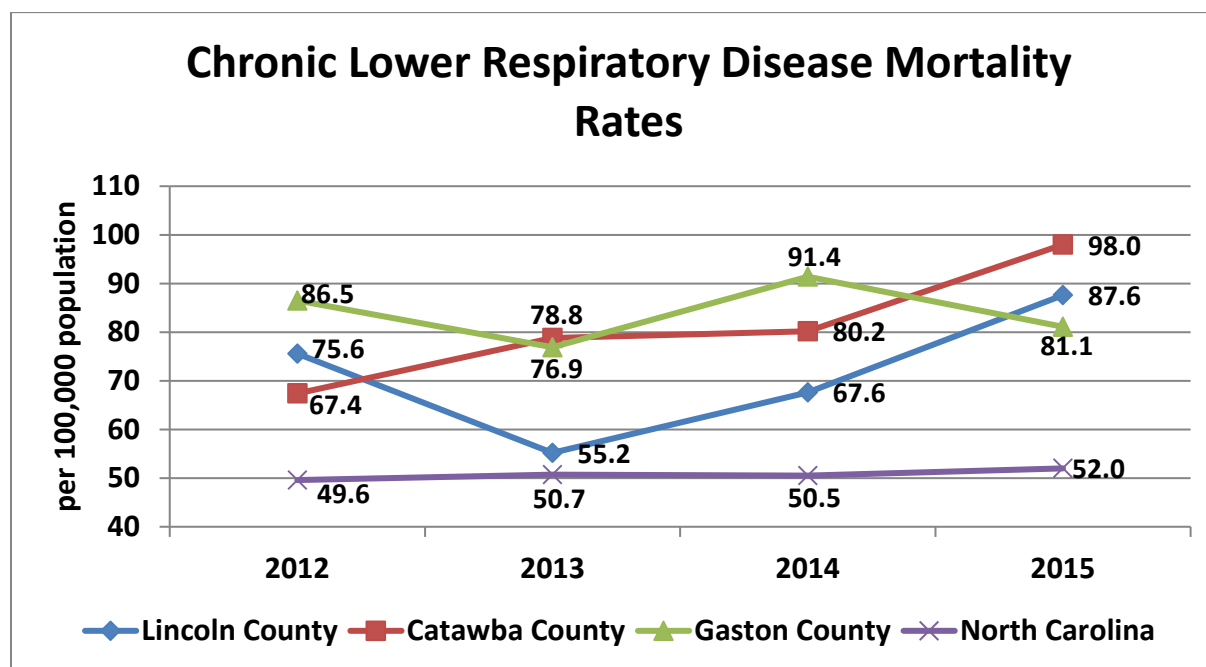
Source: NC SCHS County-Level Cancer of Selected Sites Mortality

**Heart disease was the second leading cause of death** in Lincoln County and North Carolina for 2014-2018 combined. Lincoln County heart disease rates increased to 220.4 when only considering men and dropped to 135.7 when only considering women. Additionally, between 2014 and 2018, heart disease death rates were slightly higher for whites than blacks at 178.2 and 176.0, respectively. These rates indicate a **disparity gap** between genders and races in regards to heart disease death rates in Lincoln County.



Source: NC SCHS County-Level Heart Disease Mortality

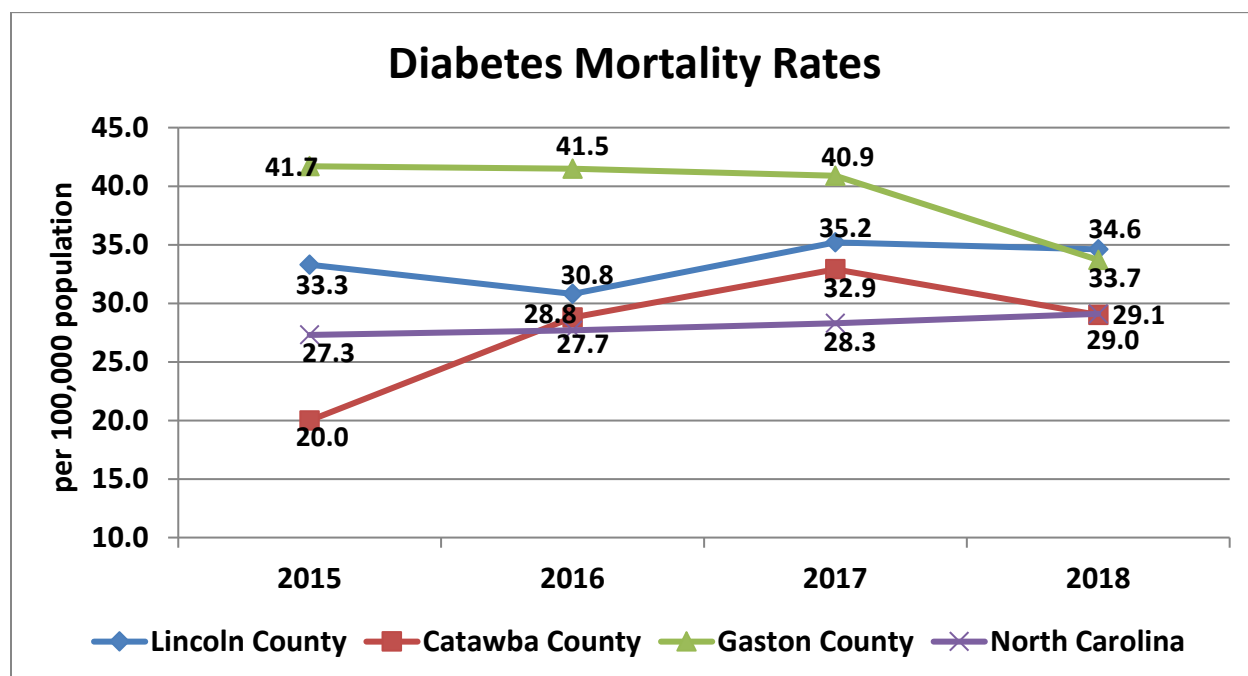
**Chronic lower respiratory diseases were the third leading cause of death** in Lincoln County for 2014-2018 combined. Emergency department case counts of chronic respiratory distress decreased every year in Lincoln County between 2015 and 2019. Chronic lower respiratory diseases include chronic bronchitis, emphysema, and asthma. (NC Detect)



Source: NC SCHS County-Level Chronic Lower Respiratory Disease Mortality

**Diabetes** was included in the top ten leading causes of death between 2015 and 2018. Diabetes was the fourth leading cause of death among adults aged 40-64 in Lincoln County and the fifth leading cause of death among adults aged 65-84 in Lincoln County. In North Carolina, African American males were more likely than any other race to die from diabetes.





Source: NC SCHS County-Level Diabetes Mortality

**Alzheimer's disease** is higher among females than males in North Carolina at 40.1% and 27.9%, respectively. Specifically, American Indian non-Hispanic females have a higher rate of Alzheimer's Disease than any other race.

White non-Hispanic **pneumonia and flu** death rates are higher than any other race when compared to African Americans and American Indian non-Hispanics, and Hispanics. In North Carolina, males have a higher death rate from pneumonia and influenza than females at 20.3 and 15.4, respectively.

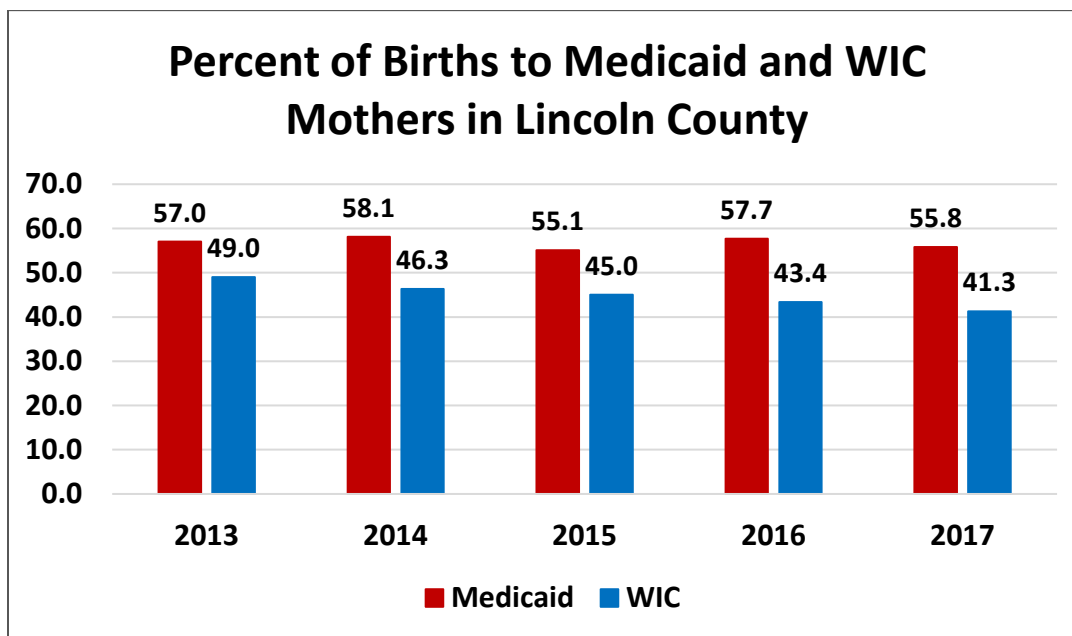
## Health Status

Health behaviors, clinical care options, social and economic factors, and physical environment are considered when determining the overall health status of a county. Lincoln County ranked 20 overall (where 1=best of 100 counties) compared to Catawba and Gaston Counties at 19 and 56, respectively. NC ranked 33 (where 1=best of 50 states) in 2018, dropping one spot from 32 the previous year. The 2018 America's Health Rankings Report presented several **strengths for North Carolina** including low prevalence of excessive drinking (16.4% of adults), low levels of air pollution, and low prevalence of frequent mental distress. **North Carolina challenges** included high percentage of uninsured population (10.7% of population), high prevalence of low birthweight, and high incidence of chlamydia (612 per 100,000).

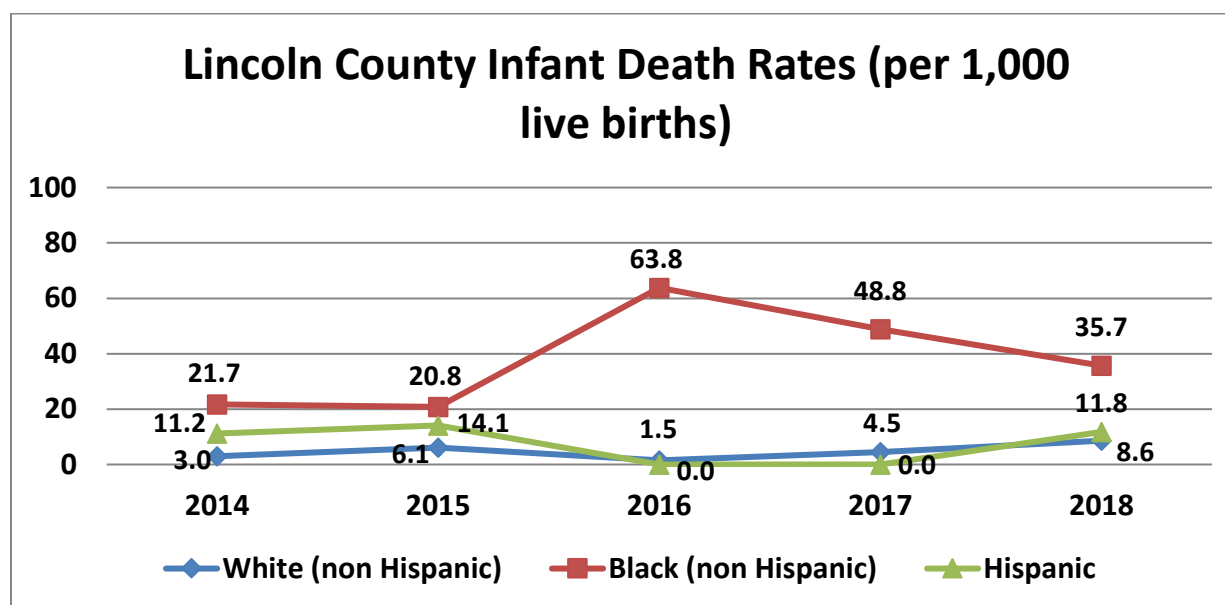
2019 County Health Rankings & Roadmaps				
Measures	Lincoln County	Top U.S. Performers	North Carolina	Rank (of 100 counties)
<b>Health Factors</b>				<b>20</b>
Alcohol-impaired driving deaths	36%	13%	30%	
Sexually transmitted infections <sub>1</sub>	278.9	152.8	577.6	
Teen births <sub>2</sub>	25	14	27	
<sub>1</sub> Number of newly diagnosed chlamydia cases per 100,000 population. <sub>2</sub> Number of births per 1,000 female population ages 15-19.				

## Maternal and Infant Health

Adequate maternal and infant services and outcomes are important because they help to determine the health of future generations and are predictors of potential public health challenges that will be faced in the future. **Pregnancy** is a time when women are screened for potentially harmful conditions that can be passed on to unborn children. Maternal and paternal family histories are examined to identify health risks and prevent possible health issues for mother and child. **Healthy birth outcomes** are the number one priority of preventative health services during pregnancy. Early identification of health issues in infants can lead to treatment and possible correction of complications to potentially prevent death or disability. Health care services before, during, and after pregnancy are vital to decreasing the risk of complications during pregnancy and infancy (Healthy People 2020 Maternal, Infant and Child Health). Higher educational attainment has been shown to affect the month of pregnancy at which women begin **prenatal care**. The earlier prenatal care begins during pregnancy the higher the likelihood of positive birth outcomes for mother and child. When considering all Lincoln County resident births in 2018 to women who began prenatal care by the end of the third month of pregnancy, 72.9% of them reported an educational attainment status of some college or more. Additionally, studies suggest that babies and moms who receive the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) have better health outcomes than those women, infants, and children that do not receive WIC but qualify (Carlson & Neuberger, 2017).

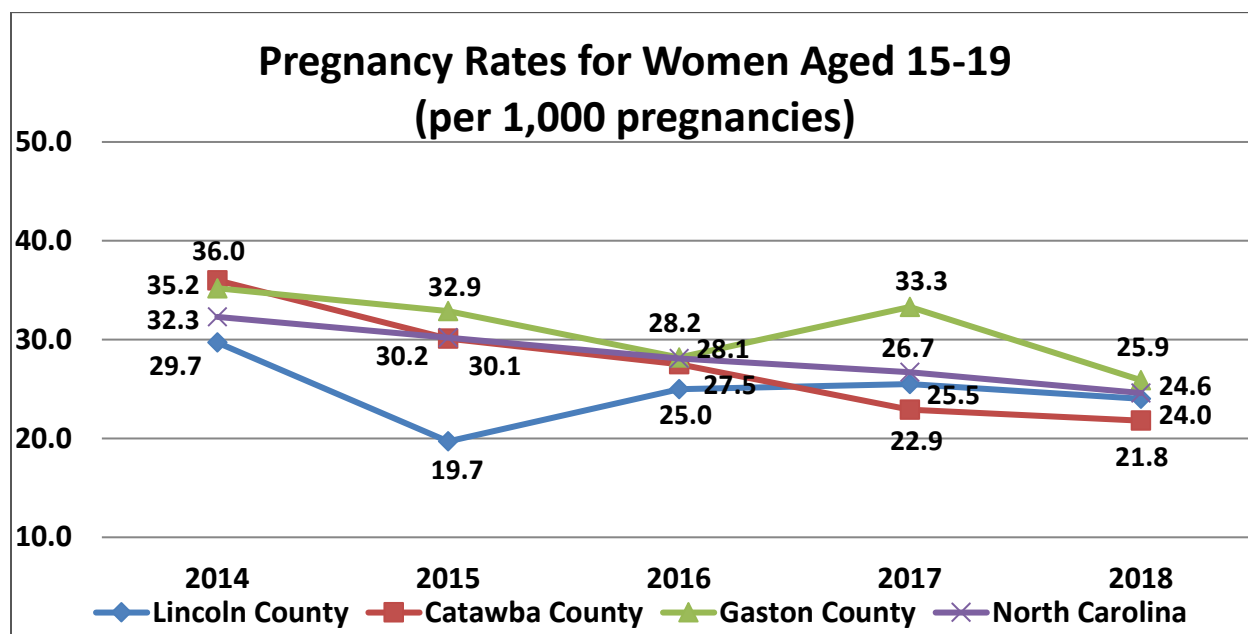


Source: NC SCHS 2020 County Health Data Book



Source: NC SCHS, Infant Mortality Report

When looking at infant mortality rates for Lincoln County, one can see a **large disparity gap** when considering race and ethnicity. These rates indicate a need for additional funding and resources for maternal, child, and infant health services and specific programming to close the disparity gap when looking at the black and Hispanic infant death rates as compared to the white infant death rate. Infant mortality is a whole community issue because even one potentially preventable infant death is too many.

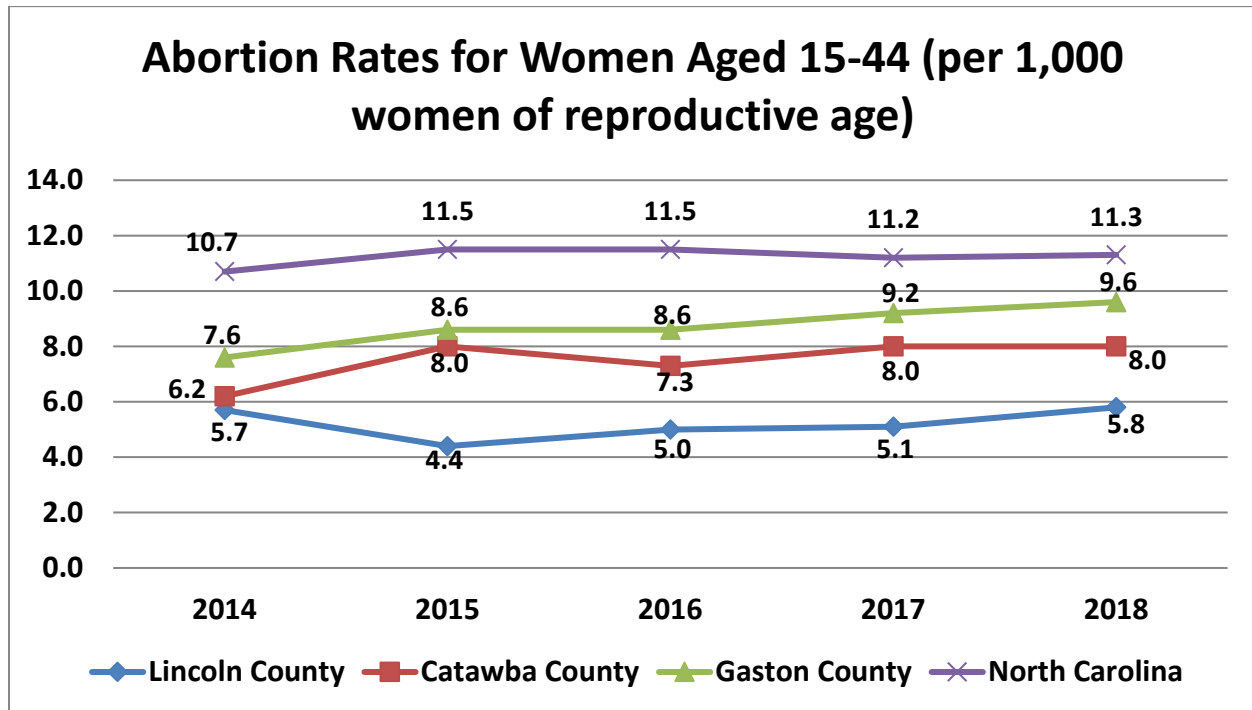


Source: NC SCHS, 2014-2018 Pregnancy Rates

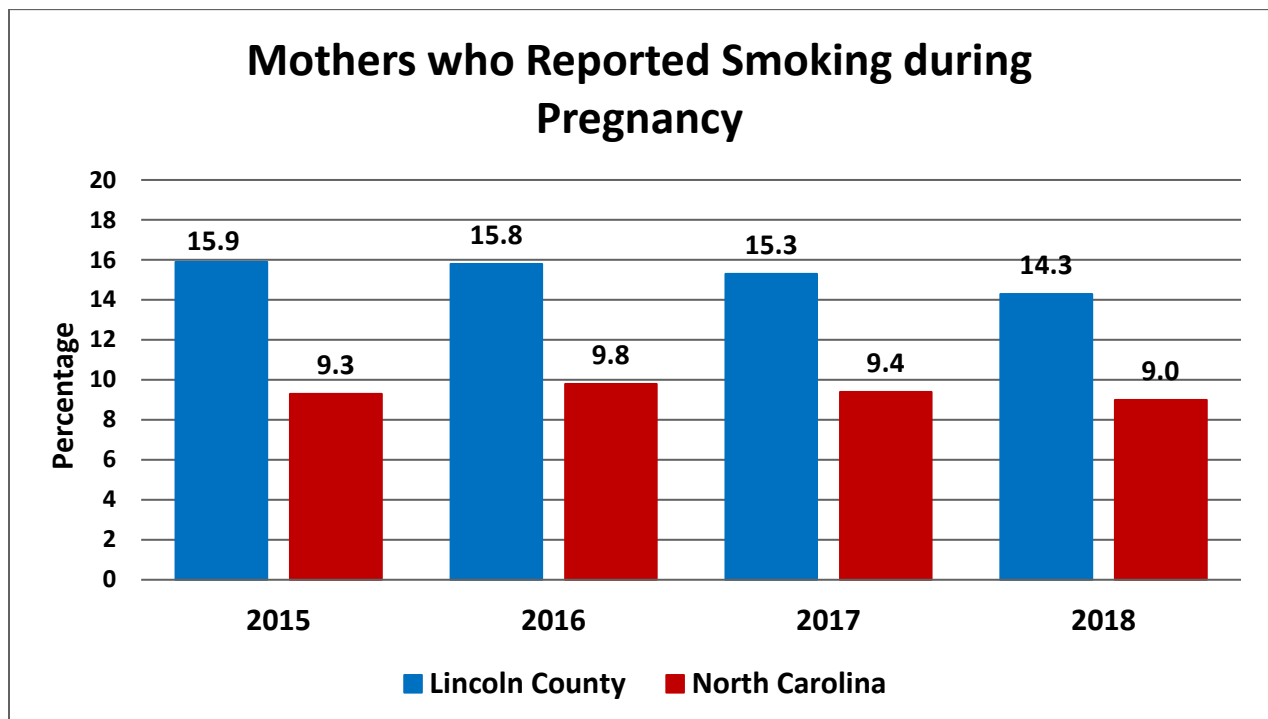
**Teen pregnancy rates** for women aged 15 through 19 are dropping statewide. Lincoln County's rates have been lower than Catawba County, Gaston County, and NC every year since 2011, with the exception of 2017 and 2018 when Catawba County's rates dropped below Lincoln County's. In Lincoln County, 14.0% of pregnancies to women aged 15 through 19 were **repeat pregnancies** in 2018 (NC SCHS, 2015 NC Repeat Teen Pregnancies Report).

According to the 2018 BRFSS survey, 53.4% of Region 4 respondents needed **contraceptive services**. 14.5% of Region 4 Respondents reported using a Long-Acting Reversible Contraceptive (LARC) method of birth control, compared to 25.9% who said they were not currently using any method of contraception. Additionally, approximately 37% of respondents who were currently using birth control, said it was highly effective.

**Abortion rates** for Lincoln County were about 38% and 66% lower than Catawba and Gaston Counties in 2018, respectively, and about 95% lower than NC during the same year. Lincoln County abortion rates have remained pretty constant between 2014 and 2018, showing only slight variation between the years.



Source: NC SCHS, Abortion Rates



Source: NC SCHS, 2015-2018 County Health Data Book Birth Indicator Tables

In Lincoln County, mothers who report **smoking during pregnancy** has been decreasing in recent years. In 2016, **gestational diabetes** was present in 7.4% of total resident births in Lincoln County. (NC SCHS, 2018 County Health Data Book Birth Indicator Tables)

**Breastfeeding** is widely known and endorsed as the most beneficial type of nutrition for infants. Breastfeeding has many **health benefits to mother and baby**. Babies that are breastfed have increased protection against some illnesses and diseases (i.e. diabetes, obesity, pneumonia, ear infections, asthma), less gastrological issues, fewer allergies, and are less likely to die from sudden infant death syndrome. Mothers that breastfeed have been shown to be less likely to develop breast cancer, ovarian cancer, diabetes, and osteoporosis. Breastfeeding is also **financially beneficial to families**. In North Carolina, 80.9% of infants were being **breastfed at the time of discharge** in 2018 compared to 80.7% in 2017, 81.6% in 2016, and 80.0% in 2015. In Lincoln County, 79.8% of infants were being breastfed at the time of discharge in 2018 compared to 80.4% in 2017, 78.4% in 2016, and 79.5% in 2015. (NC SCHS, 2017 - 2020 County Health Data Book Birth Indicator Tables)

## Child Health

**Immunizations (vaccines)** can prevent or lessen the severity of many illnesses and diseases. In 2018, 93% of 2 year old children were up-to-date on their immunizations for Lincoln County Health Department (LCHD) clients and 76% were up-to-date countywide. 2.63% of Lincoln County children were excluded from receiving vaccines in 2018 due to **parental refusal**, compared to 0.94% statewide. None of the parent refusals for Lincoln County 2 year olds in 2018 were due to **religious exemption**. LCHD ranked 23 out of 100 health departments (where 1=best of 100 local health departments) for the percentage of 2 year olds who were up-to-date on their vaccinations in 2018, compared to Lincoln County as a whole that was ranked 50 out of 100. In 2019, LCHD ranking significantly fell to 88 out of 100 health departments for the percentage of 2 year olds who were up-to-date on their vaccinations, compared to Lincoln County as a whole that was ranked 78 out of 100 in 2019. (NC Immunization Program Annual Assessment).

In 2019 there were two children identified with elevated blood lead levels and referred to LCHD, compared to four children in 2018 and one child in 2017. Public Health nurses and Care Coordinators follow-up on all referred cases to determine what action should be taken in each case.

**Exposure to lead is extremely harmful** to a young child's development and can cause damage to the brain and nervous system, stunt growth and development, increase the likelihood of learning disabilities and behavior problems, and cause difficulties with hearing and

speech (CDC). These issues can be detrimental to a child and can lead to an increased incidence of lower IQ, problems with paying attention, and poor academic performance (CDC). For this reason, it is important to **monitor your child's environment (especially in homes built before 1978), be mindful of foods and toys imported from other countries, and check traditional home remedies** to be sure they do not increase your child's lead exposure.

Lincoln County reported 10 total **child deaths** in 2018 compared to Catawba County at 16 reports and Gaston County at 24 reports. Of Lincoln County's 10 reported deaths, 9 cases involved children <1 year of age and 1 case involved a child between 15 and 17 years of age. The number one cause of child deaths in Lincoln County in 2018 was birth defects (NC SCHS).

2018 Infant and Child Deaths by Cause of Death and Age			
	Lincoln County	Catawba County	Gaston County
<b>Total Child Deaths</b>	<b>10</b>	<b>16</b>	<b>24</b>
<b>Cause of Death</b>			
Birth Defects	3	2	0
Perinatal Conditions	3	3	6
SIDS	0	0	0
Illnesses	1	4	9
Motor Vehicle Injuries	0	1	0
Drowning	0	1	0
Poisoning	0	0	0
Suffocation/ Choking/ Strangulation	0	1	2
Other Injuries	0	0	1
Homicide	1	1	0
Suicide	0	1	0
All Other Causes	2	2	6
<b>Age</b>			
Under 1	9	7	16
1 – 4	0	2	2
5 – 9	0	0	2
10 – 14	0	5	3
15 – 17	1	2	1

Source: NC SCHS, 2018 Child Deaths in North Carolina

2017 Risk Factors for Unintentional Injuries in Youth	
% of NC HSS who reported rarely or never wearing a seat belt	6.7%
% of NC HSS who reported riding with a driver who had been drinking alcohol	15.4%
% of NC HSS who reported driving when drinking alcohol	5.4%
% of NC HSS who reported texting or emailing when driving a vehicle	38.0%
% of NC HSS who reported carrying a weapon on school property	3.4%
% of NC HSS who reported being threatened or injured with a weapon on school property	6.9%

Source: 2017 Youth Risk Behavior Surveillance Survey

## Oral Health

Many oral health issues can be prevented with regular visits to the dentist. Between 2017 and 2018, all Lincoln County kindergarten children were **screened by a public health dental hygienist** to assess the percentage of dental disease present in the county. Between 2015 and 2016, the Oral Health Section (OHS) transitioned to a regional model for delivering public health hygiene services. Between 2017 and 2018, 1,798 kindergarten children and 798 third grade children were screened in our region (Region 4). (NC SCHS Oral Health Section).

### 2018 N.C. Oral Health Section Region 4 Snapshot Report\*

- 28% of Region 4 children aged 1-2 received preventative services through Medicaid (fluoride varnish) (2018 Form CMS-416: Annual EPSDT Participation Report)
- 52% of Region 4 children and teens under the age of 21 who were enrolled in Medicaid received preventative dental services (2018 Form CMS-416: Annual EPSDT Participation Report)
- 9.5% of Region 4 Kindergarten children have untreated tooth decay (NC SCHS Oral Health Section).
- 8% of pregnant women have untreated tooth decay (2018 NC Pregnant Women Basic Screening Survey; convenience sample, not regional specific)
- 46.1% of Region 4 adults aged 18 or older have had permanent teeth extracted. (2018 NC BFRSS)
- 13.6% of Region 4 adults aged 65 or older have complete tooth loss (2018 NC BFRSS)
- 87.8% of NC residents served by public water systems receive fluoridated water (NC Safe Drinking Water Information System)

\*Region 4: Union, Mecklenburg, Gaston, Lincoln, Catawba, Alexander, Iredell, Rowan, Cabarrus and Stanly Counties



According to the 2018 NC BRFSS, 62.9% of respondents indicated they have visited the dentist in the past 1-12 months, 10.7% indicated they have seen a dentist in the past 1-2 years, and 25.9% indicated they have not visited a dentist or dental clinic in  $\geq 2$  years. Additionally, 30.9% of 2018 NC BRFSS Region 4 respondents indicated they have had 1 to 5 teeth removed due to tooth decay or gum disease, 10.8% reported having 6 or more but not all teeth removed due to decay or gum disease, and 4.4% stated that all of their teeth have been removed due to decay or gum disease.

## **Physical Environment**

### **Water**

The Clean Water Act (CWA) ensures that pollutants on surface waters are regulated. This act keeps the water we drink, fish in, and play in safe for consumption and recreation (USEPA, 2019). In Lincoln County, approximately half of the population receives their drinking water through a community water system; which is a system that supplies water year round to the same population. The Lincoln County community water system is supplied from water sourced from Lake Norman. According to the 2019 County Health Rankings & Roadmaps, there were no health-based drinking water violations in the community water systems in Lincoln County. The Lincoln County Environmental Health Department abides by the NC Division of Water Quality, Groundwater Protection Unit Rules to provide private well water testing to ensure safe drinking water is provided to the public (Lincoln County NC, 2019). Evidence suggests that providing medication drop off locations and education about the proper disposal of medication can reduce the amount of pharmaceutical contamination in lakes and streams, and improve the overall quality of water (Lubick 2010, Glassmeyer 2009, Ruhoy 2008, Becker 2010, US EPA-PPCPs, as cited in CHR&R, 2019). Lincoln County Substance Use Coalition and other Lincoln County stakeholders continue to expand efforts to reduce environmental contaminants and decrease the amount of medications that are improperly disposed of in the water system. This is a community wide priority and one that is listed in 2020-2023 strategic planning documents for the Lincoln County Substance Use Coalition.

### **Air Quality**

Air pollutants not only negatively affect the environment, but they also have negative health implications. Poor air quality can negatively impact respiratory and cardiovascular systems, especially for sensitive groups including people with asthma, older adults, children, those with certain genetic characteristics, people with inadequate absorption of key nutrients, and outdoor workers. The changing climate increases ozone and carbon dioxide levels in the outdoor air, and induces longer pollen seasons causing heightened allergic sensation and asthmatic issues that can limit performance at work and school (USGCRP, 2016). According to

the 2018 US Environmental Protection Agency (USEPA) Air Quality Index Report, Lincoln County experienced no days where sensitive groups were asked to limit their outdoor exposure due to increased ozone particles in the air.

**(Refer to Appendix A, Tables 2 and 3 for details on air quality in Lincoln County)**

## **Built Environment**

A built environment can influence the overall health of a community and individual behavior (NCCDPHP, 2015). A built environment can be assessed through the availability of public transportation systems, adequate sidewalks and bike lanes, access to recreational outlets, and access to healthy foods in a community. A deficiency in these resources can invoke a sedentary lifestyle that leads to poor health outcomes.

### **Access to Healthy Places**

Lincoln County has one consolidated transportation system, Transportation Lincoln County, which serves five local human services departments and one Rural General Public service that is available for Lincoln County residents, and both services are available to persons with disabilities (Maldonado, 2017). There are 44 miles of sidewalks, 1.1 miles of bike lanes, 97 miles of NCDOT Bike Routes, and 7.5 miles of greenways and trails throughout the county and city of Lincolnton. (Lincoln County Planning and Inspections, 2019). Recreation can be found at 11 county owned facilities and parks (Lincoln County NC, 2019), five city operated facilities and parks (The City of Lincolnton, NC, 2019), two YMCA locations, and one state park. (NC Parks, 2019).

Lincoln County Parks and Recreation and the Lincoln County Health Department, in partnership with the Lincoln County Tax Department created the Get Healthy Lincoln Map, a resource to easily locate places to be active in Lincoln County. The Map divides the county into five main regions, North Brook, Howards Creek, Lincolnton, Ironton, and Catawba Springs. Dividing the county in this way, makes it easier to locate recreational facilities near your home. Each location is listed with a physical address, phone number, and a list of amenities. Lincoln County Parks and Recreation and the Lincoln County Health Department have printed maps available as well as an interactive map online. **(See appendix B to view Get Healthy Lincoln Map)**

A new recreational service coming to Lincoln County in 2020 is the Walk with Ease program. Lincoln County Parks and Recreation will begin offering the Walk with Ease program from the Arthritis Foundation in the spring. The course is intended to be offered in West Lincolnton, Lincolnton, and the East Lincoln Community Center. The class is a six week program that meets for exercise three times per week. The purpose of the program is to get people active, especially those that may be dealing with arthritis issues. Lincoln County Parks and

Recreation has received a grant from the National Recreation and Parks Association for instructor training and class materials to offer the Walk with Ease program.

### Access to Healthy Foods

Three Lincoln County Farmers Market locations are available with 15 vendors (Lincoln County Farmers Market, 2019), 14 grocery stores, two supercenters, one specialized food store, and 36 convenience stores are located throughout the county (USDA, 2014). According to the 2019 County Health Rankings and Roadmaps, Lincoln County ranks better in food insecurity and limited access to healthy foods than North Carolina, Catawba and Gaston County.

Comparison of Health Behaviors Related to Food Insecurity and Access to Healthy Foods					
		North Carolina	Catawba	Lincoln	Gaston
Health Behaviors	Overall Rank		33	32	48
<a href="#">Food Insecurity</a>		15%	13%	12%	15%
<a href="#">Limited Access to Healthy Food</a>		7%	8%	5%	11%
Food insecurity estimates the percentage of the population who did not have access to a reliable source of food during the past year.					
Limited access to healthy foods estimates the percentage of the population who are low income and do not live close to a grocery store.					
<a href="https://www.countyhealthrankings.org/app/north-carolina/2019/compare/additional?counties=37_035%2037_109%2037_071">https://www.countyhealthrankings.org/app/north-carolina/2019/compare/additional?counties=37_035%2037_109%2037_071</a>					

## Chapter 5: Health Resources and Gaps

### Health Resources Inventory Process

Members of the Partnership for Health were asked to submit available resource lists to compile a community-wide resource directory. United Way of Lincoln County provided a 2-1-1 database with community resources, Atrium Health Lincoln provided a resource directory of medical providers, the dental hygienist for the Lincoln County Health Department provided a dental health resource list, Senior Services of Lincoln County provided a resource list targeted at the senior population, Lincoln County Substance Use Coalition provided resources on crisis assistance and behavioral and mental health services for youth and adults, and Partnership for Children of Lincoln and Gaston Counties provided an updated list of childcare providers in Lincoln County. The Community Health Division of the Lincoln County Health Department located several other resources online and updated the information on the previous resource directory. The Community Health Manager for Lincoln County Health Department compiled the information into a Community Health and Wellness Resource Directory in English and Spanish to provide a directory of resources for the community. **The updated directory can be found on the Lincoln County Health Department website and in Appendix G.**

### Resource Gaps

According to the 2019 County Health Rankings & Roadmaps, Lincoln County ranks 32<sup>nd</sup> in the clinical care health outcomes (where 1=best out of 50 counties). One resource gap that was identified is the ratio of the population to one medical provider. Measures were taken from the number of primary care physicians, dentists, and mental health providers in Lincoln County. Lincoln County has a population ratio of 2,080 residents to one primary care physician, a population ratio of 2,350 residents to one dentist, and a population ratio of 2,110 residents to one mental health provider. Access to mental health providers in Lincoln County is more than four times the reported population to provider ratio of North Carolina, Catawba and Gaston County.

2019 County Health Rankings & Roadmaps				
Measures	North Carolina	Lincoln County	Catawba County	Gaston County
<b>Clinical Care</b>		<b>32</b>	<b>15</b>	<b>37</b>
Uninsured	12%	11%	13%	11%
Primary care physicians	1,420:1	2,080:1	1,490:1	1,670:1
Dentist	1,800:1	2,350:1	1,900:1	1,800:1
Mental health providers	440:1	2,110:1	510:1	460:1
Preventable Hospital Stays	4,702	5,165	3,639	5,556
Mammography screening	45%	43%	47%	42%

## Chapter 6: 2019 Identified Community Priorities

### 2019 CHA Priority 1: Substance Use

#### Healthy North Carolina 2030 Goal

##### Drug Overdose Deaths

- Decrease Drug Overdose deaths among North Carolinians from 20.4 per 100,000 people to 18.0 per 100,000 people.

##### Tobacco Use

- Decrease Tobacco Use among youth and adults. The current percent of youth reporting using tobacco in NC is 19.7%. The current percent of adults reporting tobacco use in NC is 23.8%. The Healthy NC 2030 target is 9% and 15%, respectively.

##### Excessive Drinking

- Decrease excessive drinking among North Carolinians from 16.9% to 12% by 2030.

#### Why is Substance Use Important to the Public's Health?

Substance abuse is important because it can influence many aspects of one's life affecting the individual, family, and community. Healthy People 2020 states that substance abuse plays a part in expensive social, physical, mental, and public health issues. Some of these issues include unintended pregnancies, sexually transmitted infections, violence (i.e. domestic violence, homicide, physical fights, child abuse and other types of abuse), unintentional injuries (i.e. overdose, poisoning, motor vehicle crashes, falls), other non-violent crimes (i.e. driving under the influence, theft, drug crimes), and suicide.

#### Substance Use Priority Explanation

The Lincoln County Health Department in collaboration with the Lincoln County Partnership for Health chose this priority by reviewing available primary and secondary data sources. It was determined our strategies for this priority would include education and prevention. Our implementation goals include increasing education surrounding the treatment and resources available to all community members beginning in middle school and pre and post-partum parents and caregivers, and providing targeted prevention strategies to the same subset of the population.

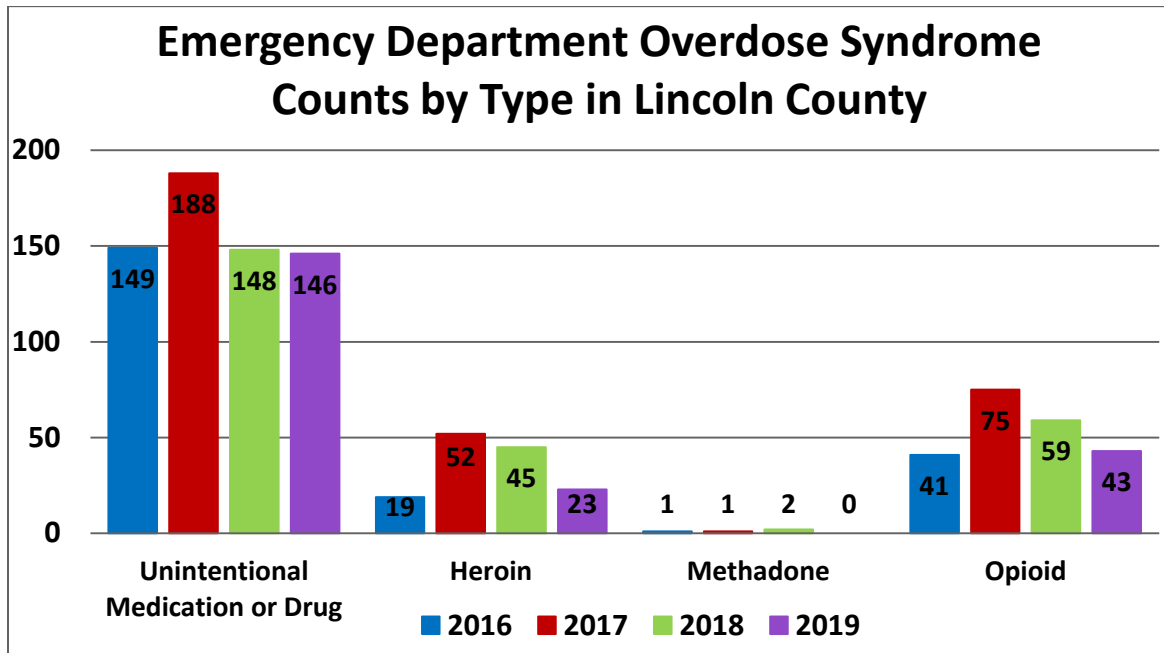
Priority	Strategy	Implementation Goal
Substance Use	Education	Provide targeted education strategies to: <ul style="list-style-type: none"> <li>• All community members beginning in middle school, especially students involved in sports and extra curricular activities.</li> <li>• Pre- and post- partum parents and caregivers.</li> </ul>
	Prevention	Provide targeted prevention strategies to: <ul style="list-style-type: none"> <li>• All community members beginning in middle school, especially students involved in sports and extra curricular activities.</li> <li>• Pre- and post- partum parents and caregivers.</li> </ul>

### Data Findings

Increased positive teen and young adult programs, activities, and interactions lead to better choices made regarding substance use. Individuals with poor family, friend, and community ties have an increased risk for substance use. Protective behaviors including good parent communication, increased understanding of risks, and increased educational opportunities to improve skills regarding the refusal of drugs, alcohol, and tobacco when asked have been shown to positively impact an individual's substance misuse and abuse risk (Fawcett et al., 1994).

### Illicit Drugs

According to the Centers for Disease Control and Prevention, Injury Prevention and Control Branch, **drug abuse and overdose** is on the rise. Opioid overdose is the cause of more than 60% of all overdose deaths nationwide. Additionally, opioid prescriptions have increased even though the amount of pain reported by Americans has not increased. The resulting increase in **prescription drugs** readily available in most of America's households is a large driving factor in the 15-year increase in opioid overdose deaths (CDC Injury Prevention & Control Branch). Suggestions for reducing the rate of opioid overdose rates include improving prescribing procedures, expanding access to substance use treatment and the use of naloxone, and promoting the use of state monitoring programs to prevent high-risk prescribing (CDC Injury Prevention & Control Branch). According to the 2018 NC BRFSS, 10.2% of Region 4 respondents indicated that they knew someone who injects drugs that have not been prescribed for them by a doctor, compared to 10.5% statewide.



Source: 2015-2018 NC DETECT County-Level Overdose Syndrome Charts

### Naloxone Usage

Naloxone is a medication that blocks receptor sites in the brain successfully reversing the effects of an overdose (SAMHSA). Naloxone works to prevent overdose by opioids including heroin, morphine, fentanyl, codeine, methadone, oxycodone, and hydrocodone. Naloxone is not effective in preventing overdose on benzodiazepines like alprazolam (Xanax), clonazepam (Klonopin), and diazepam (Valium), stimulants like cocaine and amphetamines (i.e. Ecstasy, Speed, Methamphetamine, Ritalin, Adderall), or non-opioid analgesics (i.e. ibuprofen, naproxen, acetaminophen, Aspirin). In 2017, 2018, and 2019, reported case counts of emergency department usage of naloxone to prevent overdose in Lincoln County residents was 12, 11, and 10, respectively (NC DETECT).

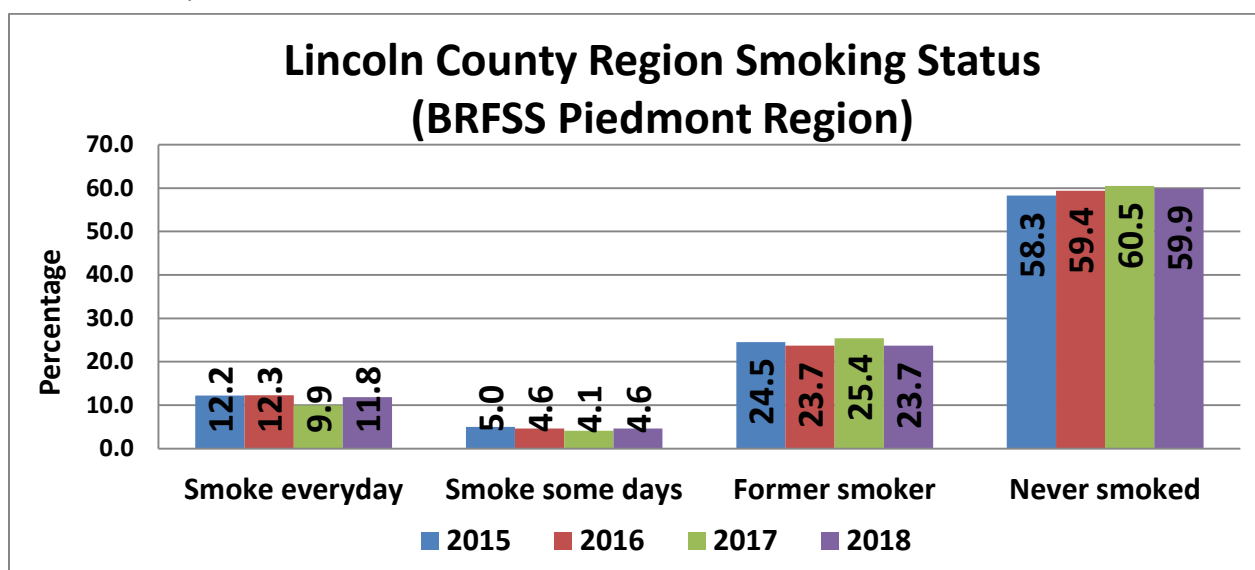
### Tobacco Use

Tobacco use remains the leading preventable cause of early death and disease in the nation. E-cigarette use among young people has become an epidemic in the nation and poses a public health threat (Healthy NC 2030: Tobacco Use).

Tobacco products are widely known to **cause various types of cancer and other chronic conditions including heart disease and lung disease**. Also, smoking is known to lead to issues during pregnancy including ectopic pregnancy, premature birth, low birth weight, stillbirth, reduced fertility in women, birth defects (i.e. cleft-lip, cleft palate), and erectile dysfunction (Health People 2020: Tobacco Use).



Although traditional tobacco use is decreasing among teens, the use of **electronic nicotine delivery systems (e-cigarettes)** among middle and high school students has alarmingly increased between 2017 and 2018. The National Youth Tobacco Survey (NYTS) is administered yearly by the Office on Smoking and Health, National Center for Chronic Disease Prevention and Health Promotion. The survey examines beliefs, attitudes, behaviors, and exposures regarding tobacco products in middle and high school students. In 2019, 14.5% of NYTS respondents reported that they were curious about using an electronic cigarette and 34.9% reported that they have tried an electronic cigarette (even once or twice). In 2019, 16.3% of NYTS respondents indicated that they had tried smoking traditional cigarettes before (even one or two puffs). According to the 2019 NYTS, the most popular brand of cigarettes was Marlboro followed by Newport and Camel. 14.4% of 2019 NYTS respondents reported that they have tried smoking cigars, cigarillos, or little cigars (even one or two puffs). Additionally, 7.5% of 2019 NYTS respondents reported that they have tried chewing tobacco, snuff, or dip (even a small amount).



Source: 2015-2018 BRFSS Survey

According to BRFSS regional data, Lincoln County Region (LCR) residents who reported they smoke every day, smoke some days, or never smoked, has remained fairly constant since 2015. However, LCR residents reporting they are former smokers, increased slightly in 2017 following several years of decrease. **6.1% of 2019 CHO Survey respondents self-reported that they currently smoke and 3% self-reported that they are regularly exposed to secondhand smoke during a typical week.** Healthy North Carolina 2030 states that secondhand smoke is an independent risk factor for lung cancer, heart disease, and stroke. Exposure to secondhand

smoke increases the likelihood of tobacco use among young people and makes it more difficult for current tobacco users to quit.

### Alcohol Use

**Binge drinking** has been shown to have negative effects on the body and mental state, and can increase the likelihood of alcohol-related unintentional injuries and death. Binge drinking is considered to have taken place when males drink five or more alcoholic drinks and females drink four or more alcoholic drinks during one occasion (usually within 2 hours). 17.1% of NC Region 4 BRFSS respondents indicated that they have binge drank in the past (even once or twice), compared to 14.8% of NC. College students are highly susceptible to binge drinking and negative drinking habits because they see drinking as part of the overall college experience. For this reason, the college environment can lead young adults to establish a problem drinking habit. In 2018, 39.4% of NC Region 4 BRFSS respondents who have attended college reported binge drinking which is higher than respondents having a high school diploma or less (12.9%).

2018 NC Region 4 BRFSS Self-Report on Binge Drinking by Risk Factor		
Gender	Male	25.6%
	Female	9.8%
Race	Non-Hispanic White	19.1%
	Non-Hispanic Black	10.6%
	Other	18.6%
Age	18 – 44	24.2%
	45 – 64	13.2%
	65+	5.9%
Education	High School or Less	12.9%
	Some College+	39.4%
Household Income	Less than \$50,000	14.1%
	\$50,000+	22.4%

Source: 2018 NC BRFSS

According to an October 2019 National Institute on Alcohol Abuse and Alcoholism Factsheet, around 1,825 college students between the ages of 18 and 24 die due to alcohol-related unintentional injuries (including motor vehicle accidents), about 696,000 individuals are assaulted by another student who has been drinking, and around 97,000 students between the

ages of 18 and 24 report alcohol-related sexual assault or rape. Additionally, about 25% of college students report negative academic consequences from drinking including poor performance in class, on exams, and on papers, receiving lower grades and missing class. According to the factsheet, heavy drinking is more notable among students who attend colleges with strong Greek and Athletic programs and is highest among those who live in fraternities and sororities (National Institute on Alcohol Abuse and Alcoholism College Drinking Report).

## **Potential Public Health Adversities Related to Substance Use**

### **Other Unintentional Injuries**

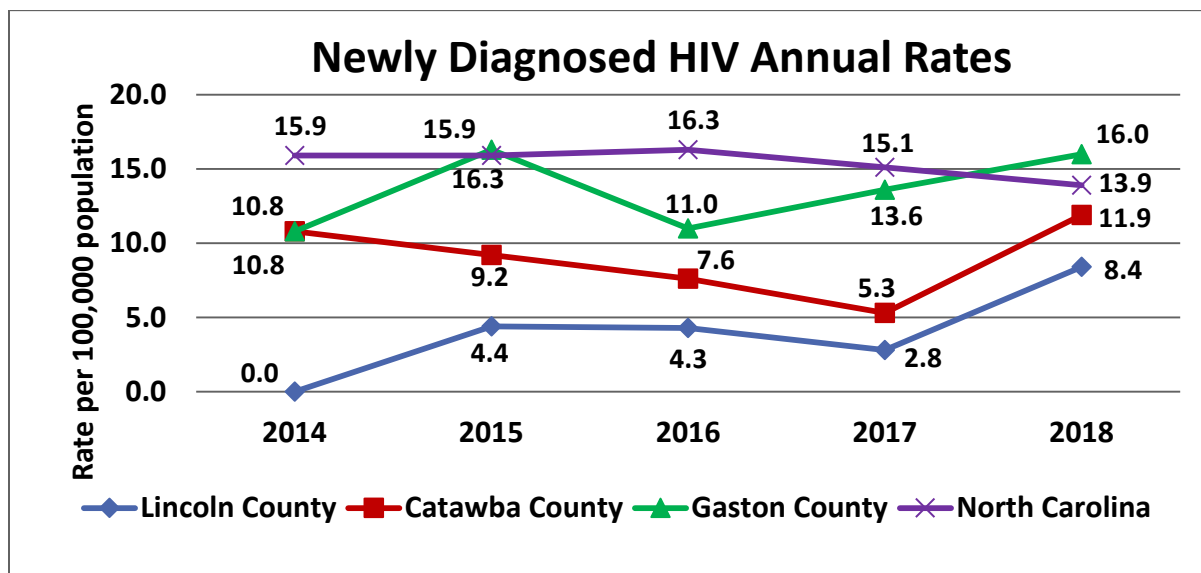
Substance use increases the chances of unintentional injuries. According to the Centers for Disease Control and Prevention, **unintentional injuries** were the 3<sup>rd</sup> leading cause of death for individuals living in the US in 2017. In Lincoln County, men are more likely than women to die due to an unintentional injury **including motor vehicle accidents**. The overall age-adjusted unintentional injury death rate, excluding motor vehicle accidents, for Lincoln County was 35.1 per 100,000 people between 2013 and 2017. Other unintentional injuries include **unintentional falls and poisonings**. Between 2014 and 2018, the mortality rate for unintentional falls and poisonings was 47.9 and 18.8 per 100,000 people, respectively.

### **Sexual Health**

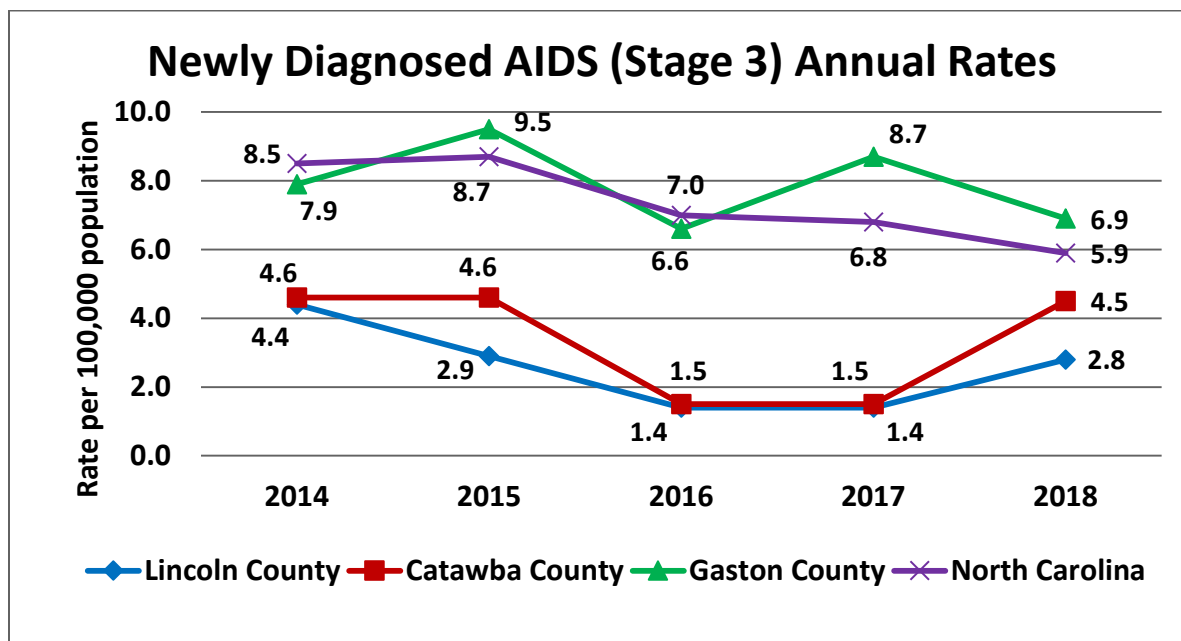
Drugs and alcohol can impair your judgement and lead you to make undesirable choices regarding sexual health. This decrease in one's ability to make safe choices can increase the risk for sexually transmitted infections (STIs/STDs), intimate partner violence, and unintended pregnancy.

### **Sexually Transmitted Infections**

Misusing drugs and alcohol puts one at greater risk for contracting STDs including **HIV**. Pregnant mothers can spread HIV to their unborn children. According to the 2018 North Carolina HIV/STD Surveillance Report, there have been 22 cases of **diagnosed infant perinatal HIV** in North Carolina between 2009 and 2018. The number of diagnoses of infant perinatal HIV has been decreasing in recent years. Perinatal HIV is HIV diagnosed before the child's first birthday. Additionally, there have been 64 cases of **children ≤13 years of age diagnosed with HIV** in North Carolina between 2009 and 2018. The number of children aged ≤13 years who have been diagnosed with HIV has been dropping since 2013. **HIV diagnoses rates for adults and adolescents** increased in Lincoln County in 2018, after showing a downward trend in the few years prior. Gaston and Catawba Counties also showed an increase in 2018.

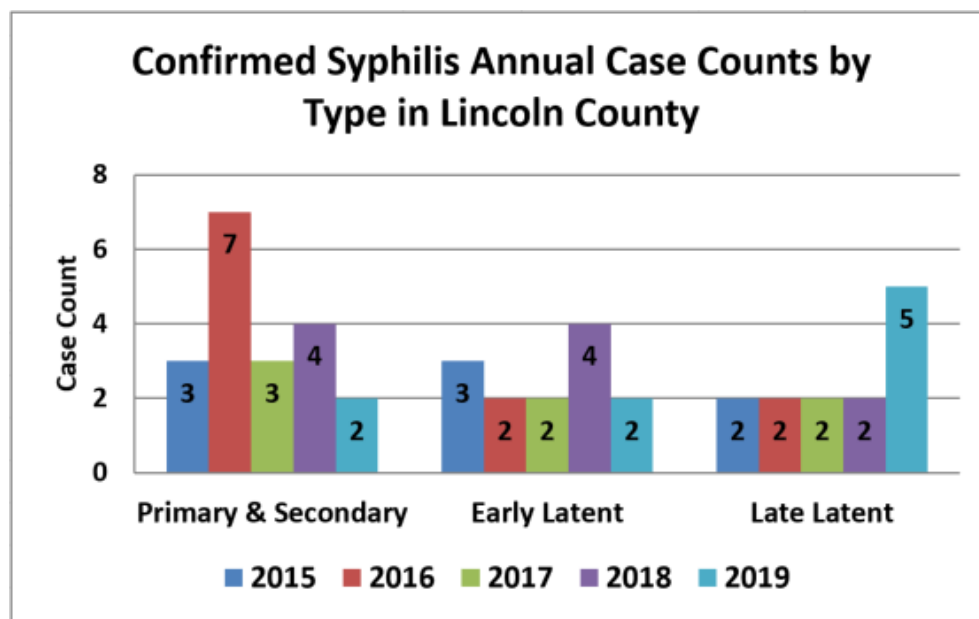


Source: 2018 North Carolina HIV/STD Surveillance Report



Source: 2018 North Carolina HIV/STD Surveillance Report

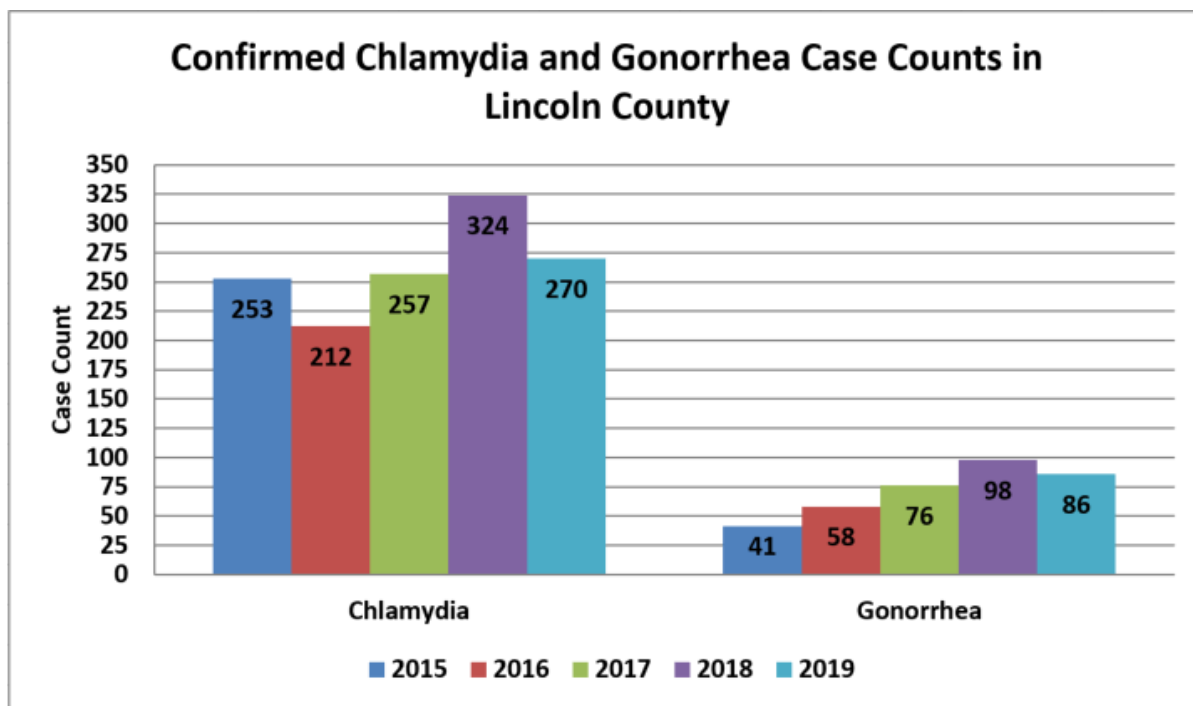
**Syphilis** is on the rise locally, regionally and nationally. Pregnant mothers can spread syphilis to their unborn children which can cause miscarriage, birth defects, or stillbirth. There were 19 infants reported with **probable congenital syphilis at birth** in NC in 2018. Of these 19 cases, 18 were probable and 1 was stillbirth. This number is a slight decrease from 2017 when there were 23 cases reported. (2018 North Carolina HIV/STD Surveillance Report).



Source: NC EDSS 2015-2019

**Chlamydia** is spread by having unprotected vaginal, anal, or oral sex with someone who has the disease. Chlamydia can cause serious reproductive harm to women making it difficult or impossible to get pregnant and can cause ectopic pregnancy. Pregnant mothers can pass chlamydia on to their babies at birth, possibly causing an eye infection or pneumonia in newborns (CDC: Chlamydia Fact Sheet).

**Gonorrhea** is a common STD and can infect one's genitals, rectum, and throat. Pregnant mothers can pass gonorrhea to their babies at birth, possibly causing serious health concerns for the newborn. For this reason, it is important healthcare providers are notified so appropriate action can be taken to test and treat the newborn for gonorrhea, decreasing the likelihood of health complications (CDC: Gonorrhea Fact Sheet).



Source: NC EDSS 2015-2019

Drugs and alcohol use decreases inhibitions, which can lead to irresponsible sexual behaviors. The best way to **prevent the spread of an STD** is by being in a monogamous relationship where each partner has been tested and found negative for STDs, using condoms and other barrier devices correctly every time you engage in sexual activity, or abstaining.

### Intimate Partner Violence

The occurrence of domestic violence or **intimate partner violence (IPV)** can lead to an increased risk for substance use as a form of coping with traumatic events. According to a paper published by the National Center on Domestic Violence, Trauma and Mental Health, the aggressor in the relationship will then sometimes use the substance use condition to **further control their partner** by threatening to expose them to authorities and/or take custody of their children. This type of threat can further exacerbate the substance use issue and prevent men and women that are victims of IPV from seeking services to support their efforts to stop the physical abuse and substance use. In a 2012 study by Engstrom, El-Bassel, and Gilbert, 90% of women entering a **methadone clinic** were found to have experienced IPV at some point in their lifetime. Additionally, 67% of US women entering a **substance use treatment program** were found to have experienced physical IPV in the last 6 months (Downs, 2001). According to the 2018 NC BRFSS, 7.0% of Region 4 individual respondents indicated that there has been a time in the past when someone had sex with them after they said or showed they did not want them to or had sex with them without consent, compared to 7.6% for NC. Of the NC individuals that

responded that someone had sex with them when they said or showed they did not want them to or had sex without consent, 38.5% of the time it was a person they were dating or in an intimate relationship with, 17% of the time it was a stranger, 16.6% of the time it was another relative, and 0.9% of the time it was a caregiver (2018 NC BRFSS).

Other studies found that women who have experienced IPV have an increased risk for substance use, even those women with no history of substance use or previous IPV experiences (Kilpatrick et al., 1997). Kilpatrick and colleagues (1997) also noted that IPV and substance use is bidirectional, reporting that substance use increases the likelihood of IPV and IPV increases the likelihood of substance use.

### Unintended Pregnancy

Substance use increases the likelihood of risky sexual behaviors, thus increasing the risks of unintended pregnancies. Women of reproductive age who self-reported opioid dependence were more likely to become pregnant four times or more in their lifetime than women who do not abuse substances at 54% and 14%, respectively (Heil et al., 2012). The study also concluded that women who abused opioids were five times as likely to report receiving an **abortion** when compared to women who do not abuse opioids.

**Health risks of unintended pregnancies** include increased abortion rates, increased rates of violence and depression during pregnancy, miscarriage, late prenatal care, decreased rates of breastfeeding, low birth weight, infant mortality, maternal mortality, premature birth, and learning and cognitive delays in infants (Healthy People 2020). To combat the negative health outcomes associated with an unplanned pregnancy and substance use, pregnant mothers should seek adequate treatment programs and family planning services for support against drug and alcohol use during and after pregnancy.

### Child Neglect and Abuse

Substance use issues with parents, caregivers, and families increases the risk for child neglect and abuse in the home. According to the National Council on Child Abuse and Family Violence (NCCAFV), substance use is an issue in 40-80% of families where children have been found to be **victims of abuse**. Additionally, children in the homes of parents who refuse substance use treatment and are removed from the home, **stay in foster care longer** and are more likely to return to foster care once they are allowed to return to the home. The report also states that children who live in homes with parents who abuse alcohol and drugs are more than four times as likely to be **neglected** as children who live in homes with parents who do not abuse drugs or alcohol (NCCAFV). In Lincoln County, the number of children in foster care declined every year between 2008 and 2011. However, Lincoln County saw an increase in the

number of children in foster care every year between 2014 and 2018, substance use is largely to blame for this increase. In 2017, the percentage of foster children reunified within 12 months was 44% in North Carolina. (Annie E. Casey Foundation).

Children who are raised with families and parents that abuse alcohol and drugs are more likely to abuse alcohol and drugs when they are older. This is referred to as the **cycle of addiction** and it plagues many families and individuals. Drug and alcohol use in adolescences and teens increases the risk for disciplinary problems at home and school, involvement in violence or crime, teen pregnancy, and affects the developing brain potentially causing mental and emotional issues now and in the future (NCCAFV). The adverse consequences from the risks listed above can follow a child into adulthood. In order to break the cycle of addiction, parents dealing with substance use disorders should **seek immediate and adequate treatment to protect the innocence of children** in the home and minimize the occurrences of adverse childhood experiences.

### **Adverse Childhood Experiences**

Adverse Childhood Experiences (ACEs) are stressful or traumatic events that take place during childhood and impact future health and wellness efforts. ACEs include different types of **abuse** like physical, sexual, and emotional, and physical and emotional **neglect**. Other forms of ACEs include **household traumas** involving witnessing domestic violence and substance use, mental illness in the household, parental separation or divorce, or member incarceration (Substance Abuse and Mental Health Services Administration). These traumatic experiences can negatively affect individuals, families, and communities while they are taking place and in the future.

The problem with ACEs is that they are very common and proven to be detrimental to public health. According to the 2014 BRFSS ACE Module (most recent ACEs data), 58.5% of North Carolinians reported at least one ACE during childhood, and 22.8% reported three or more. Additionally, 56.4% of 2014 NC BRFSS LCR respondents reported one or more ACEs within their lifetime. A disparity gap is identified when looking at gender, household income, and disability status with regards to the number of reported ACEs. Females, individuals living in homes with household incomes of less than \$50,000, and individuals considered disabled, were more likely to report ACEs than their counterparts. **Negative health outcomes** fostered by the presence of an ACE in a child's life includes chronic heart conditions (i.e. heart disease, stroke, myocardial infarction), asthma, mental issues (i.e. depression, anxiety), smoking, disability, lower income, unemployment, decreased educational attainment, and diabetes (BRFSS ACE Module data).



## 2019 CHA Priority 2: Emergency Preparedness

### Department of Homeland Security National Preparedness Goal Mission Areas

1. **Prevention** – Avoidance of certain, impending, or definite acts of terrorism
2. **Protection** – Protection of those who live, work, and play in our communities and nation against threats and hazards in a way that does not endanger our future hopes or goals
3. **Mitigation** – Reducing the effects of future disasters by decreasing the loss of lives and property
4. **Response** – Act of responding quickly after an emergency or incident to prevent loss of life and property, protect the environment, and aid in meeting essential human needs
5. **Recovery** – Focused attention put on repair, reinforcement and revitalization of infrastructure, housing, transportation, and economic services, in addition to recovery needs affecting the health of the community, environment, and social and cultural factors of people or communities marked by an emergency or incident.

### Why is Emergency Preparedness Important to the Public's Health?

Emergency Preparedness is important because it affects everyone from every background and social standing; the absence of emergency planning can prove catastrophic to individuals, communities, counties, states, and the nation. As a response to the September 11, 2001 terrorist attacks and other acts of terrorism that followed, the North Carolina Department of Public Health within the North Carolina Department of Health and Human Services created the Public Health Preparedness and Response Branch (PHP&R) within the Epidemiology Section to monitor and strengthen the capacity of public health and healthcare organizations to prevent, protect, mitigate, respond appropriately, and aid in recovery when disaster strikes. Lincoln County is part of the Cities Readiness Initiative (CRI) Region field office of the larger PHP&R Branch. The local health department, county emergency management, the hospital system, first responders and many other county and city entities are tasked with fulfilling this goal on the local level. Many organizations serving Lincoln County and the City of Lincoln form a well-constructed system of agency, community, and county preparedness plans and processes in order to prevent when possible and protect, mitigate, respond, and recover from emergency events when they occur.

### Emergency Preparedness Priority Explanation

The Lincoln County Health Department in collaboration with the Lincoln County Partnership for Health chose this priority by reviewing available data sources. Strategies for this priority include education and awareness. The implementation goals include providing education and promoting resources regarding emergency planning to all members of the community.

Priority	Strategy	Implementation Goal
Emergency Preparedness	Education	Provide education and resources to all community members regarding emergency planning and preparedness.
	Awareness	Promote county information and resources regarding emergency planning and preparedness.

## Data Findings

Lincoln County is situated in the Central Piedmont Region of North Carolina, but sits just adjacent to the Mountainous Region within the state. The Charlotte and Burlington weather stations that are located within the Piedmont Region report that between 1971 and 2000 the average minimum temperature was 28°F and the average maximum temperature was 51°F for January, and the average minimum temperature was 68°F and the average maximum temperature was 91°F for July. The Central Piedmont Region receives a moderate amount of rainfall each year when compared to the rest of the state. Additionally, the Piedmont Region is home to a majority of the population in North Carolina and contains a large number of economic centers, thus having more traffic and a greater potential for traffic congestion, when compared to the Mountain and Coastal Plain Regions (NC Climate Change Maps). Drinking water is supplied to the Lincoln County Community Water System by Lake Norman; this lake is also the largest body of water in the county.

Lincoln County houses 12 paid and volunteer fire departments. Data provided by the Lincoln County Fire Marshal's Office indicates that of all the fire related calls that were responded to between 2017 and 2019, 54.4% were considered structural fires, 19.3% were wildfires, 11.6% were fires involving trash, rubbish or a landfill, and 14.7% were vehicle or mobile property fires. Additionally, of the weather related calls that the 12 fire departments responded to between 2017 and 2019, 52.8% of the calls were due to severe weather or a natural disaster, 43.0% were due to heavy winds, 1.7% were due to floods, 1.0% were due to lightning strikes with no fire, and 1.5% were due to other reasons.

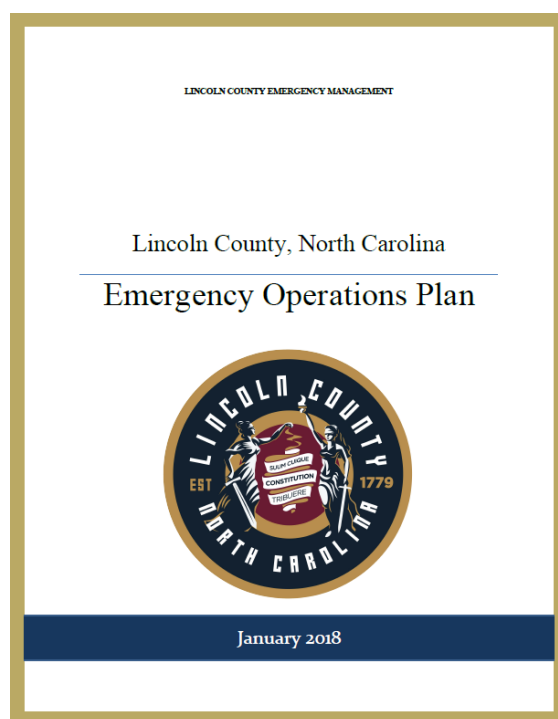
## Community Preparedness

Lincoln County has an Emergency Operations Plan that provides guidance for response and recovery efforts for man-made and natural disasters. The Lincoln County Communications Center provides a citizen alert service (Everbridge) for adverse events to communicate with the

residents of Lincoln County. This system allows for real-time notification of severe weather events, missing persons, health alerts, and other emergency events. The Lincoln County Health Department maintains a Medical Countermeasure Plan to provide prophylaxis to the entire population in the event of a disease outbreak, biological release or radiological release. Lincoln County Health Department is responsible for providing Potassium Iodide (KI) tablets to residents and businesses located in the 10 mile Emergency Planning Zone (EPZ) near the McGuire Nuclear Plant. In the event of a radiological release from the McGuire Nuclear Plant, the local health director will instruct residents when they should take the KI tablets to help protect their thyroid from a potential exposure to radiation.

The following services and functions are expanded to meet the needs of an imminent, threatened or occurring emergency event. These services may also be adversely impacted during emergency events as well (Lincoln County Emergency Management 2018 Emergency Operations Plan).

- Animal Services
- Building Inspections
- Education
- Emergency Management
- Emergency Medical Services
- Fire Departments
- Fire Marshal
- Health Department
- Law Enforcement
- Mental Health
- Public Works
- Social Services
- Solid Waste Operations
- Tax
- Transportation



Source: 2018 Lincoln County Emergency Operations Plan provided by the Lincoln County Department of Emergency Management

### Lincoln County Threat Hazard Identification

Lincoln County is exposed to many hazards, natural, man-made and technological, every year. These emergency events have the potential to cause loss of life, damage the environment

and infrastructure, and can interrupt daily operations of many of the services that are critical to all those who live, work, and play in Lincoln County. For the reasons mentioned above, and many others, it is important to identify and plan for emergency events in order to prevent these hazards if possible, protect our community, mitigate the detrimental effects of potential events, respond during a crisis, and aid in recovery.

### **Natural Hazards that affect Lincoln County**

- **Drought** – Droughts are considered prolonged periods of time when rain fall is well below the regional average for an area. Between 2008 and 2018, Lincoln County has been subjected to at least ten periods of time that would be considered drought-like. Decreased rainfall affects food production, well water supplies, and recreational activities that require the use of water. Many times, during extended periods of drought, Lincoln County has suggested voluntary water restrictions to conserve the water supply so water levels do not reach critically low levels.
- **Earthquakes** – Earthquakes are caused by sudden and extreme shifts in the earth's crust that cause damage to the built and natural environment. In the history of Lincoln County, there have been no recorded earthquakes that have originated within the county. However, earthquakes that have originated out of county have caused some architectural damage. According to the 2018 Lincoln County Emergency Operations Plan (2018 LCEOP), there is less than a 2% chance of an earthquake causing structural damage in Lincoln County within a 50 year time period.
- **Floods** – Flooding is when an unusual amount of water is present due to rainfall that causes an overflow of water outside of its normal limits, usually building up in low lying areas, bodies of water, and basements. Areas that are commonly flooded during excessive precipitation are considered floodplains. General flooding is when rain continues over an extended period of time, saturating the ground, and causing a steady rise of water in river basins. Lincoln County is more likely to experience flash flooding, when a large amount of water is suddenly dumped on an area causing issues with drainage and water absorption. Flash flooding can cause emergency situations by washing out roads, damaging property, and depending on the severity of the flood can even cause fatalities.
- **Hurricanes** – Lincoln County is generally not in a direct path of hurricane activity, however there have been times in recorded history that Lincoln County has been directly impacted by hurricane activity. Generally, Lincoln County is impacted most significantly by storms, winds, and tornadic activity that results from hurricanes closer to

the coastal areas. According to the 2018 LCEOP, Lincoln County has a large number of manufactured homes that would be susceptible to significant damage caused by storms, winds and tornadic activity that resulted from a hurricane.

- **Thunderstorms** – Thunderstorms are a common occurrence in Lincoln County, especially during spring and summer. Thunderstorms typically occur during evening hours or after dark. Generally thunderstorms that occur in the area bring with them lightning, forceful winds, heavy rainfall, and hail. These occurrences can potentially cause wildfires, flash flooding, or wind and hail damage. Thunderstorms are usually localized causing the impact of the storm to be minimal; however, there have been cases when the impact has been much greater.
- **Tornados** – Tornados are usually a consequence of larger storms causing powerful winds in the area. Tornadic activity is dangerous and can cause localized damage due to the violent nature of the rotating wind columns that make contact with the ground. Tornados are most likely to occur in Lincoln County during the spring months between March and June.
- **Wildfires** – Wildfires in Lincoln County generally occur during the dry months, between spring and summer. Many things impact the potential for wildfires beyond dry climate conditions including severe storm activity, surface fuels, and fire behavior characteristics. With the growth that Lincoln County has been experiencing over the last decade, wildfires stand to have larger impact on the county due to increased development of housing and recreation units. However, small scale wildfires only occur with moderate frequency according to the North Carolina Division of Forest Services.
- **Winter Storms** – Even though severe winter weather generally affects areas of higher elevations, Lincoln County is uniquely positioned just adjacent to the Mountain Region of the state and within the area that receives severe weather that originates from the Gulf Stream. Thus, Lincoln County's geographical location increases the likelihood the county will be impacted by severe winter weather events. Rain, snow, freezing rain and sleet are the typical forms of precipitation that affect Lincoln County during winter storm occurrences. These types of precipitation can impact communication services, build up on powerlines and trees causing a loss of electricity, and can increase the response time of emergency responders when in need due to blocked transportation routes. Loss of power could prove detrimental to residents who are electricity dependent due to a medical device, unless alternate plans are made beforehand. Loss of electricity will also result in loss of heat.

### Technological Hazards that affect Lincoln County

- **Aircraft Accidents** – Lincoln County has an airport located in Iron Station, NC. Potential incidents at the airport that result in falling debris could cause property damage, suspended services, or fatalities.
- **Hazardous Materials: Fixed Site and Transportation** – Hazardous materials (HAZMAT) are known to pose unnecessary risks to health, safety and the environment. A release of HAZMAT materials or substances, either intentionally or accidentally from a facility or during transport, can pose considerable concern for the community and the environment around the release.
- **Landfill Fires** – Landfill gases are present above and below a landfill and can move from place to place with the wind, causing odors to converge on surrounding communities.
- **Nuclear Facility** – Lincoln County is located in the 10 mile EPZ from the McGuire Nuclear Station. The concern regarding a nuclear facility is the potential for release and subsequent exposure of radiation, either intentionally or accidentally, causing damage to the environment and human health. Lincoln County participates in regional planning exercises to prepare for a potential radiological release from the nuclear station, even though the chances of experiencing a damaging release is low.
- **Pipeline Break** – Damage to a natural gas pipeline that runs under Lincoln County could cause significant damage to communities, property, and the environment and can be fatal.
- **Train Derailment** – Lincoln County has many miles of train track in the county. If a train were to be derailed, it could potentially cause fatalities or damage to property. In the event HAZMAT materials are on board when a derailment takes place, human health and environmental damage can also occur.
- **Power Failure** – Power outages are not common but do happen in Lincoln County on occasion. Generally, loss of power is due to a weather event or accident. Loss of power could prove detrimental to residents who are electricity dependent due to a medical device and will also result in loss of heat.
- **Structural Fires** – Structural fires vary in magnitude; and, the damage caused by structural fires is situational. Structural fires can cause property damage, environmental damage and loss of life.

## Human-Caused Hazards that affect Lincoln County

- **Civil Disorder/Rioting** – Although the probability of civil disobedience and rioting is low in Lincoln County, being prepared for such an event and aware that a potential situation could arise is important. An event like this would impact many services in Lincoln County, especially first responder services.
- **Public Health Emergency** – These types of hazards have the potential to impact many aspects of the public's health. The Lincoln County Health Department in conjunction with other county and city organizations, continues to plan and prepare for potential disease outbreaks or other health hazards, emergencies related to environmental health (food, air or water quality hazards), and other threats as identified within the county should they arise.
- **Terrorist Activity** – Domestic or international terrorism events would likely include chemical, biological, radiological, nuclear, or explosive actions. Although the probability of an event occurring within the county is low, measures and planning efforts for such an event is taken seriously and exercised with county, state and federal partners regularly.

Source: 2018 Lincoln County Emergency Management Emergency Operations Plan

## Personal Preparedness

82.6% of 2019 CHO Survey respondents indicated they would evacuate due to a large-scale disaster or emergency if asked to do so by public authorities. 17.2% of respondents indicated they would not or were not sure if they would evacuate under the same conditions mentioned above. The number one reason given by respondents to explain why they would not or weren't sure if they would evacuate was **concern of leaving pets behind, followed by concern about potential traffic jams and an inability to get out, and concern about leaving property behind**. Additionally, 68.4% of 2019 CHO Survey respondents indicated they felt prepared for a natural disaster or other emergency that may require them to remain in the home without power or assistance for at least 3 days. The numbers above indicate a need for increased awareness regarding preparedness plans and services within the county.

According to structural fire data provided by the Lincoln County Fire Marshal's Office, smoke detectors were present 55% of the time and operated correctly 84% of the time between 2017 and 2019 in Lincoln County. These numbers indicate a need for increased awareness and education regarding the importance of having a functional smoke detector in homes and businesses. 2019 CHO Survey respondents indicated that they were 68.5% likely to

have both smoke detectors and carbon monoxide detectors in their homes, while 28.9% indicated that they only had smoke detectors in their homes. Between 2017 and 2019, there were 12 injuries and 5 casualties reported from fire related calls from all 12 fire departments in Lincoln County. Lincoln County fire departments have participated in Smoke Alarm Saturday, which is held on the first Saturday in June, in recent years. Smoke Alarm Saturday is a North Carolina Department of Insurance Initiative out of the Office of the State Fire Marshal that aims to provide free smoke alarms to Lincoln County residents who need them. The Smoke Alarm Saturday Initiative hopes to increase the number of working smoke alarms in homes and decrease the number of injuries and casualties from fire related calls, because even 1 death that could potentially be prevented is too many.

### **Citizen Alert Information**

To sign up for the Citizen Alert Information System (Everbridge) that is available to all Lincoln County residents, please visit [LincolnCounty.org](http://LincolnCounty.org) and click on *Citizen Alert System* located under quick links on the homepage. The Citizen Alert Information System will allow you to sign up to receive real time messaging about emergency events in your area.



## 2019 CHA Priority 3: Health Services

### Healthy North Carolina 2030 Goal

#### Primary Care Workforce

- Increase the primary care workforce in North Carolina counties by 25%. Currently, 62 of North Carolina's 100 counties have a primary care provider to population ratio of 1:1,500. The goal is that all 100 counties would display the 1:1,500 ratio by 2030.

### Why is Access to Health Services Important to the Public's Health?

Access to health care impacts one's overall physical, social, and mental health status and quality of life. To achieve the best health outcomes, gaining entry into the health care system, accessing a location where health care needs can be met, and finding a health care provider that can be trusted by the patient and offer a personal relationship is required. When considering access to health care, it is important to also include oral health care and obtaining necessary prescription drugs (Healthy People 2020).

### Access to Health Services Priority Explanation

The Lincoln County Health Department, in collaboration with the Lincoln County Partnership for Health, chose this priority by reviewing available data sources. Strategies for this priority include education and awareness. Implementation goals include providing education and resources regarding recommended well-care visits, age appropriate preventive health and wellness screenings, healthy eating, and physical activity to all community members to assist in healthy decision making, and to promote county resources that address mental health, primary care, and oral health needs to improve access to care.

Priority	Strategy	Implementation Goal
Health Services	Education	Provide education regarding recommended well-care visits and age appropriate preventative health and wellness screenings to all community members.
		Provide education and resources regarding healthy eating and physical activity to all community members, to assist in improving healthy decision making.
	Awareness	Promote county specific resources that address primary care, mental health, and oral health needs to improve access to care.

## Data Findings

According to 2019 County Health Rankings and Roadmaps, Lincoln County ranks 32<sup>nd</sup> (where 1=best of 100 counties) in clinical care options compared to Catawba and Gaston Counties at 15 and 37 respectively. **55.13% of 2019 CHO Survey respondents believe there is good healthcare in Lincoln County when considering the cost, quality, and availability of healthcare in the county. A majority of respondents believe the service most needing improvement in Lincoln County is culturally appropriate health services.**

### Clinical Care and Access

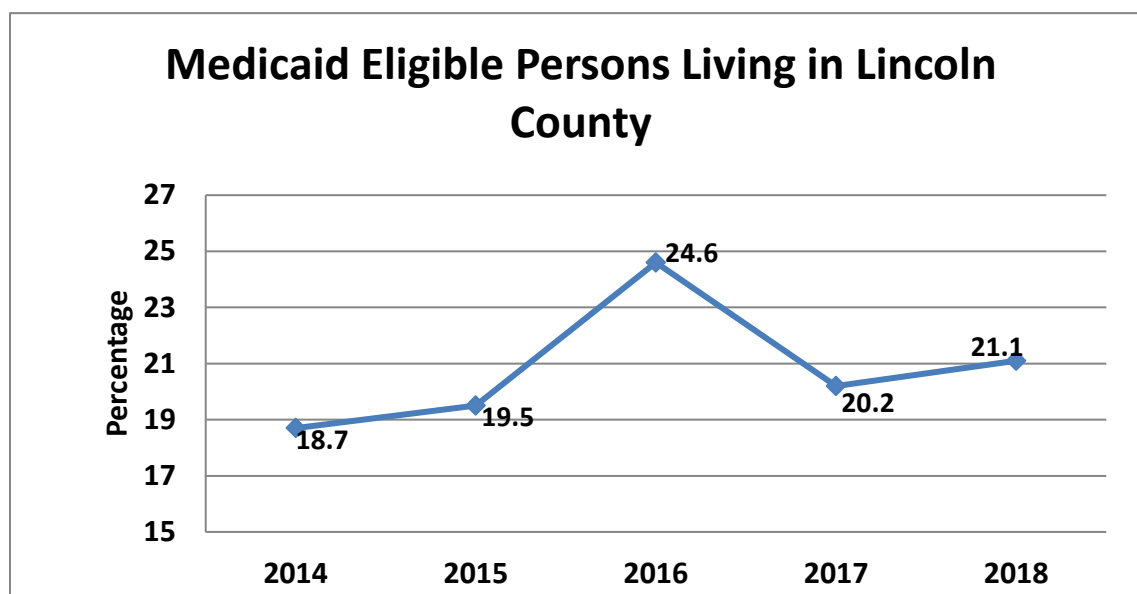
Clinical care access is vital to health and wellness. Individuals with impaired access to clinical care tend to have higher percentages of serious health concerns compared to those who have better access and can meet their healthcare needs. **Lincoln County has significantly fewer primary care physicians, dentists and mental health providers** than the average county in North Carolina. This gap in access to care represents an organizational challenge when examining Lincoln County using a Socio-Ecological lens. This deficit of providers proves to be a great inhibitor to clinical care access since this would increase the likelihood that some county residents would be required to travel out of the county to see a medical provider. Increased driving distance to medical appointments can cause individuals to use more **sick time or leave without pay** to attend their appointments.



Health care coverage status has a major impact on an individual's ability to receive and sustain comprehensive care. **A lack of health insurance or inadequate health insurance** can also exacerbate many chronic disease conditions. According to the 2018 BRFSS survey, 84.2% of NC Region 4 respondents indicated they had health insurance coverage, leaving 15.8% of NC Region 4 uninsured. Considering this statistic it should be noted that 15.8% of 2018 BRFSS NC Region 4 respondents also self-reported that there was a time in the past 12 months that they

**could not see a doctor when needed due to cost.** A **socioeconomic disparity gap** is realized when comparing insurance coverage looking at age, education, and household income. Of BRFSS NC Region 4 respondents that indicated they had insurance coverage in 2018, those that were aged 65+, those with at least some college education, and those that indicated they had a household income of  $\geq \$50,000$  were more likely to respond they had insurance coverage at 98.7%, 96.2%, and 92.7%, respectively, than their counterparts who were between 18 and 64 years of age (not eligible for Medicare), those holding a high-school diploma or less, and those that reported a household income of  $< \$50,000$  at 80.3%, 73.8% and 76.9%, respectively. This information potentially indicates a problem with available health care coverage options, cost of options available, and/or a lack of financial assistance available *or* that eligible individuals are not using the financial assistance available to them. Continued access to affordable and valuable insurance to further decrease the numbers of uninsured individuals living locally and nationwide is desirable.

According to the 2018 Medicaid Annual Report, there were 17,598 (21.1%) **Medicaid** eligible persons living in Lincoln County. The number above accounts for 211 out of every 1,000 people that are eligible for Medicaid services in Lincoln County. Catawba and Gaston Counties reported that 23.4% and 26.9% of their populations were eligible for Medicaid during the same time period, respectively. The per capita spending for Medicaid in Lincoln County was \$1,082 compared to the total expenditure per eligible at \$5,117 in fiscal year 2018.



Source: NC Division of Health Benefits 2014-2018 Annual Reports

## Primary Care

Lincoln County has a ratio of 2,080 people per 1 primary care physician compared to Catawba County and Gaston County's ratio of 1,490:1 and 1,670:1, respectively. Having a primary care provider is beneficial to an individual's quality of life and overall health. Primary care physicians can help their patients navigate good health by early detection of chronic disease and can provide guidance on how to manage current chronic disease conditions.

## Mental Health

Mental health disorders can make it harder or impossible for an affected person to seek medical treatment and prevention services when needed causing an **increased risk of chronic disease and illnesses, substance abuse, self-harm, and suicide**. The mental health provider ratio in Lincoln County is 2,110:1 compared to Catawba County and Gaston County at 510:1 and 460:1, respectively. The mental health provider ratio in Lincoln County represents an unfavorable gap in services available to county residents.

## Oral Health

According to the NC Oral Health Regional Snapshot, 48% of individuals living in Region IV under the age of 21 who were enrolled in **Medicaid** did not take advantage of the dental services provided to them through their insurance. Additionally, 72% of Region 4 children aged 1-2 did not receive preventative services (fluoride varnish) through Medicaid (NC DHHS, Division of Medical Assistance). The ratio for people per dentist in Lincoln County is 2,350:1 compared to Catawba County and Gaston County's ratio of 1,900:1 and 1,800:1, respectively. Dental disease can affect many other aspects of an individual's health, increasing one's risk factors for heart disease, respiratory infections, and diabetic complications.

## Health Behaviors affected by Access to Care

Preventative care is one of the most important ways to manage your health because when a condition is diagnosed early, it is usually easier to treat. For this reason, it is important to make wellness screening services and preventative care options available and easily accessible for all residents.

According to the 2018 NC BRFSS, 69.7% of women aged 40+ living in Region 4 have had a **mammogram** within the past 2 years, compared to 74.7% in NC as a whole. However, this statistic indicates room for improvement because 30.3% of women aged 40+ living in Region 4 have not had this potentially lifesaving exam within the past 2 years. Also, 81.1% of women aged 21-65 reported having had a **Pap test** within the past 3 years, leaving 18.9% that are missing out on this vital opportunity in Region 4 in 2018.

Across NC and Region 4, 2018 data reveals a need for increased awareness regarding

preventative **prostate exams (PSA)** for men aged 40+. Only 29.8% of men in Region 4 (aged 40+) reported that they have had a PSA test in the past 2 years, compared to 34.6% in NC. This statistic shows a need for improved education and increased access for PSA tests to target the 70.2% of Region 4 men aged 40+ that have not had the appropriate screening within the past 3 years to potentially catch and treat a prostate condition early.

According to the 2018 NC BRFSS, 80.2% of Region 4 respondents aged 45-64 reported receiving tests for high blood sugar or **diabetes** within the past three years. When survey respondents were asked if they have ever been told by a doctor or other health professional that they have pre-diabetes or borderline diabetes, approximately 35% of respondents aged ≥45 answered yes to this question compared to North Carolina at 12.1%. Additionally, 58.2% of 2017 NC BRFSS Region 4 respondents said they were limiting their sodium intake on their own, and 26.9% indicated they were advised to limit their sodium intake by a health professional. Limiting salt intake is important for diabetes management because too much salt is known to raise blood pressure.

2018 NC BRFSS Region 4 respondents aged 50-75 reported receiving one or more of the recommended **colorectal cancer screening tests** within the recommended time interval at 68.2% of the time, indicating 31.8% of individuals still needed this screening in 2018. Furthermore, only 35.6% of 2018 NC BRFSS Region 4 respondents reported **taking a multivitamin daily** and 55.8% indicated they never take multivitamins.

As per the 2018 NC BRFSS survey, Region 4 residents responded 77% of the time that they **participated in physical activity or exercises** (outside of their regular jobs) such as running, calisthenics, golf, gardening, or walking for exercise, compared to NC at 76.1% of the time. This is good news because research shows that adequate physical activity decreases your risk for many chronic health conditions including depressive disorders, heart disease, diabetes, high blood pressure, high cholesterol, obesity, and stroke. In addition to physical activity, sleep quality and length are essential to good health. **Inadequate sleep** can exacerbate chronic conditions and negatively affect one's day to day activities. Research reveals that adults aged 18+ should be getting 7-9 hours of sleep each night, while 6-17 year olds should get around 8-12 hours, 1-5 year olds should receive between 10-14 hours each night, while newborns and infants should get around 12-17 hours of sleep per day (including naps) (CDC-Sleep). Across NC and Region 4, 2018 NC BRFSS data reveals that 64.6% and 61.6% of individuals aged 18+ received the recommended 7 or more hours of sleep per day, respectively.

According to 2018 BRFSS Survey results, 36.5% of Region 4 respondents indicated they received the **influenza vaccine** (flu shot) within the past 12 months. Females were more likely than males to get the flu shot, and individuals aged ≥65 were more likely to report receiving a flu shot within the last 12 months in Region 4.

## Chapter 7: Next Steps

### Disseminating Findings

The 2019 Community Health Assessment (CHA) priorities were chosen by the Lincoln County Partnership for Health on September 23, 2019 and approved by the Lincoln County Board of Health on November 5, 2019. The Partnership for Health reconvened on January 9, 2020 to review a draft of the 2019 CHA to make edits and provide feedback. The final 2019 CHA document was submitted to the state in March 2020. Once approved, the 2019 CHA will be made available to the community on the Lincoln County Health Department and Lincoln County Government websites. Additionally, a press release publicizing the completion of the 2019 CHA document and accessibility will be sent to all available media outlets. Actual report findings from the 2019 CHA will be offered to the community by request.

### Determining Action Plans

Once the 2019 CHA is approved, the Lincoln County Partnership for Health will reconvene to determine Community Health Improvement Plans (CHIPs) and next steps. CHIPs will be chosen based on the information presented in the 2019 CHA. The Lincoln County Partnership for Health will develop work groups to focus on specific priorities and strategies that are listed in the 2019 CHA document. The 2019 priorities were chosen in collaboration with the Lincoln County Partnership for Health and the Lincoln County Board of Health and will be addressed as a collaborative unit.

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## Appendices

Appendix A –	Lincoln County Health Data Book
Appendix B –	Get Healthy Lincoln Map
Appendix C –	Primary survey findings from 2019 Community Health Opinion Survey
Appendix D –	2019 CHA Survey Tool – English
Appendix E –	2019 CHA Survey Tool – Spanish
Appendix F –	Lincoln County Child Care Facility Database
Appendix G –	Lincoln County Health and Wellness Resource Directory
Appendix H –	Hanlon Method for Priority Setting Tool

# Appendix A: Health Data Book

Table 1:

2014-2018 Years of Potential Life Lost (based on Life Expectancy at Death) in Total and by Sex Residence = Lincoln County									
Cause of Death	Total			Male			Female		
	Number of Deaths 2014-2018	5-Year Total Years of Potential Life Lost	5-Year Average Years of Potential Life Lost	Number of Deaths 2014-2018	5-Year Total Years of Potential Life Lost	5-Year Average Years of Potential Life Lost	Number of Deaths 2014-2018	5-Year Total Years of Potential Life Lost	5-Year Average Years of Potential Life Lost
Diseases of Heart	839	11,650	2,330	470	6,952	1,390	369	4,698	940
Acute Myocardial Infarction	197	3,216	643	129	2,236	447	68	980	196
Other Ischemic Heart Disease	300	4,069	814	185	2,617	523	115	1,452	290
Hypertension	36	531	106	13	211	42	23	320	64
Cerebrovascular Disease	202	2,475	495	102	1,371	274	100	1,104	221
Atherosclerosis	1	16	3	1	16	3	N/A	N/A	N/A
Cancer	860	13,999	2,800	465	6,960	1,392	395	7,039	1,408
Colon, Rectum, and Anus	69	1,093	219	41	667	133	28	426	85
Trachea, Bronchus, and Lung	245	3,722	744	124	1,743	349	121	1,980	396
Breast (Female Only)	65	1,327	265	N/A	N/A	N/A	65	1,327	265
Prostate	26	280	56	26	280	56	N/A	N/A	N/A
Diabetes Mellitus	130	2,074	415	78	1,243	249	52	832	166
Pneumonia and Influenza	70	956	191	35	423	85	35	533	107
Chronic Lower Respiratory Diseases	295	3,749	750	142	1,708	342	153	2,042	408
Chronic Liver Disease and Cirrhosis	48	1,106	221	29	660	132	19	446	89
Septicemia	64	942	188	28	395	79	36	547	109
Nephritis, Nephrosis, & Nephrotic Syndrome	93	1,213	243	53	671	134	40	542	108
Alzheimer's disease	164	1,355	271	44	371	74	120	984	197
HIV disease	4	138	28	2	52	10	2	87	17
Unintentional Motor Vehicle Injuries	77	2,530	506	52	1,641	328	25	889	178
All Other Unintentional Injuries	156	4,369	874	94	2,763	553	62	1,606	321
Suicide	54	1,586	317	40	1,197	239	14	390	78
Homicide	14	540	108	11	458	92	3	82	16
Remaining Causes	891	13,575	2,715	399	6,738	1,348	492	6,837	1,367
Total Deaths - All Causes	3,998	62,807	12,561	2,058	33,829	6,766	1,940	28,978	5,796

Source: NC SCHS, 2014-2018 Years of Potential Life Lost by Cause of Death Report

Table 2:

County	#Days with AQI	#Days Good	#Days Moderate	#Days Unhealthy for Sensitive Groups	#Days Unhealthy	#Days Very Unhealthy	AQI Max	AQI 90th %ile	AQI Median	#Days CO	#Days NO2	#Days O3	#Days SO2	#Days PM2.5	#Days PM10
Lincoln County, NC	225	184	41	.	.	.	90	58	41	.	.	225	.	.	.

Table 3:

County	CO 1-hr 2nd Max	CO 8-hr 2nd Max	NO2 98th %ile	NO2 Annual Mean	O3 1-hr 2nd Max	O3 8-hr 4th Max	SO2 99th %ile	SO2 24-hr 2nd Max	SO2 Annual Mean	PM2.5 98th %ile	PM2.5 Wtd. Mean	PM10 24-hr 2nd Max	PM10 Annual Mean	Lead Max 3-Mo. Avg
Lincoln County, NC	.	.	.	.	0.07	0.063	.	.	.	.	.	.	.	.

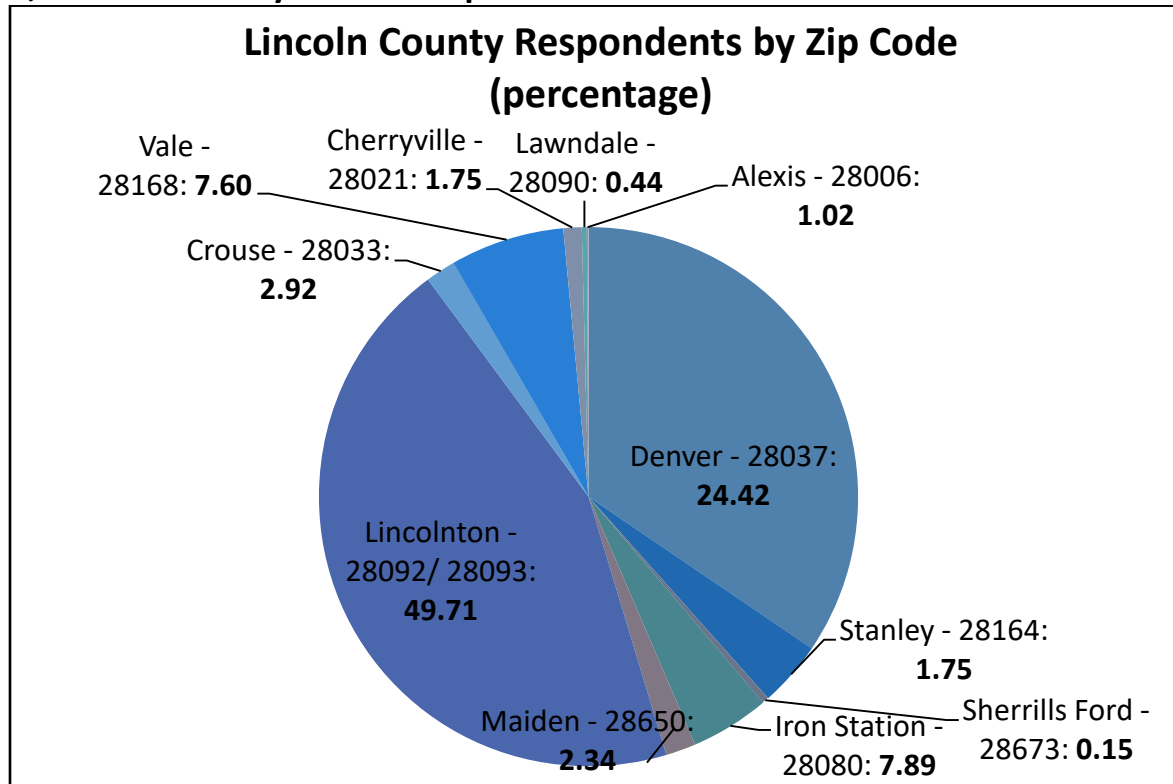
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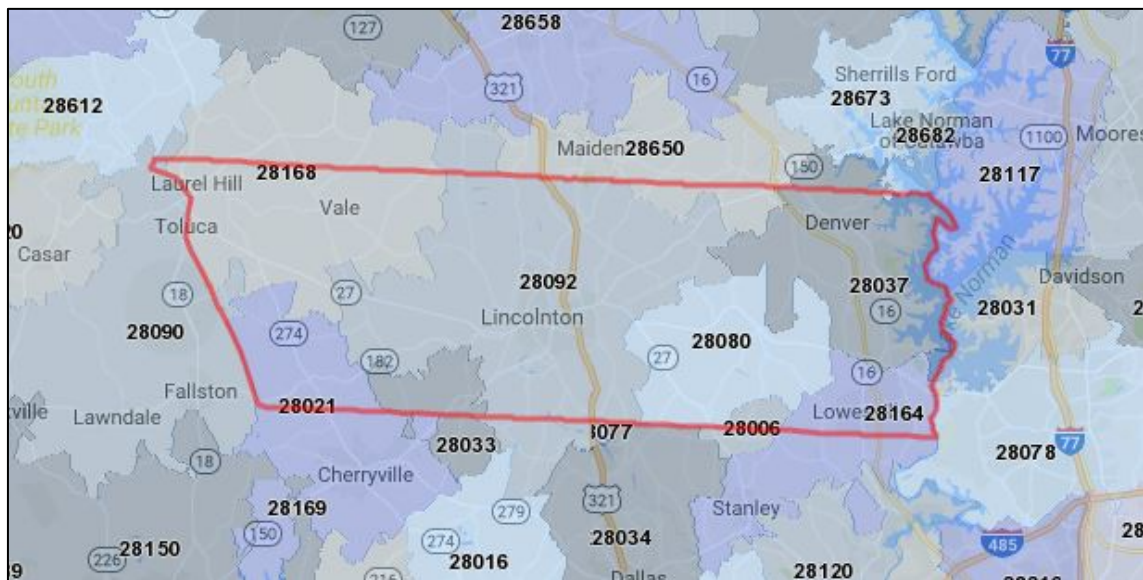


## Appendix C: Primary survey findings from 2019 Community Health Opinion Survey

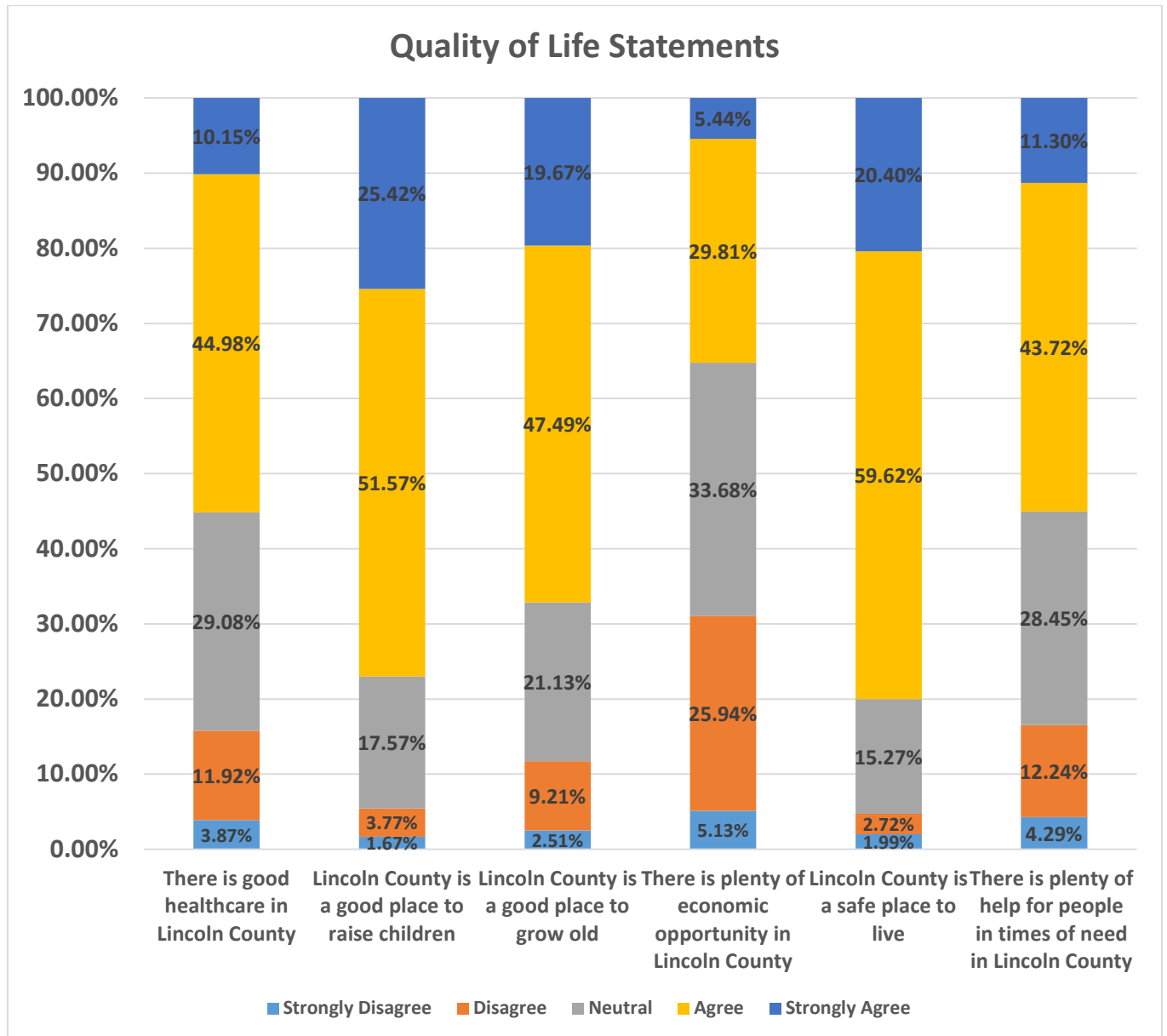
- **1,073 total surveys were completed.**



Responses were collected from 12 out of 12 possible county zip codes.



Source: Zipmap



Most people surveyed “agreed” and/or “strongly agreed” with all of the quality of life statements except the statement regarding in county economic opportunities.

### Community Improvement Questions:

**Top 3 chosen priorities by survey respondents when asked, “Which problems most affect the quality of life in Lincoln County?” 1 being the most important, 2 being second most important, and 3 being your third most important choice.**

- 1. Drug Abuse (legal, controlled, illegal)**
- 2. Low Income/Poverty**
- 3. Theft**

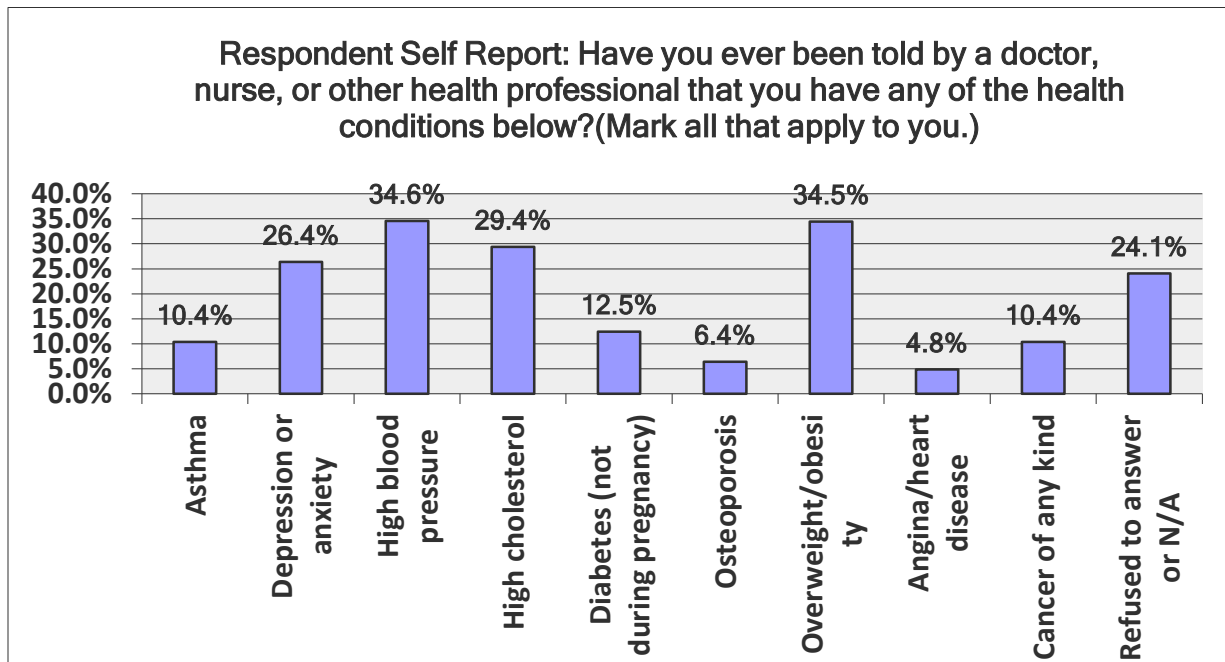
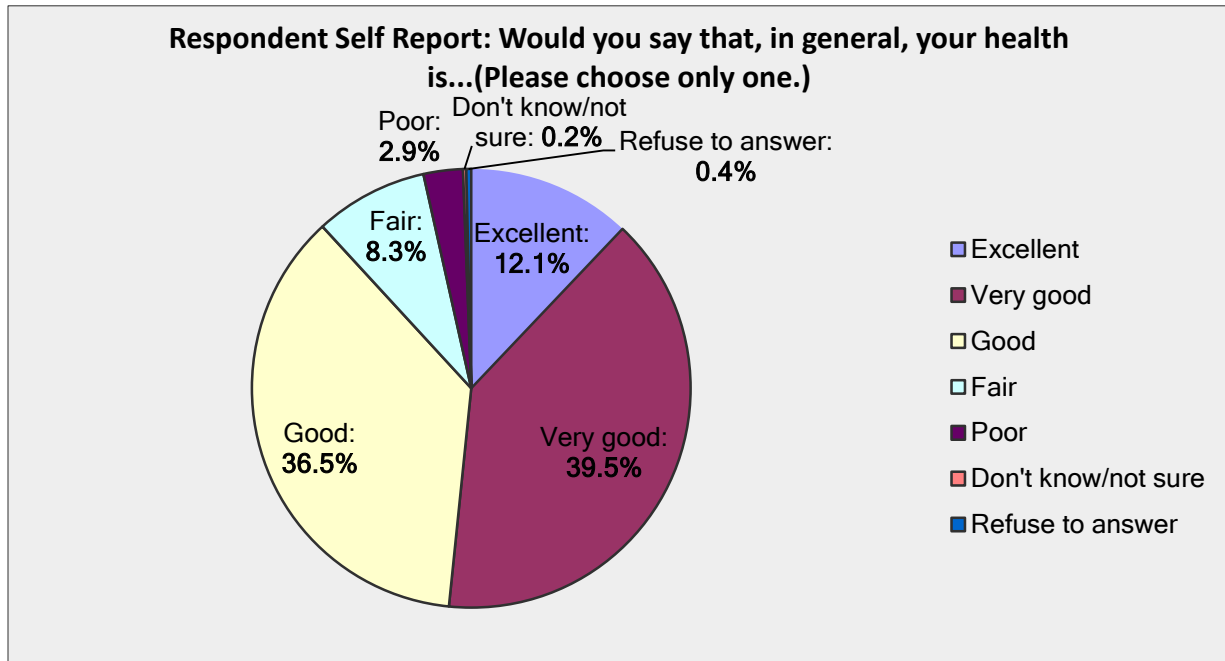
**Top 3 chosen priorities by survey respondents when asked, “Which services need the most improvement in your neighborhood or community?” 1 being the most important, 2 being second most important, and 3 being your third most important choice.**

- 1. More affordable health services**  
**Better/more recreational facilities (parks, trails, community centers)**
- 2. Better/more healthy food choices**
- 3. Positive teen activities**

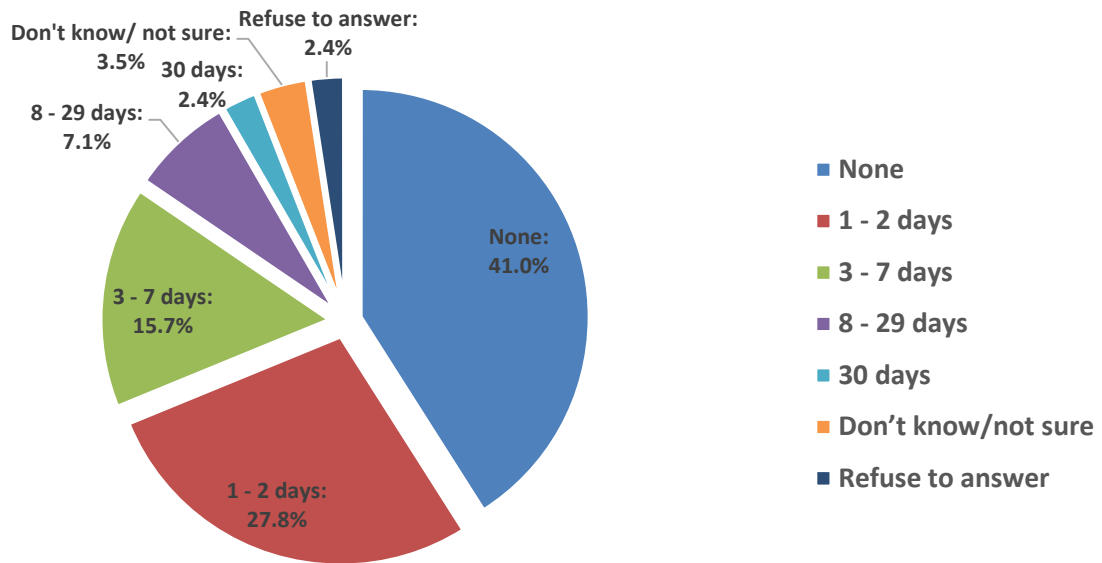
**Top 3 chosen priorities by survey respondents when asked, “Which topics do people in our community need more information about?” 1 being the most important, 2 being second most important, and 3 being your third most important choice.**

- 1. Drug or alcohol use prevention**
- 2. Exercising/fitness**
- 3. Stress management**

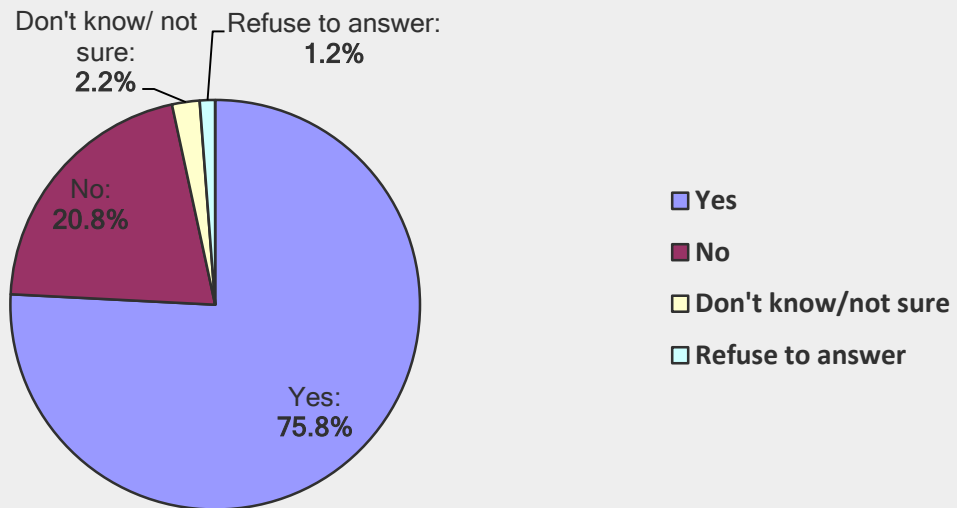
## Personal Health:



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

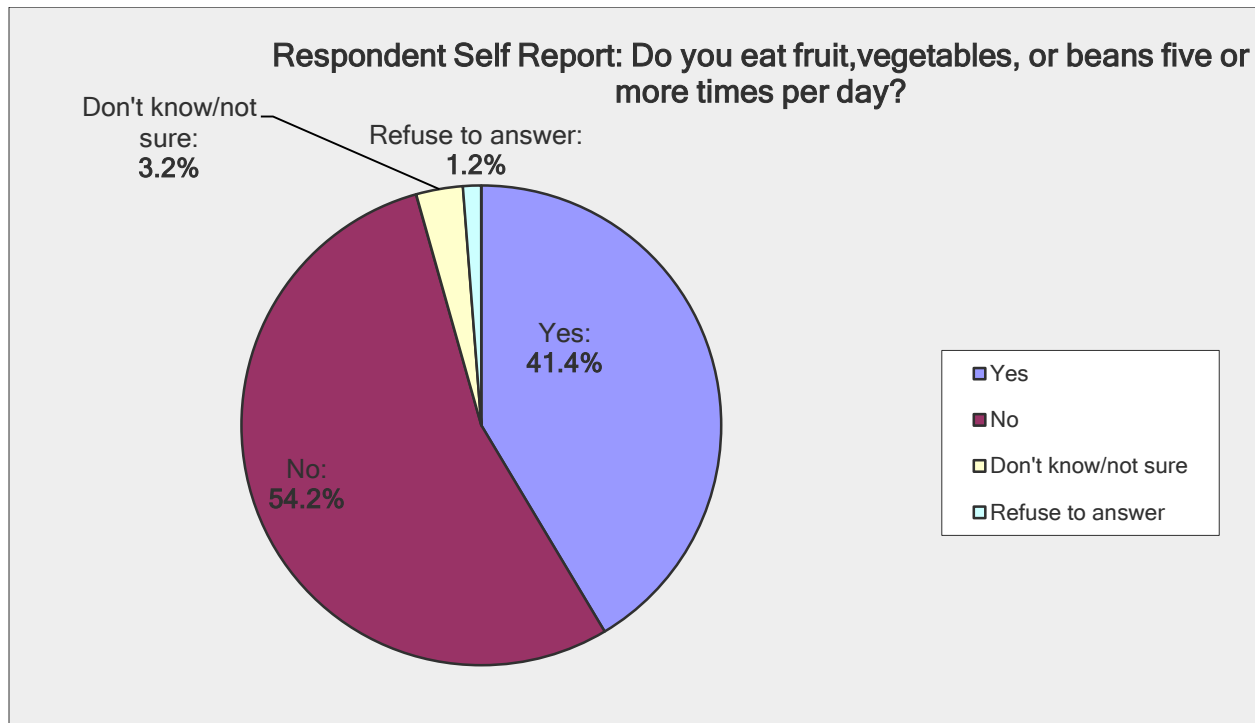


**During a normal week, other than in your regular job, do you engage in any physical activity or exercise that lasts at least a half hour?**

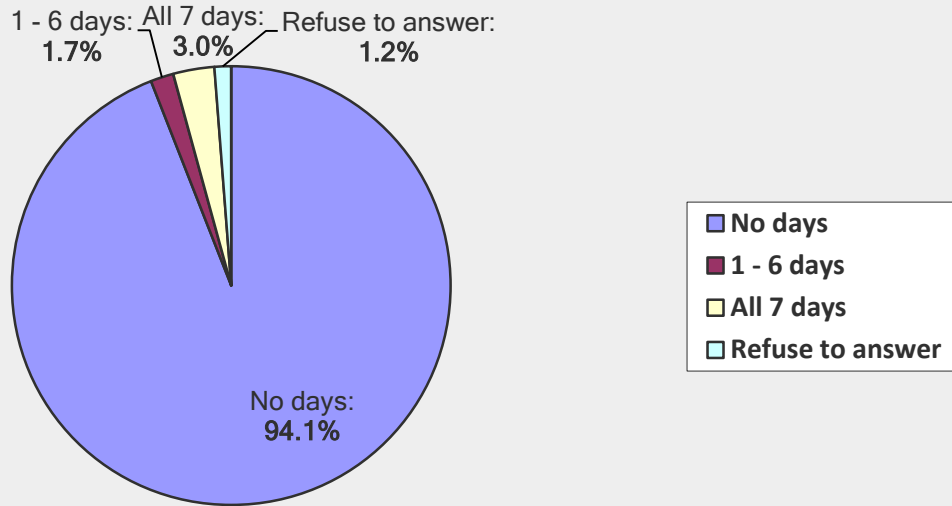


**Word Cloud: Self-reported reasons why respondents do not exercise for at least a half hour during a normal week.**

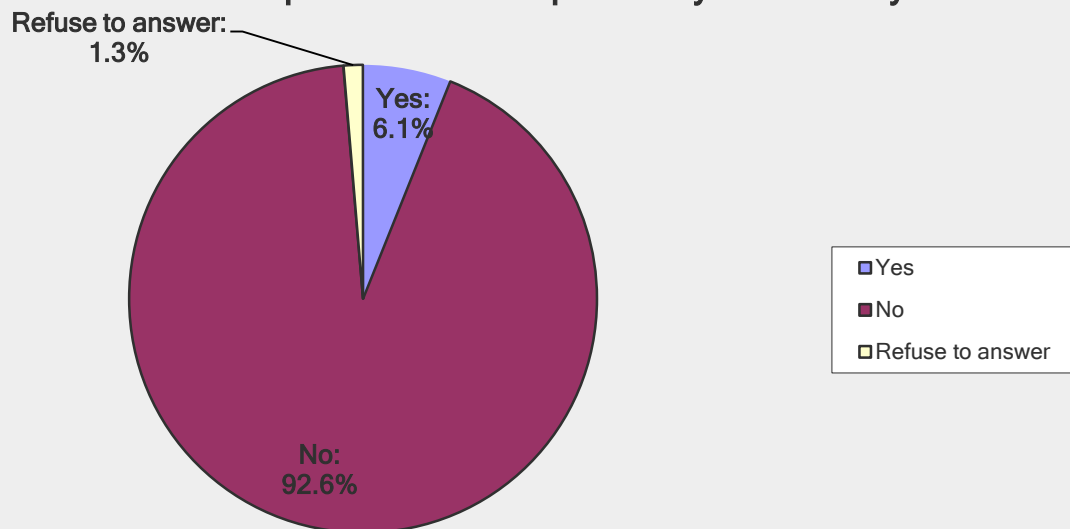
family excuses motivation take tired hot make school home gym  
 exercise tired work work day time job Lazy schedule  
 Lack ABLE busy answer n children enough time afford walking  
 motivated good



**Respondent Self Report: On how many of the past 7 days, did anyone smoke in your home, while you were there?**

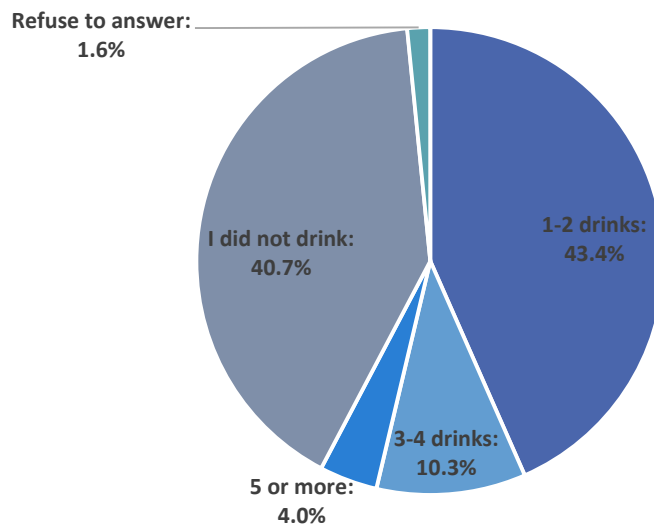


**Respondent Self Report: Do you currently smoke?**

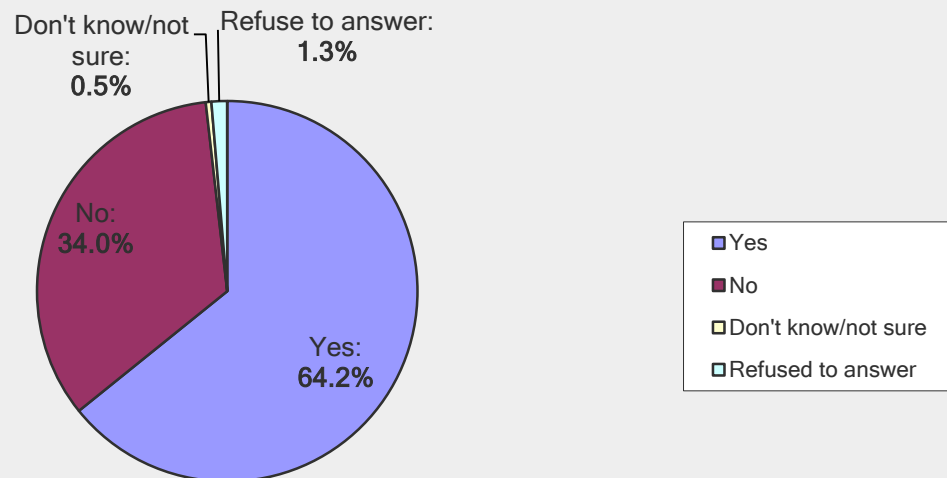




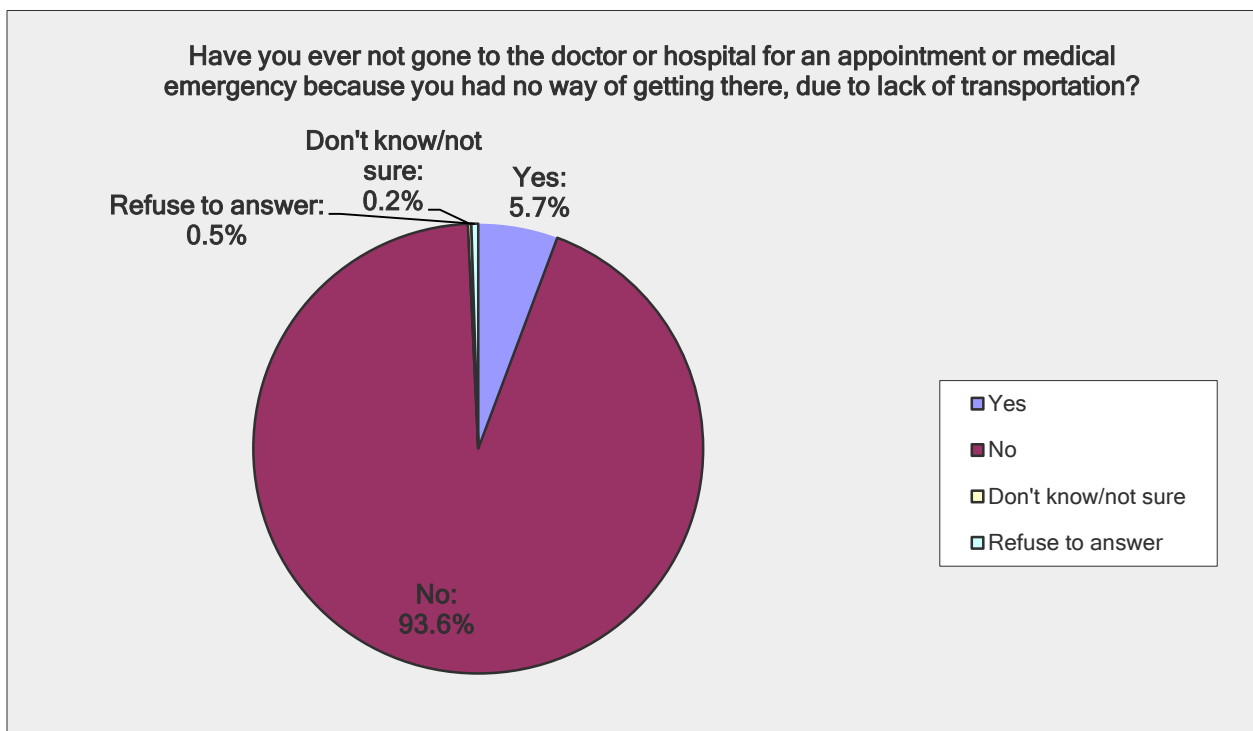
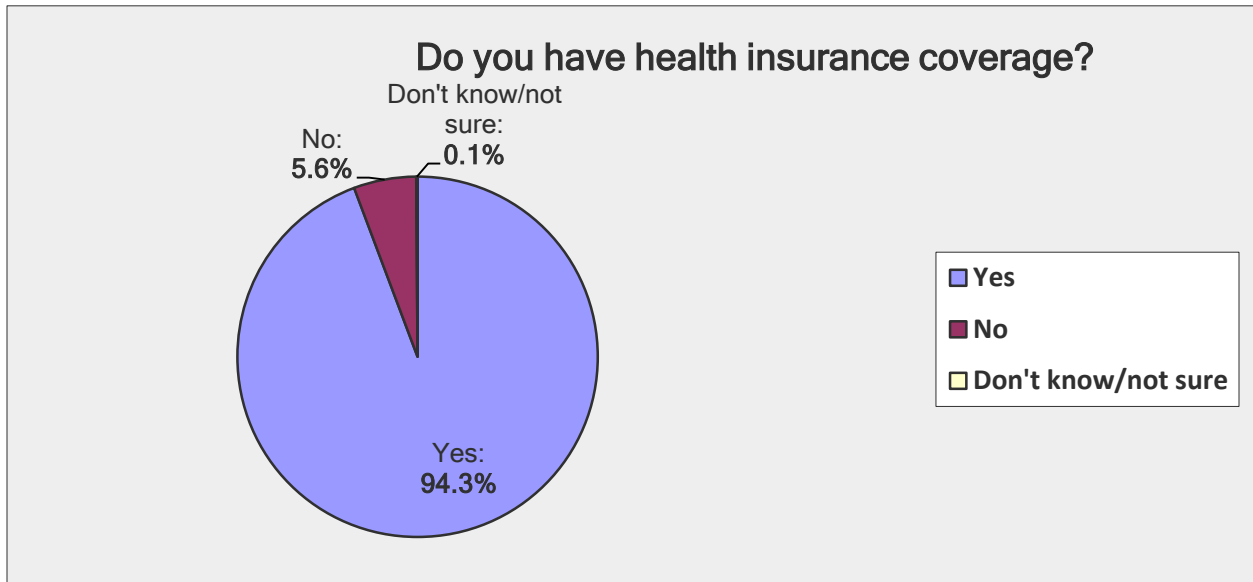
**During the past 30 days, on the days when you drank alcohol, about how many drinks did you drink on average?**



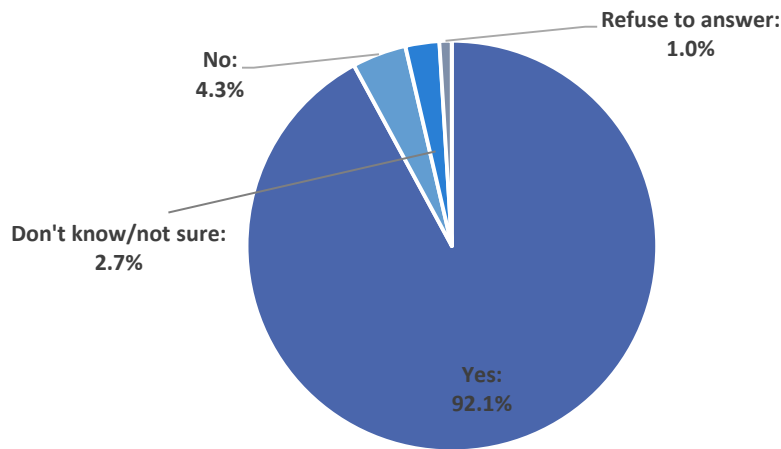
**Respondent Self Report: During the past 12 months, have you had a flu vaccine?(A flu vaccine can be a "flu shot" injected into your arm or a spray like "FluMist" which is sprayed into your nose.)**



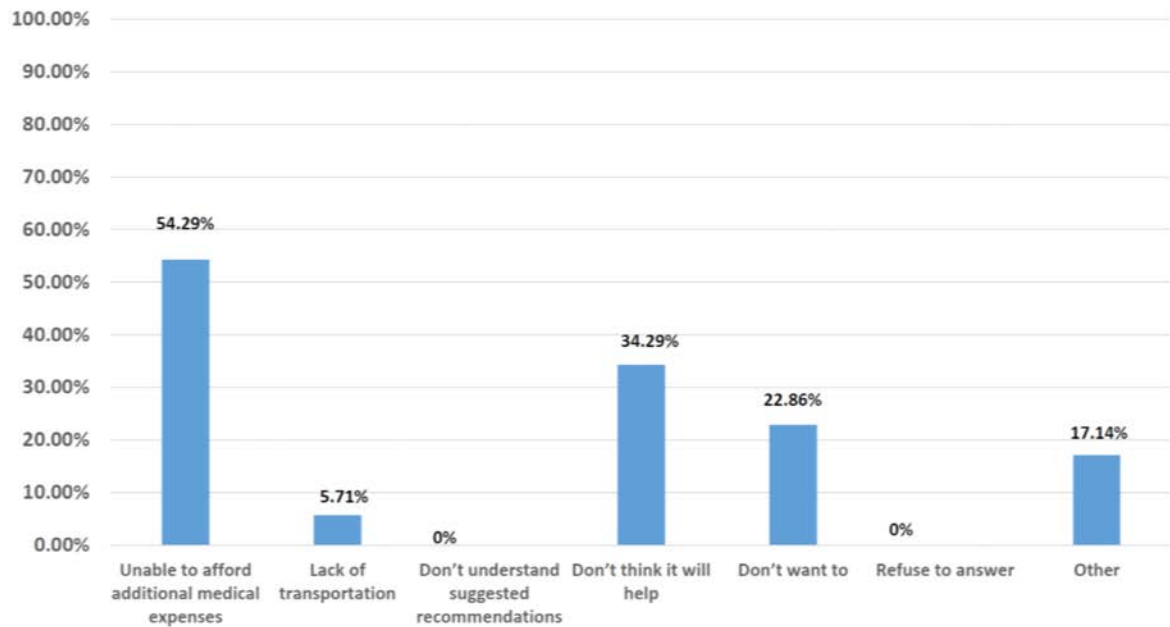
## Access to Care:



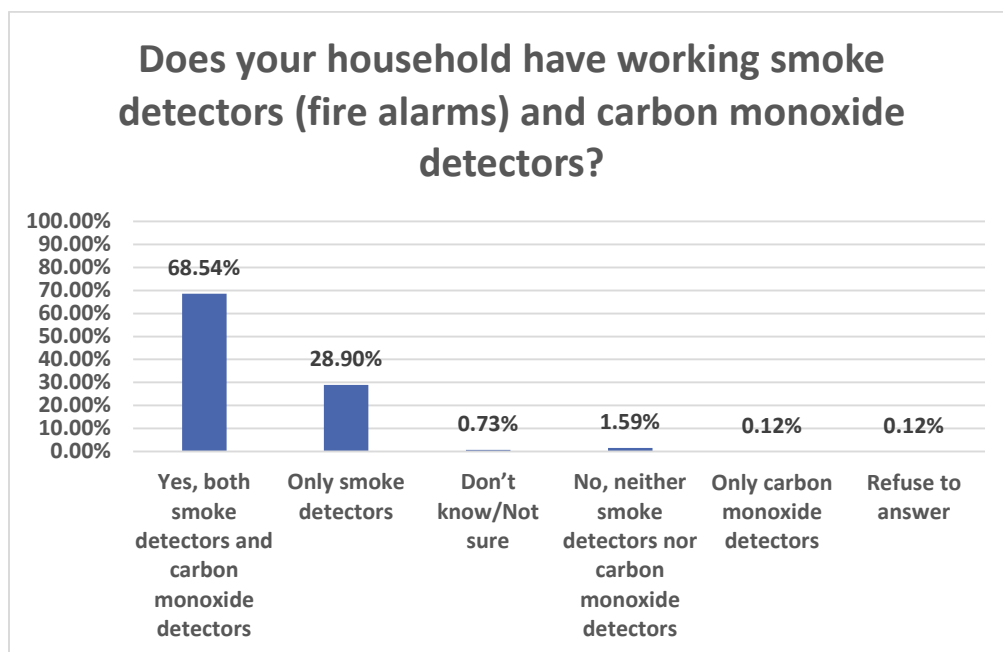
Do you follow through with your doctor's recommendations for your health and wellness such as filling prescriptions, keep follow-up appointments, or making suggested lifestyle changes?



Q20 If you answered "no" to the previous question, please select all of the reasons why you are unable to follow through with your doctor's recommendations.



## Emergency Preparedness

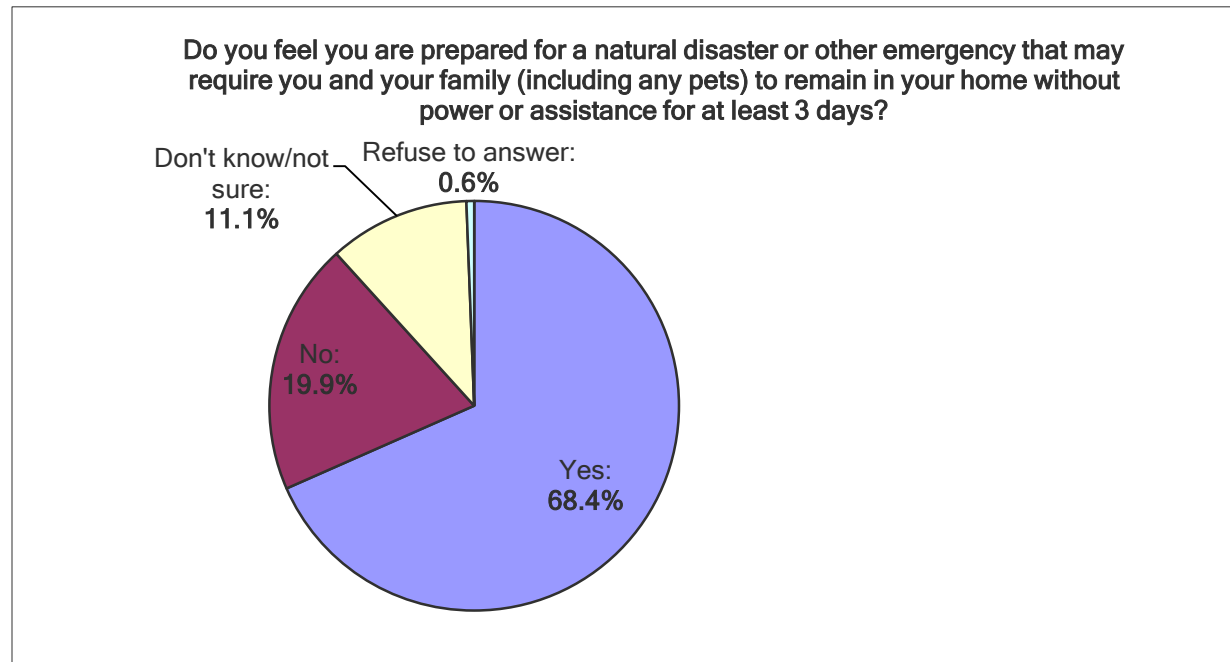


**82.6% of respondents indicated they would evacuate** due to a large-scale disaster or emergency if asked to do so by public authorities. 17.2% of respondents indicated they would not or were not sure if they would evacuate under the same conditions mentioned above.

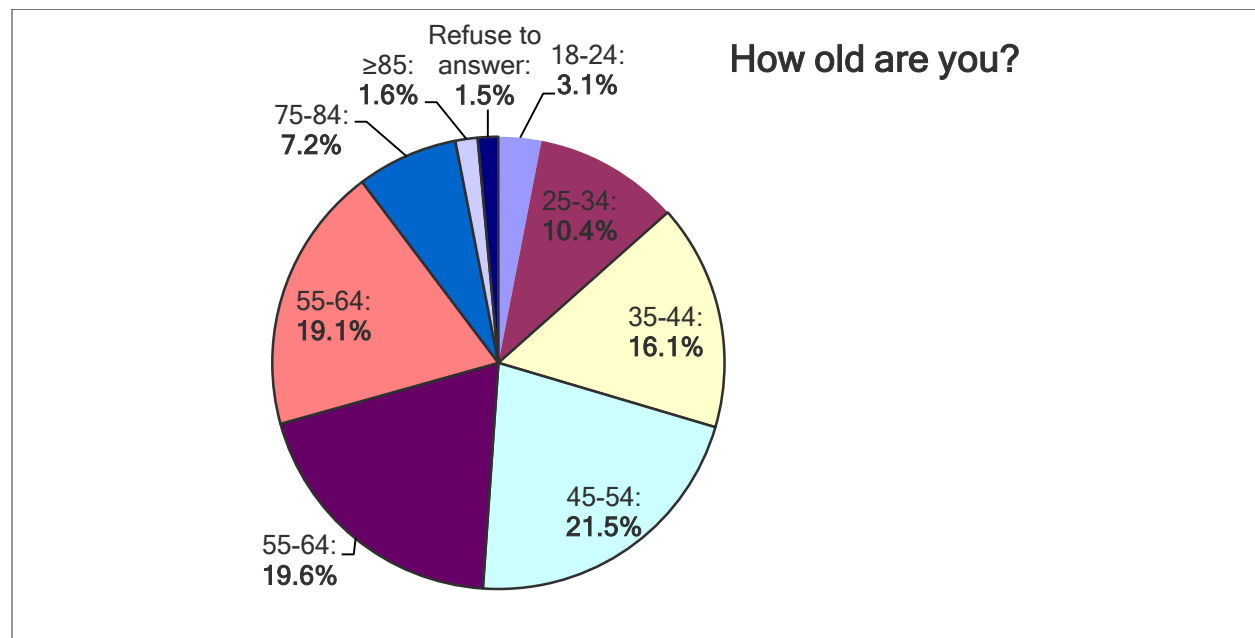
Respondent Opinion: What is the main reason you wouldn't evacuate during a mandatory evacuation called by public authorities?		
19%	1	Concern about leaving pets
10-12%	2	Concern about traffic jams and inability to get out
10-12%	3	Concern about leaving property behind
7-9%	4	Concern about family safety
7-9%	5	Lack of trust in public officials
2-5%	6	Lack of transportation
2-5%	7	Health problems where you cannot be moved
2-5%	8	Concern about personal safety

When faced with evacuation, approximately 19% of respondents were most concerned with leaving their pets behind followed by 10-12% of respondents that said they would be concerned about traffic jams and inability to get out, and concerned about leaving property behind. Other reasons including concern about family safety, lack of trust in public officials,

lack of transportation, health problems where they cannot be moved, and concern about personal safety.



### Demographic Questions:



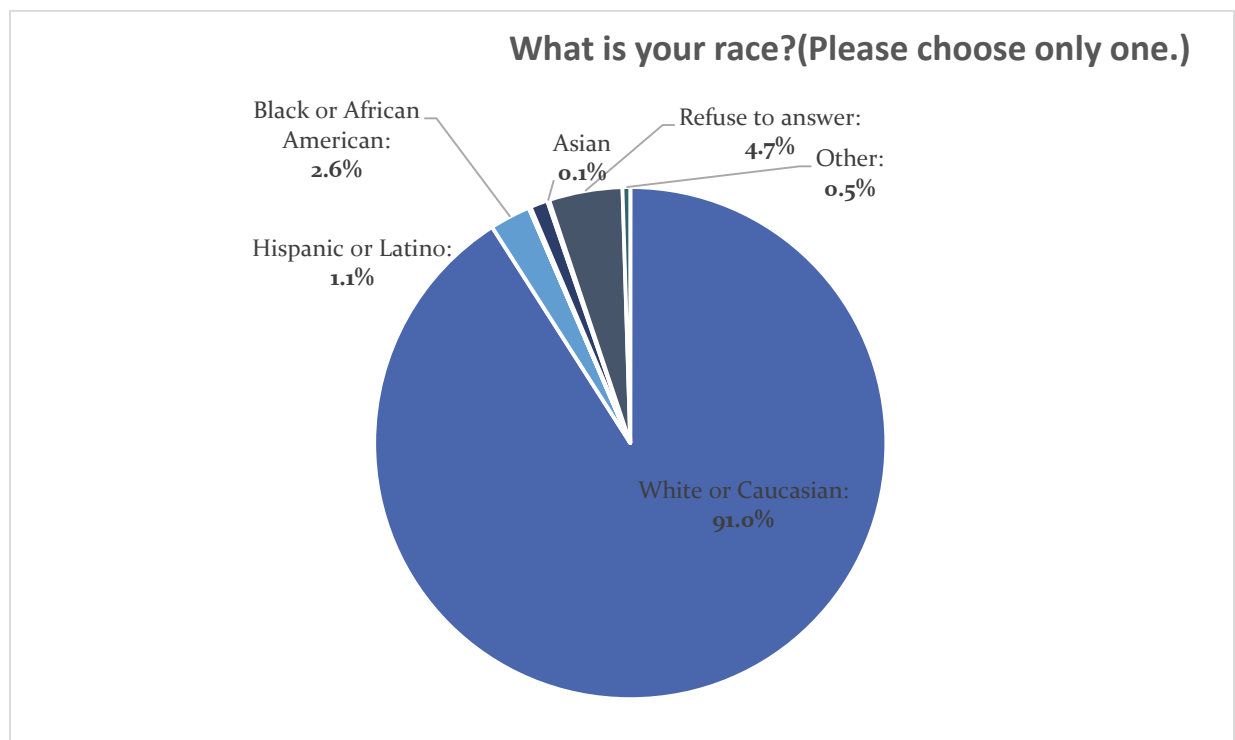
At the time of the survey, roughly 13% of respondents were Millennials (Gen Y), 38% were Gen X's, 38% were baby boomers, and 1.5% did not provide an answer for the question.

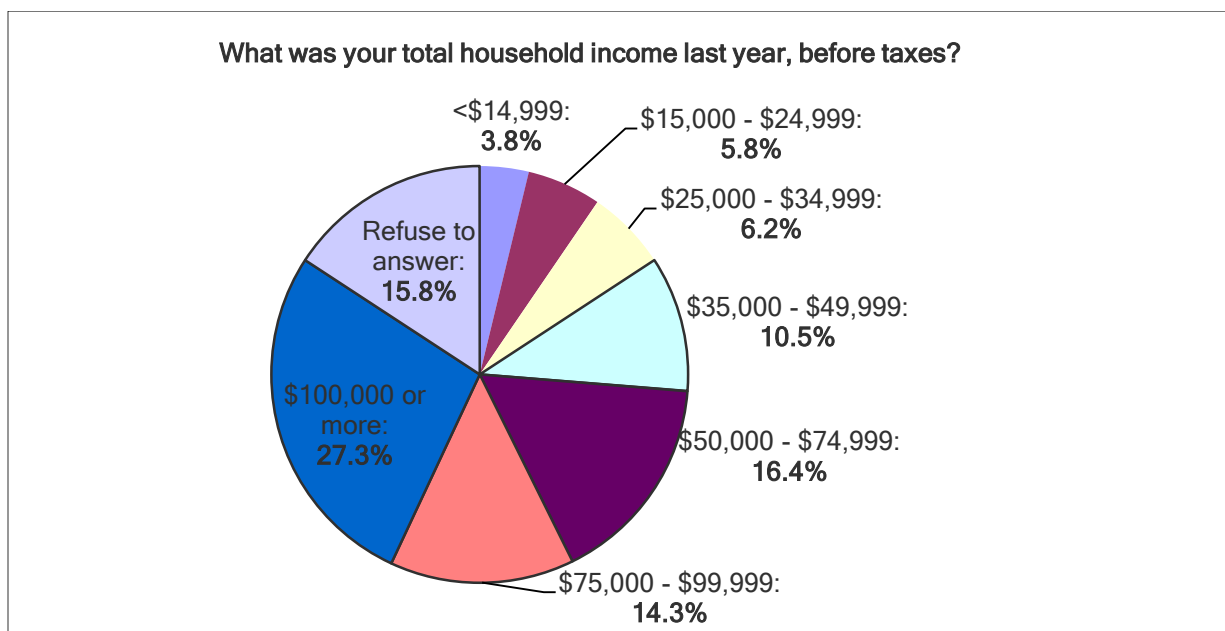
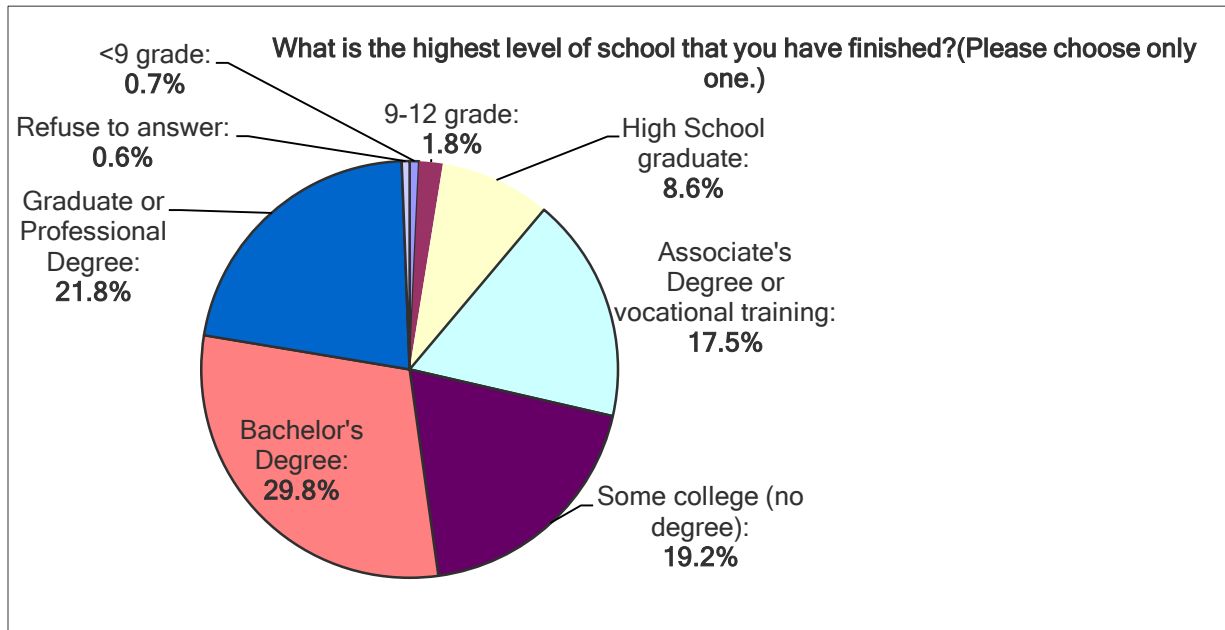
### Gender

- 66.63% of respondents were female.
- 31.54% of respondents were male.
- 1.83% refused to answer the question.

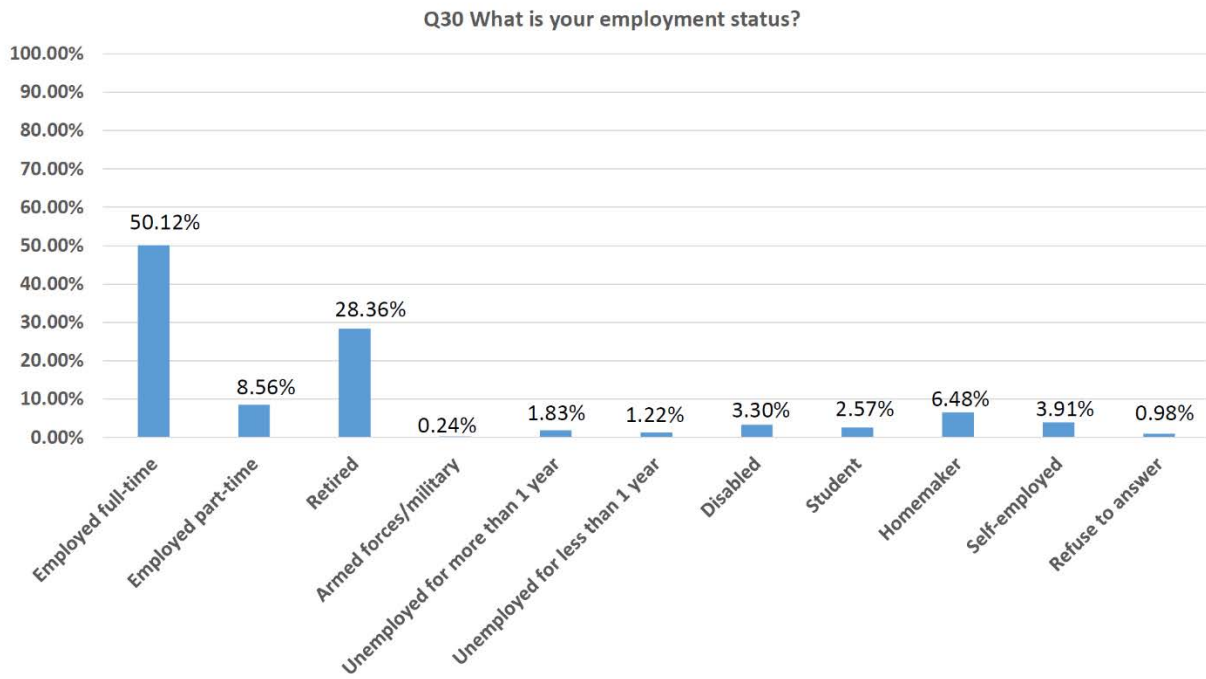
### Hispanic or Latino origin

- 3.18% of respondents were of Hispanic or Latino origin.
- 4.16% refused to answer the question.





The majority (40%) of respondents indicated that their household income supports two individuals, followed by four, one and three individuals at 18%, 17% and 15%, respectively.





## Appendix D: 2019 CHA Survey Tool – English



### Lincoln County Health Department

200 Gamble Drive  
Lincolnton, NC 28092  
PHONE: 704-735-3001  
FAX: 704-732-9034



### 2019 Lincoln County Community Health Opinion Survey

Lincoln County Health Department, in collaboration with the Lincoln County Partnership for Health, is conducting a survey that asks you to share your opinion about the health status of our county. Information from the survey will be used to identify health needs and priorities in our county. **This survey is anonymous and should take less than 15 minutes to complete.** This survey is intended for Lincoln County residents who are at least 18 years old. Please only complete this survey **ONCE**. Your opinion and responses are highly valued! Thank you for your participation.

1. Do you live in Lincoln County? ☐ Yes ☐ No  
(If no, stop the survey here.)
2. If you answered "Yes" to question #1, what is your zip code? \_\_\_\_\_

### Quality of Life Statements

3. Please tell us whether you "strongly disagree," "disagree," "neutral," "agree," or "strongly agree" with each of the next 6 statements.

Statements	Circle the number that best represents your opinion of each statement below.				
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
<b>How do you feel about the following statements?</b> "There is good healthcare in Lincoln County." Consider the cost, quality, and availability of healthcare in the county.	1	2	3	4	5
"Lincoln County is a good place to raise children." Consider the quality and safety of schools and child care programs, after school programs, and places to play in the county.	1	2	3	4	5
"Lincoln County is a good place to grow old." Consider the county's elder-friendly housing, transportation to medical services, recreation, and services for the elderly.	1	2	3	4	5
"There is plenty of economic opportunity in Lincoln County." Consider the number and quality of jobs, job training/higher education opportunities, and availability of affordable housing in the county.	1	2	3	4	5
"Lincoln County is a safe place to live." Consider how safe you feel at home, in the workplace, in schools, at playgrounds, parks, and shopping centers in the county.	1	2	3	4	5
"There is plenty of help for people during times of need in Lincoln County." Consider social support in this county: neighbors, support groups, faith community outreach, community organizations, and emergency monetary assistance.	1	2	3	4	5
<b>Please use this section for suggestions or comments regarding the statements above.</b>					

Community Improvement

The next set of questions will ask about community problems and services that are important to you. For questions #4, #5, and #6, please choose your top three answers for each question and rank those in order of importance to you with 1 being the most important. Your answers will remain anonymous and cannot be linked to you in anyway.

4. In your opinion, which problems most affect the quality of life in Lincoln County?  
(1=Most important 2= Second most important 3=Third most important)

Rank		Rank	
	Pollution (air, water, land)		Lack of community support
	Dropping out of school		Elder abuse
	Low income/poverty		Child abuse
	Drug abuse (legal, controlled, illegal)		Domestic Violence
	Homelessness		Violent crime (murder, assault)
	Lack of/inadequate health insurance		Theft
	Hopelessness		Rape/sexual assault
	Discrimination/racism		Other (describe):

☐ None

5. In your opinion, which services need the most improvement in your neighborhood or community? (1=Most important 2= Second most important 3=Third most important)

Rank		Rank	
	Animal control		More affordable/better housing
	Child care options		Healthy families activities
	Elder care options		Positive teen activities
	Services for disabled people		Transportation options
	More affordable health services		Sidewalks/Walkability
	Number of health care providers What kind?		Availability of employment
	Culturally appropriate health services		Higher paying employment
	Counseling/mental health/support groups		Road maintenance
	Better/more recreational facilities (parks, trails, community centers)		Road safety
	Better/more healthy food choices		Emergency Services
			Other (describe):

☐ None

6. In your opinion, which topics do people in our community need more information about?  
(1=Most important 2=Second most important 3=Third most important)

Rank		Rank	
	Eating well/nutrition		Driving safely
	Exercising/fitness		Using seat belts
	Managing weight		Using child safety seats
	Going to a dentist for check-ups/preventive care		Preventing pregnancy and STDs
	Going to the doctor for yearly check-ups and screenings		Drug or alcohol abuse prevention
	Getting prenatal care during pregnancy		Suicide prevention
	Getting flu shots and other vaccines		Stress management
	Preparing for an emergency/disaster		Anger management
	Quitting smoking/tobacco use prevention		Domestic violence prevention
	Child care/parenting		Crime prevention
	Elder care		Rape/sexual abuse prevention
	Caring for family members with special needs/disabilities		Other (describe):

☐ None

#### Personal Health

These next questions are about your own personal health. Your answers will remain anonymous and cannot be linked to you in any way.

7. Would you say that, in general, your health is...  
(Please choose only one.)

☐ Excellent      ☐ Fair  
☐ Very Good      ☐ Poor  
☐ Good      ☐ Don't know/Not sure  
☐ Refuse to answer

8. During the past 12 months, have you had a flu vaccine?  
(A flu vaccine can be a "flu shot" injected into your arm or a spray like "FluMist" which is sprayed into your nose.)

☐ Yes      ☐ No  
☐ Don't know/Not sure      ☐ Refuse to answer

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

☐ None ☐ 3 – 7 days ☐ 30 days ☐ Refuse to answer  
☐ 1 – 2 days ☐ 8 – 29 days ☐ Don't know/Not sure

10. Have you ever been told by a doctor, nurse, or other health professional that you have any of the health conditions below?

(Please mark all that apply to you.)

☐ Asthma ☐ Osteoporosis  
☐ Depression or anxiety ☐ Overweight/Obesity  
☐ High Blood Pressure ☐ Angina/Heart Disease  
☐ High Cholesterol ☐ Cancer of any kind  
☐ Diabetes (not during pregnancy) ☐ Refuse to answer or N/A

11. During a normal week, other than in your regular job, do you engage in any physical activity or exercise that lasts at least a half hour?

☐ Yes (skip to question #13) ☐ No (go to question #12)  
☐ Don't know/Not sure (skip to question #13) ☐ Refuse to answer (skip to question #13)

12. If you answered “no” to question #11, what are the reasons you do not exercise for at least a half hour during a normal week?

13. Think about how often you eat whole fruits, vegetables, or beans in an average day. Please consider fresh, frozen, and canned whole fruits, vegetables, or beans.

Do you eat fruits, vegetables, or beans five or more times per day?

☐ Yes ☐ No  
☐ Don't know/Not sure ☐ Refuse to answer

14. Do you currently smoke?

☐ Yes ☐ No ☐ Refuse to answer

15. On how many of the past 7 days, did anyone smoke in your home, while you were there?

☐ No days ☐ All 7 days  
☐ 1 – 6 days ☐ Refuse to answer

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

- ☐ 1 – 2 drinks
- ☐ 3 – 4 drinks
- ☐ 5 or more drinks
- ☐ I did not drink alcohol
- ☐ Refuse to answer

#### Access to Care

17. Do you have health insurance coverage?

- ☐ Yes
- ☐ No
- ☐ Don't know/Not sure

18. Have you ever not gone to the doctor or hospital for an appointment or medical emergency because you had no way of getting there, due to lack of transportation?

- ☐ Yes
- ☐ No
- ☐ Don't know/Not sure
- ☐ Refuse to answer

19. Do you follow through with your doctor's recommendations for your health and wellness such as filling prescriptions, keeping follow-up appointments, or making suggested lifestyle changes?

- ☐ Yes (skip to question #21)
- ☐ No (go to question #20)
- ☐ Don't know/Not sure (skip to question #21)
- ☐ Refuse to answer (skip to question #21)

20. If you answered "no" to question #19, please select all of the reasons why you are unable to follow through with your doctor's recommendations.

- ☐ Unable to afford additional medical expenses
- ☐ Don't think it will help
- ☐ Lack of transportation
- ☐ Don't want to
- ☐ Don't understand suggested recommendations
- ☐ Other (describe): \_\_\_\_\_
- ☐ Refuse to answer

#### Emergency Preparedness

21. Does your household have working smoke detectors (fire alarms) and carbon monoxide detectors?

- ☐ Yes, both smoke detectors and carbon monoxide detectors
- ☐ No, neither smoke detectors nor carbon monoxide detectors
- ☐ Only smoke detectors
- ☐ Only carbon monoxide detectors
- ☐ Don't know/Not sure
- ☐ Refuse to answer

22. If public authorities announced a mandatory evacuation of your neighborhood or community due to a large-scale disaster or emergency, would you evacuate?

- ☐ Yes (skip to question #24)
- ☐ No (go to question #23)
- ☐ Don't know/Not sure (go to question # 23)
- ☐ Refuse to answer (skip to question #24)

23. If you answered “no” or “don’t know/not sure” to question #22, what would be the main reason you might not evacuate if asked to do so?

(Please choose only one.)

- |                                                                |                                                                              |
|----------------------------------------------------------------|------------------------------------------------------------------------------|
| <input type="checkbox"/> Lack of transportation                | <input type="checkbox"/> Concern about leaving pets                          |
| <input type="checkbox"/> Lack of trust in public officials     | <input type="checkbox"/> Concern about traffic jams and inability to get out |
| <input type="checkbox"/> Concern about leaving property behind | <input type="checkbox"/> Health problems where you cannot be moved           |
| <input type="checkbox"/> Concern about personal safety         | <input type="checkbox"/> Other (describe): _____                             |
| <input type="checkbox"/> Concern about family safety           | <input type="checkbox"/> Don’t know/Not sure                                 |
|                                                                | <input type="checkbox"/> Refuse to answer or N/A                             |

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

- |                                              |                                           |
|----------------------------------------------|-------------------------------------------|
| <input type="checkbox"/> Yes                 | <input type="checkbox"/> No               |
| <input type="checkbox"/> Don’t know/Not sure | <input type="checkbox"/> Refuse to answer |

Demographic Questions

25. How old are you?

- |                                  |                                  |                                           |
|----------------------------------|----------------------------------|-------------------------------------------|
| <input type="checkbox"/> 18 – 24 | <input type="checkbox"/> 45 – 54 | <input type="checkbox"/> 75 – 84          |
| <input type="checkbox"/> 25 – 34 | <input type="checkbox"/> 55 – 64 | <input type="checkbox"/> 85 or older      |
| <input type="checkbox"/> 35 – 44 | <input type="checkbox"/> 65 – 74 | <input type="checkbox"/> Refuse to answer |

26. Are you Male or Female? ☐ Male ☐ Female ☐ Refuse to answer

27. Are you of Hispanic, Latino, or Spanish origin? ☐ Yes ☐ No ☐ Refuse to answer

28. What is your race? (Please choose only one.)

- ☐ White or Caucasian
- ☐ Black or African American
- ☐ American Indian or Alaska Native
- ☐ Asian including Asian Indian, Chinese, Filipino, Japanese, Korean, Vietnamese
- ☐ Pacific Islander including Native Hawaiian, Samoan, Guamanian/Chamorro
- ☐ Biracial/Multiracial
- ☐ Other \_\_\_\_\_
- ☐ Refuse to answer

29. What is the highest level of school that you have finished? (Please choose only one.)

- ☐ Less than 9<sup>th</sup> grade
- ☐ 9 – 12<sup>th</sup> grade, no diploma
- ☐ High school graduate (or GED/equivalent)
- ☐ Some college (no degree)
- ☐ Associate’s Degree or Vocational Training
- ☐ Bachelor’s Degree
- ☐ Graduate or Professional degree
- ☐ Refuse to answer



30. What is your employment status? (Please mark all that apply to you.)

- |                                                                 |                                                                 |
|-----------------------------------------------------------------|-----------------------------------------------------------------|
| <input type="checkbox"/> Employed full-time                     | <input type="checkbox"/> Unemployed for <u>less than</u> 1 year |
| <input type="checkbox"/> Employed part-time                     | <input type="checkbox"/> Disabled                               |
| <input type="checkbox"/> Retired                                | <input type="checkbox"/> Student                                |
| <input type="checkbox"/> Armed forces/Military                  | <input type="checkbox"/> Homemaker (Stay-at-home mom/dad)       |
| <input type="checkbox"/> Unemployed for <u>more than</u> 1 year | <input type="checkbox"/> Self-employed                          |
|                                                                 | <input type="checkbox"/> Refuse to answer                       |

31. What was your total household income last year, before taxes?

- |                                              |                                              |
|----------------------------------------------|----------------------------------------------|
| <input type="checkbox"/> Less than \$14,999  | <input type="checkbox"/> \$50,000 - \$74,999 |
| <input type="checkbox"/> \$15,000 - \$24,999 | <input type="checkbox"/> \$75,000 - \$99,999 |
| <input type="checkbox"/> \$25,000 - \$34,999 | <input type="checkbox"/> \$100,000 or more   |
| <input type="checkbox"/> \$35,000 - \$49,999 | <input type="checkbox"/> Refuse to answer    |

32. How many people does this income support? \_\_\_\_\_

(If you are paying child support, but your child is not living with you, this still counts as someone supported by your income.)

**The End.**

Thank you so much for taking time to complete this survey!

If you have any questions regarding the survey or if you would like to volunteer to serve on the Lincoln County Partnership for Health, please contact Laney Avery at (704) 735 – 3001.

## Appendix E: 2019 CHA Survey Tool – Spanish



### Departamento de Salud del Condado de Lincoln

200 Gamble Drive  
Lincolnton, NC 28092  
PHONE: 704-735-3001  
FAX: 704-732-9034



### 2019 Encuesta de Opinión de Salud de la Comunidad

El Departamento de Salud del Condado de Lincoln, en colaboración con el Participante en su Salud, está llevando a cabo una encuesta para conocer más acerca del estado de salud en nuestra comunidad. Vamos a utilizar los resultados de esta encuesta para identificar las necesidades de salud y prioridades en nuestro condado. **Esta encuesta es anónima y debe tardar menos de 15 minutos para completar.** Esta encuesta está dirigida a los residentes del Condado de Lincoln que tengan al menos 18 años de edad. Por favor, sólo complete esta encuesta **una vez**. ¡Su opinión y sus respuestas son muy valiosas! Gracias por su participación.

1. ¿Vive usted en el Condado de Lincoln? ☐ Sí ☐ No  
(Si no, pare de tomar la encuesta aquí.)

2. Si usted contestó "Sí" a la pregunta #1, por favor proporcione su código postal.  
\_\_\_\_\_ (Escriba sólo los primeros 5 dígitos.)



### Declaraciones de Calidad de Vida

3. Por favor díganos si usted está "fuertemente en desacuerdo," "no está de acuerdo," "neutral," "de acuerdo," o "muy de acuerdo" con cada una de las 6 siguientes declaraciones.

Declaraciones	Marque el número que mejor representa su opinión sobre cada declaración abajo.				
	Fuertemente en Desacuerdo	No está de Acuerdo	Neutral	de Acuerdo	Muy de Acuerdo
<b>¿Cómo se siente sobre las siguientes declaraciones?</b> <b>"Hay asistencia médica buena en el condado de Lincoln."</b> Considera el costo, calidad y disponibilidad de la asistencia médica en el condado.	1	2	3	4	5
<b>"El condado de Lincoln es un lugar bueno para criar niños."</b> Considera la calidad y la seguridad de las escuelas y programas del cuidado de los niños, programas escolares extracurriculares y sitios para jugar.	1	2	3	4	5
<b>"El condado de Lincoln es un buen lugar para envejecer."</b> Considera las viviendas favorables al anciano, transporte a servicios médicos, recreación y servicios para las personas mayores.	1	2	3	4	5
<b>"Hay mucha oportunidad económica en el condado de Lincoln."</b> Considera el número y la calidad de empleos, capacitación laboral / acceso a la enseñanza superior y disponibilidad de la vivienda económica.	1	2	3	4	5
<b>Utilice esta sección para comentarios en relación con las declaraciones anteriores.</b>					

### La Mejora de la Comunidad

El siguiente conjunto de preguntas le preguntará acerca de los problemas de la comunidad y los servicios que son importantes para usted. Para las preguntas #4, #5 y #6, por favor elija sus tres respuestas principales para cada pregunta y clasifique aquellos en orden de importancia para usted con 1 siendo el más importante. Sus respuestas seguirán siendo anónimas y no pueden ser vinculadas a usted de ninguna manera.

4. ¿En su opinión, cuál de los siguientes problemas más afecta la calidad de vida en el condado de Lincoln?

(1=El más importante 2=El segundo más importante 3=El tercer más importante)

Numere		Numere	
	Contaminación (aire, agua, suelo)		Falta de apoyo de la comunidad
	Abandono de la escuela		Maltrato a las personas mayores
	Bajos ingresos/pobreza		Abuso infantil
	Abuso de drogas		Violencia doméstica
	Indigencia		Delito violento (asesinato, asalto)
	Falta de/o insuficiente seguro médico		Robo
	Desesperanza		Violación/acoso sexual
	Discriminación/racismo		Otro:

☐ Ninguno

5. ¿En su opinión, cuál es el servicio que necesita el mayor mejoramiento en su vecindario o comunidad? (1=El más importante 2=El segundo más importante 3=El tercer más importante)

Numere		Numere	
	Servicio de control de animales		Mejores viviendas / más económicas
	Opciones del cuidado de los niños		Actividades sanas para la familia
	Servicios para los discapacitados		Opciones de transporte
	Más servicios de salud económicos		Aceras / vías peatonales
	Número de proveedores de cuidado de salud ¿De qué tipo?		Disponibilidad de empleo
	Servicios de salud culturalmente apropiados		Empleo mejor pagado
	Asesoramiento/salud mental/grupos de apoyo		Mantenimiento de carreteras
	Mejor / más instalaciones recreativas (parques, senderos, centros comunitarios)		Seguridad vial
	Mejor opciones de comida saludable		Servicios de emergencia
			Otro:

☐ Ninguno

6. Indique un tema que en su opinión, la comunidad necesita conocer más.  
(1=El más importante 2=El segundo más importante 3=El tercer más importante)

Numere		Numere	
	Comer bien/nutrición		Conducción segura
	Ejercicio/acondicionamiento físico		El uso de cinturones de seguridad
	Control de peso		El uso de asientos de seguridad para niños
	Ir a un dentista para un chequeo/Cuidado preventivo		Prevención de embarazo y ETS
	Ir al médico para chequeos anuales		Prevención del abuso de drogas y alcohol
	Obtener atención prenatal durante el embarazo		Prevención del suicidio
	Obtener vacunas contra la gripe y otras vacunas		Manejo del estrés
	Preparación para una emergencia/ desastre		Manejo de la ira
	Dejar de fumar/prevención del uso de tabaco		Prevención de la violencia domestica
	Cuidado de los niños/crianza de los hijos		Prevención del delito
	Cuidado de los ancianos		Violación/prevención de los abusos sexuales
	Cuidado de familiares con necesidades especiales/discapacidades		Otro (describa):

☐ Ninguno

### Salud Personal

Las siguientes preguntas son acerca de su salud propia. Sus respuestas permanecerán anónimas y no serán vinculadas con usted en ninguna forma.

7. Diría en general, que su salud es...  
(Por favor elija solo uno.)

☐ Excelente      ☐ Justo  
☐ Muy bueno      ☐ Malo  
☐ Bueno      ☐ No se/no estoy seguro/a  
☐ Me niego a responder

8. Durante los últimos 12 meses, ¿ha recibido una vacuna contra la gripe?  
(Una vacuna contra la gripe puede ser una "inyección de influenza" inyectada en el brazo o un aerosol como "FluMist" que se rocía en la nariz.)
- ☐ Sí      ☐ No  
☐ No se/no estoy seguro/a      ☐ Me niego a responder

9. Pensando en su salud mental, el cual incluye el estrés, la depresión/sentimientos de tristeza, y los problemas con las emociones, ¿por cuántos días durante los últimos 30 días diría que su salud mental no ha sido buena?

☐ Ninguno      ☐ 3 – 7 días      ☐ 30 días      ☐ Me niego a responder  
☐ 1 – 2 días      ☐ 8 – 29 días      ☐ No se/no estoy seguro/a

10. ¿Alguna vez le ha dicho un doctor, enfermera, u otro profesional de salud que usted tiene alguna de las siguientes condiciones?

(Marque todos los que aplican.)

☐ Asma      ☐ Osteoporosis  
☐ Depresión o ansiedad      ☐ Sobrepeso/Obesidad  
☐ Presión Alta      ☐ Angina/ Enfermedad del Corazón  
☐ Colesterol Alto      ☐ Cáncer de cualquier tipo  
☐ Diabetes (no durante el embarazo)      ☐ Me niego a responder o no aplica

11. Durante una semana normal, aparte de su trabajo regular, ¿usted hace alguna actividad física o ejercicio que dure por lo menos media hora?

☐ Sí (vaya a la pregunta #13)      ☐ No (vaya a la pregunta #12)  
☐ No se/no estoy seguro/a (vaya a la pregunta #13)      ☐ Me niego a responder (vaya a la pregunta #13)

12. Si contesto “no” a la pregunta #11, cuales son los motivos por los que usted no hace ejercicio por lo menos media hora durante una semana normal?

13. Piense en que tan seguido come frutas y vegetales enteros y frijoles en un día. Por favor considere frutas y vegetales o frijoles frescas, congeladas, y en lata.

¿Come frutas, vegetales o frijoles más de cinco veces por día?

☐ Sí      ☐ No  
☐ No se/no estoy seguro/a      ☐ Me niego a responder

14. ¿Usted fuma actualmente?

☐ Sí      ☐ No      ☐ Me niego a responder

15. Durante los últimos siete días, ¿Alguien fumó en su casa mientras usted estaba allí?

☐ Ninguno      ☐ Todos los siete días  
☐ 1 – 6 días      ☐ Me niego a responder

16. Una bebida que contenga alcohol equivale a una cerveza de 12 onzas, un vaso de vino de 5 onzas o una bebida con un trago de licor. Durante los últimos 30 días, en los días en que bebió alcohol, ¿cuántas bebidas tomó en promedio?

- ☐ 1 – 2 bebidas
- ☐ 3 – 4 bebidas
- ☐ 5 o más bebidas
- ☐ No bebí alcohol
- ☐ Me niego a contestar

#### Acceso a Cuidado

17. ¿Tiene cobertura de seguro médico?

- ☐ Sí
- ☐ No
- ☐ No se/no estoy seguro/a

18. Alguna vez no ha ido a un doctor o hospital para una cita o emergencia médica porque no tenía cómo ir, debido a falta de transporte?

- ☐ Sí
- ☐ No
- ☐ No se/no estoy seguro/a
- ☐ Me niego a responder

19. ¿Usted sigue las recomendaciones de su médico para su salud y bienestar, tales como el llenado de recetas, la realización de citas de seguimiento, o el cambio de estilo de vida sugerido?

- ☐ Sí (vaya a la pregunta #21)
- ☐ No (vaya a la pregunta #20)
- ☐ No se/no estoy seguro/a (vaya a la pregunta #21)
- ☐ Me niego a responder (vaya a la pregunta #21)

20. Si contestó "no" a la pregunta #19, por favor seleccione todas las razones por las que no puede seguir con las recomendaciones de su médico.

- ☐ Incapaz de pagar gastos médicos adicionales
- ☐ No creo que ayudará
- ☐ Falta de transporte
- ☐ No quiero
- ☐ No entiendo las recomendaciones sugeridas
- ☐ Otro (describe): \_\_\_\_\_
- ☐ Me niego a responder

#### Preparación de Emergencia

21. ¿Su casa tiene detector de humo (alarma contra fuego) y detector de monóxido de carbono que funcionen?

- ☐ Sí, ambos detectores de humo y de monóxido de carbono
- ☐ No, no tengo detector de humo ni de monóxido de carbono
- ☐ Solo detector de humo
- ☐ Solo detector de monóxido de carbono
- ☐ No se/no estoy seguro/a
- ☐ Me niego a responder

22. Si las autoridades públicas anuncian una evacuación obligatoria de su vecindario o comunidad debido a un desastre o emergencia grande. ¿Usted evacuaría?

- ☐ Sí (vaya a pregunta #24)
- ☐ No (vaya a pregunta #23)
- ☐ No se/no estoy seguro/a (vaya a pregunta #23)
- ☐ Me niego a responder (vaya a pregunta #24)

23. Si contesto “no” o “no se/no estoy seguro/a” a la pregunta #22, ¿cuál sería la razón principal en por qué no evacuaría si le piden hacerlo?

(Por favor elija solo uno.)

- |                                                                       |                                                                             |
|-----------------------------------------------------------------------|-----------------------------------------------------------------------------|
| <input type="checkbox"/> Falta a transporte                           | <input type="checkbox"/> Le preocupa dejar a sus mascotas                   |
| <input type="checkbox"/> Falta de confianza en los oficiales públicos | <input type="checkbox"/> Le preocupa congestión de tráfico y no poder salir |
| <input type="checkbox"/> Le preocupa dejar sus propiedades            | <input type="checkbox"/> Problemas de salud por lo cual no se puede mover   |
| <input type="checkbox"/> Le preocupa su seguridad personal            | <input type="checkbox"/> Otro (describe): _____                             |
| <input type="checkbox"/> Le preocupa la seguridad de su familia       | <input type="checkbox"/> No se/no estoy seguro/a                            |
|                                                                       | <input type="checkbox"/> Me niego a responder o no aplica                   |

24. ¿Cree que está preparado para un desastre natural u otra emergencia que pueda exigirle a usted y a su familia (incluidas las mascotas) que permanezcan en su casa sin energía ni asistencia durante al menos 3 días?

- |                                                  |                                               |
|--------------------------------------------------|-----------------------------------------------|
| <input type="checkbox"/> Sí                      | <input type="checkbox"/> No                   |
| <input type="checkbox"/> No se/no estoy seguro/a | <input type="checkbox"/> Me niego a responder |

#### Preguntas Demográficas

25. ¿Qué edad tiene?

- |                                  |                                  |                                               |
|----------------------------------|----------------------------------|-----------------------------------------------|
| <input type="checkbox"/> 18 – 24 | <input type="checkbox"/> 45 – 54 | <input type="checkbox"/> 75 – 84              |
| <input type="checkbox"/> 25 – 34 | <input type="checkbox"/> 55 – 64 | <input type="checkbox"/> 85 o más             |
| <input type="checkbox"/> 35 – 44 | <input type="checkbox"/> 65 – 74 | <input type="checkbox"/> Me niego a responder |

26. ¿Es usted hombre o mujer? ☐ Hombre ☐ Mujer ☐ Niego a responder

27. ¿Es usted de origen hispano, latino o español? ☐ Sí ☐ No ☐ Niego a responder

28. ¿Cuál es su raza? (Por favor elija solo uno.)

- ☐ Blanco
- ☐ Negro o Afroamericano
- ☐ Indígena Americano o Nativo de Alaska
- ☐ Asiático incluyendo Japonés, Chino, Coreano, Vietnamita y Filipino/a
- ☐ Isleños del Pacífico incluyendo Nativo hawaiano, samoano, Guamanian/Chamorro
- ☐ Birracial/Multirracial
- ☐ Otro \_\_\_\_\_
- ☐ Me niego a responder

29. ¿Cuál es el nivel más alto de la escuela que usted ha terminado? (Por favor elija sólo uno.)

- ☐ Menos del noveno grado
- ☐ 9 – 12º grado, sin diploma
- ☐ Graduado de la escuela secundaria (o GED/equivalente)
- ☐ Algunas clases en la universidad (sin título)
- ☐ Título Asociado (de dos años de estudios) o de una escuela de formación profesional
- ☐ Licenciatura (de cuatro años de estudios)
- ☐ Título de postgrado
- ☐ Me niego a responder



30. ¿Cuál es su estado de empleo? (Marque todos los que aplican.)

- |                                                               |                                                                 |
|---------------------------------------------------------------|-----------------------------------------------------------------|
| <input type="checkbox"/> Tiempo completo                      | <input type="checkbox"/> Desempleado por <u>menos</u> de un año |
| <input type="checkbox"/> Medio tiempo                         | <input type="checkbox"/> Deshabilitado                          |
| <input type="checkbox"/> Jubilado                             | <input type="checkbox"/> Estudiante                             |
| <input type="checkbox"/> Fuerza Armada/militaria              | <input type="checkbox"/> Ama de casa                            |
| <input type="checkbox"/> Desempleado por <u>más</u> de un año | <input type="checkbox"/> Trabajo propio                         |
|                                                               | <input type="checkbox"/> Me niego a responder                   |

31. ¿Cuál es el total de ingresos de la casa en el último año, antes de los impuestos?  
(Por favor elija uno.)

- |                                              |                                               |
|----------------------------------------------|-----------------------------------------------|
| <input type="checkbox"/> Menos de \$14,999   | <input type="checkbox"/> \$50,000 - \$74,999  |
| <input type="checkbox"/> \$15,000 - \$24,999 | <input type="checkbox"/> \$75,000 - \$99,999  |
| <input type="checkbox"/> \$25,000 - \$34,999 | <input type="checkbox"/> \$100,000 o más      |
| <input type="checkbox"/> \$35,000 - \$49,999 | <input type="checkbox"/> Me niego a responder |

32. ¿A cuántas personas mantienen estos ingresos? \_\_\_\_\_

(Si paga manutención por un hijo que no vive con usted, esto cuenta como alguien que vive bajo sus ingresos.)

#### El Fin.

**¡Muchas gracias por tomarse el tiempo para completar esta encuesta!**

**Si tiene alguna pregunta con respecto a la encuesta o si desea ofrecerse como voluntario para servir en la Asociación para la Salud del Condado de Lincoln, por favor póngase en contacto Laney Avery al (704) 735 – 3001.**

## Appendix F: Lincoln County Child Care Facility Database

Facility	Contact Information	License
A HAPPY HOME CHILD CARE	6744 LOWESVILLE LANE STANLEY, NC 28164 (704) 575-8927	Two Star Family CC Home License
A PLACE TO GROW	410 NORTH POPLAR STREET LINCOLNTON, NC 28092 (704) 732-1745	Five Star Center License
CARRIE'S DAY CARE	3898 HARMATTAN DRIVE DENVER, NC 28037 (704) 516-8218	Four Star Family CC Home License
CHESTERBROOK ACADEMY	7274 HIGHWAY 73 DENVER, NC 28037 (704) 827-1091	Five Star Center License
DA VINCI ACADEMY	429 SAINT MATTHEWS CHURCH ROAD LINCOLNTON, NC 28092 (704) 530-4413	Four Star Center License
DEATON AVE HEAD START	101 DEATON AVENUE LINCOLNTON, NC 28092 (704) 866-8721	Four Star Center License
DENVER CHRISTIAN ACADEMY PRESCHOOL	2243 NORTH HWY 16 DENVER, NC 28037 (704) 483-2207	Temporary License
FIRST BAPTIST CHILDREN'S MINISTRY	201 ROBIN ROAD LINCOLNTON, NC 28092 (704) 735-9572	Five Star Center License
FORNEY'S FUN HOUSE FAMILY CHILDCARE HOME	900 SPRING LAKE DRIVE IRON STATION, NC 28080 (980) 241-3693	Four Star Family CC Home License
G E MASSEY ELEMENTARY PRE-K	130 NEWBOLD STREET LINCOLNTON, NC 28092 (704) 735-2322	Five Star Center License
GIGGLES GALORE LEARNING CENTER LLC	583 MASON STREET LINCOLNTON, NC 28092 (704) 240-3855	Four Star Center License
IRON STATION ELEMENTARY PRE-K	4207 HIGHWAY 27 IRON STATION, NC 28080 (704) 736-4292	Five Star Center License



Facility	Contact Information	License
JUST LIKE HOME CHILD CARE LLC	128 ROCKY KNOLL COURT DENVER, NC 28037 (845) 596-6075	One Star Family CC Home License
KENLIN ACADEMY PRESCHOOL	1796 HWY 73 IRON STATION, NC 28080 (704) 732-9999	Five Star Center License
KIDDIE TOT CHILD CARE	925 HORSESHOE LAKE ROAD LINCOLNTON, NC 28092 (704) 735-8627	Four Star Family CC Home License
LINCOLN PARK HEAD START	140 INDUSTRIAL PARK ROAD LINCOLNTON, NC 28092 (704) 732-1216	Five Star Center License
LITTLE HEARTS & HANDS PRESCHOOL	178 SUNNY HILL DRIVE LINCOLNTON, NC 28092 (704) 732-0497	Four Star Center License
LONG SHOALS WESLEYAN CHILD CARE	3032 WESLEYAN CHURCH ROAD LINCOLNTON, NC 28092 (704) 732-0216	Three Star Center License
LOVE MEMORIAL PRE-K	1463 LOVE MEMORIAL SCHOOL ROAD LINCOLNTON, NC 28092 (704) 735-5649	Five Star Center License
MARYVALE DAY CARE SCHOOL	2482 JUNE BUG ROAD VALE, NC 28168 (704) 276-2660	GS 110-106
MINI ACADEMY @ DENVER	7982 UNITY CHURCH RD DENVER, NC 28037 (704) 483-8100	Five Star Center License

Facility	Contact Information	License
MRS. PEG'S CARE FOR GOD'S PRECIOUS GIFTS	3361 MAIDEN HIGHWAY NORTH LINCOLNTON, NC 28092 (704) 736-1742	Five Star Family CC Home License
NORRIS S. CHILDERS ELEMENTARY PRE-K	2595 ROCK DAM ROAD LINCOLNTON, NC 28092 (704) 736-9610	Five Star Center License
NORTH BROOK ELEMENTARY PRE-K	642 HIGHWAY 274 VALE, NC 28168 (704) 276-2479	Five Star Center License
OAKLAWN HEAD START	410 LINDEN STREET LINCOLNTON, NC 28572 (704) 735-4702	Five Star Center License
OUR GANG DAY CARE, INC.	675 NORTH HWY 16 DENVER, NC 28037 (704) 483-3622	Four Star Center License
PRECIOUS TIMES LEARNING CENTER, INC.	1040 NORTH FLINT STREET LINCOLNTON, NC 28092 (704) 732-1152	Five Star Center License
PUMPKIN CENTER PRIMARY PRE-K	3970 KING WILKINSON ROAD LINCOLNTON, NC 28092 (704) 736-1394	Four Star Center License
S RAY LOWDER ELEMENTARY PRE-K	350 KENNEDY DRIVE LINCOLNTON, NC 28092 (704) 735-2741	Five Star Center License
ST. KATE'S KORNER	2482 JUNE BUG ROAD VALE, NC 28168 (704) 276-2660	GS 110-106
THE LEARNING EXPRESS	419 NORTH PILOT KNOB ROAD DENVER, NC 28037 (704) 483-6373	Four Star Center License
TUTOR TIME CHILD CARE LEARNING CENTERS	7486 WATERSIDE LOOP ROAD DENVER, NC 28037 (704) 827-6580	Five Star Center License
DCDDEE Lincoln County 05.15.19 LA		

## Appendix G: Lincoln County Health and Wellness Resource Directory

### **Cancer**

Caromont Lincoln Radiation Oncology	440 McAlister Rd Lincolnton, NC 28092	704-735-6637
Levine Cancer Institute- Lincoln	411 McAlister Road Suite 1200 Lincolnton, NC 28092	980-212-5100

### **Cardiology**

Sanger Heart and Vascular Institute-Lincoln	447 McAlister Rd. Suite 3200 Lincolnton, NC 28092	980-212-6300
FryeCare Cardiology Associates - Lincolnton	Two Lincolnton Locations: 1531 N Aspen St Lincolnton, NC 28092	877-287-3643
	1470 Gaston St, Suite 400 Lincolnton, NC 28092 Website: piedmontcardio.com	704-735-7760

### **Dental Health**

Anchor Dental	3718 N Hwy 16 Denver, NC 28037 Website: denverncdentistry.com	704-483-5501
Aspen Dental	1432 E Main St Lincolnton, NC 28092 Website: aspendental.com	704-276-7541
Austin Dentistry	640 Magnolia St Lincolnton, NC 28092 Website: draustindentistry.com	704-732-3336
Avason Family Dentistry	7476 Waterside Loop Rd Suite 100 Denver, NC 28037 Website: avasonfamilydentistry.com	704-820-9797

Caring Dentistry	3090 E. Hwy 27 Lincolnton, NC 28092 Website: caringdentistrync.com	704-732-2629
Comfort and Care Dentistry	518 N. Generals Blvd Suite F Lincolnton, NC 28092 Website: comfortandcaredentistry.net	704-748-1110
Dedmond Family Dentistry	1435 N. Aspen St Lincolnton, NC 28092 Website: dedmondfamilydentistry.com	704-735-7001
Denver Dental Arts	7206 Austin Smiles Ct Suite 103 Denver, NC 28037 Website: denverncdentalarts.com	704-951-8272
Denver Dentistry	2226 N Hwy 16 Denver, NC 28037 Website: denverdentistrync.com	704-766-8779
Denver Pediatric Dentistry	Two Denver Locations: 7206 Austin Smiles Ct, Suite 101 Denver, NC 28037  275 N Hwy 16, Suite 204B Denver, NC 28037 Website: Denver.ncpediatricdentistry.com	980-202-0097
Dr. John L. Cloninger III, DDS	904 Donita Dr. Lincolnton, NC 28092 Website: cloninger3dental.com	704-735-0765
Dr. Robert T. Cloninger	910 Donita Dr. Lincolnton, NC 28092	704-735-3014
GFHS Lincoln Dental Services (Lincoln Dental Services)	111 Doctors Park Lincolnton, NC 28092 Website: gfhs.info/gfhs-lincoln-dental-services	704-735-2230
John L. Lassiter, DDS	323 West Main St Lincolnton, NC 28092	704-735-4722

Jones & Collins Family Dentistry	6135 Hwy 16 S Denver, NC 28037 Website: jonesandcollinsdentistry.com	704-483-4159
Lincoln Family Dentistry	821 East Sycamore St Lincolnton, NC 28092 Website: lincolntonfamilydentistry.com	704-735-3117
Lincoln Pediatric Dentistry	701 S. Laurel St Suite 1 Lincolnton, NC 28092 Website: Lincolnton.ncpediatricdentistry.com	980-247-2400
Midlakes Dental	6573 Bob White Trail Stanley, NC 28164 Website: midlakesdental.com	704-870-4048
Richard R. Pence, DDS, MAGD, PA	7482 Waterside Crossing Blvd Suite 102 Lincolnton, NC 28092 Website: drpence.com	704-827-8226
Summit Family Dentistry	275 N Hwy 16, Suite 101 Denver, NC 28037 Website: summitfamilydentist.com	980-238-4683
The Dental Zone	501 N. Hwy 16 Denver, NC 28037 Website: thedentalzonedenvernc.com	704-489-2009
Waterside Dental Care	175 Cross Center Rd Denver, NC 28037 Website: watersidedentalcare.com	704-951-8300
West Lake Dentistry	298 N. Hwy 16 Suite E Denver, NC 28037 Website: westlakedentalcare.com	704-483-1870
West LKN Dentistry	510 N. Hwy 16 Denver, NC 28037 Website: westlkn Dentistry.com	704-771-1616

**Ear Nose & Throat**

Carolina Ear, Nose & Throat – Sinus and Allergy Center	441 McAlister Rd, Suite 2500 Lincolnton, NC 28092	704-748-6712
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**Eye Care**

Accuvision Eye Care (Located in Wal-Mart)	306 N Generals Blvd Lincolnton, NC 28092 Website: <a href="http://accuvisioneye.com">accuvisioneye.com</a>	704-736-1425
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Walmart Vision Center & Glasses	306 N Generals Blvd Lincolnton, NC 28092 Website: <a href="http://Walmart.com/store/1209/Lincolnton-NC/details">Walmart.com/store/1209/Lincolnton-NC/details</a>	704-732-0917
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Carolina Eye Care	Lincolnton Location: 231 N. Generals Blvd Lincolnton, NC 28092	704-735-7101
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	Denver Location: 623 N Hwy 16 Denver, NC 28037 Website: <a href="http://carolinaeyecarenc.com">carolinaeyecarenc.com</a>	704-483-2263
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Graystone Eye	2311 E Main St Lincolnton, NC 28092 Website: <a href="http://graystone-eye.com">graystone-eye.com</a>	888-626-2020
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Lincoln Eye Center	110 Doctors Park Lincolnton, NC 28092	704-735-8512
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**Gastroenterology**

Atrium Health Gastroenterology and Hepatology	Lincolnton Location: 441 McAlister Rd, Suite 2100 Lincolnton, NC 28092	980-212-4000
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	Denver Location: 1585 Forney Creek Pkwy, Suite 2350 Denver, NC 28037	980-212-4000
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**General Surgery**

Aswad Surgical Group	Lincolnton Location:	
	441 McAlister Rd Suite 2400	704-735-0511
	Lincolnton, NC 28092	
	Denver Location:	
	1585 Forney Creek Pkwy Suite 2200	704-735-0511
	Denver, NC 28037	
	Website: aswadsurgicalgroup.com	
Atrium Health Surgery	Lincolnton Location:	980-212-6070
	441 McAlister Rd, Suite 2100	
	Lincolnton, NC 28092	
	Denver Location:	980-212-6070
	1585 Forney Creek Pkwy, Suite 2350	
	Denver, NC 28037	

**Internal Medicine**

Internal Medicine Associates	447 McAlister Rd. Suite 2200 Lincolnton, NC 28092	980-212-7080
Lincoln Internal Medicine, PA	607 S Generals Blvd Lincolnton, NC 28092	704-736-9188
	Website: lincolnim.org	

**Neurology**

Neurosciences Institute- Neurology Lincoln	441 McAlister Rd Suite 2220 Lincolnton, NC 28092	980-212-6650
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**OB-GYN**

McAlister OB-GYN Associates	Lincolnton Location:	980-212-6230
	447 McAlister Rd, Plaza II Suite 3500	
	Lincolnton, NC 28092	
	Denver Location:	980-212-6230
	1585 Forney Creek Pkwy, Suite 2100	
	Denver, NC 28037	
Novant Health Harbor Pointe OB-GYN	269 Gillman Rd, Suite 100 Denver, NC 28037	704-316-4830

**Oral Surgeons**

Carolinas Center for Oral & Facial Surgery	7482 Waterside Crossing, Suite 101 Denver, NC 28037 Website: mycenters.com/contact/lake-norman	704-820-2982
Foothills Oral Surgery	701 S. Laurel St, Suite 2 Lincolnton, NC 28092 Website: omsdrs.com	704-732-7477

**Orthodontics**

Austin Orthodontics	Lincolnton Location: 701 South Laurel St, Suite 1 Lincolnton, NC 28092  Denver Location: 7206 Austin Smiles, Suite 101 Denver, NC 28037 Website: draustinsmiles.com	704-735-1606  704-732-8722
Hamilton & Whitecotton Orthodontics	7482 Waterside Crossing Blvd, Suite 201 Denver, NC 28037 Website: lknddenverbraces.com	704-822-0320

**Orthopedics**

Novant Health Orthopedics & Sports Medicine	269 Gillman Rd, Suite 200B Denver, NC 28037	704-316-1830
OrthoCarolina	441 McAlister Rd, Suite 1100 Lincolnton, NC 28092 Website: orthocarolina.com	704-732-4064

**Pain Medicine**

Southeast Pain Care	1585 Forney Creek Pkwy Suite 1200 Denver, NC 28037	704-801-1760
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**Pediatrics**

Atrium Health Levine Children's Pediatric Medical Associates	447 McAlister Rd, Suite 3300 Lincolnton, NC 28092	980-212-2680
Lakeshore Pediatric Center	635 N Hwy 16 Denver, NC 28037 Website: lakeshorepediatric.com	704-489-8401



Lincoln Pediatrics	Lincolnton Location: 113 Doctors Park Lincolnton, NC 28092	704-735-1441
	Denver Location: 7476 Waterside Loop Rd, Suite 500 Denver, NC 28037 Website: <a href="http://lincolnpeds.com">lincolnpeds.com</a>	704-820-3919
Novant Health Lakeside Pediatrics	269 Gillman Rd, Suite 200A Denver, NC 28037 Website: <a href="http://nhpediatricsdenver.org">nhpediatricsdenver.org</a>	704-316-5287

## **Primary Care**

Lake Norman Medical Group Family Medicine	294 Hwy 16, Suite A Denver, NC 28037	704-660-4041
Denver Family Practice	5732 Hwy 150 E Denver, NC 28037	704-489-1103
Atrium Health East Lincoln Primary Care	1585 Forney Creek Pkwy, Suite 2100 Denver, NC 28037	704-489-0365
Family Medicine Associates	1531 N. Aspen St. Lincolnton, NC 28092 Website: <a href="http://lincolntonfamilydoctors.com">lincolntonfamilydoctors.com</a>	704-732-8736
Atrium Health Lincoln Family Practice	447 McAlister Rd, Suite 2400 Lincolnton, NC 28092	980-212-6500
FryeCare Lincolnton Medical Group	1470 East Gaston St, Suite 300 Lincolnton, NC 28092	704-735-7474
North State Medical Group	Lincolnton Location: 501 N. Aspen St. Lincolnton, NC 28092	704-735-3116
	Denver Location: 2266 N Hwy 16 Denver, NC 28037 Website: <a href="http://northstatemedicalgroup.com">northstatemedicalgroup.com</a>	704-483-2200

Novant Health Lakeside Family Physicians	269 Gillman Rd, Suite 100 Denver, NC 28037 Website: nhlakesidefamilyphysicians.org	704-316-4930
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Scala Medical Clinic	105 Dave Warlick Dr. Lincolnton, NC 28092	704-748-9949
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Atrium Health West Lincoln Family Medicine	3970 W Hwy 27, Suite D Lincolnton, NC 28092	704-748-2245
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## **Pulmonary**

Pulmonary Clinic of the Carolinas	111 Dave Warlick Dr. Lincolnton, NC 28092	704- 736-9959
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## **Rehabilitation**

Atrium Health Rehabilitation	Lincolnton Location: 1460 E Gaston St Lincolnton, NC 28092	980-212-7020
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Denver Location: 275 N Hwy 16, Suite 203 Denver, NC 28037	980-212-7050
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## **Sports Medicine**

Sports Medicine and Injury Care	Lincolnton Location: 447 McAlister Rd Suite 3400 Lincolnton, NC 28092	704-863-4878
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Denver Location: 1585 Forney Creek Pkwy, Suite 2350 Denver, NC 28037	980-212-4000
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## **Urology**

McKay Urology	Lincolnton Location: 441 McAlister Rd, Suite 1200 Lincolnton, NC 28092	980-212-6200
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Denver Location: 1585 Forney Creek Pkwy, Suite 2350 Denver, NC 28037	980-212-6200
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## **Department of Social Services**

Lincoln County Department of Social Services: 1136 E Main St 704-732-0738  
Lincolnton, NC 28092

- Adult Services
- Child Welfare Services
- Child Support
- Economic Services
- Work Permits
- Services for the Blind
- Vocational Rehabilitation

Website: [lincolncounty.org/dss](http://lincolncounty.org/dss)

## **Hospice in Lincoln County**

Hospice & Palliative Care 900 Donita Drive 704-732-6146  
Lincoln County Lincolnton, NC 28092  
Website: <https://www.hpccr.org/location-info/lincoln-county>

## **Hospitals in Lincoln County**

Atrium Health Lincoln 433 McAlister Rd 704-732-6146  
Lincolnton, NC 28092  
Website:  
<http://www.carolinashealthcare.org/locations/carolinas-healthcare-system-lincoln>

## **Medical Centers**

Gaston Family Health Services 212 Gamble Dr 704-735-7145  
Lincolnton, NC 28092  
Website: [gfhs.info](http://gfhs.info)

## **Public Health in Lincoln County**

Lincoln County Health Department: 200 Gamble Drive 704-735-3001  
Lincolnton, NC 28092

- Community Health
- Adult Health
- BCCP
- Child Health
- CC4C
- Chronic Disease Treatment
- Communicable Disease

- Migrant/Refugee Health
- Pregnancy Care Management
- Be Smart Family Planning
- Laboratory Services
- Interpreter Services
- School Health
- Vital Records
- WIC
- Walk-in Express Clinic
- Environmental Health

Website: <http://www.lincolncounty.org/health>

## **Urgent Care in Lincoln County**

Atrium Health Urgent Care	Lincolnton Location:	
	1802 East Main St Lincolnton, NC 28092	980-212-2610
	Denver Location:	
	275 N Hwy 16, Suite 104 Denver, NC 28037	980-212-7000
Novant Health Lakeside Family Physicians Urgent Care	269 Gillman Rd, Suite 100 Denver, NC 28037	704-316-4930

## **Adult Services**

Lincoln County DSS- <ul style="list-style-type: none"> <li>• Adult Services</li> <li>• Child Welfare Services</li> <li>• Child Support</li> <li>• Economic Services</li> <li>• Work Permits</li> <li>• Services for the Blind</li> <li>• Vocational Rehabilitation</li> </ul>	1136 E. Main St Lincolnton, NC 28092	704-732-0738
	<a href="http://lincolncounty.org/dss">lincolncounty.org/dss</a>	
Lincoln County Coalition Against Domestic Violence	PO Box 476 Lincolnton, NC 28093	704-736-0112 Crisis Line: 704-736-1224

Website: [lincolncounty-cadv.org](http://lincolncounty-cadv.org)

## **Senior Services**

Lincoln County Senior Services:	612 Center Drive	704-732-9053
<ul style="list-style-type: none"> <li>Caregiving Support/ In-Home Services</li> <li>Information/Assistance</li> <li>Nutrition Voucher Program</li> <li>Transportation</li> <li>SHIP Program</li> </ul>	Lincolnton, NC 28092	

Website: [lincolncounty.org/DocumentCenter/Home/View/2875](http://lincolncounty.org/DocumentCenter/Home/View/2875)

## **Child Services**

Adolescent Parenting Program	118 Deaton Ave Lincolnton, NC 28092	704-736-8781
Care Coordination for Children	200 Gamble Dr Lincolnton, NC 28092	704-736-8510

Children's Developmental Service Agency	1240 N. Flint St Lincolnton, NC 28092	704-748-2408
	Website: <a href="http://beearly.nc.gov/">beearly.nc.gov/</a>	

Lincoln County Coalition Against Child Abuse & Child Advocacy Center	161 Policarp St Lincolnton, NC 28092	704-736-1155
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Website: <http://www.cac-lincolncounty.org/index.html>

Lincoln County Department of Social Services:	1136 E. Main St Lincolnton, NC 28092	704-732-0738
<ul style="list-style-type: none"> <li>Child Welfare</li> <li>Report Child Abuse/Neglect</li> <li>Medicaid</li> </ul>		704-732-9017 704-736-8678 704-736-8590

Website: <http://www.lincolncounty.org/dss>

## **Education**

Denver Christian Academy	2243 N Hwy 16 Denver, NC 28037	704-483-2207
	Website: <a href="http://denverchristianacademy.com/">http://denverchristianacademy.com/</a>	

Gaston College  
Lincolnton Campus:  
511 S Aspen Street 704-748-5200  
Lincolnton, NC 28092  
Website: <http://www.gaston.edu/lincolncampus/>

Lincoln Charter School  
Lincolnton Campus:  
133 Eagle Nest Rd (Grades K-5) 704-736-4549  
Lincolnton, NC 28092 (Grades 6-12) 704-736-9888  
Denver Campus:  
7834 Galway Lane (Grades K-6) 704-489-4343  
Denver, NC 28037 (Grades 7-12) 704-483-6611  
Website: <http://www.lincolncharter.org/>

Lincoln County Schools 201 Jeb Seagle Dr. 704-732-2261  
Lincolnton, NC 28092  

- 13 Elementary Schools
- 4 Middle Schools
- 4 High Schools
- 1 School of Technology
- 1 Alternative School

Website: <http://www.lcsnc.org/>

Long Shoals Wesleyan Academy 3032 Wesleyan Church Rd 704-732-3886  
Lincolnton, NC 28092  
Website: <http://www.longshoalsacademy.org/>

Starboard Christian Academy 2380 Lake Shore Rd S 704-775-3724  
Denver, NC 28037  
Website: [wlakeprep.org](http://wlakeprep.org)

West Lake Preparatory Academy 537 N Hwy 16 704-966-2202  
Denver, NC 28037  
Website: [wlakeprep.org](http://wlakeprep.org)

## **Food/Clothing Assistance**

Amy's Closet  
Lincolnton Location:  
202 S Cedar St  
Lincolnton, NC 28092 704-483-5515  
Denver Location:  
751 N Hwy 16  
Denver, NC 28037  
Website: [lincolncounty-cadv.org/amys-house/amys-clo](http://lincolncounty-cadv.org/amys-house/amys-clo)

Christian Ministry of Lincoln County	207 S Poplar St Lincolnton, NC 28092 Website: christianministryoflincolncounty.org	704-732-0383
East Lincoln Christian Ministry	4278 Catawba Burris Rd Denver, NC 28037	704-483-4415
Good Neighbor Shop	116 S. Academy St Lincolnton, NC 28092	704-732-1835
Women, Infant, and Children Program (WIC)	200 Gamble Dr Lincolnton, NC 28092 Website: lincolncounty.org/WIC	704-736-8639

## **Housing**

Amy's House	<i>Unlisted</i>	704-736-1224
Habitat For Humanity of Lincoln County	227 E. Main St Lincolnton, NC 28092 Website: <a href="http://habitatlcnc.org/">http://habitatlcnc.org/</a>	704-748-1800
Hesed House	100 Ann Gaither Court Lincolnton, NC 28092 Website: <a href="http://hesedhouseofhope.com">hesedhouseofhope.com</a>	704-732-0175
Lincoln Housing Authority	806 McBee St Lincolnton, NC 28092 Website: <a href="https://affordablehousingonline.com/housing-authority/North-Carolina/Lincolnton-Housing-Authority/NC070">https://affordablehousingonline.com/housing-authority/North-Carolina/Lincolnton-Housing-Authority/NC070</a>	704-735-2221

## **Mental Health/Substance Use**

ICGH Lincolnton	1228 N Flint St Lincolnton, NC 28092 Website: integratedcarehickory.com	828-322-5915
Impact Carolina Services, INC	106 Doctors Park Lincolnton, NC 28092	704-732-2006
Infinite Beginnings, LLC	526 E Main St Lincolnton, NC 28092	704-748-4844

Lincoln Wellness Center	311 McBee Street Lincolnton, NC 28092	704-732-0018
Monarch: monarchnc.org		704-748-6113
Support Incorporated: supportinc.org		704-865-3525
Solid Foundations Counseling Center: solidfoundationscounseling.org		704-466-0162
Live-N-Joy	201 West Main St Lincolnton, NC 28092 Website: livenjoycounseling.com	704-754-4726
NSG Behavioral Concepts	1047 Gaston St Lincolnton, NC 28092	980-429-2830
Phoenix Counseling Center	510 S. Aspen St Lincolnton, NC 28092 Website: phoenixcc.us	704-735-7325 Crisis Line: 855-527-4747 Sexual Assault: 980-266-4268
PsycoLinc	107 N Cedar St Lincolnton, NC 28092	704-530-0850
Recovery Dynamics	326 E. Main St (Rm B0-1) Lincolnton, NC 28092 Website: <a href="http://recoverydynamicsnc.com/">http://recoverydynamicsnc.com/</a>	704-735-3507
Shelby Wellness and Therapy Center	530 E Main St Lincolnton, NC 28092 Website: shelbytherapy.com	704-284-0554
Southfork Counseling Center	701 S Laurel St, Suite 3 Lincolnton, NC 28092 Website: southforkcounselingnc.com	980-284-2159

## **Pregnancy**

Crisis Pregnancy Center	112 Doctors Park Lincolnton, NC 28092 Website: cpclincoln.com	704-732-3384
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Heartbeats Women's Center	4264 N Hwy 16 Denver, NC 28037 Website: heartbeatspcc.org	704-489-0708
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OB Care Management Program	200 Gamble Dr Lincolnton, NC 28092	704-736-8510
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## **Smoking Cessation**

Quitline		1-800-784-8669
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## **Transportation**

Transportation Lincoln County (TLC)	435 Salem Church Road Lincolnton, NC 28092
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\* Public Transportation: 704-736-2023  
 \* Medicaid Transportation: 704-732-3471  
 \* TDD/TTY: 1-800-735-2962  
 Website: <http://www.lincolncounty.org/tlc>

## **United Way**

United Way of Lincoln County	PO Box 234 Lincolnton, NC 28093 Website: <a href="http://www.uwlincolncountync.org/Home">http://www.uwlincolncountync.org/Home</a>	704-240-8621
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211-Information and Support		211
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Confidential Information and Support including:

- Food, Housing & Utilities
- Child Care & Education Services
- Financial Education/Credit Counseling
- Job Training
- Counseling/Support Groups
- Mental Health & Substance Abuse
- Senior Services
- Volunteer Opportunities
- Disaster Services and so much more

## **Additional Crisis Resources**

Emergencies:	911
Drug Abuse Hotline:	1-877-722-8766
Suicide Hotline:	1-800-273-8255
Behavioral Health/Substance Use:	1-855-527-4747 <i>or</i> text CONNECT to 741741
Crisis Assistance/ Access to Services	1-888-235-4373 (HOPE)

**\*\*\* This list is not inclusive of all resources in Lincoln County. Please consult your local phone book or call 704-735-3001.**

**The Health Department is an Equal Opportunity Provider**

## Appendix H: Hanlon Method

“Hanlon Method” - This is a modified version of a method developed by Hanlon and his colleagues (Hanlon & Pickett, 1990). While this method has several steps, it is a good method to use for setting priorities.

- **Step 1: Rate Health Problems**

The first step is to rate all of the selected health problems. Using the *Problem Importance Sample Worksheet* in Phase 5 Tools, create a separate worksheet for each health problem. List the health problem under consideration (e.g., heart disease, substance abuse, domestic violence) on the top of the form and add a brief summary of the data collected – how the community ranked this as a priority, the related secondary data, and any other information (for example, are agencies already addressing this issue? Has this been identified as a priority by Healthy NC 2020?). Three criteria that are useful in rating community health problems are:

1. Magnitude: How many persons does the problem affect, either actually or potentially?
2. Seriousness of the Consequences: What degree of disability or premature death occurs because of the problem? What are the potential burdens to the community, such as economic or social burdens?
3. Feasibility of Correcting: Is the problem amenable to interventions (i.e., is the intervention feasible scientifically as well as acceptable to the community?). What technology, knowledge, or resources are necessary to effect a change? Is the problem preventable?

The CHA Team may develop other criteria (e.g., the extent to which initiatives that address the health issue will build on community strengths and resources, the availability of local technical expertise regarding the health issue, or the probability of quick success). Whatever criteria are selected, use the scoring system described below.

The CHA Team (and others involved in the priority setting process) should agree as a group on a score of 1 to 10 for the criteria for each health problem. These scores should be noted in the appropriate boxes on the *Problem Importance Worksheet*. A problem with a score of 10 on each criteria would indicate that it is of the greatest magnitude, has the most serious consequences, and is most feasible to correct. In contrast, a score of 1 on each criteria would indicate that it is of the least magnitude, has the least serious consequences, and is least feasible to correct. Add together the scores for each health issue to obtain the Problem Importance Index. The summary score should be noted in the box on the lower right-hand corner on the *Problem Importance Worksheet*.

- **Step 2: Rank Health Problems**

To rank the health problems, list all of the problems according to their ranking on the *Problem Prioritization Worksheet*. The problem with the highest number should be listed first and subsequent problems listed in descending order. The CHA Team should review the scoring for each of the problems and reach consensus about the ranking. It is recommended that the most significant health problems addressed by the community be limited to the top three to six (i.e., the problems with the three to six highest scores). These problems will be the focus of the community health action plans in Phase 8. Various groups within the community may address the remaining problems in some fashion, but the primary problems should be limited at this point in order to ensure success. After analysis of the problems, the CHA Team may need to return to the ranking list to select other health problems if there are significant barriers associated with the first choices (Community Health Assessment Guidebook, pg 75-79).”

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