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ACKNOWLEDGEMENTS

This assessment would not be possible without the assistance and support of many individuals and groups who live and work in Alamance County.

The strategies developed from this assessment will be a direct response to the needs identified by the residents of Alamance County

A sincere thank you to all residents for your willingness to share your opinions and experiences related to living in Alamance County.

The Community Assessment Team (Alamance County Health Department, Alamance Regional Medical Center, Impact Alamance, Healthy Alamance, Elon University, and United Way of Alamance County) would like to recognize the following individuals and groups for their generous assistance:

· Community participants in surveys, focus groups, and community forums
· Agencies which supported the facilitation of surveys, focus groups, and the community forum
· Elon University Poll students and faculty; Professor Jason Husser, Director
· Elon-Alamance Health Partners for their dedication to revising this document

Links are found within the Tables and contents of this document for ease in accessing information.

Please see APPENDIX A for a list of team members’ responsibilities and community partners and their contributions.

Please see APPENDIX B for additional data and information.

Please see APPENDIX C for citations and resources for a complete list of data and references.

The Community Health Improvement Plans developed from this assessment will be in partnership with community residents and in direct response to the needs identified by the residents of Alamance County.

Disclaimer: At the time this report was compiled, all data cited was current. Please note some sources may have published new data; please check the data source for the most up-to-date information.
EXECUTIVE SUMMARY

Vision Statement: This document supports the 2015 priorities identified by the community, accurately reflect on accomplishments and challenges encountered during the last three years and illustrate the development of and growing shared lens for the role equity plays in determining the health of an individual and their community.

Leadership

Stacie Saunders, Alamance County Health Department, Health Director
Ann Meletzke, Healthy Alamance, Executive Director
Tracey Grayzer, Impact Alamance, President
Kathy Colville, Cone Health, Healthy Communities Director
Heidi Norwick, United Way of Alamance County, President

Partnerships

Table 1

<table>
<thead>
<tr>
<th>Partnerships</th>
<th>Number of Partners</th>
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<tbody>
<tr>
<td>Public Health Agency</td>
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<tr>
<td>Hospital/Health Care System</td>
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<tr>
<td>Hospital/Public Health Nonprofit Agency</td>
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</tr>
<tr>
<td>Healthcare Provider – other than behavioral health</td>
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<tr>
<td>Local Health Foundation</td>
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<tr>
<td>Dental Health Provider</td>
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<tr>
<td>EMS Provider</td>
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</tr>
<tr>
<td>Pharmacy</td>
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<tr>
<td>Businesses</td>
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<tr>
<td>Educational Institutions</td>
<td>1</td>
</tr>
<tr>
<td>Public School System</td>
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<tr>
<td>Media/Communication Outlet</td>
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</tr>
<tr>
<td>Public Members</td>
<td>6</td>
</tr>
<tr>
<td>Other</td>
<td>4</td>
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Regional/contracted services Piedmont Health Counts
Theoretical Framework/model the incorporation of health equity concepts and a Community Based Participatory Research (CBPR) approach into the Community Health Assessment process allows partners to engage the community in meaningful conversations about health and better positions partners to address priorities.

Collaborative process summary Alamance County has a long history of collaboration between the health department and the hospital in developing a community assessment. Over the years, agencies have joined the team, allowing for a cross-sectoral approach. The 2018 assessment process is Alamance County’s most collaborative process to date, incorporating community residents into all phases of the process. These include conducting five focus groups (LGBTQ, Female Head of Household, Occaneechi Band of the Saponi Nation, Parents of Children with Disabilities, and LatinX) in 2018, inviting participants to join the Community Assessment Team, summarizing the themes from the focus groups, planning and executing a community forum. Throughout the assessment, you will find quotes that are enclosed in a bright blue box. These quotes are taken directly from the five focus groups that are listed above and highlight their thoughts and perspectives on various subjects throughout the assessment.

Key findings the following themes emerged from the focus groups:

Theme #1: Lack of Trust in Healthcare System
Theme #2: Having to Go Above and Beyond to Access Healthcare
Theme #3: Health and its Connection to Social Well-Being
Theme #4: How Does Infrastructure Play a Role in Health of Communities
Theme #5: Job Stability

Health priorities the 2018 priorities are Access to Care, Education, Economic Issues

Next steps the Healthy Alamance-Elon University Community Academic Partnership will conduct a Photovoice project scheduled for April 2019 with members of the Community Assessment Team, focus group participants, additional agencies, businesses, and interested community residents as space and funding allow. All participants will receive equity training paid for by a University of Michigan Community Based Participatory Research (CBPR) grant awarded to the partnership. Upon completion, the group will create the Health Equity Collaborative. This collaborative will determine the best ways support equity issues and participate in the development of the Community Health Improvement Plan (CHIP), creating innovative strategies to better address the community priorities.
CHAPTER 1 BACKGROUND AND INTRODUCTION

The Community Assessment in Alamance County is a collaborative process that is well utilized across the following sectors: business, education, health, human services, philanthropic, and faith community leaders, as well as, elected officials across our county. Community members have been active participants in the polling and focus groups that form the basis of this assessment and participated in the 2015 process to identify our current priorities. The random selection methodology employed by the Elon University Poll allows this assessment to reflect a cross-section of resident concerns in our community. Previous assessments have been instrumental in helping local agencies and businesses to plan strategically, to understand the complexity of health issues, and to bring additional resources to our community through grants and programs.

A team with experience in and a passion for data collection and analysis leads the Community Assessment. The team is comprised of leaders at the Alamance County Health Department, Alamance Regional Medical Center, Elon University, Healthy Alamance, Impact Alamance, and the United Way of Alamance County. Together, these leaders realized the following accomplishments for this 2018 assessment: 1) Development of a survey tool to assess community opinions on health and social issues and completion of a randomized telephone survey of 337 residents, a representative sample of Alamance County residents; 2) Completion of five focus groups with 64 total participants, focused on collecting the narrative of those not typically well-represented in previous community assessments; 3) Collection of secondary data at the county-level, including sources from publicly-available state databases as well as local agency-specific data; and 4) Creation of this written assessment documenting these processes and the data collection.

A clear consensus emerged that the focus of our planning and implementation for the next three years continues to lie in three key areas: Access to care, Education, and Economic issues. It is important to note the team hopes to focus on these priorities for an entire generation, knowing measurable change will be long term and require a unified commitment to improve these areas for all residents. The next phase of this collaboration is dissemination of the major findings of this assessment. That process will include the printing and posting of the assessment in key agencies and at local libraries, the development of a website for downloading the assessment, and presentations to civic organizations, elected officials, and other community groups. A Community Health Improvement Plan will be revised for the next three years, a process led by Healthy Alamance, which will involve partnering with the community in setting strategic plans to address priorities. Alamance County residents and leaders of local agencies are invited to join our team and participate in a newly formed Health Equity Collaborative, which will support strategies that seek to address the root causes of these issues. Information about how to participate is available at the Healthy Alamance website, healthyalamanceblog.
CHAPTER 2 BRIEF COUNTY DESCRIPTION

Alamance County is in central North Carolina with a population of 162,000. The county consists of nine municipalities, three of them are the City of Burlington, Mebane and Graham and the other six are smaller townships. The county is located between two metropolitan areas, the Research Triangle to the east and the Piedmont Triad to the west. It is 150 miles east of the Appalachian Mountains, 200 miles west of the Atlantic Ocean, 30 miles south of the Virginia border, and 130 miles north of the South Carolina border.

Formed in 1849 from Orange County to the east, Alamance County has been the site of significant historical events, textile manufacturing and agriculture in North Carolina (“About Alamance County,” n.d.). Alamance County was named after Great Alamance Creek, was the site of the Battle of Alamance in 1771. By the 1840s, several mills were set up along the Haw River and near Great Alamance Creek and other major tributaries of the Haw. Between 1832 and 1880, there were at least 14 major mills powered by these rivers and streams (“About Alamance County,” n.d.). By the late 20th century, most of the plants and mills had gone out of business, including the mills operated by Burlington Industries, a company that was at one time the world’s largest textile manufacturer. Today, the leading industries in Alamance County continue to be manufacturing, professional and technical services and retail trade.

Approximately 70% of Alamance County is white, 20% black and 12% Hispanic (“About Alamance County,” n.d.). According to US Census Bureau 2010 data, the growth of the Hispanic population from 2000 to 2010 is 53 percent. Alamance County is experiencing similar national trends with an increase in the average age of population being 65 years and older. Thirty percent of our population have graduated high school, and 50% have some type post-secondary education. Alamance County’s unemployment rate is 7% (“Piedmont Health Counts,” 2019).

Children and minorities are most impacted by poor health outcomes. Sixteen percent of the total population is in poverty and 30% of all children in Alamance are in poverty. Blacks have a much higher rate of cancer, heart disease, stroke and die at an earlier age compared to their white counterparts.

Recent research also indicates that the zip code in which an individual resides in within Alamance County determines how long they will live. The life expectancy between the eastern parts of the county versus the western portion is a difference of 11 years. There is also a significant difference in access to healthy and fresh foods, physical activity opportunities, and health care access in varying parts of the county which is an underlying contributor to poor health outcomes.
Demographics

Demographic data are important to a community’s health as they are used to plan future investments and services. Data from sources such as the US Census and the Bureau of Labor Statistics also helps to determine who gets Federal aid, where assistance programs are targeted, what businesses might move to the community, and how votes count in the Electoral College. In fact, demographic data impact nearly everything residents do including how far the travel is to a grocery store, how much is paid in property taxes, and how much support a child’s school receives from local, state, and federal sources (Alamance Chamber, 2016).

Table 2

<table>
<thead>
<tr>
<th></th>
<th>Alamance</th>
<th>NC</th>
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</thead>
<tbody>
<tr>
<td>Population</td>
<td>161,586</td>
<td>10,300,541</td>
</tr>
<tr>
<td>White</td>
<td>68%</td>
<td>66.5%</td>
</tr>
<tr>
<td>African American</td>
<td>19%</td>
<td>22%</td>
</tr>
<tr>
<td>Hispanic/Latino</td>
<td>13%</td>
<td>9.5%</td>
</tr>
<tr>
<td>Asian</td>
<td>1.8%</td>
<td>2.98</td>
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<tr>
<td>American Indian</td>
<td>.76%</td>
<td>1.27%</td>
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<tr>
<td>Median Household Income</td>
<td>$42,463</td>
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<tr>
<td>Households</td>
<td>64,205</td>
<td>4,061,714</td>
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<tr>
<td>Families Below Poverty (2012-2016)</td>
<td>13.8%</td>
<td>12.4%</td>
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<tr>
<td>Children Living in Poverty (2012-2016)</td>
<td>27.8%</td>
<td>23.9%</td>
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<tr>
<td>Households with Children Receiving Food Stamps (2012-2016)</td>
<td>58.8%</td>
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<tr>
<td>Unemployed (August 2018)</td>
<td>7.48%</td>
<td>5.58%</td>
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<tr>
<td>Students Eligible for Free &amp; Reduced School Lunch (2015-2016)</td>
<td>53.2%</td>
<td>52.6%</td>
</tr>
</tbody>
</table>

Population

The estimated population of Alamance County is approximately 161,586 persons and growing. Alamance County’s population has increased by 6.92% since 2010. Thirteen percent of the population is Hispanic/Latino, significantly higher than the state’s rate (“Piedmont Health Counts,” 2019).
Race

Alamance County is a predominantly white community, with 68.15% of residents identifying as white. About 19% of the population identifies as Black/African American; less than one percent (0.76%) as American Indian; 1.81% as Asian; 0.04 as Native Hawaiian/Pacific Islander, and 7.33% identify as “some other race”. Lastly, about 2.5% of individuals identify with two or more races.

Ethnicity

About 13% of the population identify as Hispanic or Latino, which is higher than the state average of 9.55%.
Alamance County’s population by age group is like the state’s average population by age group. The 45-54 age group makes up the highest percent of the population in Alamance County (13.54%), followed by the 55-64 age group (13.00%), and the 25-34 age group (12.05%). The age group with the smallest population percent in the county is individuals 85+ (2.34%), followed by the 15-17 age group (4.01%), and the 18-20 age group (5.03%) (“Piedmont Health Counts,” 2019).

Sex

The population by sex of Alamance County is like that of the State of North Carolina with males representing 47.66% of the county and 48.60% of the state. The female counterpart represents 52.34% of the county and 51.30% of the state.
CHAPTER 3 COMMUNITY ASSESSMENT PROCESS

In 2015, the Alamance County Health Department, Impact Alamance, Healthy Alamance, Alamance Regional Medical Center/Cone Health, and the United Way of Alamance County collaborated to collect the data and write the assessment. This collaborative process and identification of the priorities was the catalyst to begin a collective action approach to improve our community’s health. These agencies realized that individual programs are not the answer to improving population health. Rather policy change, a focus on social determinants of health through collective impact work, and a commitment to creating healthier environments became the prioritized approach to tackling some of our community’s most daunting challenges.

Methodology
Elon University Poll

Survey Overview
In collaboration with Healthy Alamance, Impact Alamance, the Alamance County Health Department and other health care organizations in the community, the Elon University Poll conducted a survey of Alamance County, North Carolina residents. The goal of this survey is to provide information relevant to the Alamance County Community Health Assessment.

Elon University fully funds the Elon University Poll. The poll operates under the auspices of the College of Arts and Sciences at Elon University, led by Dean Gabie Smith. The Elon University administration, led by Dr. Connie Ledoux Book, president of the university, fully supports the Elon University Poll as part of its service to the community. Because of this generous support, the Elon University poll does not engage in any contract work. This permits the Elon University Poll to operate as a neutral, unbiased, non-partisan resource (Elon Poll, n.d.).

The poll assessed general needs and issues regarding the Alamance County community, including access to fresh fruits and vegetables, and community awareness about mental health. The poll also broke its results down into different demographics including age, location, race, gender, and education.

Methodological Information
Mode: Live Interviewer Telephone (Landline + Cell) and Interactive Voice Response telephone (Landline only)
Population: Adult Residents of Alamance County, NC Dates in the field: March 9 -20, 2018
Sample Size: 337
Margin of Error: 5.33
Confidence Level: 95%
Weighting Variables: Race, Gender, Age, Education, Location in Alamance County

Procedure
For this survey, the Elon University Poll used a mixed mode design of phone calls using live interviewers, and supplemental IVR calls. The IVR calls were an automated recording using the voice of the poll director. Random telephone numbers were purchased from Survey Sampling International (SSI).
Live caller telephone interviews to cell phones and landlines were conducted on 3/9 and 3/12-3/14. Interactive Voice Response (IVR) interviews to landlines only were conducted on 3/19 and 3/20. A survey was considered complete only if a respondent progressed through the entire survey.

**Weighting**
Weights were generated using a technique known as iterative proportional fitting, also known as ranking. Elon typically weight results from the Elon University Poll on multiple demographic characteristics. In the case of this survey, the target population consisted of adult residents of Alamance County, North Carolina. The weight variables were race, gender, age, education, and location inside or outside of Burlington, NC city limits. Each variable was weighted to match relative proportions according to most recent estimates from the U.S. Census Bureau American Community Survey.

**Support for Transparency**
The Elon University Poll supports transparency in survey research and is a charter member of the American Association for Public Opinion Research Transparency Initiative, which is a program promoting openness and transparency about survey research methods and operations among survey research professionals and the industry. All information about the Elon University Poll released to the public conforms to reporting conventions recommended by the American Association for Public Opinion Research and the National Council on Public Polls.

**Question Construction and Question Order**
In releasing survey results, the Elon University Poll provides the questions as worded and the order in which respondents receive these questions. In some cases, question ordering rotates to avoid biases.

To provide neutral, non-biased questions, we observe conventional question wording and question order protocols in all our polls. In order to avoid recency or primacy effects, candidate’s names are randomized within the text of each question. Every questionnaire is pretested multiple times before entering the field.
Branching Questions
For questions with multiple response options, the polling center often programs surveys to branch into a secondary probing question.

“Don’t Know” & “Refused” Response Options
Where appropriate, all opinion questions include an option for respondents to select “Don’t Know” or to refuse to answer. Respondents were permitted to exit the survey at any time. To see more Elon Poll data, see APPENDIX B: Additional Data and Information.

Description of Community Based Participatory Research and Focus Group Findings
Community Based Participatory Research (CBPR) is an approach to research that equitably involves community members, practitioners, and academic researchers in all aspects of the process, enabling all partners to contribute their expertise and share responsibility and ownership (Israel, et al., 2010) To capture the narratives of individuals who have been least well-represented historically, the Community Assessment Team incorporated CPBR tools into the assessment process (Cone Health, 2016). The following summarizes focus group findings conducted as part of the Alamance County Community Health Assessment project during October and November 2018.

The focus groups explored people’s experiences with health, using the health equity wheel (found to the left) and explored how their experiences with health within each factor. In all, five focus groups were conducted across the county with Female Head of Household, LatinX, Occaneechi Saponi Tribe council and members, LGBTQ (lesbian, gay, bi-sexual, transgender, and queer) individuals, and people with disabilities.

Method
To begin the data analysis process, the agencies attended a workshop on Photovoice and focus groups led by Alexandra Lightfoot, EdD and sponsored by the Community Based Participatory Research partnership of Elon University and Healthy Alamance. This workshop reviewed the CBPR approach and discussed the process for incorporating tools like Photovoice and focus groups into engagement of the community around a theme.

Results
Qualitative data analysis revealed five overarching themes across the five focus group types.

Theme #1: Lack of Trust in Healthcare System
Theme #2: Having to Go Above and Beyond to Access Healthcare
Theme #3: Health and its Connection to Social Well-Being
Theme #4: How Does Infrastructure Play a Role in Health of Communities

Theme #5: Job Stability

Discussion and Implications

The five focus groups represent individuals from four diverse groups across Alamance County. The findings represent the obstacles people face in accessing the resources they need most, and the challenges traditional institutions face in rethinking their solutions to providing care. Five themes emerged from the review of minutes and recordings. Each represents an opportunity for residents and organizations to partner together to build trust and recognize the value of bringing discussions of social well-being and nutrition (specific to access) to the patient well and sick visits. They also create opportunities for municipalities and human service agencies to develop strategies for supporting residents as they transition from receiving subsidies and support to being sustainably and successfully employed. Other opportunities include how to use available resources within communities to create better and more satisfying experiences for patients receiving healthcare. These are opportunities to rethink how to make healthcare services available in the community easier to access and to share responsibility across multiple organizations to provide the most comprehensive and service-oriented care.

Alamance County Community Forum Findings

The Alamance County Community Forum was held February 20, 2019, 6-8:00 pm at the Mayco Bigelow Community Center in North Park with 153 people registered to attend. It is estimated 130 attended; including residents, community partners, and an elected official. The forum was developed with community residents as part of incorporating the CBPR approach and served as a catalyst for focus group participants to present their findings and move towards a new partnership with the community to develop strategies for addressing health priorities. It was advertised on social media, by flyers, through community events, and by email with the intention of having as many members of the community at the table as possible.

The following themes emerged from the tabletop exercises:

- Focus development efforts on urban/rural divide by prioritizing opportunities for people of color to create small business enterprise
- Partner with those most impacted by the issues being discussed
- Create permanent solutions to issues of access; not popup or temporary ones
- Focus on improving education in Alamance County, recognizing that opportunities to create career paths for children whose families cannot afford to send them to college
- Education to the community is needed, demonstrating the value of small business to the broader community for the community to support it
- Residents want organizations and agencies to acknowledge systemic racism and address it in order to improve quality of life
- Hold property owners accountable for conditions of their properties
- Add mixed income housing and intergenerational housing to create community
- To stop isolating people into bubbles by income
• Create specific strategies that address the unique needs of different cultures and ages regarding access to care, education, and economy

To see agenda, full summary, and photovoice invitation, please see APPENDIX B: Additional Data & Information

CHAPTER 4 COMMUNITY PRIORITIES AND ACCOMPLISHMENTS

A clear consensus emerged among community agencies and leaders that the focus of our planning and implementation for the next three years continues to lie in three key areas: Access to care, Education, and Economic issues. Much has been accomplished in these areas, however, to truly make a difference our community needs more time to implement existing and new strategies and evaluate our progress.

Access to Care

Defining Access to Care goes far beyond access to medical resources in a community. Access to physical activity opportunities, fresh and healthy food, transit and social opportunities to engage in community are also extremely important to individual and community health as having adequate resources to these opportunities can often prevent the need for expensive medical care.

Physical Activity Opportunities

Proximity to exercise opportunities, such as parks and recreation facilities, has been linked to an increase in physical activity among residents. Regular physical activity has a wide array of health benefits including weight control, muscle and bone strengthening, improved mental health and mood, and improved life expectancy. Furthermore, exercise reduces the risk of cardiovascular disease, type 2 diabetes and metabolic syndrome, and some cancers.

“WE HAVE LAND BUT WE CAN’T USE IT (TO PLAY OUTSIDE)”

REFERENCING NEIGHBORHOOD CONDITIONS FOCUS GROUP QUOTE
As seen in the graph above, Alamance County’s Access to food opportunities have increased significantly since 2014 from 77.4% to 85.7%. Alamance County also ranks higher than NC and the United States on this indicator.

Numerous policy changes and built environment improvements have occurred over the past three years in Alamance County. This has occurred through a commitment of key leaders in the county to address population health through policy change and access to environments that promote physical activity, safety and connectivity.

The local health foundation, Impact Alamance, offers yearly grant opportunities for organizations and municipalities (who are active members of the Collaborative) that are requesting funding for strategies outlined in the Wellness Collaborative Strategic Plan (Alamance Wellness Collaborative Strategic Plan, 2018). Since 2015 over 4 million dollars has been invested within Alamance County to enhance or begin projects and infrastructure to increase access in communities throughout the county.

Formed in March 2015 through a partnership of Impact Alamance and Healthy Alamance, the Alamance Wellness Collaborative convenes multidisciplinary partners to implement active living and healthy eating strategies throughout the county. Members include key leaders from planning, public health, business, parks and recreation, education, and nonprofit organizations. By adopting a countywide approach,
representatives from different municipalities and agencies can work collectively and more efficiently on shared goals.

The Collaborative recognizes the importance of creating environments where current and future residents have access to opportunities to improve their health—including facilities that encourage physical activity, healthy food outlets, healthy school environments, as well as policies and the economic base to support them. The Collaborative completed a three-year Strategic Plan, identifying the following strategies to guide its work in Alamance County:

- Increase access to active transportation and trails
- Improve and support healthy school environments
- Identify and apply for funding for built environment initiatives
- Increase advocacy for policy change at the local level

Accomplishments of the Wellness Collaborative:

In 2016, the school board adopted the community use policy for all elementary school playgrounds. Schools opened use of playgrounds and walking tracks for the community to use after school hours and on weekends. Alamance County is only one of seven counties in the state that has passed this policy.

In 2018, the City of Graham (second largest city in the county) passed a 100% tobacco free policy for all city property.

In 2018, the Town of Green Level passed a 100% tobacco free policy for their public park.

In 2019, the City of Burlington passed a 100% tobacco free policy for their public parks. This is the first public park in the state that has golf courses and water recreation facilities that has gone totally tobacco free.

The City of Burlington and Town of Elon adopted a Health in All Policies resolutions in 2018, which is a commitment to use a lens of health for all internal and external decisions, including policies, design, and investments.

A new sidewalk was created to connect the bus stop to the Human Services Center located in east Burlington. The Human Services Center houses the Health Department and Department of Social Services, as well as the free and charitable clinic, Open Door Clinic. The Wellness Collaborative was instrumental in securing the sidewalk by conducting a walkability assessment to capture the need for this sidewalk and presented to the city and Department of Transportation. The new sidewalk provides safe connectivity for residents of this underserved area.

Two miles of bike lanes were created in the City of Graham (that previously had no bike lanes). The funding was obtained through an Impact Alamance Partnership grant that provides investments to Wellness Collaborative organizations that partner to create a large impact. The city partnered with the local school system for matching funds to create the bike lanes in front of Graham Middle School.
Students from the school also designed a highly visible crosswalk in front of the school to increase pedestrian safety and promote biking and walking to school.

Since the creation of the Wellness Collaborative, approximately 20 miles of hiking trail have been created throughout the county. This includes additional miles along the Haw River Mountain to Sea Trail which will eventually allow residents to hike across the county.

The City of Burlington (largest city) and the Town of Elon implemented existing land use plan that supports active transportation.

A greenway that will connect the Town of Elon (home to Elon University) to downtown Burlington was funded through collaborative action and planning of Wellness Collaborative members. The connectivity will also allow Elon students and residents to walk/run or bike to downtown Burlington. This not only creates another resource for physical activity, but also reduces air pollution by reducing cars on the road and provides a benefit to downtown businesses seeking new patrons.

Now in the final year of implementing the Strategic Plan, Collaborative members are reflecting on their accomplishments and considering what’s next. The Collaborative structure facilitates new connections and partnerships within and outside of the county, leading to opportunities to collaborate on grants, advocate for each other’s work, and develop new projects. With consultation provided by Healthy Places by Design, members have improved their understanding of strategies for policy, systems, and environmental change, and how they can be applied in their work. By creating an intentional process that focuses on Alamance County’s built environment and people, the Alamance Wellness Collaborative members and leaders are building a foundation to support the health and economic well-being of our community.

Members of the Wellness Collaborative participate in a walkability assessment of downtown Burlington with public health consultant Mark Fenton.

Food Security

Food insecurity is an economic and social indicator of the health of a community. The U.S. Department of Agriculture (USDA) defines food insecurity as limited or uncertain availability of nutritionally adequate foods or uncertain ability to acquire these foods in socially acceptable ways. Poverty and unemployment are frequently predictors of food insecurity in the United States. A survey commissioned by the Food Research and Action Center (FRAC) found that one in four Americans worries about having enough money to put food on the table in the next year. Food insecurity is associated with chronic health
problems in adults including diabetes, heart disease, high blood pressure, hyperlipidemia, obesity, and mental health issues including major depression.

*Table 5*

The food environment index combines two measures of food access: the percentage of the population that is low-income and has low access to a grocery store, and the percentage of the population that did not have access to a reliable source of food during the past year (food insecurity). The index ranges from 0 (worst) to 10 (best) and equally weights the two measures.

The food environment index graph above indicates an upward trend for Alamance County, slightly higher than the state’s rate.
This map (located to the right) was created by Elon University students in a Fall 2016 course titled GIS and Environmental Health as part of a food accessibility inventory conducted by the Alamance Food Collaborative. This map illustrates the number of grocery stores and fresh food markets (1 per 7,500 residents) in Alamance County at that time. The class compiled a geographic database of food options within the county and analyzed the food accessibility patterns. To see a summary result document, see APPENDIX B: Additional Data & Information

Alamance Food Collaborative

Formed in April 2015, through a partnership of Healthy Alamance and Impact Alamance, the Alamance Food Collaborative convenes entrepreneurs from the local restaurant industry and private sector, academics from Elon University, public health and healthcare professionals, non-profit leaders, farmers, and local government to focus on creating infrastructure for Alamance County’s food system that will have a lasting impact and influence the health of the community and economic viability. The Food Collaborative is recognized statewide for its unique model linking food policy work to the local Community Health Assessment. The Strategic Plan focuses on strategies that increase access to healthy food and go beyond simply raising awareness or conducting educational campaigns and programs. While these are important, the Food Collaborative knows that to improve health outcomes in citizens’ lives, it will take a multidisciplinary approach that works across sectors and jurisdictional lines to focus on policy, systemic, and environmental change.

Accomplishments include:

- Conducting first food assessment and SWOT (strengths, weaknesses, opportunities, threats) analysis of Alamance County.

- Receiving a grant from Impact Alamance to create the first farmer’s tool-share in Alamance County that allows farmers to borrow more expensive farm equipment for a low yearly rate. This allows new farmers and smaller farms to avoid costly equipment and use these savings to sale more produce locally at an affordable price.

- Holding the first Community Coffee elected official forum addressing food related issues in Alamance County.

- Launching Authentically Alamance in April 2018. Stickers, window clings and other branding materials are giving to local businesses, farms and restaurants that sell/use local food.
• Receiving funding from Elon University to partner in bringing food equity training to all food collaborative members.

• Commitment of food collaborative members to address food issues with a lens of racial equity.

The Alamance Food Collaborative is currently revising its strategic plan to apply a health equity lens to creating viable solutions that address food insecurity at the root causes. Ultimately, food swamps have “about four unhealthy options for each healthy one and are a strong predictor of obesity rates.” This correlation is more prevalent in areas where residents do not have cars or access to public transit options. Increasingly recognized as a feasible strategy, counties can introduce zoning restrictions that would reduce the number of fast-food businesses while increasing the number of businesses selling fresh food. This is necessary to avoid stripping a community of all its resources. An investment in the community is required to offset limiting unhealthy ones. (CityLab, 2017). To learn more, see APPENDIX B: Additional Data and Information.

North Park Farmer’s Market

In 2016, Healthy Alamance in partnership with the City of Burlington and North Park Community were awarded funds from the local health foundation, Impact Alamance, to build the first permanent farmers’ market structure in Alamance County. The structure houses the market from April through October and serves as a model in Alamance County for a full capacity farmers’ market.

The market is in the northern part of Burlington with the residents predominantly by people of color. North Park is an identified food desert in Alamance County and is the only market that accepts SNAP/EBT (Supplemental Nutrition Assistance Program). Having the market in this area benefits residents by having access to fresh, affordable food.

Not only is there a resource for fresh and healthy food in this community, but the market has served as gathering place for residents and community members. The market has evolved from a basic farmer’s market to now beginning to provide opportunities for black entrepreneurs. Several community members have set up booths to sell their baked bread, cookies, or crafts. There is often live music at the market and the opportunity to engage in cooking classes focused on how to cook the variety of fresh vegetables and meats offered at market.

Community leaders were intentional about including residents of North Park in the design of the farmer’s market as well as the weekly
operation of the market. Before the market was created, Healthy Alamance and partners lead Community Based Participatory Research in the North Park neighborhood to gain residents input on what they feel like are the most important issues in their community. Building relationships with this community will continue to be a priority.

Due to the success of this project other cities and towns in Alamance have requested similar markets with identified neighborhoods within their jurisdiction. Alamance is often asked to serve on state panels as well to talk about the success and sustainability of the North Park Farmer’s Market.

Access to Health Care

Access to care is an ongoing concern in Alamance County. Regular contact with a trusted medical provider allows individuals to receive preventive health care, such as vaccinations and mammograms. Many Alamance County residents struggle to find primary care, mental health care and dental care that they can afford.

Two important measures of access include the number of providers available to serve a community’s residents, and the health insurance coverage that helps residents to afford their services. The recruitment, development, and retention of primary care and specialist healthcare providers are critical factors in a community’s ability to assure access to healthcare.

Table 6

The graph above indicates the quality and accessibility of clinical care which heavily impacts the health of a community. Without an enough providers or adequate insurance coverage, people often do not seek care services and are thus at higher risk of developing preventable illnesses or chronic conditions.
People with access to high-quality care are more likely to receive effective treatment for their conditions and enjoy better health. This data does not reflect access to primary care providers, which increases the likelihood that community members will have routine checkups and screenings. Moreover, those with access to primary care are more likely to know where to go for treatment in acute situations. Communities that lack enough primary care providers typically have members who delay necessary care when sick and conditions can become more severe and complicated. While recent data is not available, as of 2015, the number of primary care providers for the area were on a downward trend.

Table 7

Alamance has increased the number of insured adults since 2011, however compared NC counties Alamance has a value of 82.6 which is the second worst quartile of counties.

Some Alamance County residents report difficulty accessing health care due to cost and/or lack of health insurance. Of adults between the ages of 19-64 years, 17.9 percent were uninsured as of 2017, with the highest disparities among non-citizens (68.8 percent) and those with less than a high school education (28.3 percent) (US Census: American FactFinder, 2017). Rates in Alamance County are higher than most neighboring counties, representing a definitive disparity for residents in insurance coverage.

Medical costs in the United States are extremely high, so people without health insurance may not be able to afford medical treatment or prescription drugs. They are also less likely to get routine checkups and screenings, so if they do become ill, they will not seek treatment until the condition is more advanced and therefore more difficult and costlier to treat. Many small businesses are unable to offer health insurance to employees due to rising health insurance premiums.
Affordable Care Act

In 2017, the Alamance County Health Department convened the Alamance County Affordable Care Act (ACA) workgroup for the fourth year, which aims to decrease the rate of uninsured residents by increasing enrollment on the ACA Health Insurance Marketplace. The ACA workgroup is comprised of partner agencies including the Alamance County Health Department, Alamance County Public Libraries, Alamance County Department of Social Services, Legal Aid of NC, Alamance Regional Medical Center, Piedmont Health Services and others. The workgroup continued to provide uninsured residents with assistance in accessing the ACA Health Insurance Marketplace during the 2018 Open Enrollment period through participating in several outreach events in the community such as Alamance Pride, United Way Community Council, and NC Med-Assist’s Over the Counter Giveaway. Before the Open Enrollment period, Elon-Alamance Health Partners (EAHPs) were trained as Certified Application Counselors. The EAHPs are recent Elon University graduates completing a year of service in community health in health-service agencies across the county. During the Open Enrollment period, which lasted 45 days, residents were able to schedule free appointments with several of the partners of the workgroup. The uninsured rate for residents 18-64 years old in Alamance County decreased from 14.1% in 2015 to 12% in 2016 (US Census Bureau, 2016 American Community Survey 1-Year Estimates). Following the completion of Open Enrollment, the group will continue to meet and identify entry points for health literacy programming through dissemination of the Coverage to Care booklet offered for free by the Centers for Medicare & Medicaid Services.

NCCARE360

NCCARE360 is a new statewide tool to make it easier for providers, insurers and community-based organizations to connect people with the community resources they need to be healthy.

The NC Resource Platform will be open at no cost to all North Carolinians, systems, payers, and providers. It will be a robust, integrated resource database, website, call center, and care coordination platform for clinicians, social workers, care coordinators, families and others to connect people to the community resources they need. Additionally, the platform will connect community-based organizations to each other across the State so they can collaborate, while allowing for the tracking of system-wide outcomes and supporting system improvement. Alamance County is one of three counties selected for its pilot demonstration rollout.

Teen Friendly Clinic

Alamance County Health Department received $100,000 in grant funding from Impact Alamance in 2017 to expand community access to highly effective, convenient, and evidence-based family planning services through a teen friendly approach to clinical services. SHIFT-NC has been secured as a consultant to conduct a needs assessment of the health department’s physical and operational structure in order to identify any barriers or areas of improvement in implementing the teen clinic approach. In addition, the health department has worked with private providers to increase the access of Long Acting Reversible Contraceptives (LARCS). Since the project began in 2017, 16 providers have participated in the LARC Utilization project.
Alamance Network for Inclusive Healthcare

Because of these challenges, the Alamance Network for Inclusive Healthcare was formed in 2016 to improve the quality of life for all people in Alamance County by sharing hope through accessible and compassionate care. This coalition is made up of over a dozen organizations; including free local clinics, health departments, the hospital, and federally qualified health centers (FQHCs) that constitute our local medical safety net. The Network has identified two strategic goals: improving quality of life through expanding care coordination and improving local transit. Through these goals, members of the Network work to remove barriers, increase awareness, and advocate for patient needs.

The Network has brought important improvements to our community. In December of 2016, the first adult dental clinic for the uninsured was created as a result of collaboration between the Open Door Clinic, Piedmont Health Services, and Impact Alamance. This past year, the Resource Guide to Free and Low-Cost Healthcare was created to provide patients and residents with information regarding health services that are provided throughout the county to those who are uninsured or underinsured. Most recently, this guide was translated to Spanish to expand outreach efforts. For the past two years, members of the Network have conducted customer satisfaction surveys of transit passengers and presented the results to the Burlington City Council. As a result of their collaboration, the local transit hours were extended to help ensure that patients seeking care at the FQHCs and free clinic can get to their evening appointments. Additionally, their work with the local transportation department resulted in a sidewalk and bus shelter that connect free clinics, health departments, and FQHCs to local transit. Moving forward, the Network plans to continue to support patient needs by implementing built environment strategies, including sidewalk projects, bike lanes, and crosswalks.

Child Health Insurance

Health insurance for children is particularly important. To stay healthy, children require regular checkups, dental and vision care, and medical attention for illness and injury. Children with health insurance are more likely to have better health throughout their childhood and adolescence. They are more likely to receive required immunizations, fall ill less frequently, obtain necessary treatment when they do get sick, and perform better at school. Having health insurance lowers barriers to accessing care, which is likely to prevent the development of more serious illnesses. This is not only of benefit to the child but also helps lower overall family health costs.

The above graph shows an increase in the number of Alamance children with health insurance. Compared to NC counties, Alamance has a value of 95.1%, which is in the best 50% of counties. This increase could be due to the implementation of the Affordable Care Act. Under ACA, a qualifying child is under age 19 at the close of the calendar year. Therefore, age categories used to measure health insurance now define those aged 18 as children.
Emergency Department Usage

Emergency department (ED) usage from common causes including diabetes and pneumonia/influenza represents access to care within our county, as the Emergency Department may serve as one’s primary means of receiving medical attention. Alamance County exceeds our state average and remains the highest of all our neighbors and peer, Rowan County, in 5-year trends for diagnoses of diabetes and stroke during ED visits. Usage due to pneumonia and influenza diagnoses are slightly higher than the state average (NC Detect). Injuries constitute a large portion of visits to the Emergency Department; from 2007-2009, the top five leading causes of ED Injury visits were unintentional falls, motor vehicle accidents, being struck and overexertion. Overall, these represented over 30,000 visits to emergency departments (NC SCHS). It is important to consider that many residents travel to other counties to reach regional hospitals, including UNC, Duke or Moses Cone, and this can affect emergency department data.

Education

Individuals who do not finish high school are more likely than people who finish high school to lack the basic skills required to function in an increasingly complicated job market and society. Adults with limited education levels are more likely to be unemployed, on government assistance, or involved in crime. Individuals with more education are more likely to have jobs with higher earnings; live in
communities with more resources like better schools and access to nutritious food, health services, and transportation; and acquire knowledge and skills to support healthier behaviors.

Alamance County’s high school graduation rate of 82.3% is lower than the state’s rate of 86.5%. However, the percentage of graduates in Alamance has improved since 2015-2016 when the rate was 81%. The percentage of minority high school graduates is lower than the overall percentage as shown in the following graph. This may indicate the need for more resources to assure that every student has access to resources needed to achieve their educational goals.

The Alamance-Burlington School visioning process was created in 2011 as a result of the Board of Education’s desire to enhance the capacity of the Alamance County schools. In partnership with the Chamber of Commerce, the Board of Education convened 50 community stakeholders who met regularly during the 2012-2013 school to envision the future of ABSS. “A Vision for Public Education in Alamance County,” guides the ABSS strategic plan and all ABSS advocacy efforts. To learn more, see APPENDIX B: Citations & Resources

ABSS encompasses 20 elementary schools, seven middle schools, six high schools, and three specialty schools serving ABSS students from the middle and high schools. These specialty schools include Ray Street Academy, which takes both middle and high school students who have been recommended for long-term suspension from their home schools, as well as the Career and Technical Education Center (CTEC) and the Alamance-Burlington Middle College. CTEC students split their time between their home high schools and CTEC, where they take specialty classes in either health science, culinary arts, computer science, engineering, and networking, scientific visualization, digital media, or automotive technology. The Alamance-Burlington Middle College is located on the campus of Alamance Community College and aims to graduate students with definite academic post-secondary plans.

According to the NC Department of Public Instruction, the 2017-2018 high school graduation rate of ABSS was 82.3 percent compared to the state rate of 86.3 percent. It is important to note that the ABSS four-year cohort graduation rate in 2017-2018 for African-Americans was 81.8 percent compared to
76.3 percent for Hispanics and 83.4 percent for whites. In addition to the Alamance-Burlington Middle College, Alamance Community College also offers qualified junior and senior high school students the opportunity to pursue college courses tuition-free while in high school. College courses are offered through Alamance Community College at Eastern Alamance High School, Williams High School, and Rivermill Academy.

![Four-Year ABSS Cohort Graduation Rate](Image)

Source: North Carolina Department of Public Instruction, Cohort Graduation Rates, Accessed January 2019

Alamance Community College also has unique programs to provide adult education and job training services to local businesses and industry. Alamance Community College has many programs, such as childcare and a stop on the PART bus route, to make continuing education opportunities accessible. The workforce development courses are a significant part of local economic development efforts. To increase accessibility and offer flexibility, Alamance Community College has special transfer agreements with East Carolina University, Guilford College, NC A&T State University, UNC Chapel Hill, and UNC Wilmington. Additionally, Articulation Agreements are in place between all the state’s community college systems and the 16 UNC institutions in North Carolina [AM1].

Additionally, on November 6, 2018 voters approved bonds for both Alamance Burlington School System and Alamance Community College. The $150 million School Bond (ABSS Bond) will be utilized for repairs and improvements at Alamance County’s six existing high schools, as well as two elementary schools, and for the construction of a new high school to address the expanding high school population. The $39.6 million Community College Bond (ACC Bond) will allow for updated facilities at Alamance Community College to meet the demands of 21st century employers and improve public safety training.
Finally, Alamance County is home to Elon University. Founded in 1889, Elon University is a mid-sized private liberal arts university composed of 6,196 undergraduate and 795 graduate students from 47 states and the District of Columbia and 53 nations. Elon University is grounded in engaged and experiential learning and has been recognized nationally for its commitment to undergraduate research, internships, service, leadership, and study abroad. Elon’s Kernodle Center for Service-Learning and Community Engagement plays a vital role in Alamance County, serving as a liaison between the greater community and the university. As much as 89 percent of all students engage in volunteer opportunities throughout the community, and many academic service-learning programs collaborate with local businesses and agencies to expose students to in-the-field experiences.

In addition to the undergraduate colleges of arts and sciences, business, communications, and education, Elon also offers two graduate colleges: The School of Health Sciences and the School of Law.

Current Initiatives & Activities

- **Alamance Partnership for Children**

  The Alamance Partnership for Children is a non-profit organization serving children and families in Alamance County. The Partnership administers Smart Start and NC Pre-Kindergarten funds, an early childhood initiative designed to ensure that young children enter school healthy and ready to succeed. [Alamance Partnership for Children](#)

- **Elon Academy**

  The Elon Academy is a non-profit college access and success program for academically promising high school students in Alamance County with a financial need and/or no family history of college. [Elon Academy](#)

- **Girls & Boys Club of Alamance County**

  The Salvation Army Boys and Girls Club is dedicated to inspiring youths to meet their true potential through our Afterschool Program and Summer Camp. [Salvation Army](#)

- **“It Takes A Village” Project**

  The “It Takes a Village” Project is a program that uses a collaborative approach to help children in the community who are struggling to read. Children, Elon students, and trained community volunteers are paired together for weekly tutoring sessions on campus. [Elon Village Project](#)
The Positive Attitude Youth Center is a non-profit organization in the Burlington, North Carolina community that works to reach out to children and young adults to help them mature physically, spiritually, and emotionally by providing a positive learning and social environment through after school programs, day schools, and recreational opportunities.

**Accomplishments: Collective Impact to Improve Educational Outcomes**

Alamance Achieves is a collective impact movement aimed at improving educational outcomes for all children in Alamance County. The related and critical goal to its success is through the collection and use of data to help organizations coordinate and align their efforts from cradle to career along four key goals, that is, kindergarten readiness, academic progress, high school graduation and career success.

The partnership consists of a Steering Committee whose members include the: Superintendent of the Alamance-Burlington School System, Directors of the local Health Department and Social Services, a county commissioner, the Executive Director of Impact Alamance, President of our local United Way, President of the Chamber of Commerce, Executive Director of the Partnership for Children, Elon University, Alamance Community College, corporate executives and several providers from community-based organizations – all who have been committed for several years to building the vision, foundation and framework of Alamance Achieves. Key to the partnership is Impact Alamance, the primary local foundation, which serves as the anchor organization that provides management oversight and financial support; the United Way of Alamance County which provides financial and leadership support; Elon University who provides two full-time Kenan Community Impact Fellows; and the Council, a diverse group of community members, that helps connect Alamance Achieves to key leaders and organizations in the private sector, health care, education, government, the faith community.

Alamance Achieves is focusing on four key goals to put children on track for success. Key indicators are used to track progress toward meeting these goals.

1. Every child is well, healthy and ready for school.
2. Every child succeeds in school.
Every student graduates, prepared for post-secondary learning.
Every learner is on track to achieve career goals.

Alamance Achieves

One of Alamance Achieves’ most significant accomplishments so far has been the development of a countywide definition for and measurement of kindergarten readiness. Through collaboration with Alamance-Burlington School System and Elon University, the Kindergarten Readiness Network codified a universal benchmark for school readiness along crucial developmental domains – a necessary step to establish baseline data and measure progress toward improving this outcome. Using that definition, the school system designed a measurement for readiness: A Kindergarten Screener tool that measures social-emotional, motor, language and literacy developmental domains. Piloted in fall of 2018, the screener will be evaluated for reliability and validity this year and will be administered to all incoming kindergartners in the fall of 2019.

Economy

Economic inequality influences many aspects of health and well-being, and low socio-economic status puts people at risk for heart disease, mental health problems, chronic disease and shorter life expectancy. Higher income, in turn, creates more opportunities for a healthy lifestyle, such as being able to afford to live in a safe neighborhood with parks, sidewalks, good services and strong schools.

Many low-income families struggle to provide the basics and must make difficult choices, such as sacrificing healthy food or medical care to pay other urgent bills. This can lead to severe health problems and greater financial costs down the road. The cost of housing can also push families into low quality housing conditions involving overcrowding, mold, and pests.

Despite a low unemployment rate of 4.4%, many Alamance County residents are living with low incomes. The median household income in Alamance County, $41,814, is $5,000 lower than the North Carolina median and more than $12,000 below the U.S. median.

The Self-Sufficiency Standard for North Carolina defines the minimum income needed to realistically support a family, without public or private assistance, on a "bare bones" budget, with just enough allotted to meet basic needs, but no extras. A family of four (two adults and two children) needs to earn $57,308 annually to meet this standard in Alamance County.
Median household income reflects the relative affluence and prosperity of an area. Areas with higher median household incomes are likely to have more educated residents and lower unemployment rates. Higher employment rates lead to better access to healthcare and better health outcomes, since many families get their health insurance through their employer. Areas with higher median household incomes also have higher home values and their residents enjoy more disposable income.

Equitable and stable communities provide individuals and families with safe and affordable housing, access to quality education, and the supports needed to lead a healthy life.

“OVER THERE [WEST BURLINGTON] IS THERAPY, BUT OVER HERE [EAST BURLINGTON] THERE IS STRESS”

THERE IS AN 11 YEAR LIFE EXPECTANCY GAP BETWEEN WEST AND EAST BURLINGTON

FOCUS GROUP QUOTE
Families Below Poverty with Children

Zip Code

Data Source: Claritas
Measurement Period: 2019

February 28, 2019
www.piedmonthealthcounts.org

Figure 7
Alamance County’s rate is worse than the state’s rate of 12.4% which is in the 2nd worst quartile of NC Counties.

Nearly two out of every 10 county residents are living in poverty. Three out of every ten children in Alamance County are living in poverty, and the effects of low income -- poor nutrition, lower quality educational opportunities, and chronic stress -- are especially harmful at the earliest stages of life.

“WE DON’T GO TO OUR APPOINTMENTS”
FOCUS GROUP QUOTE
Alamance County’s percentage of children living in poverty is higher than the state’s percentage of 23.9%. Alamance County is in the 2nd worst percentile of counties. This rate has been trending upward since 2007. There is a slight decrease in the percentage since it peaked in 2014.

Family income has been shown to affect a child’s well-being in numerous studies. Compared to their peers, children in poverty are more likely to have physical health problems like low birth weight or lead poisoning and are also more likely to have behavioral and emotional problems. Children in poverty also tend to exhibit cognitive difficulties, as shown in achievement test scores, and are less likely to complete basic education.
The unemployment rate in Alamance County is 3.2% which is slightly better that the state’s rate of 3.5%.

![Employment by Industry Chart]

Source: Labor & Economic Analysis Division, North Carolina Department of Commerce, 2016

**Accomplishments**

Alamance County residents voted to approve a $150 million-dollar school bond for Alamance Burlington School System in November 2018. This bond will repair several infrastructure issues at high schools in the county and build a new high school in the southeastern part of the county that is desperately needed due to population growth. A significant bond in Alamance County has not been passed since the 1950s.

A $30 million-dollar bond for Alamance Community College was also passed in November 2018. This bond will create a new Biotechnology Center, Public Safety Training Center, New Student Services Learning and Development Center, create new satellite campus in eastern and western Alamance County and build a multi-deck student and visitor vehicle center. **APPENDIX B: Additional Data and Information**
CHAPTER 5 RACIAL AND ETHNIC DISPARITIES

Race is a political construct, which classifies humans according to the color of their skin. Racism and discrimination are constant reminders of the significant role race and ethnicity have played in shaping the social structure of society. Today, racial relations continue to be perpetuated by prejudice and stereotypes that play a significant role in determining the quality of life for people of color (Annie E Casey Foundation, 2006).

Population by Race
County: Alamance

![Population by Race Chart]


Figure 9

Health equity is reflective of the quality and availability of healthcare and health opportunities across various groups. The 2018 North Carolina Health Equity Report defines health equity as “the absence of avoidable or remediable differences, allowing for the attainment of optimal health for all people... [It] is achieved when everyone can attain their full health potential, and no one is disadvantaged because of socially determined circumstances” (Disparities, 2019).

Health inequity is illustrated through health disparities which are measurable differences in health status and are often influenced by structural and social inequalities. Whether it is intentional or unintentional racism is a systematic and environmental stressor that may influence health outcomes. Ultimately, racism impacts the social determinants of health, which are social conditions that may influence an individual’s well-being, such as: socioeconomic status, housing, education, and nutrition. Consequently, the quality of these conditions may create barriers to opportunities for health equity for people of color. (CDC, 2019) Consider, in the report Unequal Treatment: Confronting racial and Ethnic disparities in Healthcare, the Institute of Medicine concluded that “the minority of patients are less likely than whites to receive the same quality of healthcare, even when they have similar insurance or
the ability to pay for care” (Institute of Medicine, 2002). Therefore, the differences in health across racial and ethnic groups should be not only a public health concern, but a system and structural concern.

In Alamance County, white people make up a little more than two thirds of the population while those of other races comprise just under one third of the population. Hispanics/Latinos make up 13.9% of the population in Alamance County, a percentage that is higher than for the state (9.55%). This reflects increased growth of this population in recent years.

Racial health disparities exist within socio demographic categories, including, for example, education. Maternal and infant mortality rates are consistently used to illustrate the overall health status of a community. The Healthy People 2020 national health target is to reduce infant mortality rate to 6 deaths per 1,000 live births. Currently, the infant mortality rate in Alamance County is 8.8 deaths per 1,000 live births, with the infant mortality rate for the African American, non-Hispanic population being 17.1 deaths per 1,000 births compared to a rate of only 6.7 deaths per 1,000 births among white women. This demonstrates a severe inequity in maternal and infant health and a need for new, innovative intervention approaches.
By positively changing a racial health disparity such as infant mortality rate, Alamance County can move towards being a more equitable place for all to live. Historically, people of color tend to face more challenges in their environment that limit their opportunities for health. The NC Health Equity 2018 reports suggests that by 2050 racial minorities will become the majority population. Therefore, social services must understand the impact of systemic racism on health equity in order to better serve the community (SCHS, 2018).

Current Initiatives & Activities

- **Alamance Racial Equity Alliance (AREA)**

  The Alamance Racial Equity Alliance is a community organization that intends to unite all people through collective learning, meaningful relationships, and community events. They organize Racial Equity trainings in Alamance County. [AREA](#)

- **Racial Equity Institute**

  The Racial Equity Institute is a group of trainers, organizers, and institutional leaders who help individuals and organization develop tools to challenge patterns of power and grow equity. [Racial Equity Institute](#)

- **Black Entrepreneur Collaborative (BEC)**

  A network of black entrepreneurs in Alamance County, a group that seeks to extinguish the hurdles blocking black people from entrepreneurship. The group’s vision and goal are “to elevate, inspire and bond black people so we can excel in leadership and entrepreneurship. We are committed to enriching lives, families and communities by providing tools for personal growth, productivity and profit.”
The Black Entrepreneur Collaborative is “A Movement” dedicated to a journey of self-confidence, black unity, and success. **APPENDIX B: Additional Data and Information**

**CHAPTER 6 HEALTH AND WELL-BEING**

**Mortality**

The leading causes of death in Alamance County are like those for the state of North Carolina (SCHS, 2017). As of 2017, the highest percentages of deaths were due to two primary causes: heart disease and cancer. These figures reflect age-adjustment for both the county and state of North Carolina. Overall, Alamance County is comparable to the state of North Carolina, falling just below many of the rates of death for the listed factors except for stroke/cerebrovascular disease and septicemia.

*Table 13*

**Leading Causes of Death Alamance County 2017**

<table>
<thead>
<tr>
<th>Rank</th>
<th>Cause</th>
<th>Number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Diseases of heart</td>
<td>337</td>
<td>19.9</td>
</tr>
<tr>
<td>2</td>
<td>Cancer</td>
<td>327</td>
<td>19.3</td>
</tr>
<tr>
<td>3</td>
<td>All other unintentional injuries</td>
<td>93</td>
<td>5.5</td>
</tr>
<tr>
<td>4</td>
<td>Cerebrovascular diseases</td>
<td>88</td>
<td>5.2</td>
</tr>
<tr>
<td>5</td>
<td>Chronic lower respiratory diseases</td>
<td>88</td>
<td>5.2</td>
</tr>
<tr>
<td>6</td>
<td>Alzheimer's disease</td>
<td>68</td>
<td>4</td>
</tr>
<tr>
<td>7</td>
<td>Diabetes mellitus</td>
<td>55</td>
<td>3.3</td>
</tr>
<tr>
<td>8</td>
<td>Nephritis, nephrotic syndrome and nephrosis</td>
<td>39</td>
<td>2.3</td>
</tr>
<tr>
<td>9</td>
<td>Septicemia</td>
<td>37</td>
<td>2.2</td>
</tr>
<tr>
<td>10</td>
<td>Influenza and pneumonia</td>
<td>36</td>
<td>2.1</td>
</tr>
<tr>
<td></td>
<td>All other causes (Residual)</td>
<td>522</td>
<td>31</td>
</tr>
<tr>
<td></td>
<td><strong>Total Deaths -- All Causes</strong></td>
<td>1690</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: State Center for Health Statistics, North Carolina
### Table 14

<table>
<thead>
<tr>
<th>NC Leading Causes of Death, 2016</th>
<th>Deaths</th>
<th>Rate</th>
<th>State Rank</th>
<th>U.S. Rate</th>
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</thead>
<tbody>
<tr>
<td>1 Cancer</td>
<td>19,523</td>
<td>161.6</td>
<td>19th</td>
<td>155.8</td>
</tr>
<tr>
<td>2 Heart Disease</td>
<td>18,266</td>
<td>155.8</td>
<td>28th</td>
<td>165.5</td>
</tr>
<tr>
<td>3 Accidents</td>
<td>5,476</td>
<td>52.2</td>
<td>26th</td>
<td>47.4</td>
</tr>
<tr>
<td>4 Chronic Lower Respiratory Diseases</td>
<td>5,311</td>
<td>44.8</td>
<td>22nd</td>
<td>40.6</td>
</tr>
<tr>
<td>5 Cerebrovascular Disease/Stroke</td>
<td>4,940</td>
<td>43.0</td>
<td>8th</td>
<td>37.3</td>
</tr>
<tr>
<td>6 Alzheimer’s disease</td>
<td>4,153</td>
<td>37.2</td>
<td>11th</td>
<td>30.3</td>
</tr>
<tr>
<td>7 Diabetes</td>
<td>2,811</td>
<td>23.5</td>
<td>17th</td>
<td>21.0</td>
</tr>
<tr>
<td>8 Nephritis/Kidney Disease</td>
<td>2,002</td>
<td>17.1</td>
<td>10th (tie)</td>
<td>13.1</td>
</tr>
<tr>
<td>9 Influenza/Pneumonia</td>
<td>1,896</td>
<td>16.5</td>
<td>11th</td>
<td>13.5</td>
</tr>
<tr>
<td>10 Septicemia</td>
<td>1,559</td>
<td>13.3</td>
<td>13th</td>
<td>10.7</td>
</tr>
</tbody>
</table>

Source: CDC, 2016

https://www.cdc.gov/nchs/pressroom/states/northcarolina/northcarolina.htm

Disparities exist in mortality statistics when considering the gender of Alamance County residents. Although the overall population consists of 77,010 male residents and a larger number of 84,576 female residents, males are vastly overrepresented in mortality data. Males have higher rates of all leading causes of death, excluding Alzheimer’s, despite the disproportionate gender ratio. African Americans have higher rates of mortality from most leading causes of death, excluding Alzheimer’s and Chronic Lower Respiratory diseases. One of the largest disparities that exist is in the number one cause of death, cancer, in which African American rates of death are significantly higher than those of White, Non-Hispanic populations.

Infant mortality rates for Alamance County were 7 infant deaths per 1,000 live births, while the state average is 7.2 as of 2017. The non-Hispanic African American infant mortality rate is 13.4. When compared with neighboring counties Caswell, Guilford and Orange and peer county, Rowan, Alamance ranks in the middle. This data, however, are somewhat distorted based on the very small sample size upon which rates are based. It is therefore also useful to observe the trends of infant mortality over time, for a more comprehensive idea of the fluctuation of data over five-year increments since 2001. In this analysis, significant improvements have been made, particularly for minority populations, in which mortality rates have fallen by more than 50 percent since 1999-2003 and continue to decrease due to
various programming within the county (See Prenatal, Infant, and Maternal Health)

Table 15

Leading Causes of Death, Alamance County by Race 2017

<table>
<thead>
<tr>
<th>Cause</th>
<th>African American</th>
<th>White</th>
</tr>
</thead>
<tbody>
<tr>
<td>Essential hypertension and...</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nephritis, nephrotic syndrome and...</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diabetes mellitus</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cerebrovascular diseases</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chronic lower respiratory diseases</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diseases of heart</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Morbidity
An important factor in measuring the health of Alamance County residents is morbidity, or the health-related quality of life in the context of overall, physical and mental health. The County Health Rankings use measures to compare this indicator, and the 2015 rankings show Alamance County being 47th out of 100 counties for morbidity. As of 2018, we ranked 63 out of 100 counties. Since 2011, there has been a steady decline in the overall quality of life of Alamance county residents (County Health Rankings, 2018)

In 2018, the average Alamance County resident experienced 3.8 days of poor physical health during a one-month period, which is comparable to the North Carolina average of 3.6 days of poor physical health for one month. The number of poor physical health days is like the number of poor mental health days experienced by both Alamance County and North Carolina residents.

Another important indicator of how diseases can negatively impact quality of life is hospital utilization data surrounding time spent under care, the number of cases that are admitted under emergency situations and the medical costs incurred from treatment.

“WE GO THE LEAST AMOUNT OF TIMES POSSIBLE (TO SERVICES)”
Focus Group Quote
# Inpatient Hospital Utilization, Alamance County, 2015

## Table 16

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>Total Cases</th>
<th>Average Days Stay</th>
<th>Average Charge Per Case</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diseases of heart</td>
<td>1,766</td>
<td>4.7</td>
<td>$42,070</td>
</tr>
<tr>
<td>Cancer</td>
<td>472</td>
<td>6.5</td>
<td>$43,378</td>
</tr>
<tr>
<td>All other unintentional injuries</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Cerebrovascular diseases</td>
<td>531</td>
<td>4.3</td>
<td>$28,474</td>
</tr>
<tr>
<td>Chronic lower respiratory diseases</td>
<td>1,381</td>
<td>5.0</td>
<td>$23,811</td>
</tr>
<tr>
<td>Alzheimer's disease</td>
<td>1,355</td>
<td>5.7</td>
<td>$39,671</td>
</tr>
<tr>
<td>Diabetes mellitus</td>
<td>263</td>
<td>3.8</td>
<td>$21,161</td>
</tr>
<tr>
<td>Nephritis, nephrotic syndrome and nephrosis</td>
<td>386</td>
<td>4.3</td>
<td>$16,455</td>
</tr>
<tr>
<td>Septicemia</td>
<td>1,074</td>
<td>6.1</td>
<td>$29,075</td>
</tr>
<tr>
<td>Influenza and pneumonia</td>
<td>397</td>
<td>4.3</td>
<td>$16,936</td>
</tr>
</tbody>
</table>

Source: NC SCHS 2015

## Cancer

Cancers caused by diet and tobacco use are preventable. For example, from 2011-2015, lung cancer accounted for 28 percent of all cancer-related mortality in Alamance County. In 2012, the Surgeon General named tobacco products the number one cause of preventable death in the United States, which remains true today. By reducing or strictly regulating the use of tobacco products, it is possible to combat high rates of lung, throat and mouth cancers and diminish mortality rates from these conditions.

According to the CDC, overweight and obesity are associated with at least 13 different types of cancer and these cancers make up 40% of all cancers diagnosed. About 2 in 3 occur in adults 50-74 years old. Additionally, the CDC states that more than half of Americans don’t know that overweight and obesity can increase their risk for cancer. Many things are associated with cancer, but avoiding tobacco use and keeping a healthy weight are among the most important things people can do to lower their risk of getting cancer. (CDC, 2017)

There are certain cancers, like cervical cancer, that are related to viruses. Vaccination against the virus, preventing infection and behavioral changes can help prevent these types of cancers.
Heart Disease and Stroke

Heart disease is a phrase that includes several more specific heart conditions. Heart Disease can cause heart attacks, stroke, heart failure, and an irregular heartbeat. The most common heart disease in the United States is coronary artery disease (CAD), which can lead to a heart attack when fat and other substances collect along the arterial wall and cause a hardening plaque material to build up. This hardened plaque causes the blood vessels to become narrowed. Other risk factors that contribute to CAD are high blood pressure, high LDL cholesterol, high triglycerides (fat), tobacco smoke, inactivity, obesity, alcohol use and diabetes mellitus. Most if not all these risk factors are indeed controllable. (CDC, 2018)

A stroke (also called cerebrovascular disease) happens when the blood flow to the brain is blocked or when a blood vessel in or around the brain bursts, and part of the brain starts to die. A stroke is very serious, but treatable, by knowing the symptoms of stroke and seeking immediate attention, doctors can improve chances of recovery if you get to the hospital within three hours of symptoms appearing. According to the NC Stroke Association, every 20 minutes, someone in North Carolina is hospitalized with a stroke and every two hours someone dies from a stroke. Up to 80 percent of strokes are preventable by making healthy lifestyle changes, such as, controlling high blood pressure, losing weight, and not smoking. Strokes can cause significant disability including paralysis as well as speech and emotional problems.

<table>
<thead>
<tr>
<th>Age-Adjusted Heart Disease Death Rates per 100,000 Residents</th>
</tr>
</thead>
<tbody>
<tr>
<td>North Carolina</td>
</tr>
<tr>
<td>209.3</td>
</tr>
<tr>
<td>174.4</td>
</tr>
<tr>
<td>159.8</td>
</tr>
</tbody>
</table>

Diabetes

Diabetes is a group of diseases marked by high levels of blood glucose, resulting from defects in insulin production or action in the body. In 2017, diabetes mellitus became the 7th leading cause of death in Alamance County, and remained the 7th in the state of North Carolina. Incidence rates have fallen since 2009, but the burden of disease on the community remains high as patients cope with their illness. Additionally, if the diabetes epidemic remains uncontrolled in North Carolina, it is estimated that annual medical and societal costs will surpass $18.6 billion by 2025. (Institute for Alternative Futures, 2015)
There are three types of diabetes as defined by the Center for Disease Control: Type 1, Type 2, and gestational. Type 1 diabetes or juvenile-onset diabetes may account for 5 percent to 10 percent of all diagnosed cases of diabetes. Risk factors are less well defined for Type 1 diabetes than for Type 2 diabetes, but autoimmune, genetic, and environmental factors are involved in the development of this type of diabetes. Type 2 diabetes or adult-onset diabetes may account for about 90 percent to 95 percent of all diagnosed cases of diabetes. Risk factors for Type 2 diabetes include older age, obesity, and family history of diabetes, prior history of gestational diabetes, impaired glucose tolerance, physical inactivity, and race/ethnicity. Gestational diabetes develops in 2 percent to 5 percent of all pregnancies but usually abates when a pregnancy is over. Gestational diabetes occurs more frequently in minorities, people with a family history of diabetes, or obese women. Women who have had gestational diabetes are at increased risk for later developing Type 2 diabetes. (CDC, 2017)

Alamance County has served as the lead county for the Local Health Department Region 5 NC Minority Diabetes Prevention Program initiative since 2016 and continues to hold classes, screen individuals for diabetes, and train Lifestyle Coaches within its 9-county service area. Recommendations from the American Diabetes Association to prevent or delay Type 2 diabetes are maintaining a healthy weight, eating well and being active. With these steps, you can stay healthier longer and lower your risk of diabetes.

Table 17
In 2016, the NC General Assembly made funding available to the Division of Public Health for the Office of Minority Health and Health Disparities to establish and administer, in consultation with the Chronic Disease and Injury Section, an evidenced-based diabetes prevention program targeting African Americans, Hispanic/Latinos and American Indians and called it the Minority Diabetes Prevention Program (MDPP). The goal of MDPP is to provide 1) a prediabetes and diabetes prevention awareness and marketing campaign in minority communities, 2) community screenings for prediabetes and referrals to Diabetes Prevention Program Lifestyle classes and diabetes self-management programs, and 3) offer the CDC’s Lifestyle Classes “Prevent T2” and “Prevenga el T2” to minority communities across NC. These year-long, evidenced-based programs can help people who have prediabetes or who are at high risk for type 2 diabetes make realistic and achievable lifestyle changes, which can cut their risk of developing type 2 diabetes by up to 58% percent (CDC, Preventing Type 2 Diabetes). People who are enrolled in the MDPP Lifestyle classes will learn to incorporate healthier eating and moderate physical activity, as well as problem-solving, stress reduction and coping skills into their daily lives. The Lifestyle classes are held with a trained lifestyle coach over a 12-month period. There are 16 classes held on a weekly basis during the first six months, after that, six or more follow-up classes are held during the last six months. Alamance County is the lead county for the Local Health Department Region 5 MDPP initiative, which includes Caswell, Chatham, Durham, Person, Rockingham, Randolph, Orange and Guilford Counties. Region 5 started this program in December 2016 and by May 2017 had developed a program website, implemented a marketing campaign, held seven regional collaborative meetings, screened 355 individuals, trained 23 Lifestyle Coaches, conducted 12 classes regionally with 110 participants, coordinated 11 screening events, and hosted a regional forum in Guilford County. In the 2017-18 fiscal year, Region 5 has continued to add new classes, train new coaches and collaborate with new partners in the community.

Infectious Diseases

Influenza and Pneumonia

Influenza, which is most commonly referred to as the flu, is a viral illness that affects the respiratory system and can be very contagious. There are two main strains of the virus, which differ in their molecular structure, and are spread through the inhalation of droplets spread by those infected with the flu from coughing, sneezing or talking. Symptoms can include fever, cough, sore throat, runny or stuffy nose, fatigue or headaches. The severity of the illness can range from mild to life-threatening, and certain groups are at a higher risk for complications than others; these include populations ages 65 years and over, those with chronic conditions such as asthma or diabetes, pregnant women and children. The Center for Disease Control (CDC) estimates that during a regular flu season up to 90 percent of deaths occur in those who are 65 years of age or older. Pneumonia can be a potential side effect of the influenza virus, as the infection causes inflammation of vessels and worsening of cough or fever and poses a particularly high risk for older adults and children.
The 2017-2018 flu season in North Carolina yielded 12,396 positive results for influenza strains in hospitals and peaked in the beginning of February. Compared to earlier years from 2014-2015, the incidence of influenza-like illness remained much higher over time up until early April. In North Carolina, there were a total of 391 influenza-associated deaths; over 288 of those cases were in populations over the age of 65.

Administering vaccines is one strategy for preventing and reducing the impact of influenza, as they allow for people to develop antibodies to protect against infection. Flu vaccines protect against the most common strains of the virus and should be administered before the flu “season” which can begin as early as October and end as late as May, but usually peaks in December. Although it is recommended for everyone over the age of 6 months to receive a flu vaccine, there are certain groups that have coexisting medical conditions that make it unsafe. In 2014, the Alamance County Health Department administered 3,483 flu vaccines, representing a small decrease from 3,567 in 2013. (NC Weekly Influenza Summary, 2018)

**Tuberculosis**

Tuberculosis (TB) is an infection of usually the lungs caused by a bacterium and if it is not treated properly, can be fatal. TB is spread through the air from one person to another when the person with TB coughs, sneezes, speaks, or sings and others breathe in bacteria expelled into the air. It is possible to have latent TB, in which people have the bacteria in their bodies, but it is not active. People with latent TB infection do not have symptoms, and they cannot spread TB bacteria to others. However, if TB bacteria become active in the body and multiply, the person will go from having latent TB infection to being sick with active TB disease. Symptoms of active TB may include cough that last more than three weeks, pain in the chest, coughing up blood or sputum, weakness, weight loss, loss of appetite, chills, fever or night sweats. Active TB is treated through a 6-9 months regimen of medication (CDC, 2018). TB cases remain very low both at a local level and at the state.

**Active TB cases reported to CDC via NCEDSS**

<table>
<thead>
<tr>
<th>Active TB cases reported to CDC</th>
<th>TB cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>0</td>
</tr>
<tr>
<td>2016</td>
<td>4</td>
</tr>
<tr>
<td>2017</td>
<td>4</td>
</tr>
<tr>
<td>2018</td>
<td>2</td>
</tr>
</tbody>
</table>
Communicable Diseases: Sexually Transmitted Infections

Sexually Transmitted Diseases (STDs) are passed from one person to another through intimate physical contact and from sexual activity including vaginal, oral, and anal sex. These infections can be caused by bacteria, parasites, or viruses. The most common STDs are Gonorrhea, Chlamydia, the Human Papillomavirus infection (HPV), Syphilis, genital herpes, and HIV/AIDS. While STDs affect individuals of all ages, STDs take a very heavy toll on young people. The CDC estimates that adolescents and young adults between the ages of 15-24 make up just over one quarter of the sexually active population, but account for half of the 20 million new sexually transmitted diseases that occur in the United States each year. STDs are not only costly, accounting for $16 billion in medical costs in the United States, annually, they are also of notable concern and of public health significance impacting morbidity and mortality in communities. They can cause infertility of women, sterility in men, ectopic pregnancies, cancer, cirrhosis or liver failure, and early death. Individuals who contract STDs tend to not know that they have one because most STDs are asymptomatic (showing no symptoms), therefore prevention, testing, and treatment are critical elements in controlling outbreaks. To prevent the spread of STDs entirely, abstain from sex or if you choose to have sex, always use an external barrier method such as a condom and tested often at your local health department or clinic. If you are diagnosed with a STD, know that all can be treated with medicine and some can be cured entirely.

“The basic human needs are all the same. So why are there so many services but not enough to invest in what is actually needed?”

FOCUS GROUP QUOTE
Data on the Burden of STIs and HIV

HIV

Human Immunodeficiency Virus (HIV) is a virus that affects specific cells of the immune system, called CD4 cells, or T cells. Over time, HIV can destroy so many of these cells that the body cannot fight off infections and disease, which may result in acquired immunodeficiency syndrome, or AIDS, in which immune systems are severely weakened. Currently, there is no effective cure for HIV or AIDS. With proper medical care, HIV can be controlled with treatment called antiretroviral therapy or ART. It can dramatically prolong the lives of many people infected with HIV and lower their chance of infecting others. Today, someone diagnosed with HIV and treated before the disease is far advanced can have a nearly normal life expectancy.

As of December 31, 2017, the number of people living with HIV who reside in North Carolina (including those initially diagnosed in another state) was 35,045. In 2017, 1,310 new HIV diagnoses were reported among the adult and adolescent population, a rate of 15.2 per 100,000 population. This rate is a slight decrease from 2016, where 1,399 adults and adolescents were newly diagnosed with HIV (rate =16.4 per 100,000). In the same year, 22 new HIV diagnoses were reported among the adult and adolescent population in Alamance County, a rate of 16.1 persons per 100,000 population. This rate is a slight increase from 2016 (18 cases, rate= 13.5 per 100,000). Alamance County ranks 29th in the state for the rate of new HIV cases. To learn more, see APPENDIX B: Additional Data and Information.
Gonorrhea

Gonorrhea is a sexually transmitted disease that can affect anyone who is sexually active. It can cause infections in the genitals, rectum, and throat. This disease is very common among young people between the ages of 15-24. Gonorrhea can be contracted by having vaginal, anal, or oral sex with someone who has gonorrhea. Gonorrhea can also be spread from a mother to her baby during delivery.

Figure 12

In North Carolina, pregnant women are screened for gonorrhea at intervals during pregnancy and if they are infected, newborns receive an antibiotic prophylactic eye ointment as a preventive measure against gonorrheal conjunctivitis. In men, symptoms of Gonorrhea are more profound compared to woman, who experience no symptoms. Immediate testing and treatment are critical if you or your partner are experiencing symptoms. Gonorrhea can be cured with the right treatment.

In North Carolina, in 2017, the reported number of gonorrhea cases was 22,694, a rate of 220.9 persons per 100,000 population, an increase from 19,726 cases in 2016 (rate of 194.2 persons per 100,000 population). In the same year (2017), Alamance County reported 273 gonorrhea cases, a rate of 168.1 persons per 100,000 population. The gonorrhea rates for the county have declined since 2016 (381 cases), however the current rates aren’t the lowest the county has experienced. As with all STDs, the best way to prevent infection before it occurs is using external barrier methods (i.e. condoms) to not spread the infection rather than rely on secondary treatments. To learn more, see APPENDIX B: Additional Data and Information.
Chlamydia

Chlamydia is a common STD that can infect both men and women. Individuals who have unprotected sex (oral, anal, or vaginal) with someone who has Chlamydia are at a high risk of contracting Chlamydia. Most people with Chlamydia show no symptoms. If you do have symptoms, they may not appear until several weeks after you have sex with an infected partner. Even when chlamydia causes no symptoms, it can eventually cause damage to other parts of your body. Chlamydia is like Gonorrhea in that, it can be cured with the right treatment. However, if Chlamydia goes untreated in women, the infection can cause pelvic inflammatory disease and indefinitely cause permanent damage to the woman’s reproductive system. To prevent such an infection, abstaining from sex is always an option and using external barrier methods is another. Repeat infections with Chlamydia are common.

In North Carolina, in 2017, the reported number of chlamydia cases was 62,893, a rate of 612.2 persons per 100,000 population, an increase from 58,078 cases in 2016 (rate of 571.8 persons per 100,000 population). In the same year (2017), Alamance County reported 905 chlamydia cases, a rate of 557.3 persons per 100,000 population. The chlamydia rates for the county have steadily increased since 2013 (646 cases). To learn more, see APPENDIX B: Additional Data and Information.

Syphilis

Syphilis is an STI that can cause long-term complications if not treated correctly. Symptoms in individuals are divided into primary, secondary, latent, and late syphilis. The infection can be acquired through direct contact with a syphilis sore during vaginal, anal, or oral sex. Syphilis can also be spread from an infected mother to her unborn baby. Syphilis can have very mild symptoms or none. The symptoms of syphilis can resemble those of many other diseases. These can include a painless syphilis sore that appears after initial exposure, or a non-itchy body rash that develops during the second stage on the palms of your hands and soles of your feet. Syphilis can be cured with the right antibiotics from a health care provider. However, treatment might not undo any damage that the infection has already done. It is important to get tested often especially if you have had sex with anyone who has been tested positive for syphilis.
In North Carolina, in 2017, the number of early syphilis (primary, secondary, and latent) cases diagnosed was 1,844, an incidence rate of 17.9 persons per 100,000 population. This number is a slight decrease from the 1,894 cases diagnosed in 2016 (rate of 18.7 per 100,000). In the same year (2017), Alamance County reported 22 cases (primary, secondary, and latent), a rate of 13.5 persons per 100,000 population. To learn more, see APPENDIX B: Additional Data and Information.

Interpretations: Disparities and Emerging Issues

There are distinct health disparities among certain populations regarding risk factors and sexual health. Young adolescents and adults, ages 20-29 have the highest incidence rates for HIV, Syphilis, Gonorrhea, and Chlamydia. Among gender groups, men are more likely than women to be infected with all STIs and HIV. Further, when examined by race/ethnicity, Blacks/African-Americans have the highest incidence rates for all STIs and HIV. In 2017, in North Carolina, Black/African American men had the highest rates of early syphilis (88.3 persons per 100,000 population) and accounted for 50.9% of total early syphilis cases. Lastly, for adults and adolescents newly diagnosed with HIV in 2017, men who report sex with men (MSM) accounted for 64.5% of all cases. Several STIs, such as syphilis are risk factors for HIV, communication with partners and health care providers, testing, and treatment are critical in preventing the HIV infection among marginalized groups at a high risk. (North Carolina Public Health, 2019)

Circumstantial factors such as poverty and income influence sexual behavior and sexual networks. In Alamance County, 27.5% of children (those under 18 years of age) are living in poverty (NC: 21.7%). These factors contribute tremendously to the persistent, marked racial disparities in STI rates. North Carolina surveillance data shows higher STD rates in some racial and ethnic groups and factors such as poverty and gaps in wealth distribution drive these differences. For families who cannot afford basic needs such as food and transportation, they may have trouble accessing quality sexual health services, and may have had experiences with the health system that discourage the accessing of testing and care.

To see preliminary data for 2018 Sexually Transmitted Infections and reportable communicable diseases, please see APPENDIX B: Additional Data & Information.

Recommendations

The following are suggestions for reducing risk of contracting all STIs:

- Talk openly with all partners about STIs and HIV
- Use external barrier methods (i.e. condoms) during all sexual acts to prevent transmission of bacteria and viruses and limit contact with sores from diseases such as syphilis.
- Maintain a mutually monogamous relationship with a partner who has been tested and has negative STI test results. Continue to get tested with your partner. It’s the only way to know if you have an STI.
- Normalize seeking reproductive health services
- As an individual continue to undergo regular and frequent STI testing and screenings.
- If you have a STI, work with your provider to get the right medicine.
- Seek pre-exposure prophylaxis, PrEP a HIV prevention tool that prevents HIV from establishing in the body by stopping the virus from entering your cells or replicating even if you have been exposed.
Lastly, abstain from sex (vaginal, oral, or anal) or reduce the number of partners to prevent exposure to infections.

Current Initiatives and Resources

- **The Alamance County Health Department**
  319 N Graham Hopedale Rd B, Burlington, NC 27217  
  Alamance County Health Department

Alamance County Health Department continues to offer free STI screening and treatment for individuals. In addition, Alamance County Health Department offers several internal contraceptive barrier methods for women and provides educational opportunities for young and older women regarding their reproductive health. **Coming Soon!** Teen-Friendly Clinic at the Health Department for adolescents and young adults under age 20 seeking free or low-cost care in a confidential setting.

- **Alamance Cares**
  3025 S. Church Street, Burlington, NC 27215  
  Alamance Cares

Alamance Cares is a non-profit agency located in Burlington that provides awareness, education, and testing for HIV, Syphilis, and Hepatitis C.

- **Open Door Clinic - Alamance County**
  319 N. Graham Hopedale Road, Suite E, Burlington, NC 27217  
  Open Door Clinic

The Open Door Clinic is located behind the Alamance County Health Department, they offer free healthcare services to uninsured residents of Alamance County.
Obesity

The percentage of obese adults is an indicator of the overall health and lifestyle of a community. Obesity increases the risk of many diseases and health conditions, including heart disease, type 2 diabetes, cancer, hypertension, stroke, liver and gallbladder disease, respiratory problems, and osteoarthritis. Losing weight and maintaining a healthy weight help to prevent and control these diseases. Being obese also carries significant economic costs due to increased healthcare spending and lost earnings.

Table 18

While it is challenging to report local data, the above graph illustrates the percentage of adults with a body mass index of 30.0 or greater as reported by weight and height. This is compounded in the United
States because many food insecure individuals consume too many calories, but the calories are not nutrient dense.

Oral Health

Oral health refers to the complete state of the teeth and bone, gums, tongue, lips, and cheeks as well as other supporting tissues in the mouth in either the absence of presence of disease. Common oral health problems include cavities, gum disease, and oral cancer. Both cavities, meaning holes in the teeth, and gum infections expose the body to further bacteria. These diseases may contribute to heart and lung disease, stroke, premature births, low birth weight deliveries, and diabetes. (CDC, 2015)

The Surgeon General’s Report found that those who suffer the worst oral health are among the poor of all ages; poor children and adults over the age of 65 particularly vulnerable. Members of racial and ethnic minority groups also experience a disproportionate level of oral health problems. Individuals who are medically compromised or who have disabilities are at greater risk for oral disease, and, in turn, oral disease further jeopardizes their health.
Oral health has been shown to impact overall health and well-being. According to the Centers for Disease Control and Prevention, nearly one-third of all adults in the United States have untreated tooth decay, or tooth caries. Additionally, one in seven adults aged 35 to 44 years old has periodontal (gum) disease. Both the severity and prevalence of periodontal disease increase with age. Periodontal disease and tooth decay are the most frequent causes of tooth loss. About 25% of adults over the age of 60 no longer have any natural teeth. Having missing teeth can affect overall health and nutrition. In addition, among those aged 65 and older, those in poverty are twice as likely as those with higher incomes to have lost all their teeth. Given these serious health consequences, it is important to maintain good oral health.

**Oral Cavity and Pharynx Cancer Incidence Rate**

Oral cancer forms in tissues of the mouth or the oropharynx (the part of the throat at the back of the mouth). The known risk factors for developing oral cancer are tobacco use and heavy alcohol consumption. According to the American Cancer Society, individuals who both smoke and drink excessively are 30 times more likely to develop oral cancer than those who do not smoke or drink. (Piedmont Health Counts, 2015)

**Tooth Decay**

In 2016 in Alamance County, the percentage of adults who have had permanent teeth removed due to tooth decay or gum disease is 43.8%

Tooth decay is the destruction of your tooth enamel, the hard, outer layer of your teeth. Tooth decay can be a problem for children, teens and adults. When you eat or drink foods containing sugars, the bacteria in plaque produce acids that attack tooth enamel. The stickiness of the plaque keeps these acids in contact with your teeth and over time the enamel can break down, which creates the formation of cavities. Over the years, bacteria can accumulate in these tiny crevices causing acid to build up which leads to decay. (American Dental Association, n.d.)

**Dentist Rate**

Oral health has been shown to impact overall health and well-being. According to the Centers for Disease Control and Prevention, nearly one-third of all adults in the United States have untreated tooth decay, or tooth caries, and one in seven adults ages 35 to 44 years old has periodontal (gum) disease. Tooth decay is the most prevalent chronic infectious disease affecting children in the U.S. and impacts more than a quarter of children ages 2 to 5 and more than half of children ages 12 to 15. Given these serious health consequences, it is important to maintain good oral health. It is recommended that adults and children see a dentist on a regular basis. Professional dental care helps to maintain the overall health of the teeth and mouth and provides for early detection of precancerous or cancerous lesions. People living in areas with low rates of dentists may have difficulty accessing the dental care they need. (Piedmont Health Counts, 2016)

**Lead Poisoning**

Lead poisoning occurs over time as a person inhales small amounts of the toxic compound, usually from lead-based paints or contaminated dust that lingers in old buildings from before regulations existed.
Children under the age of six years are particularly vulnerable to damage from lead, which can severely impair mental and physical development and be fatal at high levels (Mayo Clinic, 2016).

In 2014, 55.9 percent of all children between the ages of one and two years in Alamance County were screened for elevated lead levels in their blood. 1.6 percent of those children screened were found to have elevated blood lead levels, which is an increase from 2011 when percentages were less than one percent. In Alamance County, as well as surrounding counties, there are steadily increasing rates of elevated blood lead levels. Alamance County remains in the middle of its neighbors and is slightly above the North Carolina state average, which is around 1.3 percent of children screened. It should also be noted that these data represent a very small incidence of children and numbers should be interpreted with caution. (NCDHHS, 2017)

### Table 19

<table>
<thead>
<tr>
<th>County</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alamance</td>
<td>1.6</td>
</tr>
<tr>
<td>Caswell</td>
<td>2</td>
</tr>
<tr>
<td>Chatham</td>
<td>0.9</td>
</tr>
<tr>
<td>Guilford</td>
<td>1.3</td>
</tr>
<tr>
<td>Orange</td>
<td>1</td>
</tr>
<tr>
<td>Randolph</td>
<td>1.7</td>
</tr>
<tr>
<td>Rockingham</td>
<td>2.5</td>
</tr>
<tr>
<td>Rowan</td>
<td>2.2</td>
</tr>
<tr>
<td>NC</td>
<td>1.3</td>
</tr>
</tbody>
</table>

Source: NCDHHS, 2017


**Mental Health**

About 57 percent of Alamance County residents surveyed by the Elon University Poll in 2018 reported that their primary care provider asked them about their mental health. When breaking the characteristics of Alamance County residents who were asked by their primary care provider about their mental health into demographics, we find that most of the residents asked are white females. There is also a noticeable gap between the percentages asked about their mental health in male vs. female and in white vs. non-white, with females and whites receiving the higher percentages. Age was shown to not be a factor in the resident percentages asked about their mental health, as groups 64 and younger and 65 and older that answered yes to being asked about their mental health had percentages of 63% and 64% respectively.

The North Carolina Division of Mental Health, Developmental Disabilities, and Substance Abuse Services monitor nine progress indicators in its quarterly Community Progress Reports. These measurements
portray the effectiveness of community behavioral health systems by comparing progress indicators to nationally accepted standards of care. These standards measure how well individuals can access and continue behavioral health services. The Community Advisory Council for Mental Health Services, led by Cardinal Health Innovations and Healthy Alamance, was formed in response to the 2011 Community Health Assessment and includes mental health providers, consumers, schools, United Way, law enforcement, the health department, the local hospital, and health and human service agencies.

Alzheimer’s Disease or Dementia: Medicare Population

Dementia is a non-specific syndrome that severely affects memory, language, complex motor skills, and other intellectual abilities seriously enough to interfere with daily life. Although dementia is much more common in the geriatric population (approximately 5 percent of those over 65 are said to be affected), it can occur in the younger population, in which case it is termed "early onset dementia."

Alzheimer’s disease is the most common form of dementia among the geriatric population, accounting for 50 to 80 percent of dementia cases. It is a progressive and irreversible disease where memory and cognitive abilities are slowly destroyed making it impossible to carry out even simple, daily tasks. Alzheimer’s disease typically manifests after the age of 60. According to the Centers for Disease Control and Prevention, Alzheimer’s disease is the fifth leading cause of death among adults aged 65 and older. The Alzheimer’s Association notes that the number of people age 65 and older with Alzheimer’s disease is estimated to reach 7.1 million by 2025—a 40 percent increase from the estimated 5 million age 65 and older currently affected by the disease. Medicare costs for those with Alzheimer's and other dementias are estimated to be $107 billion dollars in 2013. (Piedmont Health Counts, 2015a)

Depression: Medicare Population

This indicator shows the percentage of Medicare beneficiaries who were treated for depression.

Depression is a chronic disease that negatively affects a person's feelings, behaviors and thought processes. Depression has a variety of symptoms, the most common being a feeling of sadness, fatigue, and a marked loss of interest in activities that used to be pleasurable. Many people with depression never seek treatment; however, even those with the most severe depression can improve with treatments including medications, psychotherapies, and other methods.

According to the National Comorbidity Survey of mental health disorders, people over the age of 60 have lower rates of depression than the general population — 10.7 percent in people over the age of 60 compared to 16.9 percent overall. The Center for Medicare Services estimates that depression in older adults occurs in 25 percent of those with other illnesses, including arthritis, cancer, cardiovascular disease, chronic lung disease, and stroke. (Piedmont Health Counts, 2015b)
People over age 65 who live alone may be at risk for social isolation, limited access to support, or inadequate assistance in emergency situations. Older adults who do not live alone are most likely to live with a spouse, but they may also live with a child or other relative, a non-relative, or in group quarters. The Commonwealth Fund Commission on the Elderly Living Alone indicated that one third of older Americans live alone, and that one quarter of those living alone live in poverty and report poor health. Rates of living alone are typically higher in urban areas and among women. Older people living alone may lack social support and are at high risk for institutionalization or losing their independent lifestyle. Living alone should not be equated with being lonely or isolated, but many older people who live alone are vulnerable due to social isolation, poverty, disabilities, lack of access to care, or inadequate housing.
Frequent Mental Distress

This indicator shows the percentage of adults who stated that their mental health, which includes stress, depression, and problems with emotions, was not good for 14 or more of the past 30 days.

Psychological distress can affect all aspects of our lives. It is important to recognize and address potential psychological issues before they become critical. Occasional down days are normal, but persistent mental/emotional health problems should be evaluated and treated by a qualified professional. (Piedmont Health Counts, 2016)

Prenatal, Infant, and Maternal Health

Mortality

Maternal health and infant mortality are often cited as the foremost indicators for the general state of health of a country or community. The health of mothers and their children often serves as a reflection of the present health of a total population, as well as a predictor of health in the next generation. Infant and maternal mortality are often looked to as indicators of the strength of a community’s health care and support systems.

Several maternal factors and behaviors have been linked to preterm birth and low birth weight, which are strongly correlated with infant mortality. These factors include but are not limited to failure to begin prenatal care in the first trimester, mothers having less than a 12th grade education, and births to adolescent women (under age 20). Babies born too early and/or too small are at a greater risk for health conditions, developmental problems, neurological impairments, development of heart and respiratory problems later in life, as well as educational and social impairments. Babies that are born too small are considered low birth weight (LBW). Low birth weight is defined, without regard to the duration of the pregnancy, as fewer than 2500 grams or about 5.5 pounds. (March of Dimes, 2016)

Table 20

<table>
<thead>
<tr>
<th></th>
<th>Infant Mortality Rates, 2016</th>
<th>Infant Mortality Rates, 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alamance</td>
<td>7</td>
<td>5.2</td>
</tr>
<tr>
<td>Caswell</td>
<td>0</td>
<td>14.7</td>
</tr>
<tr>
<td>Guilford</td>
<td>8.3</td>
<td>9.8</td>
</tr>
<tr>
<td>Orange</td>
<td>5.1</td>
<td>0.8</td>
</tr>
<tr>
<td>Pitt</td>
<td>12.9</td>
<td>8.8</td>
</tr>
<tr>
<td>Gaston</td>
<td>5.9</td>
<td>5.8</td>
</tr>
<tr>
<td>Davidson</td>
<td>9</td>
<td>4</td>
</tr>
<tr>
<td>Randolph</td>
<td>10</td>
<td>12.1</td>
</tr>
<tr>
<td>NC</td>
<td>7.2</td>
<td>7.1</td>
</tr>
</tbody>
</table>

Source: NCDHHS, 2017
Pregnancy, Prenatal Care, and Adolescent Pregnancy

While Alamance County’s low birth weight percentage is consistent with our region and the state of North Carolina, it is worth noting that our state’s percentage is higher than the national average and our region, except for Orange County, is higher than the state average. As noted above, this factor is prime indicator of our community’s overall health.

Babies born with low birth weight are more likely than babies of normal weight to have health problems and require specialized medical care in the neonatal intensive care unit. Low birth weight is typically caused by premature birth and fetal growth restriction, both of which are influenced by a mother’s health and genetics. The most important things an expectant mother can do to prevent low birth weight are to seek prenatal care, take prenatal vitamins, stop smoking, and stop drinking alcohol and using drugs.

After infants are born, breastfeeding remains an important predictor for health outcomes of both the mother and child. The health benefits of breastfeeding include less risk diarrhea, ear infections, and lower respiratory tract infections, sudden infant death syndrome, diabetes, and obesity. Breastfeeding also helps protect mothers from breast and ovarian cancer. Women’s, Infants, and Children (WIC) Food and Nutrition Service remains committed to the nutrition of both mothers and their children, and recipients of these services in Alamance County have remained consistently around or above the North Carolina state average for infant’s breastfeeding during their first months of life. Guilford County has higher rates of participation than Alamance County, but Alamance is comparative to state rates.
Prenatal care involves physical exams, weight checks, and various diagnostic tests to monitor the health of the mother and the developing child. In addition, it provides opportunities for physicians to discuss the mother’s and infant’s health and answer any questions the mother may have regarding the pregnancy. Babies born too early, also known are preterm birth, are most likely to be low birth weight. Quality, comprehensive prenatal care and support services reduce the incidence of babies born at a low birth weight (CDC, 2017). To learn more, see APPENDIX B: Additional Data and Information.

It is important to note that Alamance County has a higher teen pregnancy rate relative to Guilford County. Teen pregnancy is highly correlated to low birth weight births. Therefore, it not only important to provide education to reduce the percentage of teen pregnancy, but it is equally as important to ensure that teen mothers have access to prenatal care so that they can have the healthiest possible pregnancy. Although there have been slight reductions in the pregnancy rate per 1,000 15-17-year-old women, Alamance County from 2012-2016, had an average rate of 16.4 percent (Piedmont Health Counts, 2018).

Table 21

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Pregnancy Rate per 1,000 females aged 15-17</th>
</tr>
</thead>
<tbody>
<tr>
<td>African American, non-Hispanic</td>
<td></td>
</tr>
<tr>
<td>Hispanic</td>
<td></td>
</tr>
<tr>
<td>White, non-Hispanic</td>
<td></td>
</tr>
<tr>
<td>Overall</td>
<td></td>
</tr>
</tbody>
</table>

Source: Piedmont Health Counts, 2018 (Alamance County)

Cesarean delivery can save lives and improve outcomes when used in response to certain specific medical indications of risk but are linked to possible complications and less desirable birth outcomes. The procedure is a major abdominal surgery, and as such introduces significant risks of its own to mothers and babies. Since 2003, the percent of live births that are delivered by C-Section has steadily increased. Since 2013, C-Section births have made up over 20 percent of all live births in North Carolina. The percentage of all births that resulted in a C-section from 2009 to 2013 was 30.2. Healthy People 2020, national health objectives, have identified reduction in C-Sections as a priority area in improving maternal and child health. The target C-Section rate in Healthy People 2020 is 23.9 percent. (Healthy People 2020)

In 2011, maternity care coordination services provided to eligible pregnant women through state funding underwent significant changes including the establishment of Pregnancy Medical Homes to serve women. In order to participate in the program, maternal health providers must agree to the
following:

- Ensure that no elective deliveries are performed before 39 weeks of pregnancy
- Engage fully in the 17P project to prevent prematurity in each pregnancy medical home
- Decrease the C-section rate among first time pregnant women
- Complete a high-risk screening on each pregnant Medicaid recipient in the program and integrate the plan of care with local care/case management
- Open chart audits

Supporting Maternal and Child Health in Alamance County

Centering Pregnancy provides a group model of prenatal care for women at the Alamance County Health Department. This model, open to all women receiving care at ACHD, allows women to participate in their own medical care services, including collecting their own weight and blood pressure measurements. Each of the ten sessions offers group discussion around prenatal care topics and emotional support from women in an open, informative environment. Locally, Centering Pregnancy groups are held in both English and Spanish. Research shows that women participating in Centering Pregnancy are less likely to experience a preterm birth and have higher rates of breastfeeding initiation.

The Alamance County WIC Breastfeeding Peer Counselor Program has targeted increasing rates of women who initiate and continue breastfeeding. The program offers training to peer counselors from certified lactation consultants in order to offer women culturally sensitive support and relationships in both prenatal and postpartum phases.

Healthy Mothers Healthy Babies, led by the Health Department, serves to reduce infant deaths. Since 2005, the coalition has sponsored educational campaigns surrounding issues like Shaken Baby Syndrome prevention and Safe Surrender. The program also offers car seats to mothers in need.

The Adolescent Parenting Program at the Alamance County Exchange Club provides additional support for adolescents who are pregnant or parenting for the first time. Through mentorship and educational opportunities, the goals of the program are to delay additional pregnancies, improve maternal and infant care, prevent abuse or neglect of self or child, and plan for future employment for parents. The program has been operating in Alamance County since 1997.

Reproductive Health and Life

Reproductive health refers to the diseases, disorders and conditions that affect the functioning of the male and female reproductive systems during all stages of life. It is important for both men and women to take steps to protect their bodies from infection and injury and prevent problems—including some long-term health problems. (CDC, 2017)

Reproductive life planning is the process where men and women set goals such as deciding to have a child, and how to achieve those goals. A woman’s reproductive system is a delicate and complex system in the body, therefore, individuals should choose a reproductive life plan that works best for them. Reproductive life plans also depend on the individual’s personal goals regarding education, employment, housing, social support, and personal health behaviors such as diet, tobacco use, and
exercise. Reproductive life planning can include planning for pregnancies or not becoming pregnant, considering access to health services for preconception/wellness services including family planning, and having dialogue between with a health care provider. Reproductive life planning is intended to help individuals prevent unintended pregnancies (a pregnancy that is mistimed, unwanted, or unplanned at the time of conception) and STIs/HIV, recognize what steps are needed for having children or not having children and ensure healthy outcomes for women, children, and families. (National Institute of Environmental Health Sciences, 2018)

An essential part of a reproductive life plan includes the dialogue between the individual and their health care provider. If there is lack of communication and individuals do not seek healthcare services, problems can arise over the years in relation to the individual's reproductive system and their potential to have children. Disorders of reproduction can include birth defects, developmental disorders, low birth weight, preterm birth, reduced fertility, impotence, and menstrual disorders. The health of women, mothers, and children often serves as a reflection of the present health of a total population, as well as a predictor of health in the next generation. Infant and maternal mortality are often looked to as indicators of the strength of a community’s health care and support systems. Over the years, infant mortality steadily increases in Alamance County, the disparities contributing to the rate are highlighted below.

Disparities and Interpretations

Several maternal factors and behaviors have been linked to preterm birth and low birth weight, which are strongly correlated with infant mortality. These factors include but are not limited to failure to begin prenatal care in the first trimester, mothers having less than a 12th grade education, and births to adolescent women (under age 20). All these factors are affected by a woman’s individual health knowledge and behaviors, access to appropriate care, and socioeconomic factors (i.e. education, employment, income). In Alamance County, the infant mortality rate is 8.8, this rate is higher the State (7.2) and United States’ values (5.9, 2013-2015) and an increase from previous years. As stated above, education of the mother is a contributing factor to the health of an unborn baby. In one area of Alamance County, almost 10% of individuals ages 16 and older are unemployed, higher than the county’s percentage of unemployment (7.48%). (Alamance County State of the County Health Report, 2016)
Within the vicinity of Alamance County Health Department (zip code: 27217), 41.7% of young children are living in poverty (children under 5 years of age). Family income has been shown to affect a child’s well-being and children in poverty are more likely to have physical health problems like low birth weight. To assist women with their health before conception and during pregnancy, birth, and the postpartum period, Alamance County Health Department offers Women’s Health Services, Prenatal Care, and Centering Pregnancy. Addressing health conditions among infants early can prevent death, disability, and enable children to live prosperous, healthy lives.

Recommendations

The following are suggestions in preventing unintended pregnancies, STIs/HIV, and other disorders/infections of your reproductive system: (NCDHHS, 2009)

- Create a reproductive life plan
- Talk openly with partner and healthcare provider about plan
- Choose external and internal contraceptive methods that are affordable and meet health needs
- Normalize seeking reproductive health and family planning services
- Ask questions ALWAYS if unsure and need clarification
Current Initiatives and Resources

**Centering Pregnancy**
Today, 97% of women in Centering Pregnancy prefer receiving their prenatal care in Centering to traditional care. To learn more, see *Prenatal, Infant, and Maternal Health*

**Teen Friendly Clinic**
Adolescent health is necessary and important, and it reflects health care practice as an adult. The National Campaign to Prevent Teen and Unintended Pregnancy reports that 50% of pregnancies nationally are unplanned, and this number increases to 70% for women between the ages of 20-29. Additionally, young people, ages 20-29 have the highest incidence rates of STIs and HIV. To reduce numbers within the county, Teen-friendly services are coming soon to Alamance County Health Department. The goal of the clinic is to encourage adolescents of Alamance County to make informed decisions about their health, including STIs and birth control options. The Centers for Disease Control and Prevention (CDC) reports that adolescents ages 15-19 are most likely to use birth control pills or condoms as their primary contraceptive method, but long-acting reversible methods (LARCs) are on the rise. The services to be offered to teenagers at the clinic include:

- Same Day insertions of LARCs (i.e. IUD and IMPLANT)
- Later Clinic Hours
- The availability of teen packs with condoms and educational materials
- Easier access to emergency contraception

In North Carolina, People under 18 years of age do not need parent/caregiver permission to seek receive STI prevention, testing, or treatment.

**LARC Utilization Project**
In partnership with the health department, five private practices, one Federally Qualified Health Center (FQHC), and five probate practices are participating in the project, totally, five medical doctors, three obstetricians, six certified nurse midwives, one nurse practitioner, and one family nurse practitioner providing LARC’s.

**Alamance County Health Department Women’s Health Clinic**
The Women’s Health Clinic offers:

- many types of birth control
- physical exams
- pregnancy testing
- Pap tests
- STI testing

The Maternity Care Clinic offers care during your pregnancy. Doctors and/or nurse midwives are available for patients’ care. Our prenatal clinic also offers special programs like Centering Pregnancy, Pregnancy Care Management, the Women, Infants, and Children Supplemental Nutrition Program (WIC), and on-site Medicaid certification.
Bedsider.org

Bedsider.org is an online birth control support network for women 18-29 operated by Power to Decide, the campaign to prevent unplanned pregnancy. Power to Decide works to ensure that every young person has the power to decide if, when, and under what circumstances to get pregnant-increasing their opportunity to pursue the future they want.

Substance Abuse and Prevention Programs
Tobacco, Alcohol, and Substance Abuse

According to the Detailed Mortality Statistics Report, in 2017 there were a reported 44 deaths by means of accidental poisoning by and exposure to noxious substance. A noxious substance is defined as a poison or any other substance capable of producing injury unlawfully administered to another or taken by oneself with a deliberate intent of causing ill effects or death.

Twenty-three deaths were accidental poisoning by exposure to narcotics and psychodysleptics [hallucinogens], and 20 deaths due to accidental poisoning by and exposure to other unspecified drugs, medicaments & biological substances in Alamance County. Most of these deaths were between the ages of 24-54 years old (SCHS, 2017). To learn more, see APPENDIX B: Additional Data and Information

Smoke Free Initiative

North Carolina’s law to prohibit smoking in certain public places went into effect January 2, 2010. Recently, Burlington Housing Authority (BHA) properties went Smoke-Free within 25 feet of their entrances on June 1, 2017. In addition, the City of Graham adopted a new policy on October 3rd, 2017 that prohibits smoking on all city property and grounds. Unless businesses, schools, restaurants, and other facilities prohibiting tobacco smoke have recently replaced the existing tobacco-free signs, the exiting signs are outdated and do not clearly communicate that all e-cigarettes are also prohibited. Since August 2008, G.S. 115C-407 h has required that every North Carolina school district have a written 100% tobacco-free school policy that prohibits the use of any tobacco products on campus and at school-related events for students, staff and visitors. Under S.L. 2013-165, e-cigarettes are defined as “tobacco products”. A popular e-cigarette among high school students is shaped like a USB flash drive. JUUL is a popular brand of e-cigarette that have as much nicotine as a pack of 20 regular cigarettes. The recent CDC, Youth Risk Behavior Surveillance System revealed that 22.1% of North Carolina high school students have used e-cigarettes at least one day in the past 30 days. Nationally, the rate was 13.2 percent. (CDC, 2018)

According to the CDC e-cigarettes are unsafe for kids, teens, and young adults because:

Figure 17
- Most e-cigarettes contain nicotine—the addictive drug in regular cigarettes, cigars, and other tobacco products.
- Nicotine can harm the developing adolescent brain. The brain keeps developing until about age 25.
- Using nicotine in adolescence can harm the parts of the brain that control attention, learning, mood, and impulse control.
- Each time a new memory is created, or a new skill is learned, stronger connections—or synapses—are built between brain cells. Young people’s brains build synapses faster than adult brains. Nicotine changes the way these synapses are formed.
- Using nicotine in adolescence may also increase risk for future addiction to other drugs.

Combating Opioid Abuse

Alamance County, like many counties, has seen increased effects of opioid abuse in recent years. From 2013 to 2016, there were 49 deaths in Alamance County due to opioids (NC Injury & Violence Prevention, 2017). In 2017, there were 19 opioid deaths as reported by Alamance County Emergency Medical Services (Note: This is preliminary data. Final data will be released by Division of Public Health in 2018). To expand the capacity of first responders to reduce the number of opioid deaths, the police departments of Burlington, Elon University, Town of Elon, Gibsonville, Graham, and Mebane, as well as the Alamance County Sheriff’s Office, now carry naloxone. In 2017, Alamance County EMS administered 369 doses of naloxone and between 8/1/2013 and 12/31/2017 (Emergency Medical Services of Alamance County). Through funds from Project Lazarus (NC Injury & Violence Prevention), the health department ran a four-week ad at Carousel Theaters in Alamance Crossing to highlight the life-saving effects of naloxone and its availability through our local pharmacies. The ad ran in all PG and R-rated movies from mid-May to early June 2017. The Prescription Drug Abuse Prevention Task Force, a subcommittee of Alamance Citizens for a Drug Free Community, works to promote the four medicine drop boxes available in Alamance County at the Alamance County Sheriff’s Office, Elon University, Burlington, and Mebane Police Departments. Additionally, Safe Kids Alamance County collaborates with local law enforcement twice a year to hold Operation Medicine Drops at local pharmacies throughout the County. These services allow residents to drop off unused prescription medications, preventing them from being abused or contaminating the water supply (Safe Kids Worldwide, 2018). To learn more, see APPENDIX B: Additional Data and Information.
**Determinants of Health**

According to Healthy People 2020, Social Determinants of Health are conditions (social, economic and physical) within the environment in which people are born, live, learn, work, play, worship and age that affect a wide range of health outcomes, risk factors, basic functioning and overall quality of life. Health starts in homes, schools, workplaces, neighborhoods and communities; health outcomes are determined in part by access to social and economic opportunities.

Examples of Social Determinants include: availability of resources to meet daily needs (such as safe housing and local food markets); access to education, economic and job opportunities; access to health care services; quality of education and job training; availability of community-based resources in support of community living and opportunities for recreational and leisure-time activities; transportation options; public safety; social support; social norms and attitudes (such as discrimination and racism); exposure to crime, violence and social disorder; socioeconomic conditions; residential segregation; language and literacy; access to mass media and emerging technologies (such as cell phones, internet and social media); culture.

Examples of Physical Determinants include: natural environment and weather (such as green space and climate change); built environment (such as buildings, sidewalks, bikes lanes and roads); worksites; schools; recreational settings; housing; community design; exposure to toxic and physical hazards; physical barriers (especially for people with disabilities); aesthetic elements (such as lighting, trees and benches). By working to establish policies that positively influence social and economic conditions while supporting changes in individual behavior we can improve population health in ways that can be sustained over time. This framework has been used to identify evidence-based resources.

It is important to note that going beyond creating strategies that address environmental conditions requires a Health in All Policies Approach. This approach requires organizations with the shared vision to address health concerns to focus not only on the environment, but systems and policies as well. It means creating partnerships with those best positioned to make change and those most impacted by decisions which impact the health of our most vulnerable.
Determinants of Health cover a broad range of factors in determining the health of the individual as well as the community. They include:

- Policymaking
- Social factors
- Health services
- Individual behavior
- Biology and genetics

They take into consideration how connected each of these factors are to each other and speak to the challenges of addressing complex social problems (Healthy People 2020).

**Healthy Days and Disability**

People's assessment of their physical health, which includes physical illness and injury, is a good measure of recent health. When people feel healthy, they are more likely to feel happy and to participate in their community socially and economically. Areas with unhealthy populations lose productivity due to lost work time. Healthy residents are essential for creating a vibrant and successful community.

Persons with a disability are more likely to live in poverty as compared to the rest of the population. The poverty rate is especially high among persons with long-term disabilities. Without adequate income, individuals with disabilities may not be able to afford necessary expenses, such as rent or mortgage, utility bills, medical and dental care, and food. People with disabilities living below the poverty level are more likely to experience material hardship in comparison to others living in poverty.

There are a variety of human services provided to support individual and family health.

**Alamance County Department of Social Services**

Alamance County Department of Social Services provides a variety of support services for individuals and families in need.

**Medicaid** - Medicaid is a health insurance program for low-income individuals and families who cannot afford health care costs. Medicaid serves low-income parents, children, seniors, and people with disabilities. Alamance County Department of Social Services reports for FY’17-18:

- 7,691 applications were taken for medical assistance, including Family & Children’s programs as well as Adult programs providing essential coverage for medical coverage for doctor visits, prescription drugs, hospitalization and preventative care
- 13,443 Family & Children’s Medicaid—Medicaid for Pregnant Women
- 730 applications received through Affordable Care Act
- 1,597 elderly or disabled adults living in Long Term facilities or assisted living facilities within the county and cannot afford cost of care. The State Special Assistance program provides funds to ensure they can stay in the facility with the daily care and services they require
- 1,295 financially needy elderly and disabled adults receive help in paying Medicare premiums

In order to make Medicaid expansions more affordable for states, the federal government is covering 100 percent of the costs of Medicaid eligibility expansions between the years 2014 and
2016. *Since Medicaid was not expanded in 2014, North Carolina is already experiencing economic repercussions.*

Work First - Alamance County Department of Social Services administers Work First Employment Services, where clients receive job skills training and job search or work experience to assist in becoming employed and self-sufficient. For FY'17-'18:

- Monthly average of Work First cases receiving employment services = 133
- Of total number of program participants, 41% of program participants successfully completed program compliance
- Total child only cases = 295. *In most child only cases, the child receiving the benefit is in the custody of an individual other than the birth parent—such as is the case with grandparents raising grandchildren—an ever-increasing demographic within our community*
- The average monthly payment amount for Work First was $203.00

Child Care Subsidies - Alamance County Department of Social Services receives Child Day Care Subsidy

Funds and Smart Start Funds to assist working families and teen parents with the cost of child day care to support employment and education—both essential for maintaining self-sufficiency. The total Budget of State Subsidy and Smart Start for FY ‘17-’18 is $7,208,984:

- Average monthly payment per child provided = $509
- Average # of children served monthly to support employment = 865
- Average number of families with employment and education = 37
- Average # of Special Needs children served monthly = 14
- Average # of Teen Parents served to support education = 11

Food and Nutritional Services (SNAP: Supplemental Nutrition Assistance Program/Food Stamps)

12,007 families or 25,055 individuals who are food insecure in our county received assistance in FY ‘17-’18 through Food & Nutrition Services:

- An increase of 65% over the last five years
- Of total number of participants, 24% of Food and Nutrition participants are working
- The average monthly payment is $243.32
- 2,133 individuals age 60 and over receive Food & Nutrition benefits

The National School Lunch program, an affiliation of federal and state level government, provides free and reduced lunch in schools to children in low-income families. Children with families whose incomes fall below 130 percent of the poverty level, or below $33,615 (2013-2014) qualify for free lunch, and children below 185 percent, or below $43,568 (2013-2014) of the poverty level are eligible for reduced price lunch, which can cost no more than $0.40.

- Alamance-Burlington School System has 57.4 children eligible for this program.

Families

There are 43,554 families in Alamance County with a 9.32% increase from 2010 to 2019. As seen below, despite the increase in families, the average household income as seen the smallest increase for Blacks/African Americans of the minority groups identified.
Crime/Intentional Injuries

A violent crime is a crime in which the offender uses or threatens to use violent force upon the victim. According to the FBI'S Uniform Crime Reporting Program, violent crime includes four offenses: murder and nonnegligent manslaughter, rape, robbery, and aggravated assault. Violence negatively impacts communities by reducing productivity, decreasing property values, and disrupting social services.

Social and economic factors strongly influence the health of the individual and community. Studies repeatedly show a strong correlation between socioeconomic status and health outcomes. Understanding how a community compares to surrounding areas in terms of key social indicators such as educational attainment and crimes rates as well as understanding the comparative economic status of a community is necessary to determine the types of community health programs needed.

Social Support/Civic Engagement

Social association and community engagement, along with relationships with family and friends, represent an individual’s social support network. Research suggests that belonging to voluntary groups and membership organizations enhances perceptions of social trust, and that individuals with strong networks are more likely to perform healthy behaviors. Furthermore, studies have shown that individuals living in areas with high levels of social trust and with strong social networks experience better health outcomes compared to individuals who lack such support.
Religion

While many social factors are obvious social determinants of health, religion is a part of the culture. As such, it can contribute to a sense of connectedness or to a sense of isolation depending on the person’s beliefs and where they live. Many of Alamance County’s settlements were originally defined by religious affiliation. While local data is difficult to obtain, national trends are available at The Pew Forum which outlines the percentage of residents per denomination statewide. Please review link below to learn more. (Pew Research Center, 2014)

It is important to note that many health care organizations focusing on care coordination utilize community churches to offer screenings and education opportunities. This strategy connects members to services with the intent to reduce chronic health conditions in underserved areas.

Financial and Economic Factors

Households receiving public assistance generally have difficulty providing adequate care for all members of the household. Individuals in these households may not be able to afford the resources necessary to succeed in school and at work, and in some cases, may defer or decline treatment for health conditions.
Financial Assistance

People with an independent living difficulty encounter challenges performing instrumental activities of daily living (IADLs) due to a physical, mental, or emotional condition. Examples of IADLs include grocery shopping or visiting a doctor's office alone. Older adults may have more difficulty accessing food or health services due to inability to drive or navigate public transportation, physical limitations (walking, reaching, lifting, etc.), and financial limitations. Without assistance, older people with an independent living difficulty may not be able to successfully perform daily activities and can experience a decline in quality of life.
Transportation

The accessibility, availability, and affordability of healthy and varied food options in the community increase the likelihood that residents will have a balanced and nutritious diet. A diet composed of nutritious foods, in combination with an active lifestyle, can reduce the incidence of heart disease, cancer, and diabetes, and is essential to maintain a healthy body weight and prevent obesity. Low-income and underserved areas often have limited numbers of stores that sell healthy foods. People living farther away from grocery stores are less likely to access healthy food options on a regular basis and thus more likely to consume foods which are readily available at convenience stores and fast food outlet.

Figure 20
“WHEN YOU ASK SOMEONE NOT TO EAT SOMETHING WHAT ARE THEY GIVING UP?”

FOCUS GROUP QUOTE
Individual Behavior

Human behavior contributes strongly to health outcomes. Most preventable deaths and illnesses in the United States are directly caused by human behaviors such as smoking, risky sexual behaviors and unhealthful diets. Behavior modification depends on many structural and environmental factors as well as individual motivation and education.

Income Inequality

Throughout our state, incomes well above the Federal Poverty Level are still far below what is necessary for families to meet their basic needs. As the labor market continues to change, more and more families struggle to stretch their wages to meet the costs of necessities.

There is also a clear disparity and inequity when income is broken down by race. Though many families are often not deemed “poor” by the official poverty measure, they lack enough income to meet the rising costs of food, housing, transportation, health care, and other essentials. The Self-Sufficiency Standard for North Carolina 2017 tracks the true cost of living facing North Carolina families today. It highlights the growing gap between sluggish wages and ever-increasing expenses, clearly illuminating the economic “crunch” experienced by so many families today. By tracking and calculating the true cost of living facing families, the Standard allows for comparisons of geographic differences as well as documentation of historical trends.

Median household income reflects the relative affluence and prosperity of an area. Areas with higher median household incomes are likely to have more educated residents and lower unemployment rates. Higher employment rates lead to better access to healthcare and better health outcomes, since families get their health insurance through their employer. Areas with higher median household incomes also have higher home values and their residents enjoy more disposable income.
The Self-Sufficiency Standard for North Carolina 2017 defines the amount of income necessary to meet the basic needs of North Carolina families, differentiated by family type and where they live. The Standard calculates the costs of six basic needs plus taxes and tax credits. It assumes the full cost of each need, without help from public subsidies (public housing, Medicaid, or child care assistance) or private/informal assistance (unpaid babysitting by a relative or friend, food from food banks, or shared housing). More than 700 family compositions for each of NC’s 100 counties are calculated. This research was conducted by the University of Washington School of Social Work. Currently, 36 states across the country have a Self-Sufficiency Standard. The Self Sufficiency Standard pioneers a new measurement of wage adequacy.

Economic security not only requires the ability to secure the costs of daily basic needs, but also creating an emergency savings fund and choosing the appropriate asset-building pathway. The Self-Sufficiency Standard Report for North Carolina 2017 addresses the first two elements. Its companion report The Economic Security Pathways Report focuses on the third element of asset-building.
The Federal Poverty Level (FPL) is a five-decades-old calculation based on the cost of food and assumes that food is one-third of a family’s budget. The Standard is based on the costs of all basic needs of a working family—not just food, but also housing, child care, health care, transportation, miscellaneous costs, plus taxes and tax credits. Unlike the FPL’s one-size-fits-all model, these costs vary, not just by the size of the family and number of children, as with the FPL, but also by the age of the children, as some costs, particularly child care, differ dramatically by age. Finally, while the FPL is the same no matter where one lives the Standard varies for each county or area in a state.

Federal poverty thresholds are set every year by the Census Bureau and vary by size of family and ages of family members. A high poverty rate is both a cause and a consequence of poor economic conditions. A high poverty rate indicates that local employment opportunities are not enough to provide for the local community. Through decreased buying power and decreased taxes, poverty is associated with lower quality schools and decreased business survival.

The Self Sufficiency Standard is calculated through a “Market Basket of Good” approach. The Federal Poverty Level is only based on the cost of food. Other flaws of the Federal Poverty Measure include: the measure is more than 50 years old, has been adjusted for inflation, yet inflation does not represent the real acceleration of costs; only considers total number in household with no adjustment for age of person, does not account for specific geographic location of family.

The data for the Standard is obtained from scholarly or credible sources such as the U.S. Census Bureau or state agencies:

Housing - the Standard uses the most current Fair Market Rents (FMRs) available. FMRs are released annually by the U.S. Department of Housing and Urban Development, and generally reflect the 40th percentile of housing.

Child Care - the Standard uses the most current and accurate information available that is geographically, age and setting specific. The Standard uses child care costs at the 75th percentile, assumes that infants, toddlers, and preschoolers receive full-time care, and school-age children receive part-time care.

Food - the Standard uses the USDA Low-Cost Food Plan, which does not allow for any take-out, fast food or restaurant meals. Food costs in the Standard are varied according to the number and age of children and the number and gender of adults.
Health Care - Health care costs include the employee’s share of insurance premiums and out-of-pocket expenses, such as co-payments, uncovered expenses and insurance deductibles. Out-of-pocket health care costs are obtained from the Medical Expenditure Panel Survey Agency for Healthcare Research and Quality, and regional ratios for health care insurance are calculated to capture geographical variation.

Transportation - Public transportation costs are used in areas where more than 7% of the population uses public transportation to get to and from work (nowhere in South Carolina). In all other areas, it is assumed that adults require a car (one for each adult). Private transportation costs (car) are calculated using Consumer Expenditure Survey for fixed costs, regional ratios for automobile insurance, AAA report for variable costs, and National Transportation Survey for distance to work.

Taxes - Taxes calculated in the Standard include state sales tax, state and federal income taxes and payroll taxes. Tax credits are also calculated in the Standard. In particular, the Earned Income Tax Credit (EITC), the Child Care Tax Credit (CCTC) and the Child Tax Credit (CTC) are included. In addition, state tax credits available to low-income families are also included.

Miscellaneous - Include all other essentials such as clothing, shoes, paper products, diapers, nonprescription medicines, cleaning products, household items, personal hygiene items and telephone service. It does not include entertainment or savings. Miscellaneous expenses are calculated at 10% of all other costs.

Here is a comparison example between the Federal Poverty Measure (FPM) and the Self-Sufficiency Standard for Alamance County North Carolina. A family (2 adults + 1 preschooler + 1 school-age) has expenses calculated at $2,025 a month using the Federal Poverty guidelines and the Self-Sufficiency Standard data reveals that expenses for a family budget would be $4,776 a month or $57,308 a year. The FPM is covering only 42% of a family’s needs each month.

Alamance County has a population of approximately 160,000, with 30% of resident graduating high school and a median household income of $42,000.
The cost of basic needs in Alamance

Minimum Wage

Minimum wage is $7.25 per hour. In this example, a family of three (1 adult + 1 preschooler + 1 school-age child) a minimum wage worker must work 134 hours per week to meet basic needs in Alamance County. The Federal Poverty Measure is calculated at $20,160 and the Self Sufficiency Standard is calculated at $50,554 (annually). To learn more, see **APPENDIX B: Additional Data and Information**.

A minimum wage worker must work **134** hours per week to meet basic needs in Alamance County.

Housing

From 2013-2017, 65.4 percent of Alamance County occupied households were owned by their residents. This has decreased since 2009-2013, when around 67.1% of occupied households were owned by their residents. The averagely monthly gross rent for individuals is around $774 per month (U.S. Census Bureau, 2017).
Access to stable housing is often the foundation for an individual’s success and is a critical component for family stability; without safe, affordable and permanent housing in place it is often challenging to make ends meet or thrive. Stable housing provides the basis for obtaining job training and keeping food on the table while also reducing the stress that often lead to substance abuse. In Alamance County there is not a lack of housing, but there is a lack of affordable housing. The minimum wage falls far short of what’s needed to afford the fair market rent for a 2-bedroom housing in Alamance County; the housing wage needed is for a two-bedroom house is 2.26 times higher than the minimum wage. A person making minimum wage ($7.25/hour) would have to work 75 hours/week to afford a 1-bedroom rental home. (National Low-Income Housing Coalition, 2018).

Foreclosure rates are highest in the central and southern regions of the county. Given this disparity on eligibility for housing, homelessness is a growing concern in Alamance county given we are in a housing crisis.

As of January 2017, North Carolina had an estimated 8,962 homeless individuals (US Interagency Council on Homelessness, 2017). Homelessness has a long history in Alamance County, specifically involving the homeless shelter, Allied Churches of Alamance County. The Allied Churches pantry serves an average of 118 families per week and around 45 individuals per night. They served an average of homeless 350 individuals in 2018.

Since 2016, the shelter has had 3 different Executive Directors, the latest being Jai Baker. The shelter has struggled with consistent funding streams and was close to being shut down in September of 2018. Since then, local businesses have raised funds and requests have been made for monthly stipends from the various municipalities within the county (Times News, 2018).

Homelessness has no one solution and will take many partnerships between organizations to combat. Below are recommendations for Alamance County regarding the homelessness crisis.
Recommendations

- Focusing on early childhood programs to improve community health (trauma informed approaches)
- Service-enriched housing
- Strong rapid re-housing programs
- Increase availability of low-income housing (County Health Rankings, 2018)

Food Security

Food security means access for all people, all the time, to enough food for an active, healthy life. Both nationally and statewide, one in six people face hunger. According to the USDA, a “food desert” is defined as an urban neighborhood or a rural town without ready access to fresh, healthy, and affordable food. Instead of supermarkets or grocery stores, these communities may have no food access, or are served only by fast food restaurants or convenience stores that offer few healthy options. Low-access communities are defined as at least 33 percent of the population live more than one mile from a supermarket or large grocery store, ten miles in a non-metropolitan census. According to statistics from Feeding America, 14.7 percent of Alamance County’s total population is food insecure, or 22,930 residents. Of this group, roughly 82 percent are income-eligible for federal anti-hunger programs, leaving 18 percent who are dependent on charitable food assistance. (Feeding America, 2018)
Food insecurity is an economic and social indicator of the health of a community. The U.S. Department of Agriculture (USDA) defines food insecurity as limited or uncertain availability of nutritionally adequate foods or uncertain ability to acquire these foods in socially acceptable ways. Poverty and unemployment are frequently predictors of food insecurity in the United States. A survey commissioned by the Food Research and Action Center (FRAC) found that one in four Americans worries about having enough money to put food on the table in the next year. Food insecurity is associated with chronic health problems in adults including diabetes, heart disease, high blood pressure, hyperlipidemia, obesity, and mental health issues including major depression.

According to the Elon University Poll, 57% of respondents in Alamance County do not have access to fresh produce, such as fruits and vegetables, within one mile from where they live. (Elon Poll, 2018)

To learn more, see [APPENDIX B: Additional Data and Information](#) for data on food pantries and prepared meal programs in Alamance County.

**Motor Vehicles**

Public transportation offers mobility to U.S. residents, particularly people without cars. Transit can help bridge the spatial divide between people and jobs, services, and training opportunities. Public transportation is also beneficial because it reduces fuel consumption, minimizes air pollution, and relieves traffic congestion.

The Healthy People 2020 national health target is to increase the proportion of workers who take public transportation to work to 5.5%.
Land Use

Acreage & Share Totals for Existing Land Use Categories

Residential- About 109,254 acres, or 57 percent of Alamance County is occupied by single family homes on parcels that are five acres or less. A majority of single-family house are near primary roads and municipalities. The county has seen significant residential growth in the southeastern corner.

Social and economic factors strongly influence the health of the individual and community. Studies repeatedly show a strong correlation between socioeconomic status and health outcomes. Internationally, public health practitioners are implementing health impact assessment (HIA) to account for the direct and indirect health impacts of public policy. Since 2003 the San Francisco Department of Public Health has been developing a practice of Health Impact Assessment in the context of land use development. The Department uses several complimentary tactics, including: 1) analysis of health impacts of development projects and land use plans; 2) integration of health impact analysis in environmental impact assessment; and 3) facilitation of community dialogue on the relationships among land use and public health.

Table 26

<table>
<thead>
<tr>
<th>Existing Land Use</th>
<th>Acres</th>
<th>Share (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td>109,254.42</td>
<td>57.16%</td>
</tr>
<tr>
<td>Agricultural/Vacant</td>
<td>73,647.46</td>
<td>38.53%</td>
</tr>
<tr>
<td>Institutional / Public</td>
<td>3,930.38</td>
<td>2.06%</td>
</tr>
<tr>
<td>Unknown</td>
<td>1,587.42</td>
<td>0.83%</td>
</tr>
<tr>
<td>Open Space / Recreational</td>
<td>1,140.52</td>
<td>0.60%</td>
</tr>
<tr>
<td>Commercial / Office</td>
<td>1,082.75</td>
<td>0.57%</td>
</tr>
<tr>
<td>Industrial</td>
<td>477.20</td>
<td>0.25%</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>191,120.15</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

*Source: Alamance County Tax & GIS Departments, 2005*
Understanding how a community compares to surrounding areas in terms of key social indicators such as educational attainment and crimes rates as well as understanding the comparative economic status of a community is necessary to determine the types of community health programs needed (Piedmont Health Counts, 2005).

Table 27

Agriculture-Approximately 38 percent of county land (73,647 acres) is used for agricultural, or related, purposes such as traditional farming practices (crop production, horticulture, viticulture, and animal husbandry).

Institutional / public- (schools, churches, and church owned facilities, governmental properties, and cemeteries). About 2.06 percent of the land, or 3,930 acres, is utilized for institutional or public use.

Commercial/ office- (retail services, restaurants, automobile dealerships, automobile service facilities, offices, and convenience stores). Approximately 0.57 (1,082.75 acres) percent of land is used for commercial or office purposes.

Industrial- (manufacturing, sawmills, gas and oil storage, mining and quarrying, public utilizes, landfills, and airports). About 0.25 percent (477 acres) of land is used industrially.

Recreational and Open Space- Only about 1,140 acres or about 0.06 percent of land is used recreationally in the county.
Pollution and Air Quality

Recognized carcinogens are compounds with strong scientific evidence that they can induce cancer. In industry, there are many potential exposures to carcinogens. Generally, workplace exposures are at higher levels than public exposures. These data only reflect releases of chemicals, not whether (or to what degree) workers or the public has been exposed to those chemicals.

Table 28

Water Quality

Public drinking water systems are required to monitor approximately 90 contaminants and indicators regulated by the Environmental Protection Agency. A health-based violation occurs when a contaminant exceeds its Maximum Contamination Limit (MCL)—the highest amount allowed in drinking water—or when water is not treated properly. Limiting the levels of microorganisms, chemicals, and other contaminants in a community's public water supply reduces residents' risk of waterborne diseases, cancer, and other adverse outcomes.

Table 29
Parks and Recreation

There are six park facilities owned and operated by the Alamance County Recreation and Parks Department. The park facilities are located at the following: The Recreation and Parks Office in Graham, Cedarock Park in Burlington, Morgan Place Park in Elon, Pleasant Grove Recreation Center in northeast Alamance County, the Eli Whitney Recreation Center on Greensboro-Chapel Hill Road, and the Ray Street Creation Center in Graham.

Alamance County Recreation and parks offers basketball, little league baseball, softball, tee-ball and football for children ages 4 to 14. Four athletic complexes located at elementary schools are utilized for youth sports as well as 15 local sports fields and eight gyms throughout the county.
APPENDIX A

Acknowledgements
ALAMANCE COUNTY COMMUNITY ASSESSMENT PLANNING TEAM MEMBERS & COLLABORATORS

Public Health Agency
Arlinda Ellison – Alamance County Health Department (author, community forum)
Chloe Donohoe – Alamance County Health Department
Maryn Hayward – Alamance County Health Department/Cone Health – ARMC (author, community forum)
Sally Gordon – Alamance County Health Department (author, formatting, planning for community forum)
Stacie Saunders – Alamance County Health Department (editing, funding for community forum)

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Kathy Colville – Cone Health – ARMC (funding for community forum, facilitator)
Kelsey Warren – Cone Health – ARMC (author)
Rachel Marquez – Cone Health - ARMC
Vashti Shiwmangal – Cone Health - ARMC
Yasmin Garcia Rico – Cone Health – ARMC (author)

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Ryan Kirk, Ph.D. - Elon University
Stephanie Baker, Ph.D. - Elon University (Healthy Alamance-Elon University Community Academic Partnership, author)

Community Organizations
Ann Meletzke – Healthy Alamance (Healthy Alamance-Elon University Community Academic Partnership, author, editing, formatting, planning & funding for community forum)
April Durr – United Way of Alamance County (author, community forum)
Bernadette Cooper – Alamance Achieves (author, community forum)
Daniela Ceron – Alamance Achieves (author, community forum)
Heidi Norwick – United Way of Alamance County
Jared Bishop – Healthy Alamance (author, formatting, planning for community forum)
Jessica Farmer – Impact Alamance (cover design, infographics)
Kacie Lynch – Impact Alamance (author, community forum)
Marcy Green – Impact Alamance (author, editing, formatting, planning for community forum)
Olise Obi - Healthy Alamance
Tracy Grayzer – Impact Alamance (funding for community forum, facilitator)
Businesses
Sweeties Southern and Vegan Catering

Dental Health Providers
Kim Jernigan - NC DHHS DPH (author)

Community Members
Beverly Payne (focus group participant, planning for community forum)
Calvetta Watlington (focus group participant)
Ken Smith (focus group participant, community forum presenter)
Rose Watlington (focus group participant, planning for community forum, presenter)
Sherea Burnett (focus group participant, planning for community forum)
Stephanie Yarboro (focus group participant, planning for community forum)

Media/Communication Outlets
Burlington Times-News

Others
Bobbi Ruffin, Mayco Bigelow Community Center, Recreation and Parks, City of Burlington
MJ Wilkerson—Alamance County Public Library
Libby Hodges—Alamance County Planning Manager
APPENDIX B

Additional Data & Information
Alamance County Community Forum Agenda

Forum Purpose & Objectives:

The Community Forum is an opportunity for honest and respectful discourse in small group settings that supports healthy people, strong communities, and a thriving local economy. This forum is designed to encourage participation, challenge biases and traditional ways of thinking, and offer a new platform for all participants to assist with creating innovative strategies to address inequities.

- Create awareness, understanding, and a level platform for developing innovative strategies to address complex social issues
- Broaden the definition of health for participants
- Build awareness of the roles that everyone plays in creating a healthy community
- Identify areas in which community residents, partners, organizations, and collaboratives can work together to apply a health equity lens to the work they are doing to support the health of the community

6:00 – 6:30 pm  Walking Gallery, Networking, Dinner

6:30 – 6:45 pm  Welcome & What is the Community Assessment?  Arlinda Ellison
Using Community Based Participatory Research to Enhance the Community Assessment  Stephanie Baker

6:45 – 7:00 pm  Presentation of Community Quotes  Focus Group members

7:00 – 7:50 pm  Table-Top Exercises  Community

7:50 – 8:00 pm  Feedback from Community & Next Steps  Ann Meletzke

Adjourn

Notes from Alamance County Community Forum

Black Entrepreneur Collaborative Table - Discussed economic development in rural areas, focusing on how to accommodate for lack of grocery stores and a bus line which does not connect rural Alamance to
resources. Members agreed that an individual shouldn’t have to choose between living in an area with businesses or living in a more residential area.

Members questioned how many forums were being conducted in rural areas to find out what residents prefer there.

The expense of energy bills was discussed.

Innovative concepts to explore from conversation include:

- Ways to support permanent health clinics in rural communities by partnering with faith-based resources
- Black-owned utilities

**Education Table** - Discussed what education means to the participants – “education, health, wealth; all necessary to complete the circle” In order to achieve better education, better teacher pay, better buildings, and relationships between the schools and community are required.

Members discussed the relationship with food security and most agreed they are dependent on large grocery stores and cars to get them to the store. While many said they would like a small place in their neighborhood to foster relationships for their children, they agreed that the perception is that small grocery stores cost more.

In referencing a stable income, while participants appreciate small business and how it contributes to the community, few felt the economy could be sustained by small business enterprise.

Members discussed school conditions and expressed the following frustrations:

- Feeling overwhelmed by the issues
- The need to look at systemic biases

Regarding neighborhood conditions, attendees listed the following ideas for consideration:

- Talk to community and partner with the community to make visions come true
- Hold property owners accountable for conditions of their properties
- Add mixed income housing and intergenerational housing to create community
- Stop isolating people into bubbles by income

**Alamance Food Collaborative Table** - Members of the table discussed their perceptions of east versus west Burlington.

Regarding healthcare, the following themes emerged in reference to food’s intersection with health:

- Taking responsibility for our neighbor’s health
- Support for entrepreneurs
- Education on food preservation

In exploring discrimination’s impact on food, participants agreed that many must go out of their way to go to the grocery store. They questioned how to educate middle- and upper-class residents on how discrimination affects community structure and why poverty isn’t about bad choices. How do you shift the conversation away from placing the burden of change on the poor?
In addition to the above, other conversations regarding food security included advocating for healthy choices means you are unintentionally passing judgement. They discussed increasing food distribution of locally grown food as key. Creating spaces that welcome everyone alongside economic opportunities.

**Environment Table** - This group explored the limited mobility in the current market for employment and asked what businesses are we incentivizing to come to Alamance County? Can we influence them to provide living wages, full-time employment, and health insurance?

The participants asked are we removing barriers to home ownership because they felt this is tied to ownership of the environment.

Attendees explored issues with older adults losing jobs and having difficulty re-entering the system. They asked are we providing continuing education opportunities for these adults?

Healthcare, quality and affordability were discussed. Making co-pays are hard to justify and medicine prices were cited as huge barriers. With the expense, it is a difficult expense to prioritize. Other issues raised, including discrimination impacting the quality of service received.

Related to housing, holding property owners accountable for conditions was discussed. In addition, the following concerns were raised:

- Language barriers adding to exploitation
- Building up versus building out
- Roads that are dangerous to pedestrians in East Burlington
- Areas on east side not receiving attention
- Socioeconomic divide

**Latinx Table** - Discussed the following barriers that impact health for their community:

- Understanding what a 401k is and providing workshops to assist with understanding the opportunity (Additional concerns related to not knowing if you will live to benefit from it)
- Lack of knowledge that is passed down due to different cultural priorities
- Appreciation for a mixed community serving more people
- Prevention versus politics and using this approach to support youth
- Addressing root causes of health and understanding cultural differences with food and nutrition
- Limited opportunities for education to make sense

**Discrimination Table** - This group explored food equity and healthcare issues (lifestyle versus medication), the value of government assistance, how to assist child care centers with becoming licensed, and options besides college for those who cannot afford it.

**Healthcare Table** - Housing and its relationship to healthcare issues were explored with the following suggestions:

- Requiring inspections for rentals
- Pediatric asthma
- Affordable utilities
• Decent and affordable housing options
• Having to live life in the moment – crisis to crisis

**Housing Table** - Using an equity lens to focus on housing, the group identified the following:

• Creating a community land trust to help stabilize cost for housing and land – concept helps those who cannot afford housing.
• Landlord monopolizing
• Families fear to file complaints against landlords
• Elon professors don’t live in Alamance County because the school system is not as good as surrounding counties

**Alamance Wellness Collaborative Table** - This group discussed the challenges of picking between systems and structures and how this exercise creates challenges for residents to articulate what they want. Regarding building both economy and environment, the participants suggested committing to a percentage of both in strategic planning.

**Neighborhood Conditions Table** – Discussed discrimination as it relates to minority-owned business development, citing people of color being turned down for business permits or buying commercial properties. Making spaces that we want to flourish affordable to people who want to live there.
COMMUNITY PHOTOVOICE PROJECT

Interested in exploring *Health Equity* in Alamance County? Please be a part of our photovoice project!

---

**What is Photovoice?**

Photovoice is a community research tool used to document and reflect reality. It is an empowering process that combines photography with grassroots social action and is commonly used in community development, education, and public health.

We have a strong desire for this group to launch a long term effort to address health equity, and a passion to combat health disparities seen in their communities.

- Desire to Share information and discuss
- Every Thursday: April 4-May 2, 6-8pm

If Interested, Please contact:
Jared.Bishop@conehealth.com  336-214-0771

*Figure 28*
Elon Poll

Survey Questions

Do you have access to fresh produce, such as fruits and vegetables, within 1 mile from where you live?

Yes.................................................................142............................42%
No.................................................................193............................57%
Don’t Know.....................................................2.................................1%
N=..............................................................337............................100%

Table 30

Access to Fresh Produce Within 1 Mile of Residence

With 57% of respondents indicating that they do not have access to fresh produce within one mile of their residence, the burden of Alamance County residents to access fresh food is brought to life by the graphs and survey results. When looking at the demographic breakdowns of the graph we can also see the great discrepancy between survey respondents both inside and outside of Burlington with their difficulty to access fresh produce. With approximately a 20% difference, the need to increase access for Burlington residents to obtaining fresh produce should be addressed and highlighted.
Does your primary care provider ask you about your mental health?

Yes.................................................................213........................................57%
No.................................................................106........................................42%
Don’t Know.........................................................13........................................1%
Refused...........................................................5........................................2%
N=.................................................................337........................................100%

Table 31

This table shows us that out of the Elon Poll respondents, 57% were asked about their mental health by their primary care provider. When comparing this number to the graph below, two alarming trends can be noticed. The percentages of primary care providers that asked them about their mental health for both male and non-white respondents were lower than the overall average of 57%. When observing the graph, both the male and non-white indicators are much lower than the other demographics listed on the graph.
How would you rate your own financial situation today? Would you say that it is excellent, good, fair, or poor?

Excellent .................................................................................................................. 29 ........................................ 9%

Good .......................................................................................................................... 155 ........................................ 46%

Fair ............................................................................................................................ 120 ........................................ 36%

Poor ........................................................................................................................... 30 ........................................ 9%

Refused ..................................................................................................................... 3 ........................................ 1%

N= .............................................................................................................................. 337 ........................................ 100%

Table 32

When observing the table above we see that 82% of respondents fall between the middle two financial categories of good and fair, while 18% fell in the outlying categories of excellent or poor. This respondent feedback is interesting especially when comparing both the table and the graph together, as trends begin to arise. For example, by observing the graph personal finances are impacted by respondents to the survey who are non-white, as they had the greatest percentages of indicating a personal finance of fair or poor.
Alamance County
LOCAL FARMS AND FOOD PROFILE
DATA FROM 2012 & 2007 USDA CENSUS

83,551
ACRES OF FARMS IN ALAMANCE COUNTY

732
FARMS IN ALAMANCE COUNTY

16,000
GROSS REVENUE FROM AGRI TOURISM & RECREATIONAL ACTIVITY

417
ANIMAL FARMS IN ALAMANCE COUNTY

$17,525,000
VALUE OF ANIMAL PRODUCTS IN ALAMANCE COUNTY

$16,000
FARM INCOME FROM AGRI TOURISM & RECREATIONAL ACTIVITY

114
ACRES AVERAGE SIZE OF FARM

8
FARMS WITH AGRI TOURISM & RECREATIONAL ACTIVITY

$531,000
DIRECT TO CONSUMER SALES

32
FRUIT, NUT & BERRY FARMS

56
MELON, VEGETABLE & POTATO FARMS

$492,000
SALES VEGETABLE, MELON, POTATO FARMS

94
FARMS THAT SELL DIRECT TO CONSUMER

12
FARMS SELLING THROUGH CSA

15
FARMERS MARKETS, ROADSIDE STANDS, AND PRODUCE MARKETS IN ALAMANCE COUNTY

$264,000
MV FROM CSA

26,843
ACRES HARVESTED

Figure 29
As seen in the Median household income by race in Alamance County vs. NC graphic, it is evident that White Alamance County residents have a higher income than their African American, American Indian/Alaskan Native, Native Hawaiian / Pacific Islander, and some other race. Meanwhile, Asian residents of Alamance County have a higher income than all other races in Alamance County.
Workers who Walk to Work by Race/Ethnicity

Table 34

Workers Commuting by Public Transportation by Race/Ethnicity
County: Alamance

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Indian or Alaska Native</td>
<td>0.0%</td>
</tr>
<tr>
<td>Asian</td>
<td>0.0%</td>
</tr>
<tr>
<td>Black or African American</td>
<td>0.8%</td>
</tr>
<tr>
<td>Hispanic or Latino</td>
<td>0.1%</td>
</tr>
<tr>
<td>Native Hawaiian or Other Pacific ...</td>
<td>50.8%</td>
</tr>
<tr>
<td>Other</td>
<td>0.1%</td>
</tr>
<tr>
<td>Two or More Races</td>
<td>0.0%</td>
</tr>
<tr>
<td>White, non-Hispanic</td>
<td>0.0%</td>
</tr>
<tr>
<td>Overall</td>
<td>0.2%</td>
</tr>
</tbody>
</table>

Source: American Community Survey (2012-2016) www.piedmonthealhcouts.org

Workers Who Walk to Work by Race/Ethnicity

Table 35

Workers who Walk to Work by Race/Ethnicity
County: Alamance

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Indian or Alaska Native</td>
<td>0.0%</td>
</tr>
<tr>
<td>Asian</td>
<td>0.8%</td>
</tr>
<tr>
<td>Black or African American</td>
<td>1.9%</td>
</tr>
<tr>
<td>Hispanic or Latino</td>
<td>4.0%</td>
</tr>
<tr>
<td>Native Hawaiian or Other Pacific ...</td>
<td>1.5%</td>
</tr>
<tr>
<td>Other</td>
<td>2.7%</td>
</tr>
<tr>
<td>Two or More Races</td>
<td>1.4%</td>
</tr>
<tr>
<td>White, non-Hispanic</td>
<td>1.5%</td>
</tr>
<tr>
<td>Overall</td>
<td>7.1%</td>
</tr>
</tbody>
</table>

Source: American Community Survey (2012-2016) www.piedmonthealhcouts.org
This graph indicates that racial discrepancies are still a factor and a problem in Alamance County. As shown by the graph, almost every minority group indicated has a percentage of children living below the poverty line that is worse than the overall value.
Determinants of Health

The interactive “Our Money Needs Calculator” web portal provides an easy way to select a family size and county in North Carolina to calculate how much income is needed to meet basic needs.

Figure 30

The county data sheets provide snapshots of various family sizes across the state. Often the cost of housing and childcare accounts for 45% of all expenses.

Figure 31

Alamance County food pantries using Link 2 Feed (Second Harvest Food Bank)

- Onboarding took place in June 2018, currently 16 food pantries in Alamance County are using this new portal.
- For the time period 6/1/18 – 1/31/19 there were 3,767 unique (unduplicated) households served, and 8,830 unique (unduplicated) individuals served.
- 1,280,335 lbs. of food was distributed to Alamance County food pantries by Second Harvest (6/1/18 – 1/31/19). (These programs raised 341,212 pounds on their own thru food drives, donations, etc.)

Figure 31
## Education

### Table 37

<table>
<thead>
<tr>
<th>Subject</th>
<th>Student Demographic Group</th>
<th>Alamance-Burlington School System</th>
<th>State of North Carolina</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Math</td>
<td>All Students</td>
<td>47.1%</td>
<td>56.1%</td>
<td>-9%</td>
</tr>
<tr>
<td></td>
<td>Grades 3-8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>African American</td>
<td>28.1%</td>
<td>36.5%</td>
<td>-8.4%</td>
</tr>
<tr>
<td></td>
<td>Latino</td>
<td>39%</td>
<td>48%</td>
<td>-9%</td>
</tr>
<tr>
<td></td>
<td>White</td>
<td>61.5%</td>
<td>68.2%</td>
<td>-6.7%</td>
</tr>
<tr>
<td></td>
<td>Economically Disadvantaged</td>
<td>33.5%</td>
<td>40.9%</td>
<td>-7.4%</td>
</tr>
<tr>
<td>Reading</td>
<td>All Students</td>
<td>49.2%</td>
<td>57.3%</td>
<td>-8.1%</td>
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<tr>
<td></td>
<td>Grades 3-8</td>
<td></td>
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<td></td>
</tr>
<tr>
<td></td>
<td>African American</td>
<td>32.9%</td>
<td>39.7%</td>
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<tr>
<td></td>
<td>Latino</td>
<td>39.7%</td>
<td>43.9%</td>
<td>-4.2%</td>
</tr>
<tr>
<td></td>
<td>White</td>
<td>63.1%</td>
<td>70.7%</td>
<td>-7.6%</td>
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<tr>
<td></td>
<td>Economically Disadvantaged</td>
<td>36.8%</td>
<td>41.9%</td>
<td>-5.1%</td>
</tr>
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</table>

Source: NC Department of Public Instruction, 2017-18 School Assessment and Other Indicator Data
4-Year Cohort Graduation Rate Report  
2014-15 Entering 9th Graders Graduating in 2017-18 or Earlier

Alamance-Burlington Schools  
LEA Code: 010

Table 38

<table>
<thead>
<tr>
<th>Subgroup</th>
<th>Denominator</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Students</td>
<td>1945</td>
<td>81.3</td>
</tr>
<tr>
<td>Male</td>
<td>1046</td>
<td>78.6</td>
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<tr>
<td>Female</td>
<td>899</td>
<td>84.4</td>
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<tr>
<td>American Indian</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Asian</td>
<td>28</td>
<td>&gt;95</td>
</tr>
<tr>
<td>Black</td>
<td>418</td>
<td>81.8</td>
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<tr>
<td>Hispanic</td>
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<tr>
<td>White</td>
<td>947</td>
<td>83.4</td>
</tr>
<tr>
<td>Economically Disadvantaged</td>
<td>837</td>
<td>76.1</td>
</tr>
<tr>
<td>English Learner</td>
<td>163</td>
<td>64.4</td>
</tr>
<tr>
<td>Students with Disabilities</td>
<td>251</td>
<td>61.0</td>
</tr>
<tr>
<td>Academically Gifted</td>
<td>323</td>
<td>&gt;95</td>
</tr>
</tbody>
</table>

Subgroup information is based on data collected when a student is last seen in the cohort.  
* Indicates that the student population in the subgroup is too small to report the value.  
The percentage is not shown if it is greater than 95 percent or less than 5 percent.

Source: Public Schools of North Carolina
4-Year Cohort Graduation Rate Report  
2014-15 Entering 9th Graders Graduating in 2017-18 or Earlier  
Statewide Results

Table 39

<table>
<thead>
<tr>
<th>Subgroup</th>
<th>Denominator</th>
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<tr>
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<td>Male</td>
<td>61374</td>
<td>83.2</td>
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<td>Female</td>
<td>58705</td>
<td>89.6</td>
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<tr>
<td>American Indian</td>
<td>1641</td>
<td>84.4</td>
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<tr>
<td>Asian</td>
<td>3404</td>
<td>93.4</td>
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<tr>
<td>Black</td>
<td>31747</td>
<td>83.2</td>
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<tr>
<td>Hispanic</td>
<td>17504</td>
<td>79.9</td>
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<tr>
<td>Two or More Races</td>
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<td>White</td>
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<td>English Learner</td>
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<td>Students with Disabilities</td>
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<tr>
<td>Academically Gifted</td>
<td>19739</td>
<td>&gt;95</td>
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</table>

Subgroup information is based on data collected when a student is last seen in the cohort. The percentage is not shown if it is greater than 95 percent or less than 5 percent.

Source: Public Schools of North Carolina
### Table 40

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<thead>
<tr>
<th></th>
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<th>2016</th>
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<td>Rate</td>
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<td>111</td>
<td>26.2</td>
<td>96</td>
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<tr>
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### Table 41

<table>
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<th>2016</th>
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<td>Cases</td>
<td>Rate</td>
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<td>Rate</td>
<td>Cases</td>
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<td>299</td>
<td>192</td>
<td>319</td>
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<tr>
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<td>123</td>
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<table>
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</thead>
<tbody>
<tr>
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<td>Rate</td>
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</tr>
<tr>
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<td>646</td>
<td>418.3</td>
<td>727</td>
<td>466.9</td>
<td>797</td>
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<td>530</td>
<td>377.5</td>
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<td>3,563</td>
<td>695.2</td>
<td>4,138</td>
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<td>411.6</td>
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<table>
<thead>
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<td>4.5</td>
<td>12</td>
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<td>3.6</td>
<td>16</td>
<td>11.4</td>
<td>15</td>
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<td>17.4</td>
<td>198</td>
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<tr>
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<td>1</td>
<td>2.5</td>
<td>1</td>
<td>2.6</td>
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<tr>
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<td>4.6</td>
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<td>3</td>
<td>2</td>
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<tr>
<td>Caswell County</td>
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<td>13</td>
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<td>4.4</td>
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</tr>
<tr>
<td>North Carolina</td>
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<td></td>
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</table>

<table>
<thead>
<tr>
<th>Classification</th>
<th>Number of Records</th>
<th>Percent</th>
</tr>
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<tbody>
<tr>
<td>Hepatitis A</td>
<td>1</td>
<td>0.88%</td>
</tr>
<tr>
<td>Hepatitis C - Acute</td>
<td>2</td>
<td>1.77%</td>
</tr>
<tr>
<td>Haemophilus influenzae</td>
<td>7</td>
<td>6.19%</td>
</tr>
<tr>
<td>Pneumococcal meningitis</td>
<td>0</td>
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<tr>
<td>Meningococcal</td>
<td>0</td>
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<tr>
<td>Streptococcal infection Group A, Invasive</td>
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<tr>
<td>Toxic Shock Syndrome, streptococcal</td>
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<td>Toxic Shock Syndrome, non-streptococcal</td>
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<tr>
<td>Influenza death (&lt;18 years old)</td>
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</tr>
<tr>
<td>Influenza, NOVEL virus infection</td>
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<td>Legionellosis</td>
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<td>Disease</td>
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<td>Lacrosse (California)</td>
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<tr>
<td>Arboviral Other</td>
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<td>Malaria</td>
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<tr>
<td>Dengue</td>
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<tr>
<td>Yellow Fever Virus</td>
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<td>Shigellosis</td>
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<td>3.54%</td>
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<td>0.00%</td>
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<td>Lyme disease</td>
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<tr>
<td>Plague</td>
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</tr>
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<td>Tularemia</td>
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<tr>
<td>Botulism - foodborne/wound</td>
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<td>Botulism - infant</td>
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<tr>
<td>SARS</td>
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<td>Vaccinia</td>
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<td>0.00%</td>
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<td>Smallpox</td>
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<td>0.00%</td>
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<tr>
<td>Hemorrhagic Fever Virus infection</td>
<td>0</td>
<td>0.00%</td>
</tr>
<tr>
<td>Leprosy (Hansen's Disease)</td>
<td>0</td>
<td>0.00%</td>
</tr>
<tr>
<td>Staphylococcus aureus - VRSA</td>
<td>0</td>
<td>0.00%</td>
</tr>
<tr>
<td>Salmonellosis</td>
<td>31</td>
<td>27.43%</td>
</tr>
<tr>
<td>Campylobacter Infection</td>
<td>26</td>
<td>23.01%</td>
</tr>
<tr>
<td>Cyclosporiasis</td>
<td>1</td>
<td>0.88%</td>
</tr>
<tr>
<td>E Coli</td>
<td>7</td>
<td>6.19%</td>
</tr>
<tr>
<td>HUS</td>
<td>0</td>
<td>0.00%</td>
</tr>
<tr>
<td>Listeriosis</td>
<td>1</td>
<td>0.88%</td>
</tr>
<tr>
<td>Trichinosis</td>
<td>0</td>
<td>0.00%</td>
</tr>
<tr>
<td>Cholera</td>
<td>0</td>
<td>0.00%</td>
</tr>
<tr>
<td>Vibrio Infection, Other</td>
<td>0</td>
<td>0.00%</td>
</tr>
<tr>
<td>Vibrio Vulnificus</td>
<td>0</td>
<td>0.00%</td>
</tr>
<tr>
<td>Condition</td>
<td>Cases</td>
<td>%</td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>-------</td>
<td>-----</td>
</tr>
<tr>
<td>Typhoid acute</td>
<td>0</td>
<td>0.00%</td>
</tr>
<tr>
<td>Paratyphoid Fever</td>
<td>0</td>
<td>0.00%</td>
</tr>
<tr>
<td>Typhoid carrier</td>
<td>0</td>
<td>0.00%</td>
</tr>
<tr>
<td>C. perfringens</td>
<td>0</td>
<td>0.00%</td>
</tr>
<tr>
<td>Staphylococcal</td>
<td>0</td>
<td>0.00%</td>
</tr>
<tr>
<td>Foodborne Other</td>
<td>0</td>
<td>0.00%</td>
</tr>
<tr>
<td>Foodborne Poison</td>
<td>0</td>
<td>0.00%</td>
</tr>
<tr>
<td>Foodborne Hypothesis</td>
<td>0</td>
<td>0.00%</td>
</tr>
<tr>
<td>Influenza, Adult Death (18 years of age or more)</td>
<td>12</td>
<td>10.62%</td>
</tr>
<tr>
<td>Chikungunya</td>
<td>0</td>
<td>0.00%</td>
</tr>
<tr>
<td>Middle East Respiratory Syndrome (MERS)</td>
<td>0</td>
<td>0.00%</td>
</tr>
<tr>
<td>Zika</td>
<td>0</td>
<td>0.00%</td>
</tr>
<tr>
<td>Hepatitis C - Chronic</td>
<td>0</td>
<td>0.00%</td>
</tr>
<tr>
<td>Carbapenem-resistant Enterobacteriaceae (CRE)</td>
<td>0</td>
<td>0.00%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>113</strong></td>
<td><strong>100.00%</strong></td>
</tr>
</tbody>
</table>

Table 45

<table>
<thead>
<tr>
<th>Low Birth Weight</th>
<th>County</th>
<th>%LBW</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alamance</td>
<td>9.7</td>
<td></td>
</tr>
<tr>
<td>Caswell</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Guilford</td>
<td>9.8</td>
<td></td>
</tr>
<tr>
<td>Orange</td>
<td>7.1</td>
<td></td>
</tr>
<tr>
<td>NC</td>
<td>9.1</td>
<td></td>
</tr>
<tr>
<td>US</td>
<td>8.17</td>
<td></td>
</tr>
</tbody>
</table>

Source: NCHHS & CDC (2017)
<table>
<thead>
<tr>
<th>Percent Infants Enrolled in WIC Breastfeeding</th>
<th>2016-2017</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BF Initiation Rate</strong></td>
<td></td>
</tr>
<tr>
<td>Alamance</td>
<td>73.38</td>
</tr>
<tr>
<td>Caswell</td>
<td>77.34</td>
</tr>
<tr>
<td>Guilford</td>
<td>82.9</td>
</tr>
<tr>
<td>Rowan</td>
<td>74.34</td>
</tr>
<tr>
<td>NC</td>
<td>72.88</td>
</tr>
<tr>
<td><strong>BF at 6 Weeks</strong></td>
<td></td>
</tr>
<tr>
<td>Alamance</td>
<td>46.08</td>
</tr>
<tr>
<td>Caswell</td>
<td>42.98</td>
</tr>
<tr>
<td>Guilford</td>
<td>56.05</td>
</tr>
<tr>
<td>Rowan</td>
<td>43.5</td>
</tr>
<tr>
<td>NC</td>
<td>48.44</td>
</tr>
<tr>
<td><strong>BF at 6 Months</strong></td>
<td></td>
</tr>
<tr>
<td>Alamance</td>
<td>31.1</td>
</tr>
<tr>
<td>Caswell</td>
<td>27.19</td>
</tr>
<tr>
<td>Guilford</td>
<td>33.83</td>
</tr>
<tr>
<td>Rowan</td>
<td>23.87</td>
</tr>
<tr>
<td>NC</td>
<td>29.44</td>
</tr>
</tbody>
</table>

Source: Nutrition NC
Figure 32
Figure _____. Percentage of Persons 16 years and Older Unemployed in Zip code: 27217, Alamance County.

**Table 47**

<table>
<thead>
<tr>
<th>Cause of Death</th>
<th>Total Deaths</th>
<th>20-24</th>
<th>25-34</th>
<th>35-44</th>
<th>45-54</th>
<th>55-64</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accidental poisoning by and exposure to noxious substance</td>
<td>44</td>
<td>3</td>
<td>7</td>
<td>11</td>
<td>14</td>
<td>9</td>
</tr>
<tr>
<td>Accidental poisoning by and exposure to narcotics and psychodysleptics [hallucinogens], NEC</td>
<td>23</td>
<td>2</td>
<td>5</td>
<td>5</td>
<td>8</td>
<td>3</td>
</tr>
<tr>
<td>Accidental poisoning by and exposure to other and unspecified drugs, medicaments &amp; biological substances</td>
<td>20</td>
<td>1</td>
<td>2</td>
<td>6</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Accidental poisoning by and exposure to alcohol</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>
The 2018 Community Health Assessment (CHA) supports the 2015 priorities identified by the community, accurately reflects on accomplishments and challenges encountered during the last three years and illustrates the development of and growing shared lens for the role equity plays in determining the health of an individual and their community. The CHA process is conducted every three years and includes collecting and analyzing data, and selecting health priorities on which to focus. There may be areas of interest not included in the full report; however, this report represents a significant portion of community members, health care providers and stakeholders.

2015-2020 HEALTH PRIORITIES

Theoretical Framework

The CHA is a collaborative effort between Alamance County Health Department, Healthy Alamance Coalition, Alamance Regional Health, Impact Alamance, United Way, and Elon University. The steering committee led the process and determined health priorities. Alamance County residents provided their feedback and perspectives through a telephone survey and focus groups.
**CHA PROCESS**

1. Form Steering Committee
2. Meet with Steering Committee
3. Conduct survey, focus groups and key informant interviews
4. Select health priorities
5. Collect local, state and national data
6. Compile data and present findings at community forum
7. Draft report
8. Share report with Board of Health and the public
9. Develop Action Plan

**Focus Group Key Findings**

- Lack of trust in healthcare system
- Going above and beyond to access healthcare
- Health’s connection to social well-being
- Infrastructure’s role in the health of the community
- Job Stability

**Establish Alamance County Health Equity Collaborative**

**Develop Community Health Improvement Plan to Address Health Priorities**

**Next Steps**

Work together to build a healthier & resilient Alamance County

For a complete report visit: www.alamance-nc.com/health
APPENDIX C

Citations & Resources
Chapter 2

Description of Alamance County


Demographics


Population

Chapter 3

Elon Poll


Community Based Participatory Research


Chapter 4


Alamance County, North Carolina. (n.d.) Retrieved February 12, 2019, from https://en.wikipedia.org/wiki/Alamance_County,_North_Carolina#Demographics


Food Security

Counts, P. H. (n.d.). Piedmont Health Counts: Indicators: Primary Care Provider Rate:

County: Alamance. Retrieved February 27, 2019, from
http://www.piedmonthealthcounts.org/indicators/index/view?indicatorId=385&localeId=1942

Alamance Regional Medical Center. (n.d.). Retrieved from
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Alamance County, North Carolina. (n.d.). Retrieved February 27, 2019, from
http://www.countyhealthrankings.org/app

Bureau, U. S. C. (n.d.). American FactFinder - Results. Retrieved February 27, 2019, from
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https://medicaid.ncdhhs.gov/medicaid/get-started/learn-if-you-are-eligible-medicaid-or-health-choice/medicaid-income-and


Education


Economy

Chapter 5

Racial and Ethnic Disparities


df

State Center for Health Statistics (SCHS). (2010). North Carolina Statewide CHAMP Survey Results. Retrieved February 27, 2019

from https://schs.dph.ncdhhs.gov/data/champ/2010/k11q01.html
Chapter 6

Mortality

https://schs.dph.ncdhhs.gov/interactive/query/lcd/lcd.cfm

https://www.cdc.gov/nchs/pressroom/statess/northcarolina/northcarolina.htm


Morbidity


Chronic disease

https://schs.dph.ncdhhs.gov/data/bytitledate.cfm?year=2017


**Infectious Disease**


CDC. (2018). Basic TB Facts Retrieved February 11, 2019, from
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**Sexually Transmitted Infections**


CDC. (n.d.). The State of STDs. Retrieved December 27, 2018 from


CDC. STD health equity. Retrieved December 27, 2018 from
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Alamance County State of County Health Report. Retrieved December 31, 2018 from

**Oral Health**

http://www.piedmonthealthcounts.org/indicators/index/view?indicatorId=333&localeTypeId=2

BRFSS 2016 - North Carolina Regions: (How many of your permanent teeth have been removed because of tooth decay or gum disease? <br> Do not include teeth lost for other reasons, such as injury or orthodontics.). (n.d.). Retrieved February 8, 2019 from

Tooth Decay - American Dental Association. (n.d.). Retrieved February 8, 2019 from
https://www.mouthhealthy.org/en/az-topics/d/decay

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Lead Poisoning


Mental Health


Prenatal, infant and maternal health


Pregnancy, prenatal care and adolescent pregnancy


Supporting maternal and child health in Alamance County

Reproductive Health and Life


Substance Abuse and Prevention Programs

Tobacco, Alcohol, and Substance Abuse


Smoke Free Initiative


Combating Opioid Abuse


Emergency Medical Services of Alamance County. (n.d.) Retrieved February 11, 2019 from https://www.alamance-nc.com/ems/


Current Nutrition Initiatives


Determinants of Health
Healthy Days and Disability

Families

Crime/Intentional Injuries

Social Support/Civic Engagement

Religion

Financial and Economic Factors

Financial Assistance

Transportation

Individual Behavior

Income Inequality

Piedmont Health Counts. (2016). People Living Below the Poverty Level. Retrieved February 18,


Housing


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The County Health Rankings (2018). Rapid Re-Housing Programs. Retrieved February 18, 2019 from

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Food Security

Motor Vehicles

Land Use

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Pollution and Air Quality

Water Quality

Parks and Recreation

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