

# Duplin County



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## 2019 Community Health Needs Assessment

# Table of Contents

List of Figures .....	5
List of Tables .....	7
Executive Summary .....	8
Service Area .....	9
Methods for Identifying Community Health Needs .....	9
Secondary Data .....	9
Primary Data .....	9
Summary of Findings .....	10
Demographics .....	10
Socioeconomic .....	10
Education .....	10
Health Outcomes .....	10
Access to Health Services .....	11
Access to Transportation Services .....	11
Selected Priority Areas .....	12
Conclusion .....	12
Introduction .....	13
Duplin County Health Department and Vidant Duplin Hospital .....	13
Community Health Team Structure .....	13
About Health ENC .....	14
Member Organizations .....	15
Steering Committee .....	16
HealthENC.org .....	17
Distribution .....	17
Evaluation of Progress Since Prior CHNA .....	18
Community Feedback on Prior CHNA .....	18
Methodology .....	19
Overview .....	19
Secondary Data Sources & Analysis .....	19
Health and Quality of Life Topic Areas .....	20
Health ENC Region Comparison .....	20
Primary Data Collection & Analysis .....	20
Community Survey .....	21
Focus Group Discussions .....	25
Data Considerations .....	26
Prioritization .....	27
Overview of Duplin County .....	29
About Duplin County .....	29
Demographic Profile .....	29
Population .....	29
Age and Gender .....	31
Life Expectancy at Birth .....	32
Birth Rate .....	32
Race/Ethnicity .....	32
Military Population .....	33
Veteran Population .....	33
Socioeconomic Profile .....	34
NC Department of Commerce Tier Designation .....	34
Income .....	34
Poverty .....	36
Housing .....	39
Food Insecurity .....	40
Employment .....	41
SocioNeeds Index .....	42

Educational Profile.....	43
Educational Attainment .....	43
High School Dropouts.....	44
High School Suspension Rate.....	45
Environmental Profile.....	46
Crime and Safety .....	48
Violent Crime and Property Crime .....	48
Juvenile Crime .....	49
Child Abuse.....	51
Incarceration.....	52
Access to Healthcare, Insurance and Health Resources Information.....	53
Health Insurance.....	53
Health Resources .....	54
Civic Activity .....	55
Political Activity.....	55
Governance .....	56
<b>Findings .....</b>	<b>57</b>
Secondary Data Scoring Results.....	57
Primary Data .....	57
Community Survey .....	57
Focus Group Discussions.....	63
Data Synthesis.....	64
Topic Areas Examined in This Report .....	65
Navigation Within Each Topic.....	66
Diabetes .....	67
Key Issues.....	67
Secondary Data .....	67
Primary Data.....	68
Highly Impacted Populations.....	68
Access to Health Services.....	69
Key Issues.....	69
Secondary Data .....	69
Primary Data.....	70
Highly Impacted Populations.....	71
Transportation.....	71
Key Issues.....	71
Secondary Data .....	71
Primary Data.....	72
Highly Impacted Populations.....	73
Education .....	73
Key Issues.....	73
Secondary Data .....	73
Primary Data.....	74
<i>Highly Impacted Populations</i> .....	74
Education level is critical to the social and economic development and impacts the population health.....	74
Social Environment .....	75
Key Issues.....	75
Secondary Data .....	75
Primary Data.....	76
Highly Impacted Populations.....	76
Mortality .....	77
<b>Other Significant Health Needs .....</b>	<b>78</b>
Economy.....	78
Substance Abuse.....	78
<b>A Closer Look at Highly Impacted Populations .....</b>	<b>80</b>
Disparities by Age, Gender and Race/Ethnicity .....	80
Geographic Disparities.....	81
<b>Conclusion .....</b>	<b>82</b>
<b>Appendix A. Impact Since Prior CHNA .....</b>	<b>83</b>

<b>Appendix B. Secondary Data Scoring .....</b>	<b>89</b>
<b>Overview .....</b>	<b>89</b>
Comparison Score.....	89
Indicator Score.....	89
Topic Score.....	89
<b>Comparison Scores.....</b>	<b>90</b>
Comparison to a Distribution of North Carolina Counties and U.S. Counties .....	90
Comparison to North Carolina Value and U.S. Value.....	90
Comparison to Healthy People 2020 and Healthy North Carolina 2020 Targets .....	91
Missing Values .....	91
<b>Indicator Scoring.....</b>	<b>91</b>
<b>Topic Scoring .....</b>	<b>91</b>
<b>Age, Gender and Race/Ethnicity Disparities .....</b>	<b>92</b>
<b>Topic Scoring Table .....</b>	<b>93</b>
<b>Indicator Scoring Table .....</b>	<b>93</b>
<b>Sources .....</b>	<b>103</b>
<b>Appendix C. Primary Data .....</b>	<b>104</b>
English Survey .....	105
Spanish Survey .....	134
Focus Group Questions .....	167
<b>Appendix D. Community Resources.....</b>	<b>169</b>

## List of Figures

Figure 1. Health ENC Online Data Platform .....	17
Figure 2. Secondary Data Scoring .....	19
Figure 3. Education of Community Survey Respondents-English.....	22
Figure 4. Education of Community Survey Respondents-Spanish .....	22
Figure 5. Employment Status of Community Survey Respondents - English.....	23
Figure 6. Employment Status of Community Survey Respondents - Spanish .....	23
Figure 7. Health Care Coverage of Community Survey Respondents - English .....	24
Figure 8. Health Care Coverage of Community Survey Respondents - Spanish.....	25
Figure 9. Total Population (U.S. Census Bureau).....	29
Figure 10. Population Density of Health ENC Counties (U.S. Census Bureau, 2010).....	30
Figure 11. Population by Age (U.S. Census Bureau, 2016).....	31
Figure 12. Population 18+ and 65+ (U.S. Census Bureau, 2016) .....	31
Figure 13. Population by Race/Ethnicity (U.S. Census Bureau, 2016).....	33
Figure 14. Median Household Income (American Community Survey, 2012-2016).....	34
Figure 15. Median Household Income of Health ENC Counties (American Community Survey, 2012-2016) .....	35
Figure 16. Median Household Income by Zip Code (American Community Survey, 2012-2016) .....	36
Figure 17. People Living Below Poverty Level (American Community Survey, 2012-2016) .....	37
Figure 18. Children Living Below Poverty Level (American Community Survey, 2012-2016) .....	37
Figure 19. People 65+ Living Below Poverty Level (American Community Survey, 2012-2016) .....	38
Figure 20. Persons with Disability Living in Poverty (American Community Survey, 2012-2016) .....	38
Figure 21. Mortgaged Owners Median Monthly Household Costs, Health ENC Counties (American Community Survey 2012-2016).....	39
Figure 22. Severe Housing Problems (County Health Rankings, 2010-2014 .....	40
Figure 23. Households with Children Receiving SNAP (American Community Survey, 2012-2016.....	41
Figure 24. SocioNeeds Index® (Conduent Healthy Communities Institute, 2018) .....	42
Figure 25. People 25+ with a High School Degree or Higher and Bachelor's Degree or Higher (American Community Survey, 2012-2016).....	44
Figure 26. High School Dropout Rate (North Carolina Department of Public Instruction).....	45
Figure 27. High School Suspension Rate (North Carolina Department of Public Instruction).....	45
Figure 28. Mode of Commuting to Work (American Community Survey, 2012-2016).....	47
Figure 29. Workers who Drive Alone to Work (American Community Survey, 2012-2016) .....	47
Figure 30. Violent Crime Rate (North Carolina Department of Justice).....	48
Figure 31. Property Crime Rate (North Carolina Department of Justice).....	48
Figure 32. Juvenile Undisciplined Rate (North Carolina Department of Public Safety) .....	49
Figure 33. Juvenile Delinquent Rate (North Carolina Department of Public Safety).....	50
Figure 34. Child Abuse Rate (Management Assistance for Child Welfare, Work First, and Food & Nutrition Services in North Carolina & University of North Carolina at Chapel Hill Jordan Institute for Families) .....	51
Figure 35. Incarceration Rate (North Carolina Department of Public Safety).....	52
Figure 36. Persons with Health Insurance (Small Area Health Insurance Estimates, 2016).....	53
Figure 37. Persons Only Receiving Health Insurance through Medicaid, Medicare or Military Healthcare (American Community Survey, 2012-2016).....	54
Figure 38. Voting Age Population (American Community Survey, 2012-2016) .....	55

Figure 39. Voter Turnout in the Last Presidential Election (North Carolina State Board of Elections, 2016)	56
Figure 40. Top Quality of Life Issues, as Ranked by Survey Respondents	58
Figure 41. Level of Agreement Among Duplin County Residents in Response to Nine Statements about their Community - English	59
Figure 42. Level of Agreement Among Duplin County Residents in Response to Nine Statements about their Community - Spanish	59
Figure 43. Services Needing the Most Improvement, as Ranked by Survey Respondents-English	60
Figure 44. Services Needing the Most Improvement, as Ranked by Survey Respondents-Spanish	61
Figure 45. Health Behaviors that Residents Need More Information About, As Ranked by Survey Respondents - English	62
Figure 46. Health Behaviors that Residents Need More Information About, As Ranked by Survey Respondents - Spanish	63
Figure 47. Data Synthesis	65
Figure 48. Secondary Data Scoring Overview	84
Figure 49. Score Range	84
Figure 50. Comparisons used in Secondary Data Scoring	85
Figure 51. Compare to Distribution Indicator Gauge	85
Figure 52. Distribution of County Values	85
Figure 53. Comparison to Single Value	85
Figure 54. Comparison to Target Value	86
Figure 55. Trend Over Time	86

## List of Tables

Table 1. Significant Health Needs .....	12
Table 2. Health and Quality of Life Topic Areas.....	20
Table 3. Survey Respondents.....	21
Table 4. List of Focus Group Discussions .....	26
Table 5. List of Community Participants by Disciple.....	28
Table 6. Population by Gender and Age (U.S. Census Bureau, 2016).....	32
Table 7. Life Expectancy at Birth by Race and Sex.....	32
Table 8. Top 25 Industries and Employment Range .....	41
Table 9. SocioNeeds Index® (Conduent Healthy Communities Institute, 2018).....	43
Table 10. Secondary Data Scoring Results by Topic Area .....	57
Table 11. Focus Group Results by Topic Area .....	64
Table 12. Criteria for Identifying the Top Needs from each Data Source .....	64
Table 13. Topic Areas Examined In-Depth in this Report.....	65
Table 14. Description of Gauges and Icons used in Secondary Data Scoring .....	66
Table 15. Data Scoring Results for Diabetes .....	67
Table 16. Data Scoring Results for Access to Health Services.....	69
Table 17. Data Scoring Results for Environment .....	72
Table 18. Data Scoring Results for Education .....	74
Table 19. Data Scoring Results for Social Environment.....	75
Table 20. Leading Causes of Mortality in Duplin County, North Carolina, Health ENC.....	77
Table 21. Indicators with Significant Race/Ethnic, Age, or Gender Disparities.....	80
Table 22. Topic Scores for Duplin County .....	88
Table 23. Indicator Scores by Topic Area .....	89
Table 24. Indicator Sources and Corresponding Number Keys.....	103

# Executive Summary

The 2018/9 Duplin County Community Health Needs Assessment (CHNA) provides an overview of the significant community health needs identified in Duplin County, North Carolina. The vision of this report is to offer a meaningful understanding of the most pressing health needs across Duplin County, as well as to guide planning efforts to address those needs. The health status of a community plays a large role in social and economic prosperity, hence it is important that a community strives to continually improve and maintain its health. Successful health programming must also include input from community agencies and community members. The first step in improving the health status of any community is to complete a community health assessment and share the findings with the community. The CHNA is a systematic collection and analysis of information about the health of the community. Special attention has been given to the needs of vulnerable populations, unmet health needs or gaps in services, and input gathered from the community. Findings from this report will be used to identify, develop and target initiatives to provide and connect community members with resources to improve the health challenges in their communities

The 2018/9 Duplin County CHNA was developed through a partnership between the Duplin County Health Department, Vidant Duplin Hospital, and Health ENC with Vidant Duplin Hospital serving as the fiscal sponsor. Health ENC grew out of conversations with health care leaders about improving the community health needs assessment (CHNA) process in eastern North Carolina. Health ENC, now a program of the Foundation for Health Leadership and Innovation (FHLI), coordinates a regional CHNA in 33 counties of eastern North Carolina. In addition, the Health ENC Program Manager works to build coalitions and partnerships that will address health issues identified through the regional CHNA process. Details of the regional leadership are included in the Introduction section.

## Community Health Team Leadership

*Duplin County Health Department*- Elizabeth Ricci, BSN, RN, Nursing Director, Ila Davis, BSN, RN, MEd, Tracey Simmons-Kornegay, Health Director

*Vidant Duplin Hospital*- Sue Wells, Manager, Outreach Services Community Health, Laura Maready, Director of Marketing & Development, Christina Miller, BSN, RN, MBA, Director of Patient Care Services, Acute

*Vidant Health*- Melissa Y. Roupe, MSN, RN Senior Administrator, Community Health Improvement

The Community Health leadership team attended the April 2017 symposium to learn about the regional Community Health Needs Assessment project in eastern North Carolina. The CHNA planning team met several times between May 2017 and February 2018 to discuss the initiative and planned to join the project. The Community Health Leadership Team attended the March 2018 Regional CHNA Kick-Off Event. A MOU was signed at the end of March with the Regional CHNA which outlined the obligations for Duplin County as it takes part in the regional CHNA project. The phases included: (1) a research phase to identify, collect and review demographic, socioeconomic, health and environmental data; (2) a community input phase to receive input from community members utilizing a survey and focus group discussions; (3) data synthesis and analysis phase; (3) a period of data reporting and discussion among community partners; and (4) a prioritization and decision-making phase. Upon completion of this work, a

report was generated by the vendor and the Duplin County leadership team edited the report and added county level data as appropriate. This completed CHNA serves as the 2019 CHNA for Vidant Duplin Hospital and the 2018 CHNA for Duplin County Health Department. The Duplin County Health Department submitted this document as their 2018 CHNA to the NC Department of Public Health on April 2, 2019. The Community Health Improvement plans (CHIP) are in development. The Duplin County Health Department will submit their action plans in September 2019. Vidant Duplin Hospital will identify action plans specific to the hospital in their 2019 Implementation Strategy.

## **Service Area**

The service area for this report is defined as the geographical boundary of Duplin County, North Carolina. Duplin County is located inland from the coastal area of the state and has an area of 822 square miles, of which 816 square miles is land and 5.5 square miles is water.

## **Methods for Identifying Community Health Needs**

Health ENC commissioned Conduent Healthy Communities Institute (HCI) to assist with its Community Health Needs Assessment. Conduent Healthy Communities Institute is a multi-disciplinary team of public health experts, including healthcare information technology veterans, academicians and former senior government officials. Conduent HCI completed the data analysis of the primary and secondary data, including analysis of the three focus groups and developed the web platform for data sharing across the 33 participating counties.

### Secondary Data

Secondary data used for this assessment were collected and analyzed from Conduent HCI's community indicator database. The database, maintained by researchers and analysts at Conduent HCI, includes over 100 community indicators from various state and national data sources such as the North Carolina Department of Health and Human Services, the Centers for Disease Control and Prevention and the American Community Survey. See [Appendix B](#) for a full list of data sources used.

Indicator values for Duplin County were compared to North Carolina counties and U.S. counties to identify relative need. Other considerations in weighing relative areas of need included comparisons to North Carolina state values, comparisons to national values, trends over time, Healthy People 2020 targets and Healthy North Carolina 2020 targets. Based on these seven different comparisons, indicators were systematically ranked from high to low need. For a detailed methodology of the analytic methods used to rank secondary data indicators see [Appendix B](#).

When available, county-level data are compared to the state of North Carolina, as well as Health ENC Counties. The Health ENC region consists of 33 counties in eastern North Carolina participating in the regional CHNA: Beaufort, Bertie, Bladen, Camden, Carteret, Chowan, Cumberland, Currituck, Dare, Duplin, Edgecombe, Franklin, Gates, Greene, Halifax, Hertford, Hoke, Hyde, Johnston, Lenoir, Martin, Nash, Onslow, Pamlico, Pasquotank, Pender, Perquimans, Pitt, Sampson, Tyrrell, Washington, Wayne and Wilson.

### Primary Data

The primary data used in this assessment consisted of (1) a community survey distributed through online and paper submissions and (4) focus group discussions. Over 600 Duplin County residents contributed their input on the community's health and health-related needs, barriers, and opportunities, with special focus on the needs of vulnerable and underserved populations. See [Appendix C](#) for all primary data collection tools used in this assessment.

## Summary of Findings

### Demographics

The general population characteristics of Duplin County and its regional counties were based on 2016 US Census data population estimates. The population of Duplin County is estimated to be 58,969 a slight decrease from the 2016 CHNA. The White population accounts for 70.1% of the total population in Duplin County, with the Black or African American population accounting for 25.9% of the total population. The proportion of residents that identify as White in Duplin County (70.1%) is similar to North Carolina (71.0%) and higher than Health ENC counties (63.8%). Duplin County has a larger share of residents that identify as Hispanic or Latino (21.9%) compared to North Carolina (9.2%) and Health ENC counties (9.6%). This data is relatively unchanged as compared to the previous CHNA.

The population of Duplin County is evenly divided between males and females, which is the typical pattern. The gender balance in the region is similar with an average of 49% males and 51% females. The overall life expectancy in Duplin County is 78.4, which is higher than compared to the Regional Mean (77.7) and the state (78.3). There continues to be a disparity in life expectancy between White 79.5 years and African Americans 76.3 years. The overall median age in Duplin County was 38.9, approximately 2.8 years younger than the median age in the region, and 0.7 years older than the median age for NC as a whole.

### Socioeconomic

Duplin County has a high poverty rate with 27.6 % of residents living below the poverty level, 41.2 % of children live in poverty, and 41.7 % live in single parent households. The overall poverty rate in Duplin County was higher than the comparable state and Regional rate throughout the period cited. The poverty rate has increased overall since the 2016 CHNA data. In Duplin County, the 5 year 2012-2016 data for per capital personal income was \$17,960 which was \$8819 below the state average. These figures have only increased slightly but the gap between county and state has widened. The unemployment rate for Duplin is 4.1 (2018), this is a decrease from the last CHNA of 4.6.

### Education

When comparing Duplin County to the NC average, the 2016-2017 high school graduation rate was lower in Duplin County Schools (81.3%) as compared to the state (85.3%). 2018 average SAT score for Duplin County students is 966 out of 1600. Only 32.2% of graduates took the SAT. This is a decrease from the 2016 CHNA data. The Seventy-two percent of people over the age of twenty-five have a high school degree or higher and 10.3% of those over age twenty-five have a bachelor's degree or higher in the community in 2012-2016. For both indicators, Duplin County performs poorer than the state.

### Health Outcomes

Chronic diseases such as heart disease and cancer remain the leading causes of death in the county for adults. Heart disease, cerebrovascular disease and cancer deaths showed an increase in the death rate as compared to the 2016 CHNA data. The NC State Center for Health Statistics trend data for Duplin County (years 2013-2017) shows the age adjusted death rates per 100,000 populations for cardiovascular disease, stroke, heart disease and diabetes are all higher than state. Thirty-one percent of the population is 55 years and older and the incidence of these diseases will increase as the population ages. Many risk factors for chronic diseases have been identified and can be modified by lifestyle changes. The most important modifiable risk factors are: eliminating harmful substance use including tobacco, maintaining a healthy weight and nutrition, receiving education on how to manage your

chronic health issues to prevent secondary effects, eliminating second hand smoke exposure, getting adequate exercise and having access to a health care provider to assist with disease management.

For children in the birth to 19 years of age group, the largest numbers of deaths are conditions in the perinatal period, and birth defects. This has not changed from previous CHNA assessment. The health of the infant is closely linked to the health of the mother, before and during pregnancy. The infant death rate per 1,000 live births has decreased (from 9.1 in last assessment to 8.3) but is still higher than the state rate of 7.1 per 1000 live births.

There is a decrease in total low birth weight births defined as less than 2500 grams, Duplin (8.4) state (9.0). There continues to be a disparity between babies born to Black/ African American women (12.3) and white (9.2) women. The teen pregnancy rates have been declining since the 2016 assessment, but Duplin County remains higher (60.4 per 100,000 residents) than the state (57.8). The percentage of teen births that were repeat pregnancies (21.9) is now lower than the state (22.4). Duplin teen pregnancy rates for minorities are higher than the state rates. Teenage parents usually fall at the low end of the poverty status as they usually have little support, are more likely to drop out of school and consequently have fewer job opportunities.

#### [Access to Health Services](#)

The development of the top ten chronic diseases can be impacted by making healthy lifestyle choices. Heart disease and diabetes are associated statistically with a higher Body Mass Index (BMI), elevated cholesterol and high blood pressure. Diabetes affects the blood vessels of the heart, eyes, and kidneys over time and creates secondary health problems. Duplin County has a lower number of active health care professional in the county. The number of primary care physicians in Duplin is 2.9 per 10,000 residents and this number has decreased from the last CHNA rates which was 3.7. The state rate is 7 per 10,000 residents and this is increasing. The ratio of dentists is even lower; Duplin has 1.7 Dentist per 10,000 residents, the state rate is 5 per 10,000. The deficiency in these resources impacts the population's health across the life span. This gap in resources decreases access to health care for many segments of the population, increases costs for residents who will need to go out of county to seek care and contributes to residents not seeking care. This gap is difficult to impact and has not improved since the last assessment.

#### [Access to Transportation Services](#)

Transportation is a significant challenge for rural counties. There is no public transportation system in Duplin County that provides transit services on a regular and continual basis. The current system requires the person needing transit to call the office 2 days before the ride is needed to schedule pick- up. There are no routine bus routes or bus stops. Data shows that 8.3% of households do not have access to a vehicle. The mean travel time to work is 26.8 minutes which is higher than the state average.

#### [Substance Use](#)

The available data on substance use at the county level does not provide a clear picture of the impact on the community. There have been low numbers of deaths related to substance use but the rise in the manufacture and use of methamphetamines, neonatal abstinence syndrome and the number of people incarcerated for drug use is increasing. The majority of the children placed in foster care by DSS is related to parental drug use. This issue has increased significantly since the last CHNA.

The CHNA findings are drawn from an analysis of an extensive set of secondary data (over 100 indicators from national and state data sources) and in-depth primary data from community leaders, health and non-health professionals who serve the community at large, vulnerable populations, at risk populations and populations with unmet health needs. Through a synthesis of the primary and secondary data the significant health needs were determined for Duplin County and are displayed in Table 1.

**Table 1. Significant Health Needs**

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Access to Health Services
Diabetes
Economy
Education
Exercise, Nutrition & Weight
Social Environment
Substance Abuse
Transportation

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## Selected Priority Areas

The community engagement sessions were held in January 2019. The group discussed the available and/or needed county resources to impact the goals, and the chance of success with current resources. The group decided on four health priorities for 2019-2021:

1. **Chronic Disease Prevention & Management:** Focus on Healthy Lifestyles and Weight Management; Nutrition Education; Dental Care with a focus on children and adolescents.
2. **Access to Care:** Physical & Mental Health Care Services; Focus on After Hours Care; Primary Care & Specialty Care Available; Dental Care; Pediatric & Adolescent Care; and Transportation issues which impact access.
3. **Disaster Recovery & Mitigation:** Focus on recovery from previous hurricanes, as well as mitigating actions to prevent / minimize future damage from natural disasters. Focus on mental health issues, especially among youth.
4. **Substance Use:** Youth & Adult; including focus on youth and the use of alcohol, tobacco and other drugs; adult incarcerations related to substance use and treatment options instead of incarceration for the population.

## Conclusion

The prioritization of the identified significant health needs will guide community health improvement efforts of Duplin County. Following this process, Duplin County will outline how they plan to address the prioritized health needs in their implementation plans.

# Introduction

## Duplin County Health Department and Vidant Duplin Hospital

Local public health agencies in North Carolina are required to conduct a comprehensive Community Health Assessment (CHA) at least once every four years. The CHA is required of public health departments in the consolidated agreement between the NC Division of Public Health (DPH) and the local public health agency. Furthermore, a CHA is required by the NC Local Health Department Accreditation Board (G.S. § 130A-34.1), as part of the US Affordable Care Act of 2011, non-profit hospitals are required to conduct a community health needs assessment (CHNA) at least every three years. Recognizing that duplicate assessment efforts are a poor use of community resources, DCHD and Vidant Duplin Hospital have collaborated in conducting the community health assessment every three years.

The Foundation for Health Leadership and Innovation (FHLI) and the Brody School of Medicine (BSOM) entered into an agreement with Duplin County to, in cooperation with other participants, to conduct a regional community health needs assessment with 33 eastern counties in NC. The project which will collect, compile, analyze and report data in accordance with the North Carolina Department of Health and Human Services' Division of Public Health requirements to submit a completed community health assessment for each county in the state and with the requirements under the Affordable Care Act for every non-profit or government hospital to conduct and publicly post a community health needs assessment.

The document is a summary of all the available evidence and serves as a resource until the next assessment. The completed CHNA serves as the basis for prioritizing the community's health needs, and culminates in planning to meet those needs.

### [Community Health Team Structure](#)

The Duplin County Health Department and Vidant Duplin Hospital wish to thank all of the people and organizations that have made the 2018 Community Health Assessment process and report possible. We would like to thank the following individuals for their participation in this assessment and with the prioritization process:

County Commissioner- Mr. Jesse Dowe

Board of Health - Dr. Margie Hunter, DVM; Adell Cooper, Leigh Gurley

Health Department – Tracey Simmons Kornegay, Health Director; Beth Ricci, Nursing Director; Rigoberto Castellanos, Health Educator

Vidant Duplin Hospital- Deborah Hernandez, President Vidant Duplin; Sue Taylor, VP Personal Care Services; Matt Gitzinger, Director of Operations; Tom Fife, Foundation Director; Laura Maready, Director of Marketing; Christina Miller, Director Personal Care Services; Leigh Anne Bartlett; Sue Wells, Manager Community Health; Melissa Roupe, Senior Administrator Vidant Corporate;

Community Health Vidant- Desiree Wynn, Crystal Dempsey, Krista

Horne Mental Health- Eastpointe Community Relations, Melissa Reese

Department of Social Services- Susan Thigpen, Director

James Sprunt Community College- Ken Boham, Interim Director; Amber Martinez, Single Stop Student Services  
Department of Transportation- Angel Venecia, Director of Transportation  
Department of Aging- Melisa Brown, Director of Senior Center  
Duplin County Partnership for Children- Tristan  
Bruner 4H Prevention- Jasmine Williams  
Public Member- Caroline Edwards, student  
ECU Cooperative Extension- Sydney Johnson  
Duplin County Public Schools- Ben Thigpen, Assistant Superintendent; Sue Ellen Cottle, Lead Nurse  
Goshen Medical Center- Lynn Hardy, Quality Control  
Faith Community- Pastor Ted Thomas, First Baptist

## About Health ENC

Initiated in 2015 by the Office of Health Access at the Brody School of Medicine at East Carolina University, Health ENC grew out of conversations with health care leaders about improving the community health needs assessment (CHNA) process in eastern North Carolina. Health ENC, now a program of the Foundation for Health Leadership and Innovation (FHLI), coordinates a regional CHNA in 33 counties of eastern North Carolina. In addition, the Health ENC Program Manager works to build coalitions and partnerships that will address health issues identified through the regional CHNA process.

As part of the Affordable Care Act, not for profit and government hospitals are required to conduct CHNAs every three years. Similarly, local health departments in North Carolina are required by the Division of Public Health (DPH) in the NC Department of Health and Human Services (DHHS) to conduct periodic community health assessments as well. Local health departments have been required to submit their community health needs assessments once every four years. The particular year CHNA submissions are made by hospitals within a three-year cycle or by local health departments within a four-year cycle is not uniform across the state or region.

Additionally, although local health departments and hospitals have guidance from their respective oversight authorities on how to conduct and report the results of their CHNAs, that guidance allows for wide variations in the execution of these reports. The methodologies, specific data items gathered, the interpretation of the data as well as the general approach and scope of one CHNA may have little resemblance to a CHNA in another jurisdiction or conducted by another organization.

For these reasons, health care leaders across eastern North Carolina have partnered to standardize the CHNA process for health departments and hospitals in the region. This effort will also sync all participant organizations on to the same assessment cycle. Combining efforts of local health departments and hospitals in a regional CHNA will ultimately lead to an improvement in the quality and utility of population health data, the ability to compare and contrast information and interventions across geographic boundaries, and the reduction of costs for everyone involved, while maintaining local control and decision-making with regard to the selection of health priorities and interventions chosen to address those priorities. Simultaneously, it will create opportunities for new and better ways to collaborate and partner with one another.

Upon receipt of generous funding support provided by The Duke Endowment, the Office of Health Access at ECU's Brody School of Medicine transferred administrative and operational responsibility for Health ENC to the Foundation for Health Leadership and Innovation in 2018. The project continues to be

guided by a steering committee representing local health departments, hospitals and other stakeholders committed to improving the health of the people of eastern North Carolina.

## **Member Organizations**

Health ENC is comprised of more than 40 organizations. Twenty-two hospitals, twenty-one health departments and two health districts participated in the regional CHNA.

### *Partner Organizations*

- Foundation for Health Leadership & Innovation
- ECU Brody School of Medicine
- The Duke Endowment

### *Hospitals and Health Systems*

- Cape Fear Valley Health (Cape Fear Valley Medical Center, Hoke Hospital and Bladen County Hospital)
- Carteret Health Care
- Halifax Regional Medical Center
- Johnston Health
- UNC Lenoir Health Care
- Nash Health Care System
- Onslow Memorial Hospital
- The Outer Banks Hospital
- Pender Memorial Hospital
- Sampson Regional Medical Center
- Sentara Albemarle Medical Center
- Vidant Beaufort Hospital
- Vidant Bertie Hospital
- Vidant Chowan Hospital
- Vidant Duplin Hospital
- Vidant Edgecombe Hospital
- Vidant Medical Center
- Vidant Roanoke-Chowan Hospital
- Wayne UNC Health Care
- Wilson Medical Center

### *Health Departments and Health Districts*

- Albemarle Regional Health Services
- Beaufort County Health Department
- Bladen County Health Department
- Carteret County Health Department
- Cumberland County Health Department
- Dare County Department of Health and Human Services
- Duplin County Health Department
- Edgecombe County Health Department
- Franklin County Health Department
- Greene County Department of Public Health

- Halifax County Public Health System
- Hoke County Health Department
- Hyde County Health Department
- Johnston County Public Health Department
- Lenoir County Health Department
- Martin-Tyrrell-Washington District Health Department
- Nash County Health Department
- Onslow County Health Department
- Pamlico County Health Department
- Pitt County Health Department
- Sampson County Health Department
- Wayne County Health Department
- Wilson County Health Department

### **Steering Committee**

Health ENC is advised by a Steering Committee whose membership is comprised of health department and hospital representatives participating in the regional CHNA, as well as other health care stakeholders from eastern North Carolina. The program manager oversees daily operations of the regional community health needs assessment and Health ENC.

#### *Health ENC Program Manager*

- Will Broughton, MA, MPH, CPH - Foundation for Health Leadership & Innovation

#### *Health ENC Steering Committee Members*

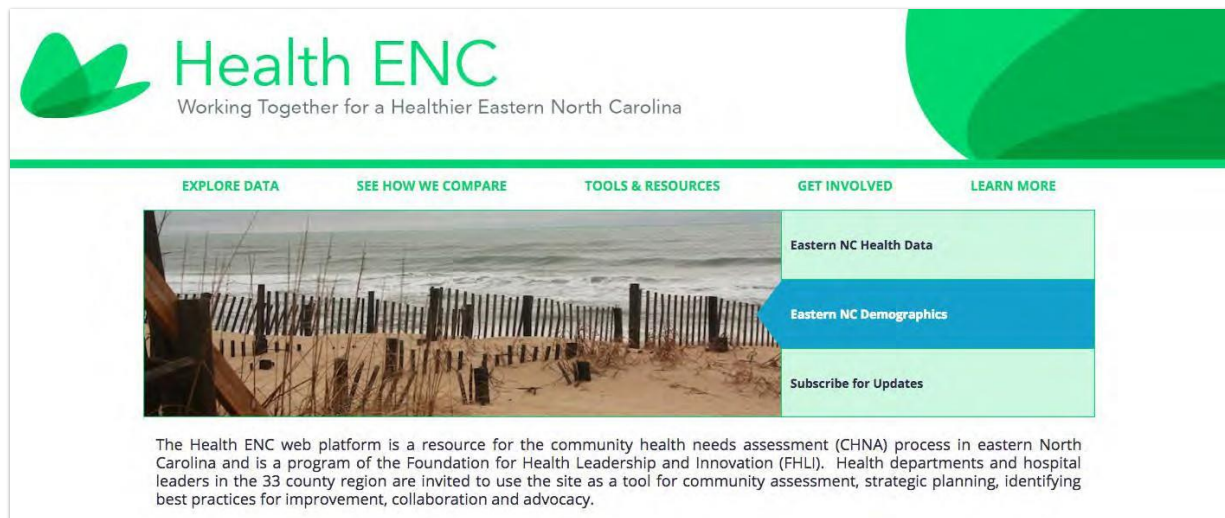
- Constance Hengel, RN, BSN, HNB-BC - Director, Community Programs and Development, UNC Lenoir Health Care
- James Madson, RN, MPH - Steering Committee Chair, Health Director, Beaufort County Health Department
- Battle Betts - Director, Albemarle Regional Health Services
- Caroline Doherty - Chief Development and Programs Officer, Roanoke Chowan Community Health Center
- Melissa Roupe, RN, MSN - Sr Administrator, Community Health Improvement, Vidant Health
- Davin Madden – Health Director, Wayne County Health Department
- Angela Livingood – Pharmacy Manager, Pender Memorial Hospital
- Lorrie Basnight, MD, FAAP - Executive Director, Eastern AHEC, Associate Dean of CME, Brody School of Medicine
- Anne Thomas- President/CEO, Foundation for Health Leadership & Innovation

## HealthENC.org

The [Health ENC](https://www.healthenc.org) web platform, shows the community health needs assessment process in eastern North Carolina. The website serves as a “living” data platform, providing public access to indicator data that is continuously updated, easy to understand and includes comparisons for context. Much of the data used in this assessment is available on [HealthENC.org](https://www.healthenc.org) and can be downloaded in multiple formats. Results of the 2018 Eastern North Carolina Community Health Survey can be downloaded by county or the entire Health ENC Region.

In addition to indicator data, the website serves as a repository for local county reports, funding opportunities, 2-1-1 resources and more. Health departments, hospital leaders and community health stakeholders in the 33-county region are invited to use the website as a tool for community assessment, strategic planning, identifying best practices for improvement, collaboration and advocacy.

**Figure 1. Health ENC Online Data Platform**



## Distribution

An electronic copy of this report is available on [HealthENC.org](https://www.healthenc.org). The completed report is posted on the Vidant Duplin Hospital <https://www.vidanthealth.com/Locations/Hospitals/Vidant-Duplin-Hospital> and the Duplin County website under the Health Department <https://www.duplincountync.com>. Any person wishing a paper copy may download from the website or contact the DCHD Nursing Director at 910-296-2130.

## Evaluation of Progress Since Prior CHNA

The community health assessment, which is both a process and a document, investigates and describes the current health status of the community, what has changed since the last assessment, and what still needs to change to improve the health of the community

The community health improvement process should be viewed as an iterative cycle. An important piece of that cycle is revisiting the progress made on priority health topics set forth in the preceding community health needs assessment. By reviewing the actions taken to address priority health issues and evaluating the impact those actions have made in the community, it is possible to better target resources and efforts during the next round of the CHNA cycle.

As part of the 2016 Community Health Needs Assessment, the following areas were selected as prioritized health needs.

- Access to Care
- Substance Abuse/ Mental Health
- Chronic Disease
- Prevention/ Healthy Lifestyles

A detailed table describing the strategies/action steps and indicators of improvement for each priority area can be found in [Appendix A](#).

## Community Feedback on Prior CHNA

The 2016 Duplin County Community Health Needs Assessment was made available to the public via website for Vidant Duplin Hospital <https://www.vidanthealth.com/Locations/Hospitals/Vidant-Duplin-Hospital> and the Duplin County website <https://www.duplincountync.com> under the DCHD website. Community members were invited to submit feedback via in-person session, email or by phone. No comments had been received on the preceding CHNA at the time this report was written.

# Methodology

## Overview

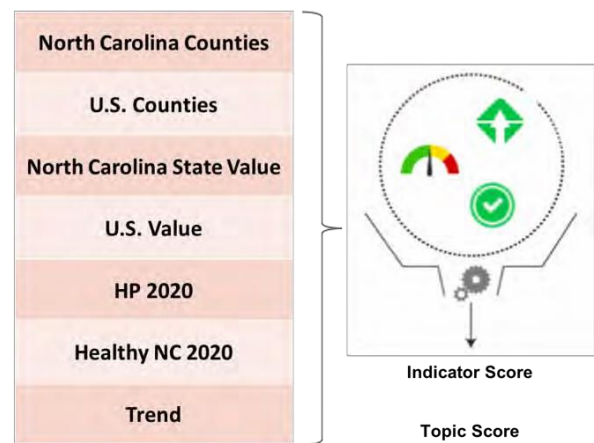
Two types of data are analyzed for this Community Health Needs Assessment: secondary data and primary data. Secondary data is data that has been collected from other sources while primary data has been collected directly as a part of this report. Each type of data is analyzed using a unique methodology, and findings are organized by health topic areas. These findings are then synthesized for a comprehensive overview of the health needs in Duplin County.

## Secondary Data Sources & Analysis

The main source of the secondary data used for this assessment is [HealthENC.org](http://www.healthenc.org)<sup>1</sup>, a web-based community health platform developed by Conduent Healthy Communities Institute. The Health ENC dashboard brings non-biased data, local resources, and a wealth of information in one accessible, user-friendly location. The secondary data analysis was conducted using Conduent HCI's data scoring tool, and the results are based on the 147 health and quality of life indicators that were queried on the Health ENC dashboard on July 18, 2018. The data are primarily derived from state and national public data sources. For each indicator on the platform, there exist several comparisons to assess Duplin County's status, including how Duplin County compares to other communities, whether health targets have been met, and the trend of the indicator value over time.

Conduent HCI's data scoring tool systematically summarizes multiple comparisons to rank indicators based on highest need (Figure 2). For each indicator, the Duplin County value is compared to a distribution of North Carolina and U.S. counties, state and national values, Healthy People 2020 targets, Healthy North Carolina 2020 targets, and the trend over the four most recent time periods of measure. Each indicator is then given a score based on the available comparisons. The scores range from 0 to 3, where 0 indicates the best outcome and 3 indicates the worst outcome. Availability of each type of comparison varies by indicator and is dependent upon the data source, comparability with data collected from other communities, and changes in methodology over time. The indicators are grouped into topic areas for a higher-level ranking of community health needs.

**Figure 2. Secondary Data Scoring**



Please see [Appendix B](#) for further details on the secondary data scoring methodology.

<sup>1</sup> Health ENC is an online platform that provides access to health, economic and quality of life data, evidence-based programs, funding opportunities and other resources aimed at improving community health. The platform is publicly available and can be accessed at <http://www.healthenc.org/>.

## Health and Quality of Life Topic Areas

Table 2 shows the health and quality of life topic areas into which indicators are categorized. These topic areas are broadly based on the Healthy People 2020 framework, with each topic area containing multiple indicators. The five topic areas exhibiting the most significant need as evidenced by the secondary data analysis are included for in-depth exploration in the data findings. Four topic areas specific to population subgroups, including Children's Health, Men's Health, Women's Health, and Older Adults & Aging, include indicators spanning a variety of topics. If a particular subgroup receives a high topic score, it is not highlighted independently as one of the top 5 findings but is discussed within the narrative as it relates to highly impacted populations. Three additional categories (County Health Rankings, Mortality Data, and Wellness & Lifestyle) are not considered for in-depth exploration, since all three are general categories that include indicators spanning a wide variety of topics. Topic areas with fewer than three indicators are considered to have data gaps and do not receive topic scores. These topics are indicated by an asterisk in Table 2.

**Table 2. Health and Quality of Life Topic Areas**

Access to Health Services	Family Planning*	Prevention & Safety
Cancer	Food Safety*	Public Safety
Children's Health*	Heart Disease & Stroke	Respiratory Diseases
County Health Rankings	Immunizations & Infectious Diseases	Social Environment
Diabetes	Maternal, Fetal & Infant Health	Substance Abuse
Disabilities*	Men's Health	Teen & Adolescent Health*
Economy	Mental Health & Mental Disorders	Transportation
Education	Mortality Data	Vision*
Environment	Older Adults & Aging	Wellness & Lifestyle
Environmental & Occupational Health	Other Chronic Diseases	Women's Health
Exercise, Nutrition, & Weight	Oral Health*	

\*Topic area has fewer than 3 indicators and is considered a data gap. No topic score is provided.

## Health ENC Region Comparison

When available, county-level data are compared to the state of North Carolina, as well as Health ENC Counties. The Health ENC region consists of 33 counties in eastern North Carolina participating in the regional CHNA: Beaufort, Bertie, Bladen, Camden, Carteret, Chowan, Cumberland, Currituck, Dare, Duplin, Edgecombe, Franklin, Gates, Greene, Halifax, Hertford, Hoke, Hyde, Johnston, Lenoir, Martin, Nash, Onslow, Pamlico, Pasquotank, Pender, Perquimans, Pitt, Sampson, Tyrrell, Washington, Wayne and Wilson. Values for the Health ENC region were calculated by aggregating data from these 33 counties.

## Primary Data Collection & Analysis

To expand upon the information gathered from the secondary data, Health ENC Counties collected community input. Primary data used in this assessment consists of focus groups and both an English-language and Spanish-language community survey. Community input tools are available in [Appendix C](#).

### Community Survey

Community input was collected via a 57-question online and paper survey available in both English and Spanish. Survey Monkey was the tool used to distribute and collect responses for the community survey. Completed paper surveys were entered into the Survey Monkey tool. The community survey was distributed from April 18, 2018 – June 30, 2018.

### Survey Distribution

The community survey was available on the Vidant Duplin Hospitals webpage; emails were sent to community partners with the link to the on-line survey. On-line survey link was distributed to the local libraries, posted at county agencies, forwarded to the public schools and local businesses. The paper surveys were distributed to churches, available at the Health Department and Vidant Duplin Hospital. DCHD and Vidant staff solicited participation at community meetings/outreach events, School health meetings, Juvenile Crime, Population Health, Board of Health, Vidant Duplin Board of Directors, local crisis centers, daycares and civic/service organizations. Bi-lingual staff at the health department reached out with paper surveys to the Spanish community by way of local Hispanic stores, churches and clients who came through the Health Department.

Table 3 summarizes the number of survey respondents. A total of 689 responses were collected from Duplin County residents, with a survey completion rate of 88.8%, resulting in 612 complete responses from Duplin County. The survey analysis included in this CHNA report is based on complete responses.

**Table 3. Survey Respondents**

Service Area	Number of Respondents*		
	English Survey	Spanish Survey	Total
All Health ENC Counties	15,917	441	16,358
Duplin County	552	60	612

\*Based on complete responses

Survey participants were asked a range of questions related - but not limited - to: what populations are most negatively affected by poor health outcomes in Duplin County, what their personal health challenges are, and what the most critical health needs are for Duplin County. The survey instrument is available in [Appendix C](#).

### Demographics of Survey Respondents

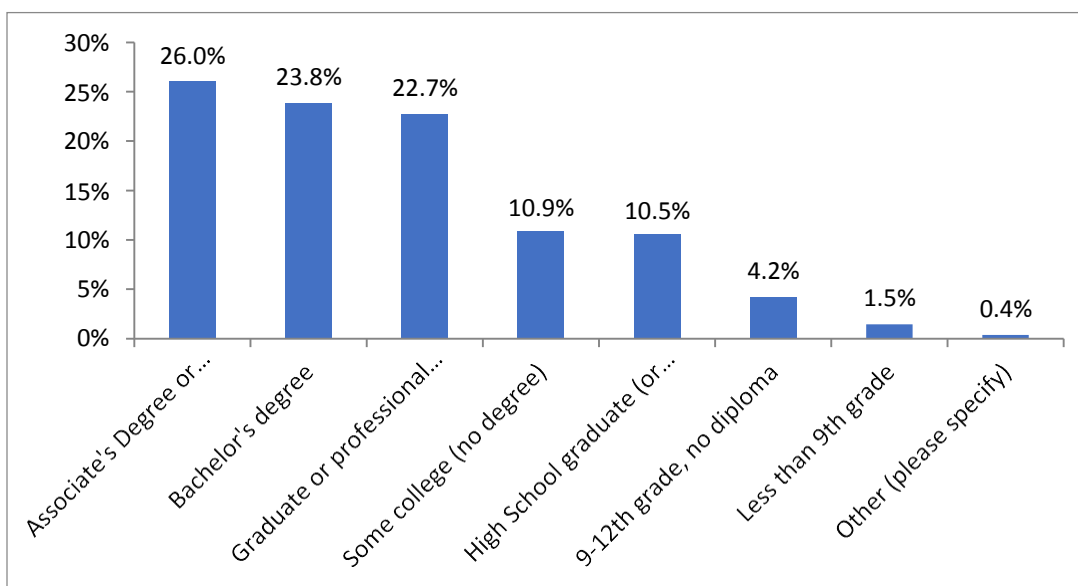
The following charts and graphs illustrate Duplin County demographics of the community survey respondents. English survey results and Spanish survey results are presented separately to highlight differences between survey groups.

Among Duplin County survey participants, 52.4% of English survey respondents were over the age of 50, with the highest concentration of respondents (13.5 %) grouped into 55-59 age group. 95% of Spanish survey respondents were under the age of 50 with the highest concentration of survey respondents grouped into the 30-34 age group. A high proportion of respondents were female (82.3% English survey, 68.3% Spanish survey) and identified as White (69.7% English survey, 53.4% Spanish survey). 50% of Spanish survey participants identified as Mexican or Mexican American and 36.7% identified as Other

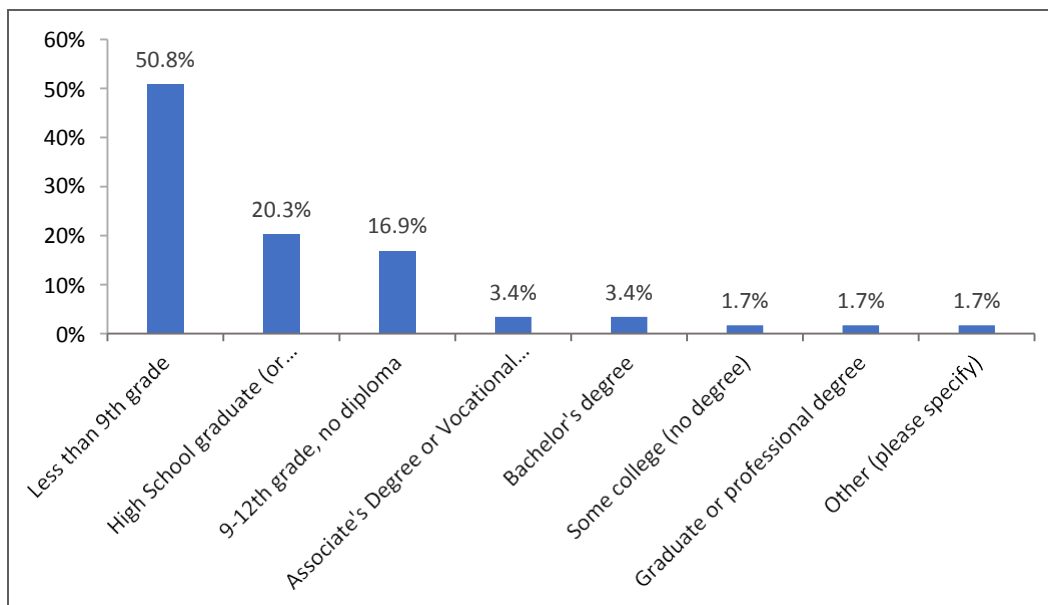
Hispanic/Latino. 91.7% of Spanish survey respondents do not primarily speak English at home compared to 2.4% of English survey respondents.

Many English survey respondents had earned either a Bachelor's (23.8%), Graduate/Professional Degree (22.7%) or Associate Degree or Vocational Training (26%) Figure 3. Just over half of Spanish survey respondents had less than a 9<sup>th</sup> grade education and 20.3% had completed High School (Figure 4).

**Figure 3. Education of Community Survey Respondents-English**



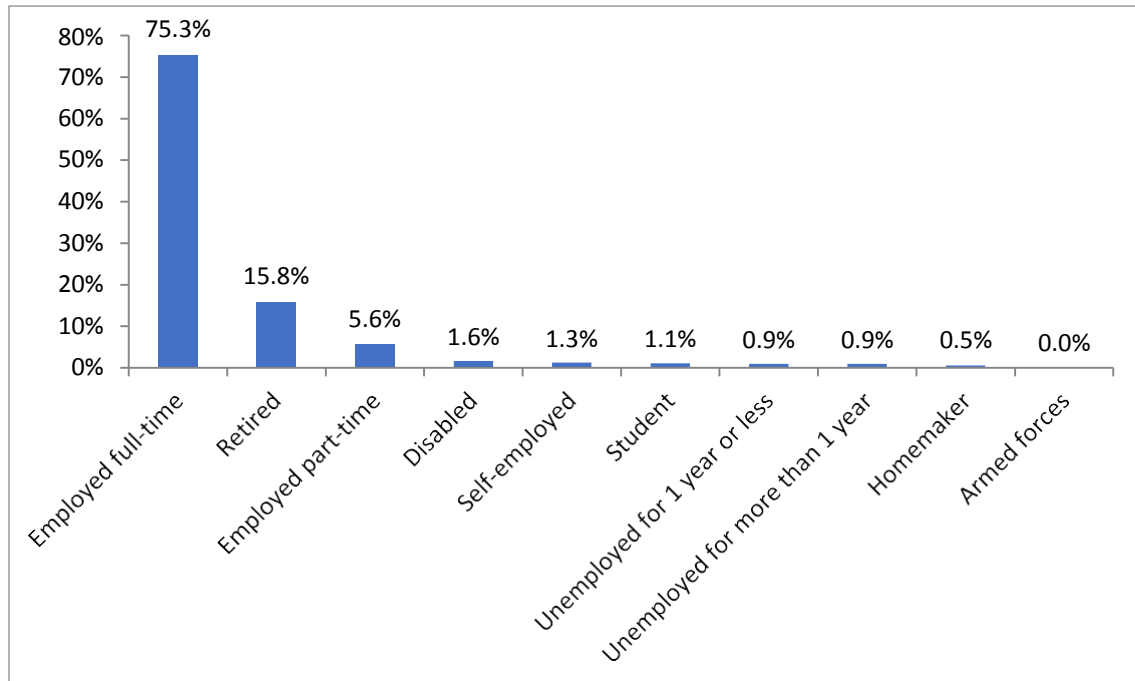
**Figure 4. Education of Community Survey Respondents-Spanish**



As shown in Figure 5 and 6, most survey respondents were employed full-time (75.3% English survey, 50% Spanish survey). 40% of Spanish survey respondents selected Homemaker as their employment

status. The highest share of English survey respondents (21.3%) had annual household incomes from \$50,000 to \$74,999 before taxes and the average household size was 2.8 individuals. The highest share of Spanish survey respondents (35%) had household annual incomes from \$15,000 to \$24,999 before taxes and the average household size was 4.3.

**Figure 5. Employment Status of Community Survey Respondents - English**



**Figure 6. Employment Status of Community Survey Respondents - Spanish**

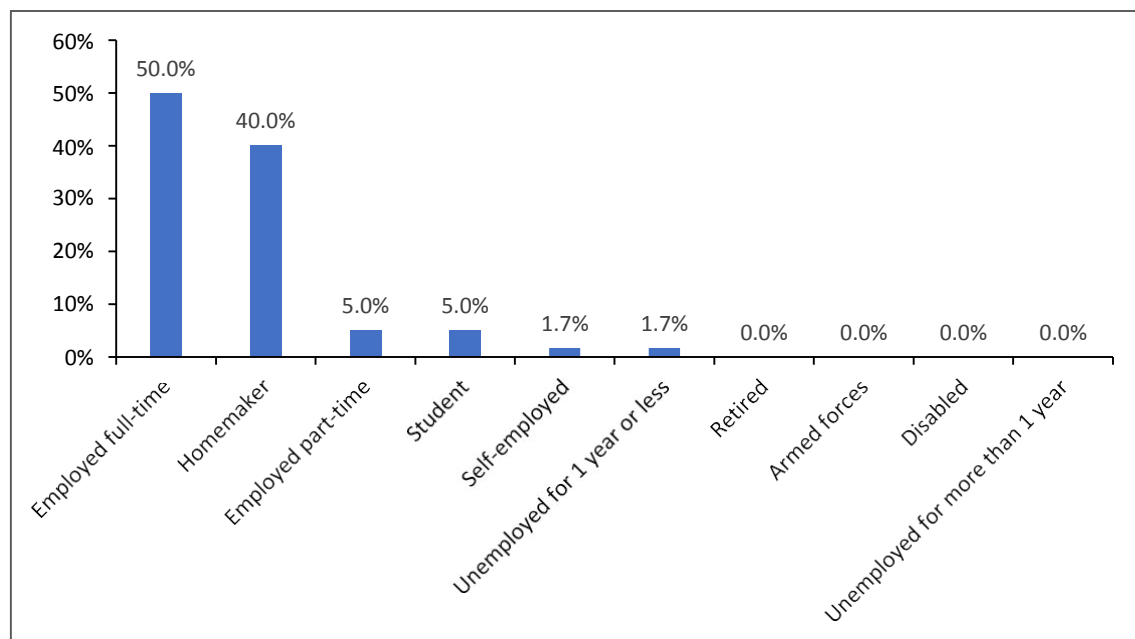
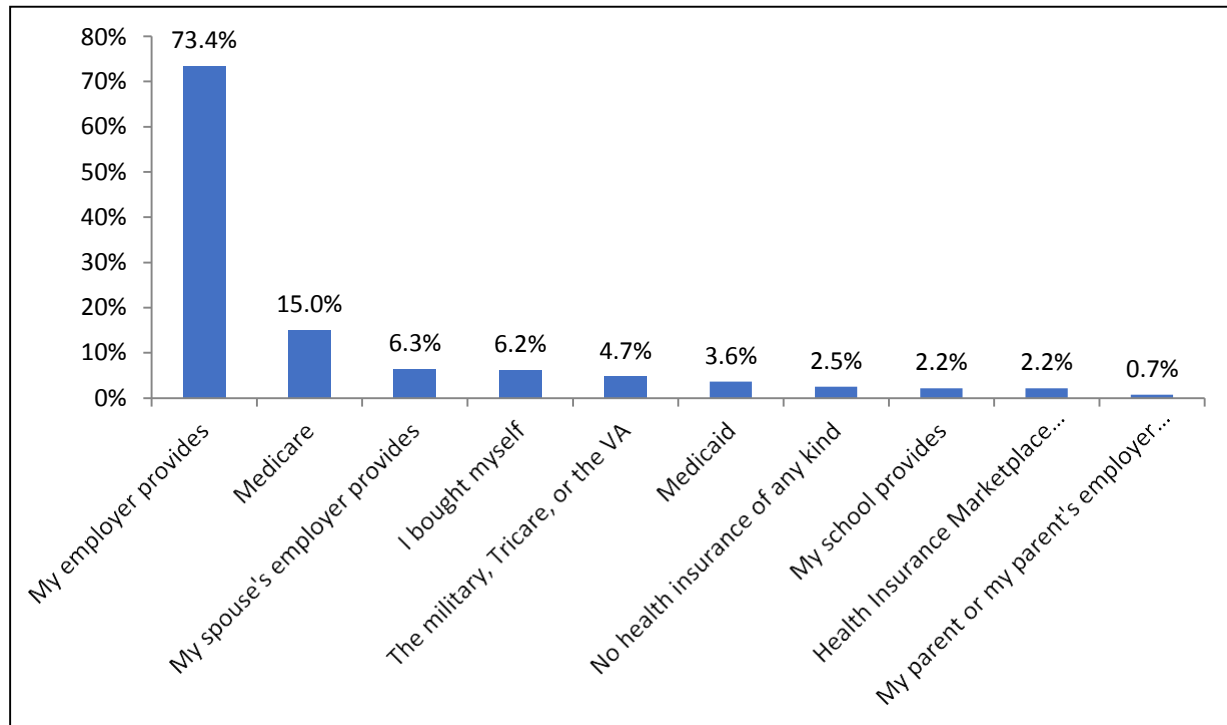
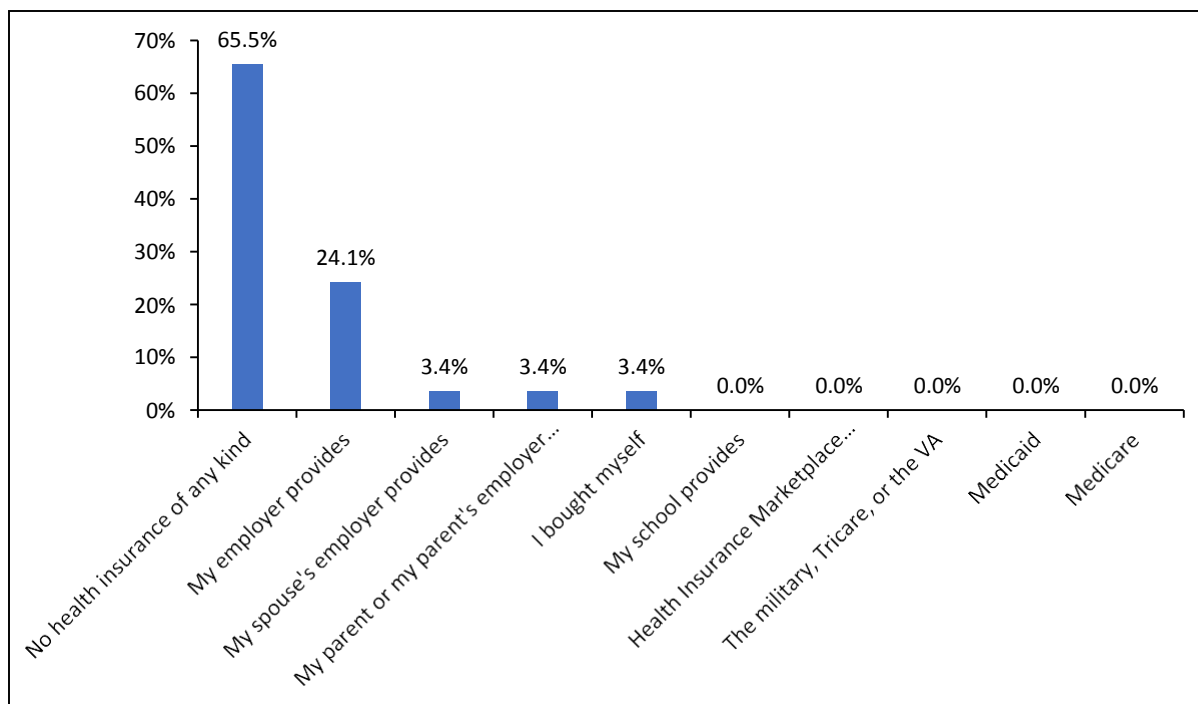


Figure 7 and Figure 8 shows the health insurance coverage of community survey respondents. Almost three quarters of English survey respondents have health insurance provided by their employer (73.4%) only 24.1% of Spanish survey respondents have health insurance provided by their employer. 65.5% of Spanish survey respondents have no insurance of any kind.

**Figure 7. Health Care Coverage of Community Survey Respondents - English**



**Figure 8. Health Care Coverage of Community Survey Respondents - Spanish**



The survey was a convenience sample survey, and thus the results are not representative of the community population as a whole. Key findings from select questions on the community survey are integrated into this report by theme or topic area, with an emphasis on the most significant needs as evidenced by both primary and secondary data. A summary of full survey results (all 57 questions) is available on [HealthENC.org](http://HealthENC.org). Full results can be downloaded by county or for the entire Health ENC Region.

### *Focus Group Discussions*

Another form of community input was collected through focus groups. Focus groups are carefully constructed dialogues that invite diverse groups of people to discuss important and pressing issues. Focus groups provide community members an opportunity to engage in productive learning and sharing sessions. Focus group discussions focused on community strengths, opportunities for improvement, existing resources, health needs, and possible solutions for improving the health of Duplin County. A list of questions asked at the focus groups is available in [Appendix C](#).

The purpose of the focus groups for Health ENC's 2019 CHNA/CHA was to engage with a broad cross-section of individuals from each county, such as migrant worker groups, healthcare workers, or county employees, to name a few.

Conduent HCI consultants developed a Focus Group Guide and led training webinars for Health ENC members. Topics included facilitation techniques, moderator and note taker roles, as well as tips and

expectations for documenting focus group discussions. The list of focus group questions was reviewed and a transcript was provided for documentation purposes.

Four focus group discussions were completed within Duplin County between July 11, 2018 – July 25, 2018 with a total of 51 individuals. Participants included various individuals from the general population and health care workers. Table 4 shows the date, location, population type, and number of participants for each focus group.

**Table 4. List of Focus Group Discussions**

<b>Date Conducted</b>	<b>Focus Group Location</b>	<b>Population Type</b>	<b>Number of Participants</b>
7/11/2018	Warsaw First Missionary Baptist Church	General Population	11
7/17/2018	New Christian Chapel Baptist Church	General Population	19
7/19/2018	Department of Aging	In-Home Aides	12
7/25/2018	Vidant Duplin Hospital	General Population	9

Focus group transcripts were coded and analyzed by common theme. The frequency with which a topic area was discussed in the context of needs and concerns or barriers and challenges to achieving health was used to assess the relative importance of the need in the community. Key themes that emerged from the focus group discussions are integrated into this report by topic area, with an emphasis on the most significant needs as evidenced by both primary and secondary data. A deeper analysis of focus group findings is available on [HealthENC.org](http://HealthENC.org).

Results of the focus group dialogues further support the results from other forms of primary data collected (the community survey) and reinforces the findings from the secondary data scoring. By synthesizing the discussions that took place at the focus groups alongside the responses from the community survey, the primary data collection process for Duplin County is rich with involvement by a representative cross section of the community.

## **Data Considerations**

Several limitations of the data should be considered when reviewing the findings presented in this report. Although the topics by which data are organized cover a wide range of health and health-related areas, within each topic there is a varying scope and depth of data availability. In some topics there is a robust set of secondary data indicators, but in others there may be a limited number of indicators for which data is collected, or limited subpopulations covered by the indicators.

Data scores represent the relative community health need according to the secondary data that is available for each topic and should not be considered to be a comprehensive result on their own. In addition, these scores reflect what was found in the secondary data for the population as a whole, and do not factor in the health or socioeconomic need that is much greater for some subpopulations. In addition, many of the secondary data indicators included in the findings are collected by survey, and though methods are used to best represent the population at large, these measures are subject to instability—especially among smaller populations. The infant mortality rate indicator was corrected

after the development of the content for this report. The values have been updated here and the impact was determined to be minimal to the analysis overall.

The disparities analysis, used to analyze the secondary data, is also limited by data availability. In some instances, data sources do not provide subpopulation data for some indicators, and for other indicators, values are only available for a select number of race/ethnic groups. Due to these limitations, it is not possible to draw conclusions about subpopulation disparities for all indicators.

The breadth of primary data findings is dependent on several factors. Focus group discussion findings were limited by which community members were invited to and able to attend focus group discussions, as well as language barriers during discussion for individuals whose native language is not English. Because the survey was a convenience sample survey, results are vulnerable to selection bias, making findings less generalizable for the population as whole.

## Prioritization

In order to better target community issues with regards to the most pressing needs and align with the available county resources, the CHNA team held two community sessions. The sessions were held in January 2019 to share CHNA data and then prioritize the significant health needs of the community. Members of the community, focus group participants, agencies that served vulnerable populations, health providers, faith leaders and others were sent an invitation in November 2018. The invitation to attend the community meeting was distributed in December 2018 to county agencies, the faith community, non-profits, focus group participants, public schools and agencies serving vulnerable and at-risk populations.

On January 8<sup>th</sup>, 2019 the first of two sessions were held at Vidant Duplin Hospital, there were 25 people present. Melissa Roupe, Senior Administrator for Community Health Improvement, Vidant Health was the facilitator of the sessions. The primary and secondary data analysis was presented and then the participants reviewed and discussed the findings. A preliminary list of 15 significant health needs/concerns based on secondary and primary data of the group was developed. From there the participants scored the items which were the most important to work on. A multi-voting method was used. Each participant was given three colored stickers. They were instructed to vote for their top three choices by placing their stickers on the corresponding posters posted around the room. They were instructed that they may use all three votes for one item or spread them out. After voting the topics with the fewest votes were eliminated, there were 10 health needs remaining.

The second session was held on January 15, 2019 with 25 people present, held at the same location and with the same facilitator as the initial meeting. The group then examined the 10 health priorities and discussed the similarities/ difference in the lists and how to combine the highest health priorities into three or four improvement plans. The group discussed the available and/or needed county resources to impact the goals, and the chance of success with current resources. The following Table 5 illustrates the community members who attended the community engagement sessions by service area.

**Table 5. List of Community Participants by Discipline**

Public Health	3
Hospital	10
County Government	1
Board of Health	3
Mental Health	1
Duplin County Schools	2
Community College	2
Faith Based	1
Department of Social Services	1
Agencies serving children	1
Medical Providers	3
Agency serving aged	1
Public member	1
Transportation agency	1
Agency serving youth	2

The group decided on four health priorities for 2019-2022:

1. **Chronic Disease Prevention & Management:** Focus on Healthy Lifestyles and Weight Management; Nutrition Education; Dental Care with a specific focus on children and adolescents (Youth).
2. **Access to Care:** Physical & Mental Health Care Services; Focus on After Hours Care; Primary Care & Specialty Care Available; Dental Care; Pediatric & Adolescent Care; and Transportation Issues which impact access.
3. **Disaster Recovery & Mitigation:** Focus on recovery from previous hurricanes, as well as mitigating actions to prevent / minimize future damage from natural disasters. Focus on mental health issues, especially among youth.
4. **Substance Use:** Youth & Adult; including focus on youth and the use of alcohol, tobacco and other drugs; adult incarcerations related to substance use and treatment options instead of incarceration for the population.

# Overview of Duplin County

## About Duplin County

Duplin County is a rural agrarian economy and depends on livestock, poultry and associated manufacturing industries for jobs and economic growth. Today, Duplin's agriculture industries range from the family farm to corporate headquarters of agriculture related businesses. The impact of Hurricane Florence in September 2018 has impacted the county in ways not fully realized at this time of the data collection and community input session. Many people were displaced during and after the storm and are unable to return as their homes and many do not have the financial resources to recover. Local agricultural industry was impact by the loss of crops and workers.

## Demographic Profile

The demographics of a community significantly impact its health profile. Population growth has an influence on the county's current and future needs. Specific population subgroups, including veterans and different age, gender, race and ethnic groups, may have unique needs and require varied approaches to health improvement efforts. The following section explores the demographic profile of Duplin County, North Carolina.

### Population

According to the U.S. Census Bureau's 2016 population estimates, Duplin County has a population of 58,969 (Figure 9). The population of Duplin County has decreased from 2013 to 2016.

**Figure 9. Total Population (U.S. Census Bureau)**

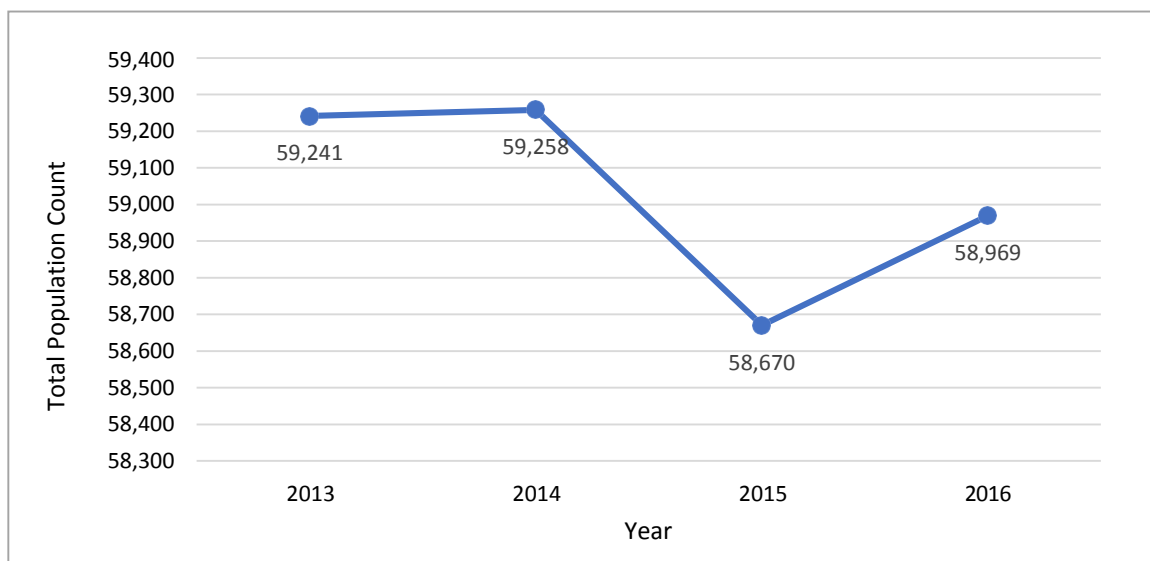
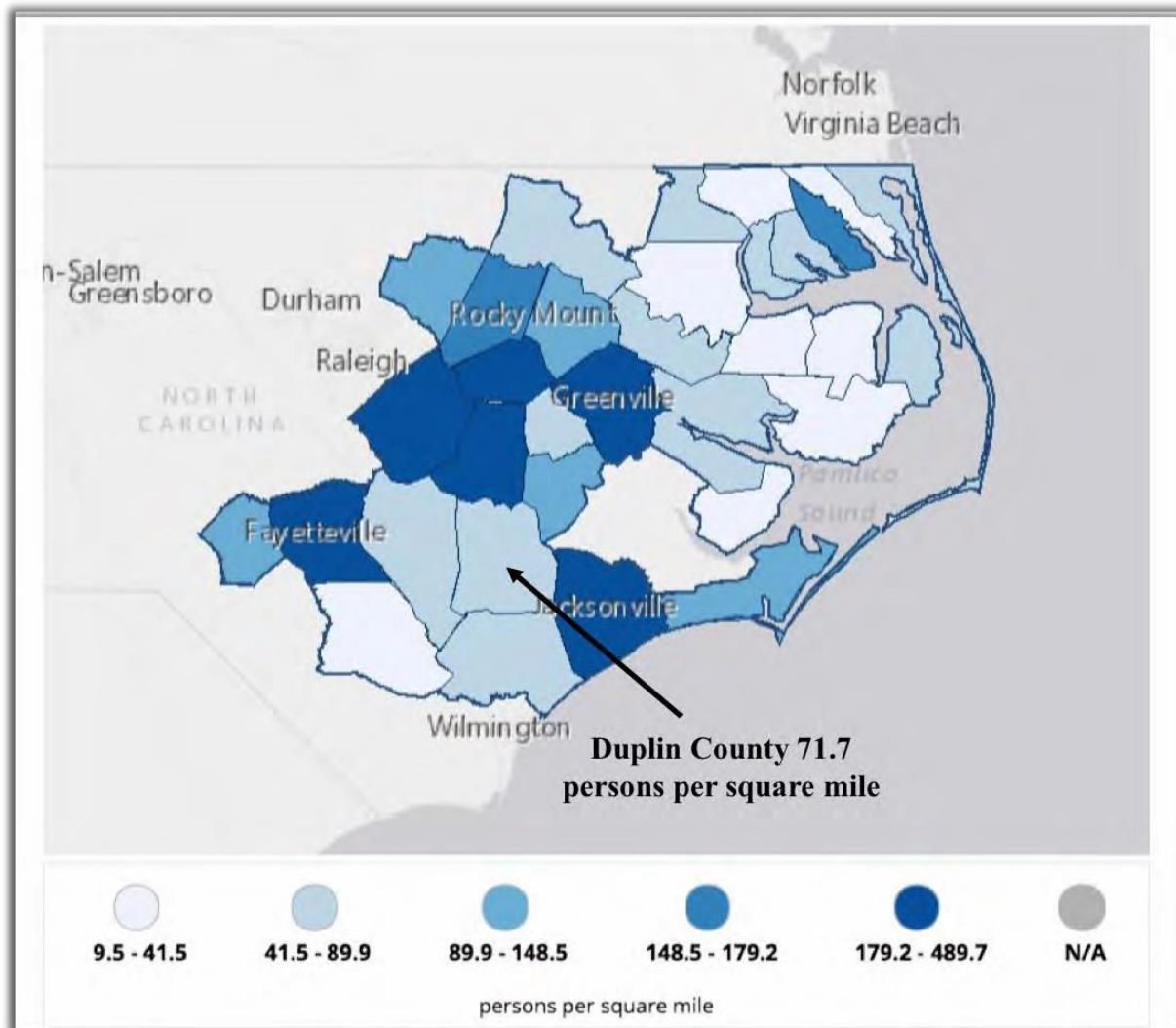


Figure 10 shows the population density of Duplin County compared to other counties in the Health ENC region. Duplin County has a population density of 71.7 persons per square mile.

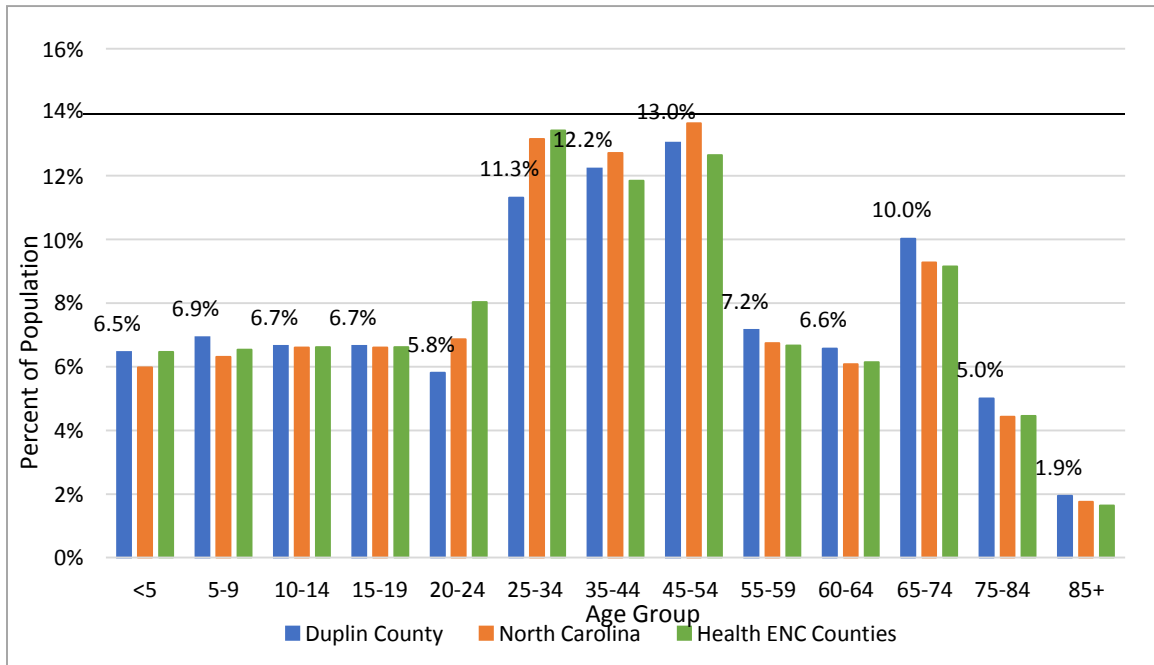
**Figure 10. Population Density of Health ENC Counties (U.S. Census Bureau, 2010)**



### Age and Gender

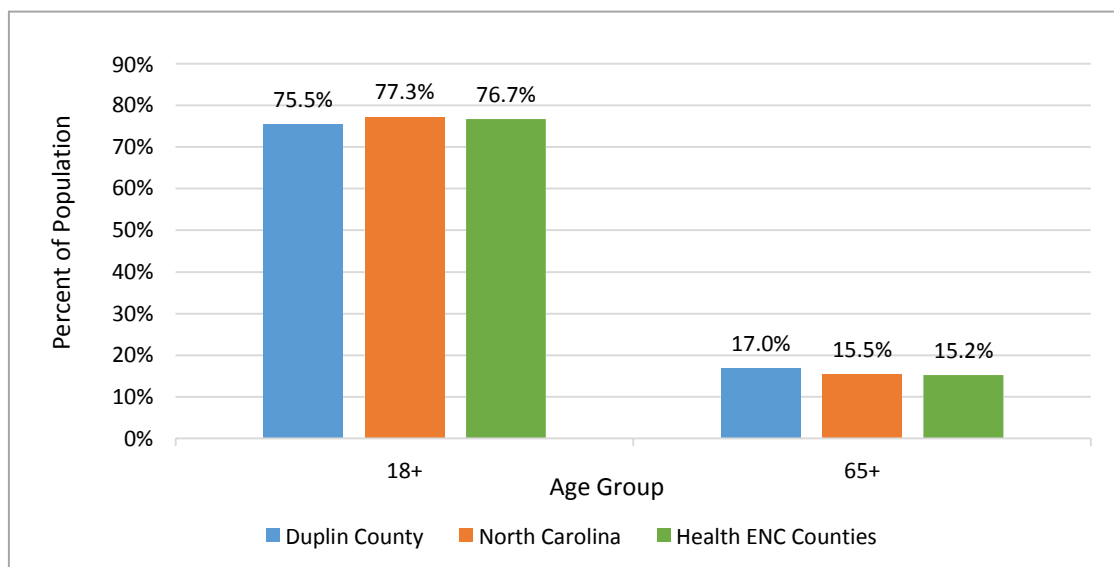
Overall, the age distribution of Duplin County residents is similar to that of North Carolina and the Health ENC region. Figure 11 shows the Duplin County population by age group. Approximately 26% of the population is 0-19 years of age, 26% is 45-64 years of age and 17% are 65 years and older.

**Figure 11. Population by Age (U.S. Census Bureau, 2016)**



People over the age of 18 comprise 75.5% of the Duplin County population, compared to 77.3% in North Carolina and 76.7% in the Health ENC counties. Age 65 and older comprise 17.0% of the Duplin County population, 15.5% in North Carolina and 15.2% in the Health ENC counties (Figure 12).

**Figure 12. Population 18+ and 65+ (U.S. Census Bureau, 2016)**



Males comprise 49.0% of the population, whereas females comprise 51.0% of the population (Table 5). The median age for males is 38.3 years, whereas the median age for females is 41.7 years. Both are slightly higher than the North Carolina median age (37.2 years for males and 40.1 years for females).

**Table 6. Population by Gender and Age (U.S. Census Bureau, 2016)**

	Percent of Total Population		Percent of Male Population		Percent of Female Population		Median Age (Years)	
	Male	Female	18+	65+	18+	65+	Male	Female
<b>Duplin County</b>	49.0%	51.0%	74.2%	15.4%	76.8%	18.5%	38.3	41.7
<b>North Carolina</b>	48.6%	51.4%	76.3%	13.9%	78.4%	17.0%	37.2	40.1
<b>Health ENC Counties</b>	49.2%	50.8%	75.8%	13.5%	77.5%	16.9%	N/A	N/A

### Life Expectancy at Birth

Life expectancy is the average number of additional years that someone at any given age would be expected to live if current mortality conditions remained constant throughout their lifetime (Table 6). Duplin has a higher life expectancy, median age 78.1 years, as compared to state (74.6) and region (74.9). The gap in White and African American's life expectancy is large and continues to widen as compared to last assessment. Women have a longer life expectancy (81.2) as compared to males (74.9) and this ratio has been constant in the previous assessments cycles.

**Table 7. Life Expectancy at Birth by Race and Sex 2014-2016 (NCSCHS 2016)**

	Percent of Total Population by Sex		Percent of White	Percent of African American	Median Age (Years)
	Male	Female	All	All	All
<b>Duplin County</b>	74.9	81.2	79.5	76.3	78.1
<b>North Carolina</b>	74.8	79.9	78.3	74.9	74.9
<b>Health ENC Counties</b>	72.1	77.1	75.5	73.4	74.6

### Birth Rate

Birth rates are important measures of population health. The birth rate is usually the dominant factor in determining the rate of population growth; however, population growth is also driven by the age structure of the population (e.g., deaths), immigration and emigration. The birth rate in Duplin County (12.0 live births per 1,000 populations in 2016) is the same as the birth rate in North Carolina (12.0) and slightly lower than the birth rate in Health ENC counties (13.1). Birth rates have decreased slightly over the past three measurement periods in all three jurisdictions.

### Race/Ethnicity

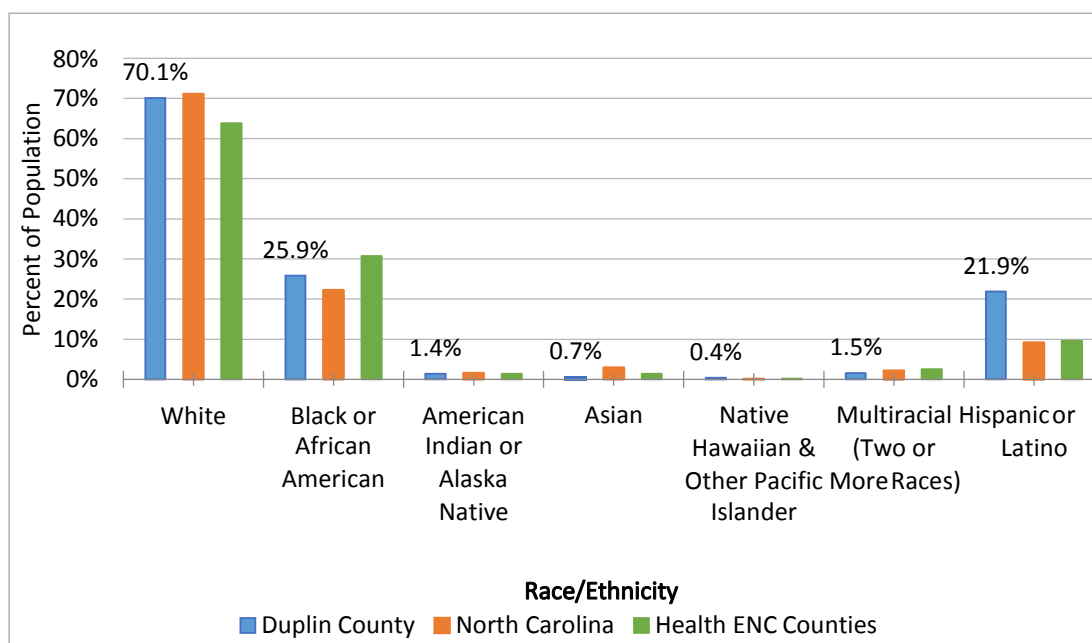
The race and ethnicity composition of a population is important in planning for future community needs, particularly for schools, businesses, community centers, health care and child care. Race and ethnicity

data are also useful for identifying and understanding disparities in housing, employment, income and poverty.

Figure 13 shows the racial and ethnic distribution of Duplin County compared to North Carolina and Health ENC counties. The first six categories (White, Black or African American, American Indian or Alaska Native, Asian, Native Hawaiian & Other Pacific Islander and Multiracial) are racial groups and may include persons that identify as Hispanic or Latino. The seventh category (Hispanic or Latino) is an ethnic group and may include individuals that identify as any race.

The White population accounts for 70.1% of the total population in Duplin County, with the Black or African American population accounting for 25.9% of the total population. The proportion of residents that identify as White in Duplin County (70.1%) is similar to North Carolina (71.0%) and higher than Health ENC counties (63.8%). Duplin County has a larger share of residents that identify as Hispanic or Latino (21.9%) compared to North Carolina (9.2%) and Health ENC counties (9.6%). This data is relatively unchanged as compared to the previous CHNA.

**Figure 13. Population by Race/Ethnicity (U.S. Census Bureau, 2016)**



#### Military Population

The percent of the population 16 years of age and older in the military (armed forces). In 2012-2016, Duplin County has a smaller share of residents in the military (0.2%) compared to North Carolina (1.0%) and counties in the Health ENC region (4.0%).

#### Veteran Population

The veteran population is given as a percent of the civilian population aged 18 years and older and this data is used for policy analyses, to develop programs, and to create budgets for veteran programs and facilities. Duplin County has a veteran population of 8.1% in 2012-2016, compared to 9.0% for North Carolina and 12.4% for Health ENC counties.

## Socioeconomic Profile

Social determinates of health (SDOH) are the complex circumstances in which individuals are born and live that impact their health. They include intangible factors such as political, socioeconomic, and cultural constructs, as well as place-based conditions including accessible healthcare and education systems, safe environmental conditions, well-designed neighborhoods, and availability of healthful food. Social determinates of health are well known to be strong determinants of health outcomes – those with a low socioeconomic status are more likely to suffer from chronic conditions such as diabetes, obesity and cancer. Community health improvement efforts must determine which subpopulations are most in need in order to effectively focus services and interventions.

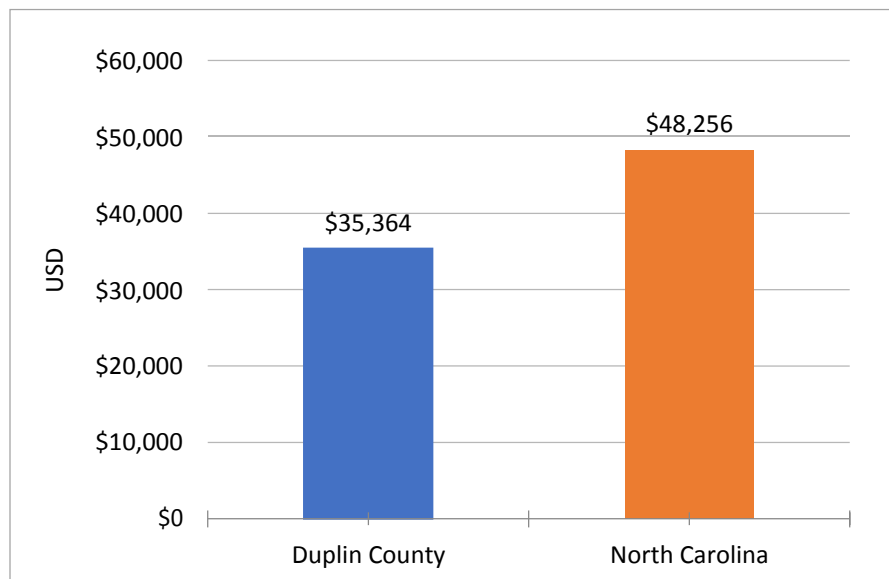
### NC Department of Commerce Tier Designation

The North Carolina Department of Commerce annually ranks the state's 100 counties based on economic well-being and assigns each a Tier designation. The 40 most distressed counties are designated as Tier 1, the next 40 as Tier 2 and the 20 least distressed as Tier 3. Duplin County has been downgraded to a Tier 1 designation in 2018. This is a change from the 2016 CHNA when Duplin was a Tier 2.

### Income

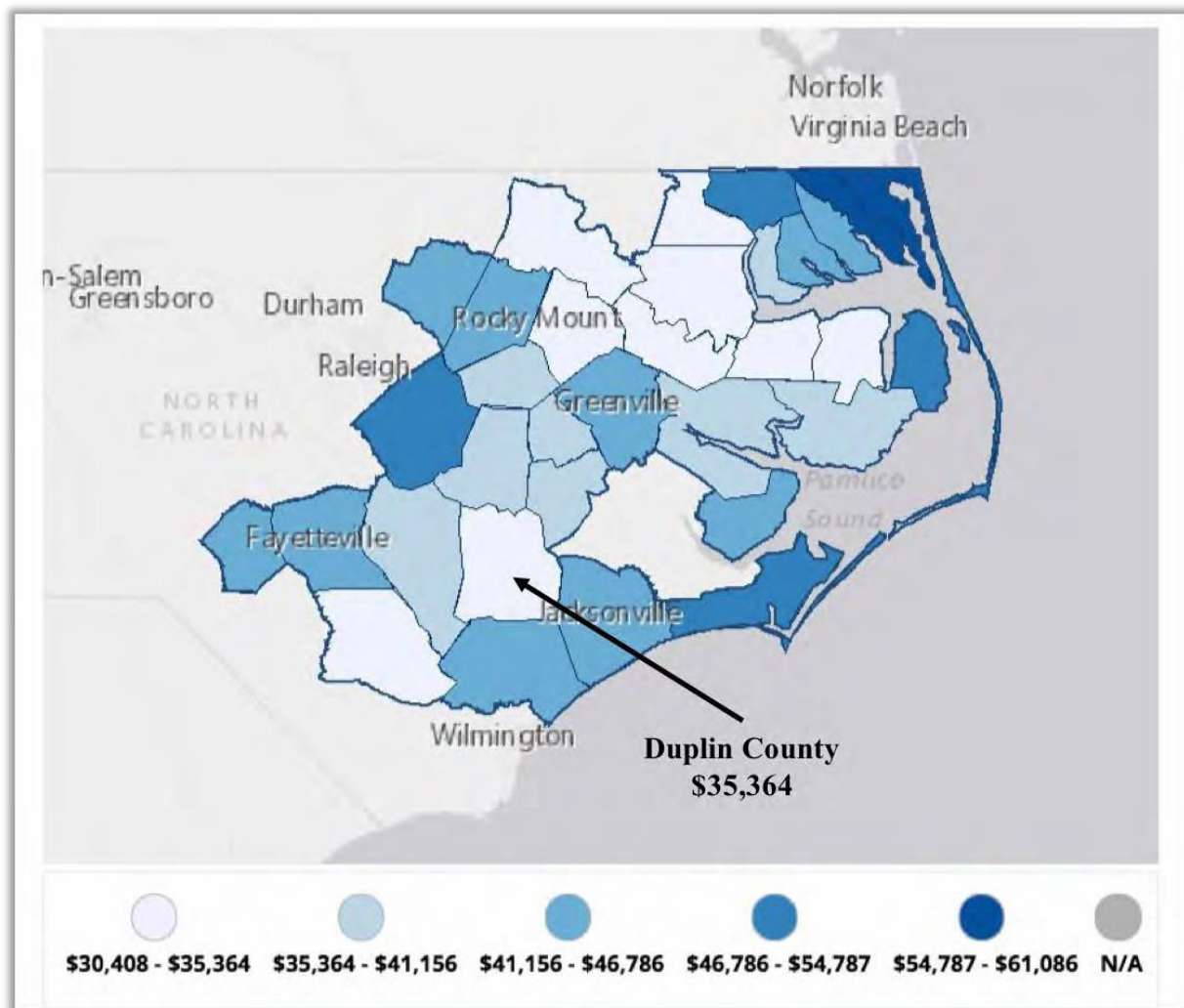
Median household income reflects the relative affluence and prosperity of an area. Areas with higher median household incomes are likely to have a greater share of educated residents and lower unemployment rates. Figure 14 shows the median household income in Duplin County (\$35,364), which is lower than the median household income in North Carolina (\$48,256). There has been no statistical informant since the last CHNA.

**Figure 14. Median Household Income (American Community Survey, 2012-2016)**



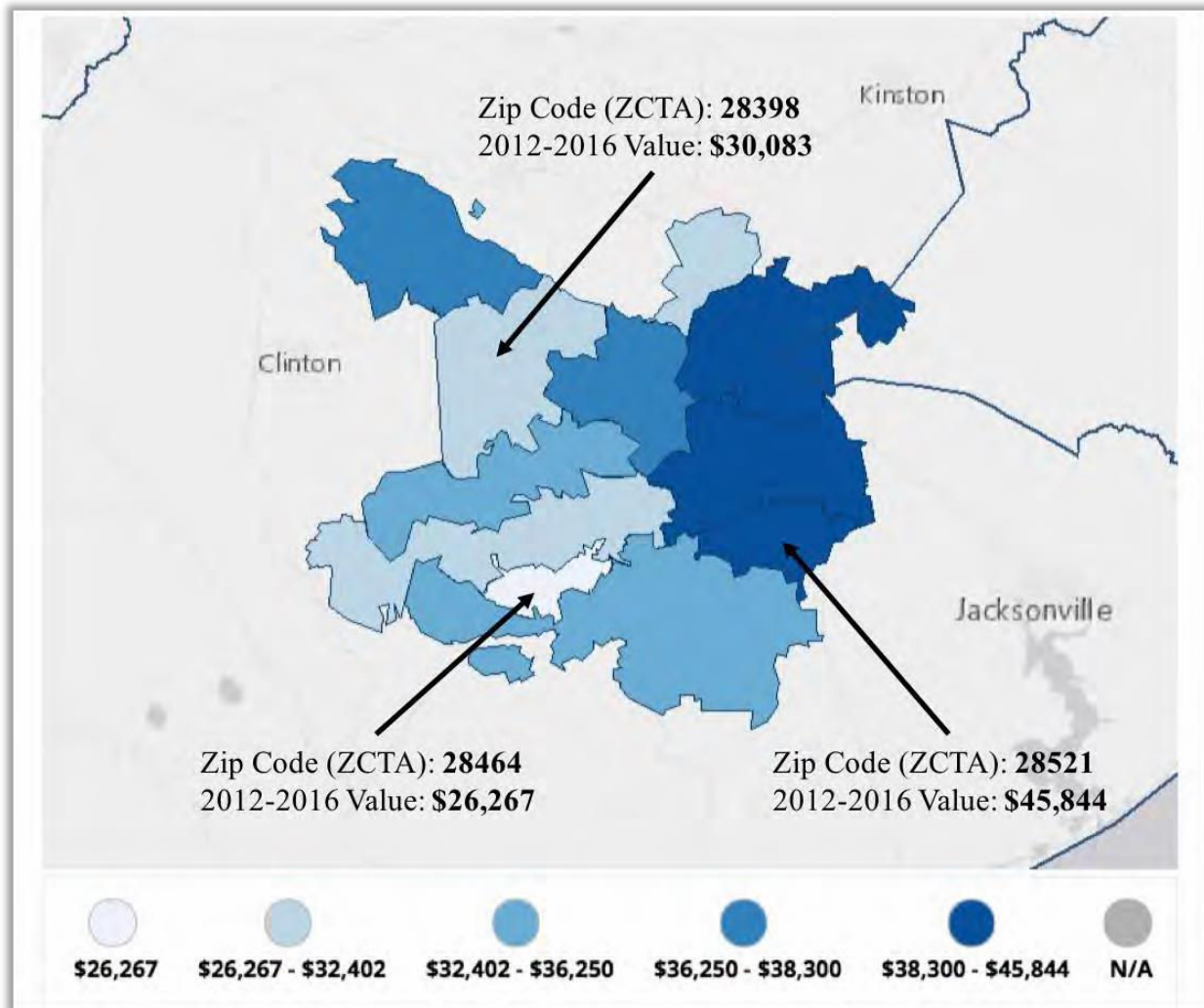
Compared to counties in the Health ENC region, Duplin County has a relatively low median household income. In the region, eight counties have a lower median household income than Duplin County; the remaining 24 counties in the Health ENC region have a higher median household income (Figure 15).

**Figure 15. Median Household Income of Health ENC Counties (American Community Survey, 2012-2016)**



Within Duplin County, zip code 28464 has the lowest median household income (\$26,267), followed by zip code 28398 (\$30,083), while zip code 28521 has the highest median household income (\$45,844) (Figure 16). Several of the zip codes in Duplin county are also represented within the neighboring counties.

**Figure 16. Median Household Income by Zip Code (American Community Survey, 2012-2016)**

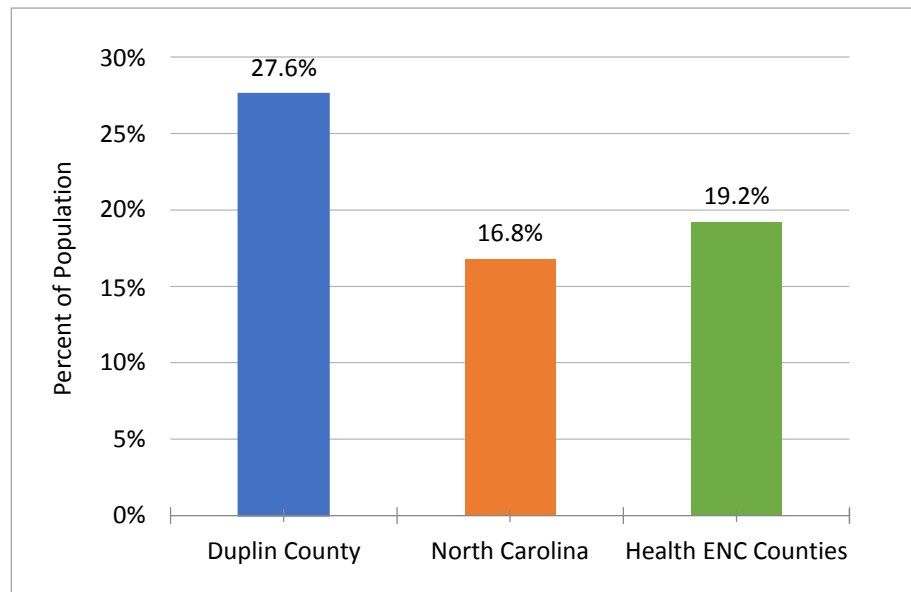


### Poverty

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. Children in poverty are more likely to have physical health problems, behavioral problems and emotional problems. Seniors who live in poverty are an especially vulnerable group due to increased physical limitations, medical needs, and social isolation. Persons with a disability are more likely to live in poverty compared to the rest of the population. 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.

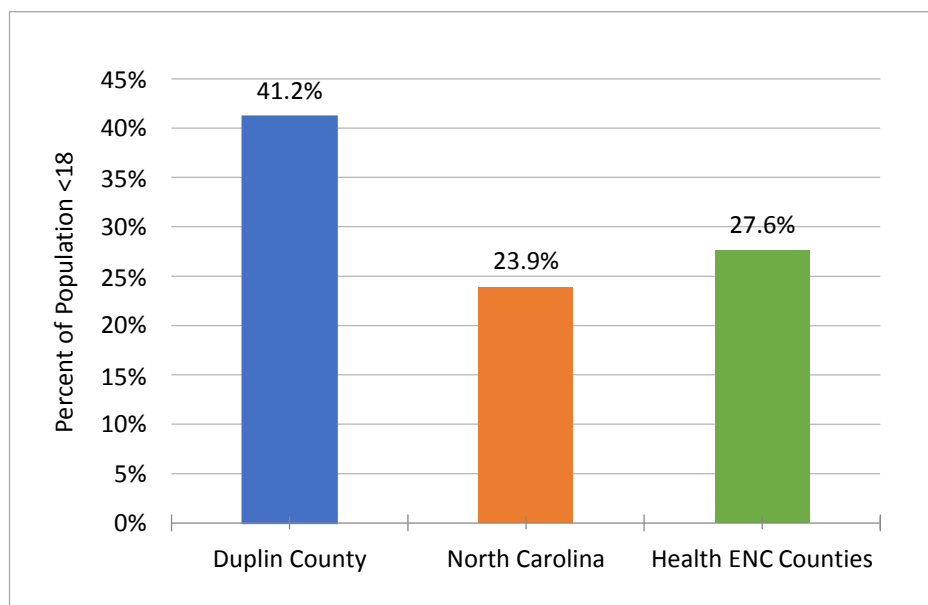
As seen in Figure 17, 27.6% percent of the population in Duplin County lives below the poverty level, which is higher than the rate for North Carolina (16.8% of the population) and the Health ENC region (19.2%). The poverty rate has increased as compared to the 2016 Community Assessment report.

**Figure 17. People Living Below Poverty Level (American Community Survey, 2012-2016)**

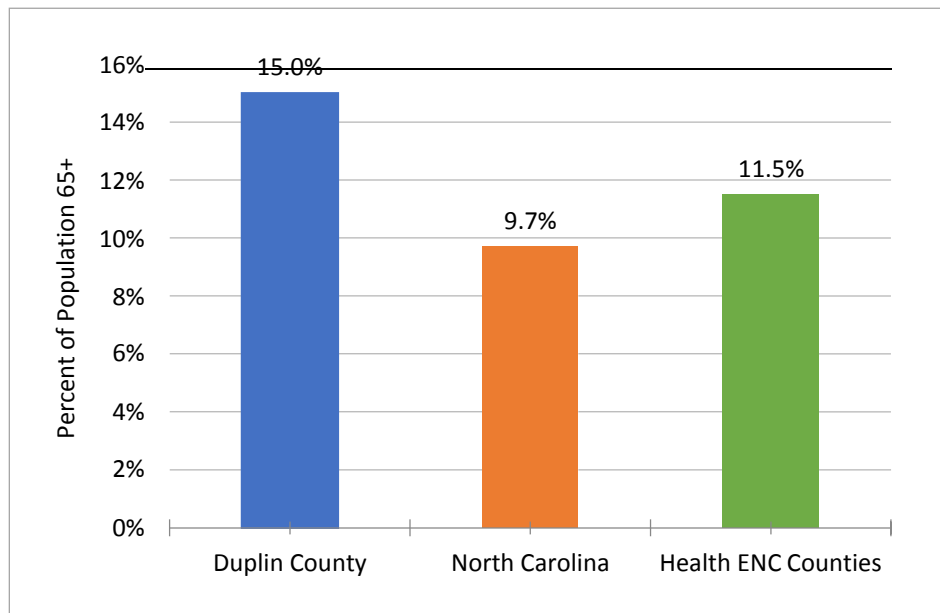


The rate of both children and older adults living below the poverty level is also higher for Duplin County when compared to North Carolina and Health ENC counties (Figure 18 and 19). There is an upward trend in the poverty rates for both adults and children as compared to the last CHNA.

**Figure 18. Children Living Below Poverty Level (American Community Survey, 2012-2016)**

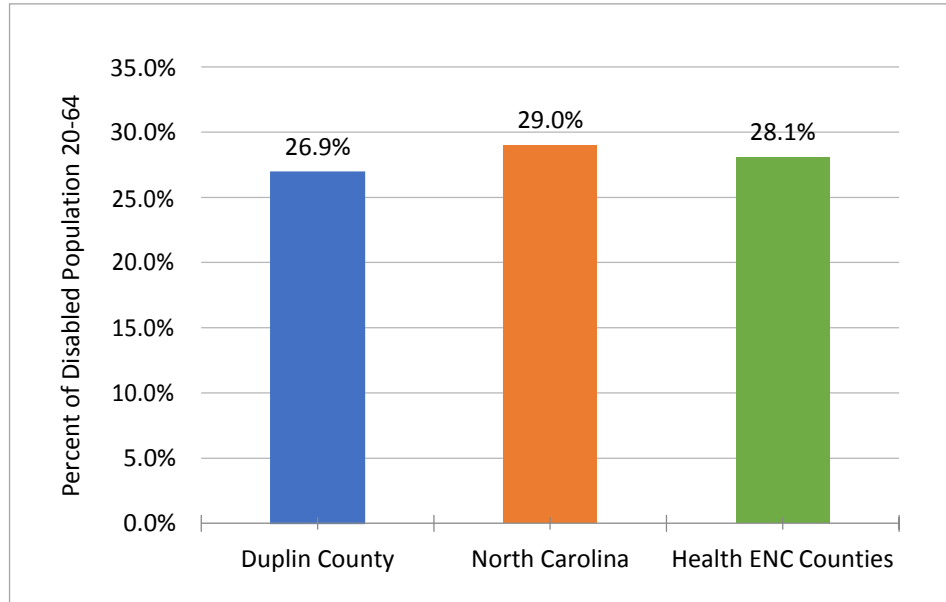


**Figure 19. People 65+ Living Below Poverty Level (American Community Survey, 2012-2016)**



As shown in Figure 20, the percent of disabled people living in poverty in Duplin County (26.9%) is lower than the rate for North Carolina (29.0%) and Health ENC counties (28.1%).

**Figure 20. Persons with Disability Living in Poverty (American Community Survey, 2012-2016)**

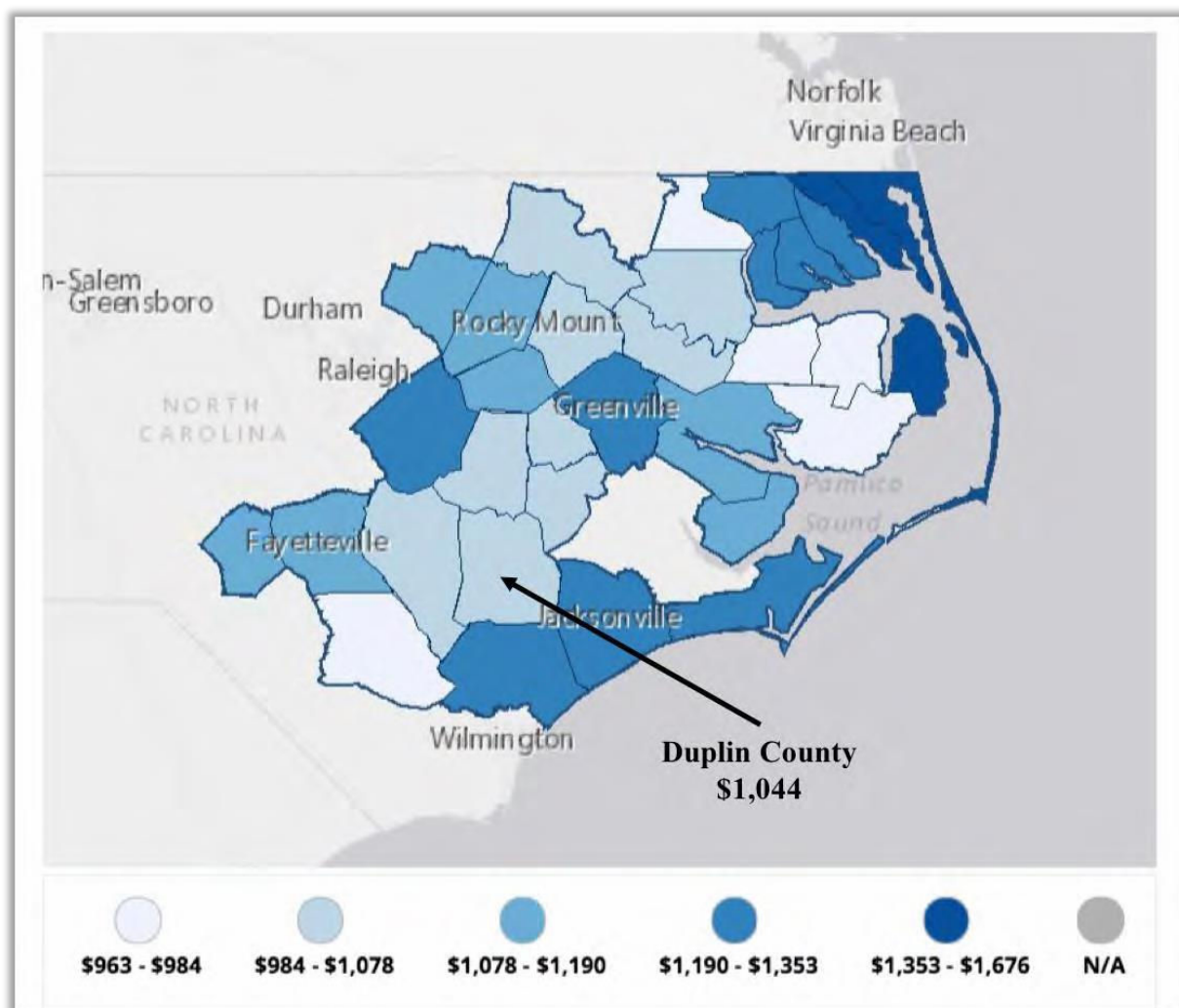


### Housing

The average household size in Duplin County is 2.7 people per household, which is slightly higher than the North Carolina value of 2.5 people per household.

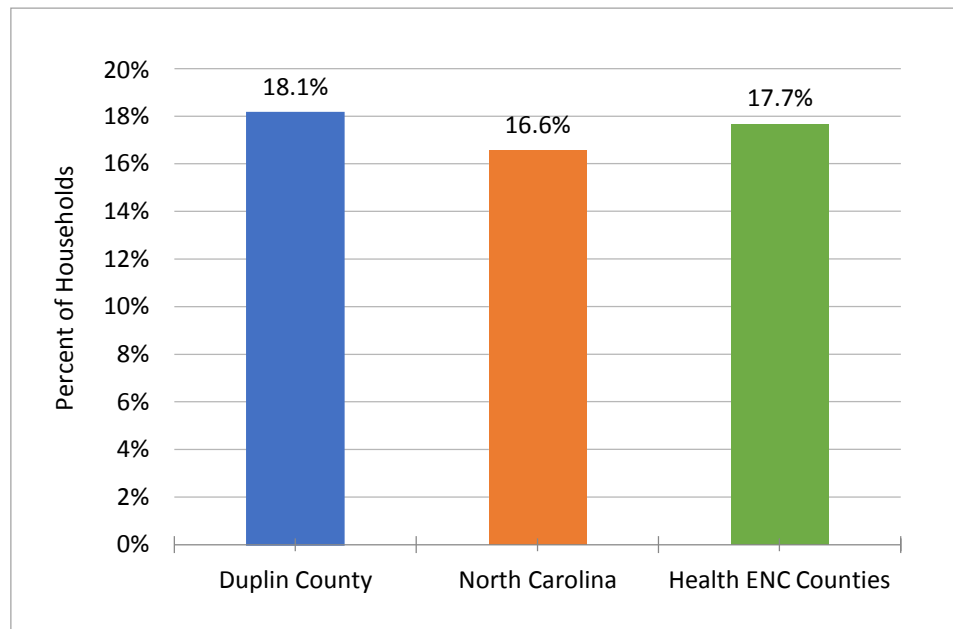
High costs of homeownership with a mortgage can strain both homeowners and the local housing market. Figure 21 shows mortgaged owner's median monthly household costs in the Health ENC region. In Duplin County, the median housing costs for homeowners with a mortgage is \$1,044. This is lower than the North Carolina value of \$1,243, and lower than 22 other counties in the Health ENC region. Though this looks positive but in reality 27.6 % of the population lives below the federal poverty level so housing costs will be more than 30% of the monthly income.

**Figure 21. Mortgaged Owners Median Monthly Household Costs, Health ENC Counties (American Community Survey 2012-2016)**



Safe and affordable housing is an essential component of healthy communities, and the effects of housing problems are widespread. Figure 22 shows the percent of households with at least one of the following problems: overcrowding, high housing costs, lack of kitchen, or lack of plumbing facilities. Slightly more than 18% of households in Duplin County have severe housing problems, compared to 16.6% in North Carolina and 17.7% in Health ENC counties. The effects of Hurricane Florence in September of 2018 on the county have increased the magnitude of the housing problem and is not reflected in the current data.

**Figure 22. Severe Housing Problems (County Health Rankings, 2010-2014)**

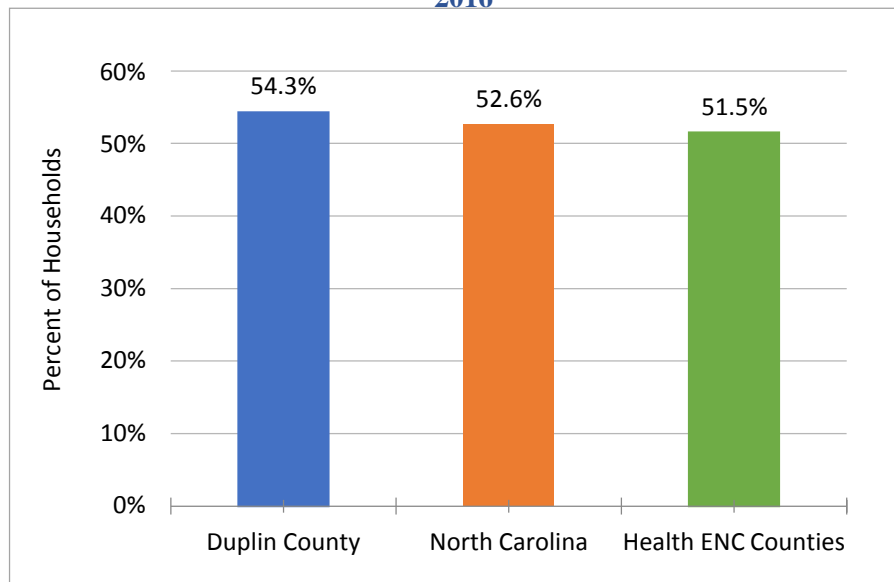


### Food Insecurity

The Supplemental Nutrition Assistance Program (SNAP) is a federal assistance program that provides low-income families with electronic benefit transfers (EBTs) that can be used to purchase food. The goal of the program is to increase food security and reduce hunger by increasing access to nutritious food.

Figure 23 shows the percent of households with children that participate in SNAP. The rate for Duplin County, 54.3%, is higher than the state value of 52.6% and the Health ENC region value of 51.5%.

**Figure 23. Households with Children Receiving SNAP (American Community Survey, 2012-2016**



### Employment

The following Table 7, lists the top employers of the County.

**Table 8. Top 25 Industries and Employment Range 2018 (2<sup>nd</sup> Quarter)**

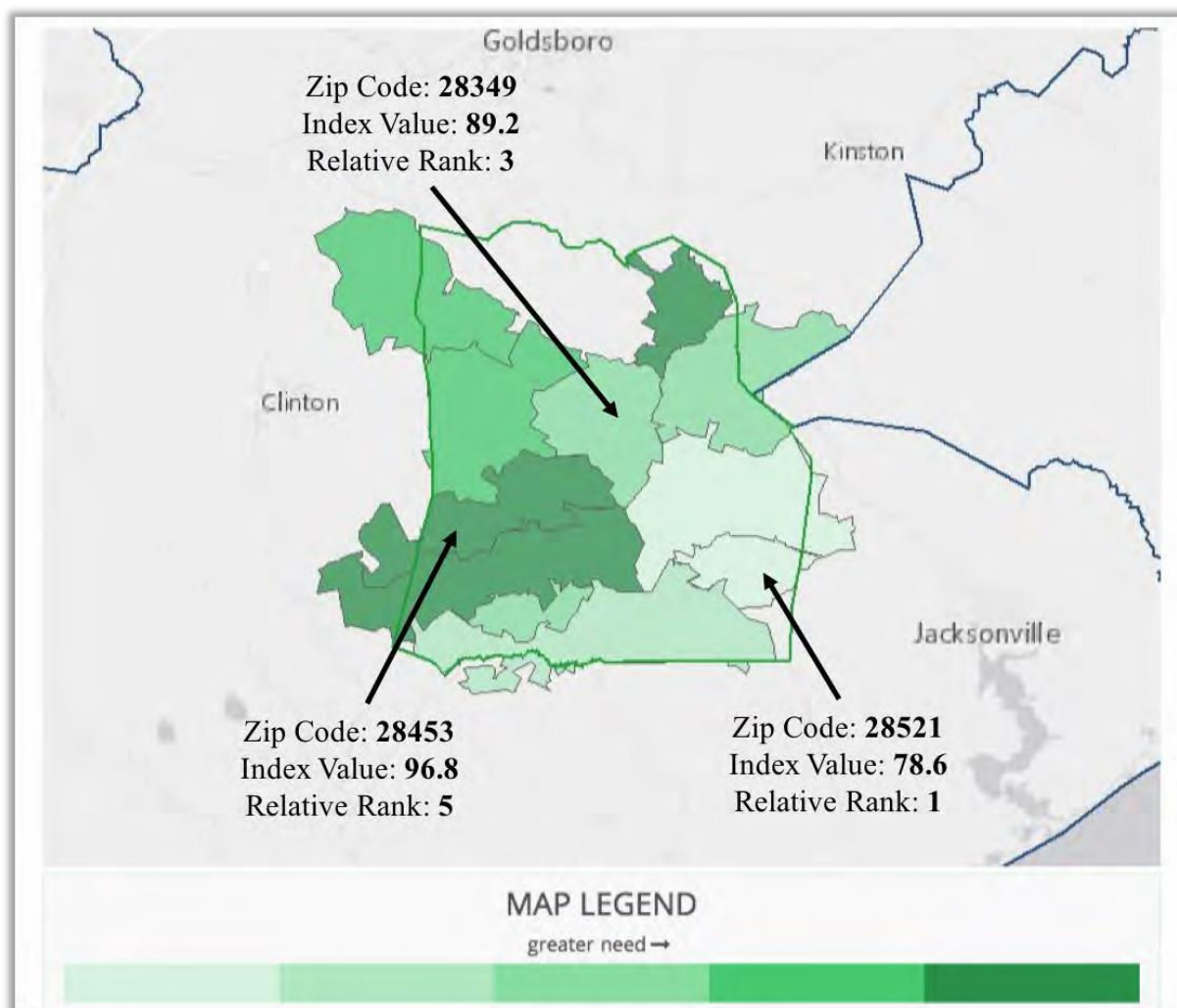
Company Name	Industry	County	Employment Range
Butterball Llc	Manufacturing	Duplin	1000+
Smithfield Foods Inc	Manufacturing	Duplin	1000+
Duplin County Schools	Education & Health Services	Duplin	1000+
House Of Raeford	Manufacturing	Duplin	500-999
Murphy Family Ventures Llc	Natural Resources & Mining	Duplin	500-999
County Of Duplin	Public Administration	Duplin	500-999
Bay Valley Foods Llc	Manufacturing	Duplin	500-999
Lear Corporation	Manufacturing	Duplin	500-999
Vidant Medical Center	Education & Health Services	Duplin	250-499
Burch Equipment Llc	Natural Resources & Mining	Duplin	250-499
Southern Produce Distributors Inc	Natural Resources & Mining	Duplin	250-499
Johnson Breeders Inc	Natural Resources & Mining	Duplin	100-249
Villari Bros Foods Llc	Manufacturing	Duplin	100-249
James Sprunt Technical College	Education & Health Services	Duplin	100-249
Precision Hydraulic Cylinders Inc	Manufacturing	Duplin	100-249
Wal-Mart Associates Inc.	Trade, Transportation, & Utilities	Duplin	100-249
The Pork Company	Manufacturing	Duplin	100-249
Mcdonalds	Leisure & Hospitality	Duplin	100-249
Valley Proteins Inc	Manufacturing	Duplin	100-249
Goshen Medical Center	Education & Health Services	Duplin	100-249
Bojangles Famous Chicken & Biscuits	Leisure & Hospitality	Duplin	100-249
Cottle Strawberry Nursery Inc	Natural Resources & Mining	Duplin	100-249
Food Lion	Trade, Transportation, & Utilities	Duplin	100-249
Anthros Inc	Professional & Business Services	Duplin	50-99
Enviva Management Company Llc	Trade, Transportation, & Utilities	Duplin	50-99

### SocioNeeds Index

Conduent Healthy Communities Institute developed the SocioNeeds Index® to easily compare multiple socioeconomic factors across geographies. This index incorporates estimates for six different social and economic determinants of health – income, poverty, unemployment, occupation, educational attainment, and linguistic barriers – that are associated with poor health outcomes including preventable hospitalizations and premature death.

Zip codes within Duplin County are assigned an index value from 0 (low need) to 100 (high need), based on how those zip codes compare to others in the U.S. Within Duplin County, the zip codes are then ranked from 1 (low need) to 5 (high need) to identify the relative level of need. Zip codes with populations under 300 persons are excluded. Zip code 28453, with an index value of 96.8, has the highest level of socioeconomic need within Duplin County. This is illustrated in Figure. Index values and the relative ranking of each zip code within Duplin County are provided in Table 8.

**Figure 24. SocioNeeds Index® (Conduent Healthy Communities Institute, 2018)**



**Table 9. SocioNeeds Index® (Conduent Healthy Communities Institute, 2018)**

<b>Zip Code</b>	<b>Index Value</b>	<b>Relative Rank</b>
28453	96.8	5
28508	96.7	5
28458	96.1	5
28398	94.6	4
28341	92.8	4
28464	91.6	3
28572	90.2	3
28349	89.2	3
28466	86.4	2
28518	80.4	1
28521	78.6	1

Source: <http://www.healthenc.org/socioneeds>

Understanding where there are communities with high socioeconomic need is critical to forming prevention and outreach activities.

## **Educational Profile**

Graduating from high school is an important personal achievement and is essential for an individual's social and economic advancement. Graduation rates can also be an important indicator of the performance of an educational system. Having a bachelor's degree opens up career opportunities in a variety of fields and is often a prerequisite for higher-paying jobs.

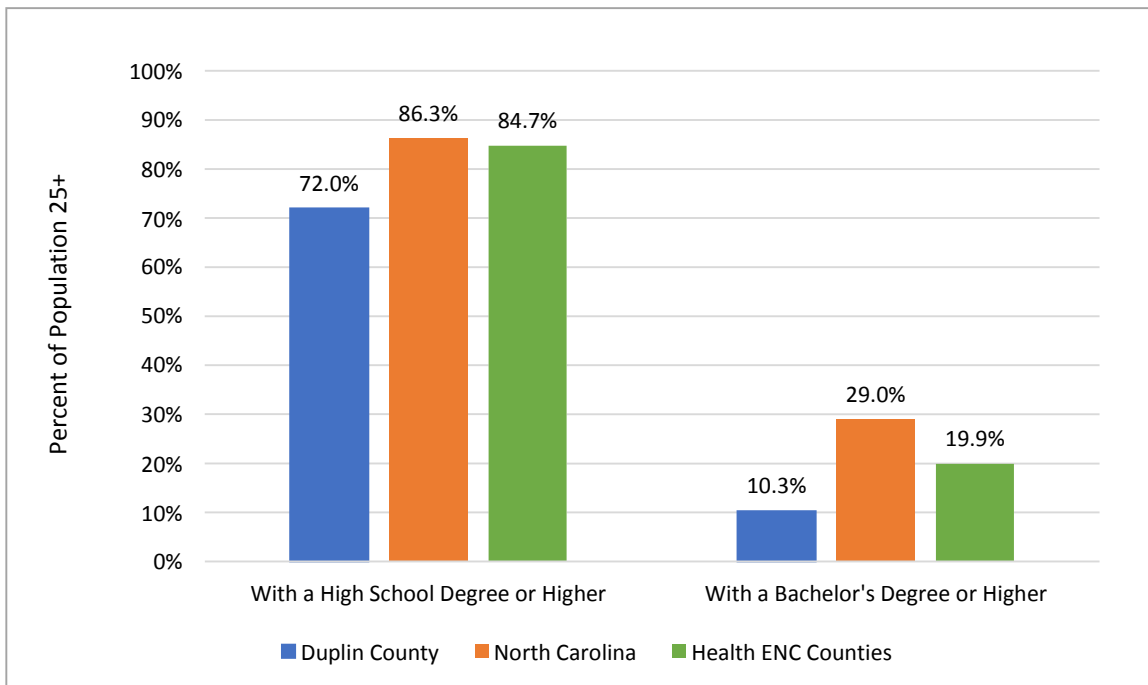
### *Educational Attainment*

Duplin County Schools consists of thirteen public schools that include seven K-8 schools, one K-6 school, four high traditional high schools and an early college high school. The 17-18 student enrollment is 9609, which is less than the previous CHNA data. There is one community college, James Sprunt Community College offering 30 + programs leading to an associate's degree, diploma and certifications. They offer courses traditional liberal arts programs and have several programs tailored to the industries in the county such as diesel and heavy equipment technology, swine management and viticulture.

When comparing Duplin County to the NC average, the 2016-2017 high school graduation rate was lower in Duplin County Schools (81.3%) as compared to the state (85.3%). This is a decrease from the 2016 CHNA data.

Countywide, the percent of residents 25 or older with a high school degree or higher (72.0%) is lower than the state value (86.3%) and the Health ENC region (84.7%) (Figure 25). Higher educational attainment in Duplin County is lower than the state value and the Health ENC region. While 29.0% of residents 25 and older have a bachelor's degree or higher in North Carolina, and 19.9% in the Health ENC counties, only 10.3% of residents 25 and older have a bachelor's degree or higher in Duplin County.

**Figure 25. People 25+ with a High School Degree or Higher and Bachelor's Degree or Higher (American Community Survey, 2012-2016)**



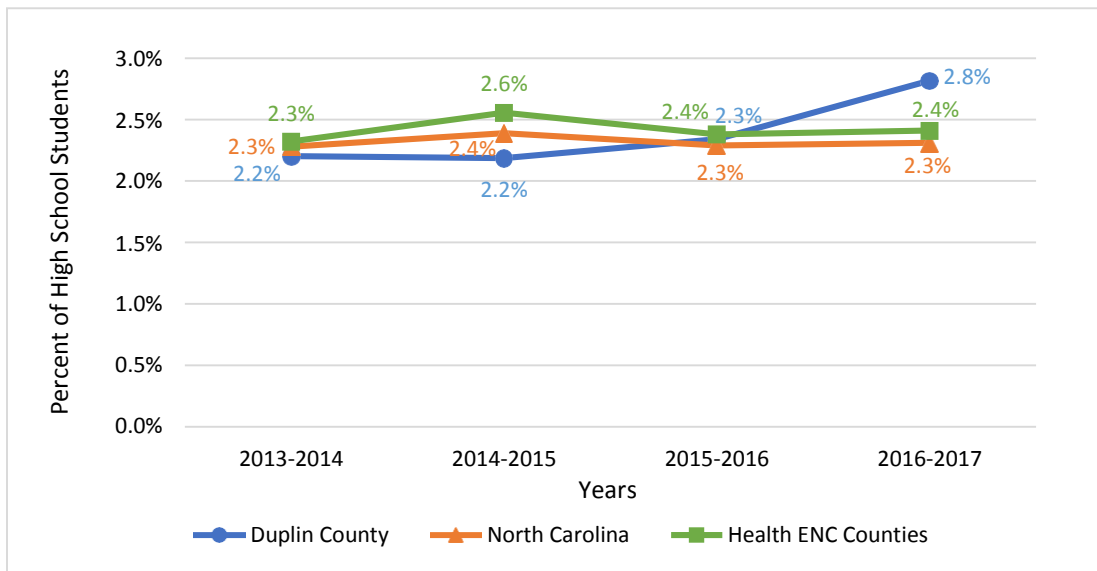
#### High School Dropouts

High school dropouts earn less income than high school and college graduates, and are more likely to be unemployed. High school dropouts are generally less healthy and require more medical care. Further, high school dropout rates are linked with heightened criminal activity and incarceration rates, influencing a community's economic, social, and civic health.

Duplin County's high school dropout rate, given as a percent of high school students in Figure 26, is 2.8% in 2016-2017, which is higher than the rate in North Carolina (2.3%) and the Health ENC region (2.4%).

Duplin County's high school dropout rate has increased over three time periods since 2014-2015.

**Figure 26. High School Dropout Rate (North Carolina Department of Public Instruction)**

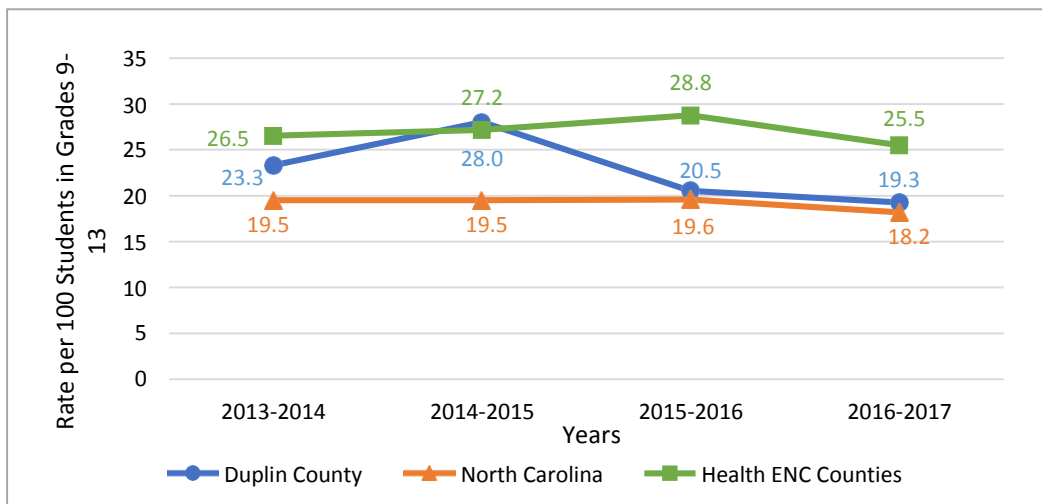


### High School Suspension Rate

High school suspension is a form of discipline in which a student is temporarily removed from a classroom and/or school due to a violation of school conduct or code. Higher rates of suspension can be related to high rates of antisocial or delinquent behaviors, which may further contribute to potential future involvement in the juvenile justice system. Additionally, schools with higher suspension rates have higher rates of law or board of education violations and generally spend more money per student.

Duplin County's rate of high school suspension (19.3 suspensions per 100 students) is higher than North Carolina's rate (18.2) but lower than the rate of Health ENC counties (25.5) in 2016-2017. As shown in Figure 27, although the rates for North Carolina and the Health ENC region are fairly consistent across four time periods, there was fluctuation in Duplin County's rate between 2013-2014 and 2015-2016.

**Figure 27. High School Suspension Rate (North Carolina Department of Public Instruction)**



## Environmental Profile

Duplin County is located inland from the coastal area of the state and has an area of 822 square miles, of which 816 square miles is land and 5.5 square miles is water. Duplin County part of the Coastal Plains and is in the Cape Fear River basin. The Northeast Cape Fear River runs the length of the County with many smaller streams and tributaries branching out. The Angola Swamp is in the southern portion of the county and extends into Pender County. Duplin County is a rural agrarian economy and depends on livestock, poultry and associated manufacturing industries for jobs and economic growth. Today, Duplin's agriculture industries range from the family farm to corporate headquarters of agriculture related businesses.

Duplin County's water system consists of both public water systems covering towns/ municipalities and private wells. The public water systems have been in compliance with federal health-based drinking water standards. The most current annual drinking water reports for public systems are located on the individual town's websites. Majority of private wells are supplied by groundwater. Typically, this is composed of rain that seeps into the ground between soil, clay and rocks before becoming ground water and enters the well supply. Private well owners are responsible to test their water. They may request water testing from Environment Health for a fee. During times of disaster, for example during Hurricane Florence, the state waived the water testing fee and Environmental Health was able to test private wells at no charge.

## Transportation Profile

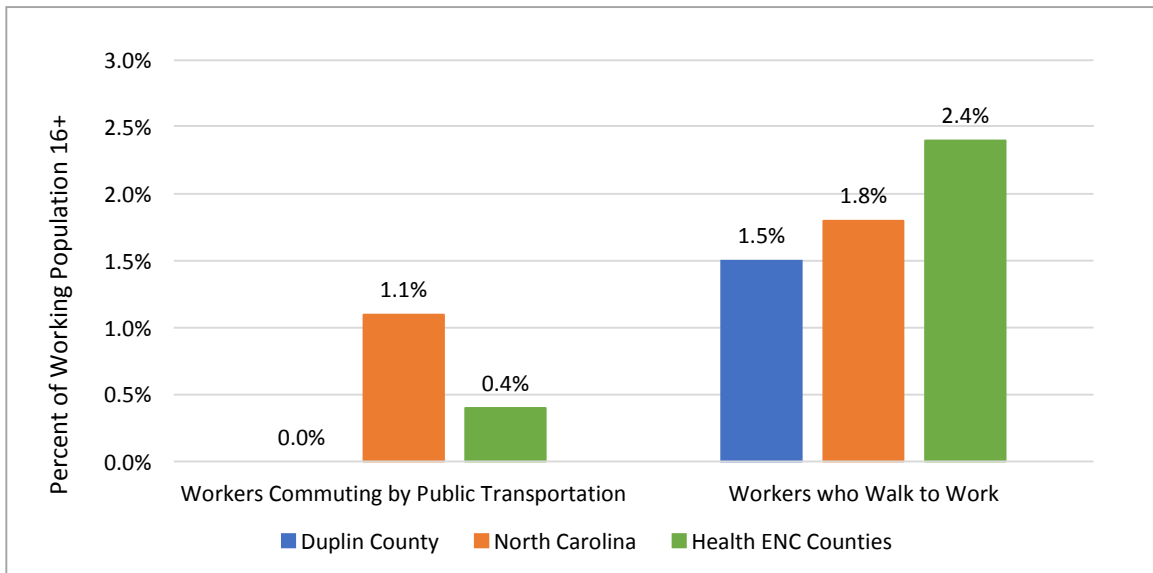
Public transportation offers mobility, particularly to people without cars. Transit can help bridge the spatial divide between people and jobs, services, and training opportunities. Public transportation also reduces fuel consumption, minimizes air pollution, and relieves traffic congestion. Walking to work helps protect the environment, while also providing the benefit of daily exercise.

Interstate 40 is accessible via six exits across Duplin County and provides connections to I-95, I-85, I-77 and I-26. The typical drive times from the Interstate 40 access from the town of Kenansville, the center of the county, are listed below.

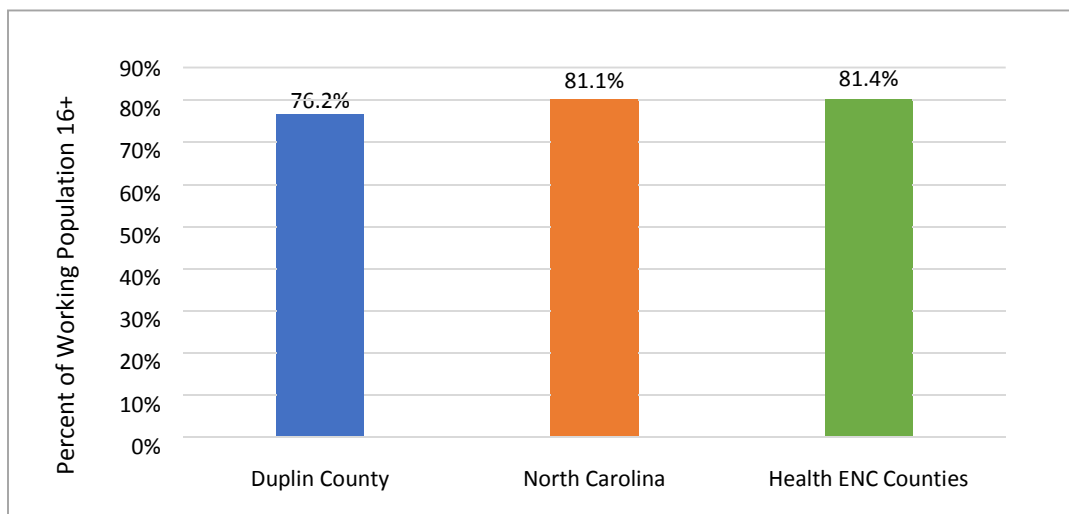
Interstate 95	30 minutes
Wilmington	65 minutes
Morehead City	90 minutes
NC Beaches	40 minutes
Raleigh/Research Triangle Park	90 minutes
Myrtle Beach, SC	120 minutes

Countywide, 1.5% of residents walk to work, compared to the state value of 1.8%. Public transportation is rare in Duplin County, with an estimated 0% of residents commuting by public transportation, compared to the state value of 1.1% (Figure 28). In Duplin County, 76.2% of workers 16 and older drive alone to work, compared to 81.1% in North Carolina (Figure 29).

**Figure 28. Mode of Commuting to Work (American Community Survey, 2012-2016)**



**Figure 29. Workers who Drive Alone to Work (American Community Survey, 2012-2016)**



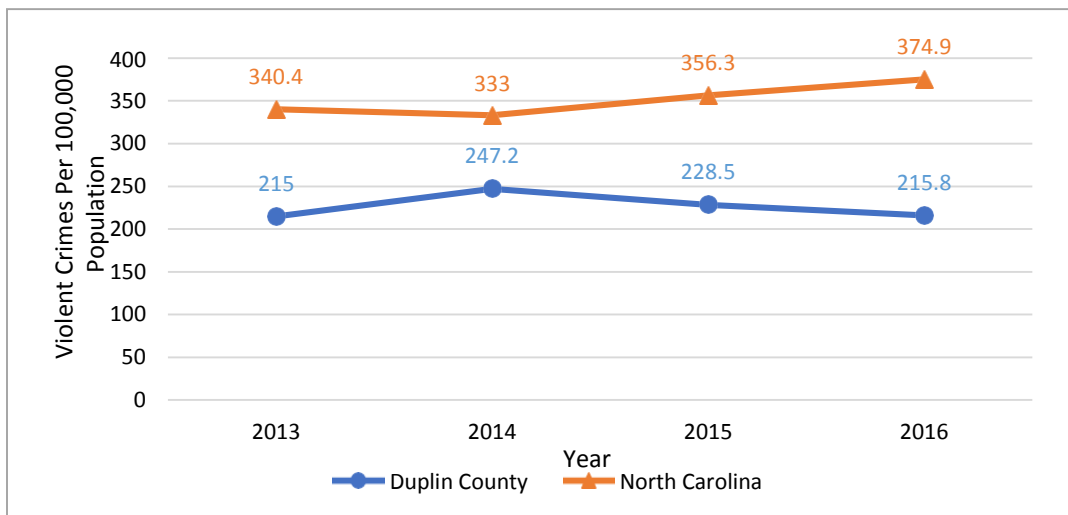
## Crime and Safety

Both violent crime and property crime are used as indicators of a community's crime and safety. Violence negatively impacts communities by reducing productivity, decreasing property values and disrupting social services.

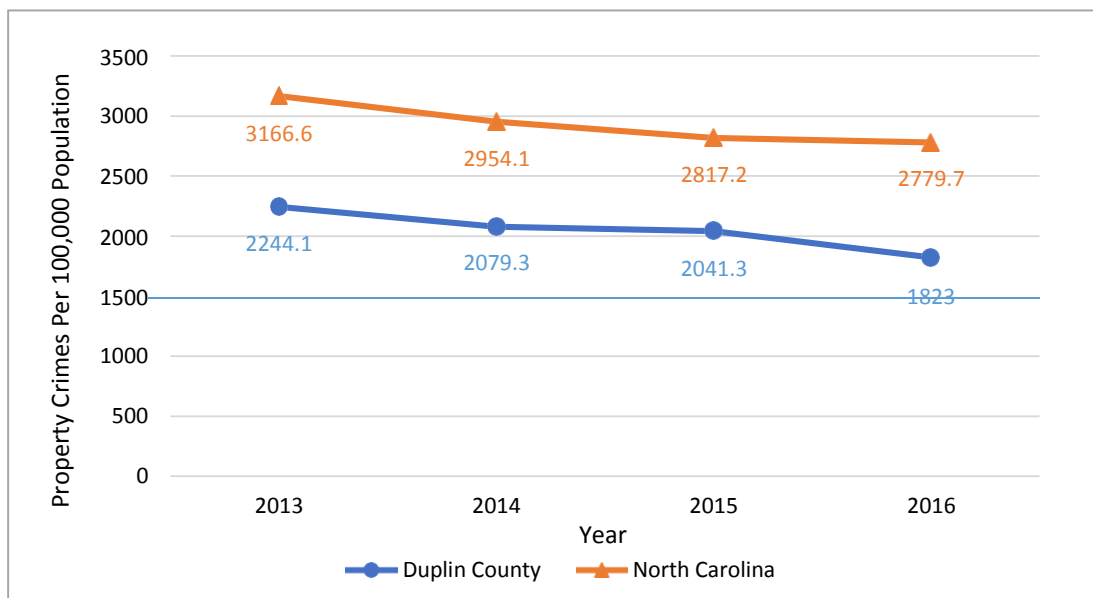
### Violent Crime and Property Crime

Violent crime includes four offenses: murder and non-negligent manslaughter, rape, robbery, and aggravated assault. Property crime includes the offenses of burglary, larceny-theft, motor vehicle theft, and arson. The violent crime rate in Duplin County is 215.8 per 100,000 populations, compared to 374.9 per 100,000 people in North Carolina (Figure 30). The property crime rate in Duplin County (1,823 per 100,000 people) is lower than the state value (2,779.7 per 100,000 people) (Figure 31). The rates of violent crime and property crime in Duplin County are decreasing slightly.

**Figure 30. Violent Crime Rate (North Carolina Department of Justice)**



**Figure 31. Property Crime Rate (North Carolina Department of Justice)**



### Juvenile Crime

Youth who commit a crime may not gain the educational credentials necessary to secure employment and succeed later in life. Negative peer influences, history of abuse/neglect, mental health issues, and significant family problems increase the risk of juvenile arrest. The juvenile justice system aims to reduce juvenile delinquency through prevention, intervention, and treatment services.

Figure 32 shows the juvenile undisciplined rate per 1,000 youth ages 6-17 years old. The undisciplined rate describes juveniles who are unlawfully absent from school, regularly disobedient and beyond disciplinary control of the parent/guardian, are regularly found where it is unlawful for juveniles to be or have run away from home for more than 24 hours. The 2017 juvenile undisciplined rate in Duplin County (0.0) is lower than the rate in North Carolina (1.5) and the Health ENC region (1.1).

**Figure 32. Juvenile Undisciplined Rate (North Carolina Department of Public Safety)**

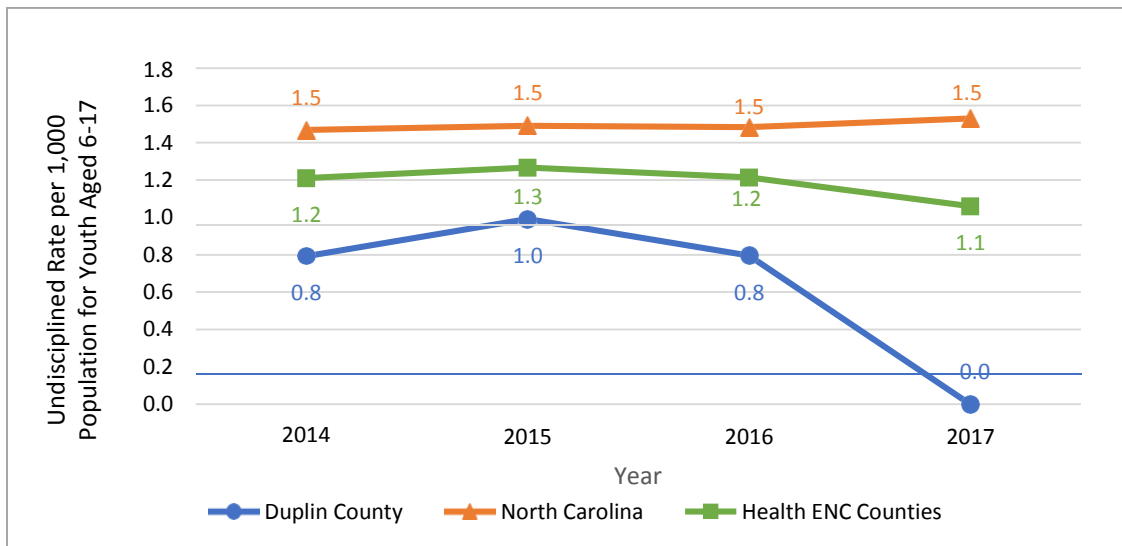
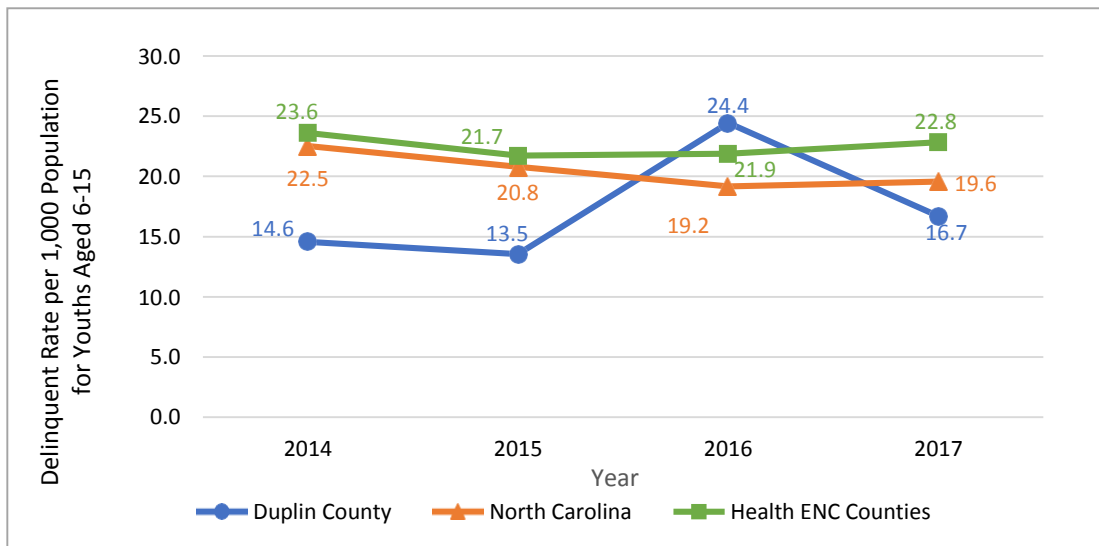


Figure 33 shows the juvenile delinquent rate, or juvenile crime rate, per 1,000 youth ages 6-15 years old. While the juvenile crime rate in Duplin County increased from 2015 to 2016, the rate decreased from 24.4 in 2016 to 16.7 in 2017. The 2017 juvenile delinquent rate for Duplin County (16.7) is lower than North Carolina (19.6) and the Health ENC region (22.8).

**Figure 33. Juvenile Delinquent Rate (North Carolina Department of Public Safety)**



The N.C. Department of Public Safety partners with Juvenile Crime Prevention Councils (JCPC) in each county to galvanize community leaders, locally and statewide, to reduce and prevent juvenile crime. General Statute 143B-845 - 852 sets out that it is the intent of the General Assembly to develop community-based alternatives to youth development centers and to provide community based delinquency and substance abuse prevention strategies and programs. The statute also says that the General Assembly intends to provide non-institutional disposition alternatives that will protect the community and juveniles. These programs and services are to be planned at the local level by local Juvenile Crime Prevention Councils (JCPCs) in partnership with the state.

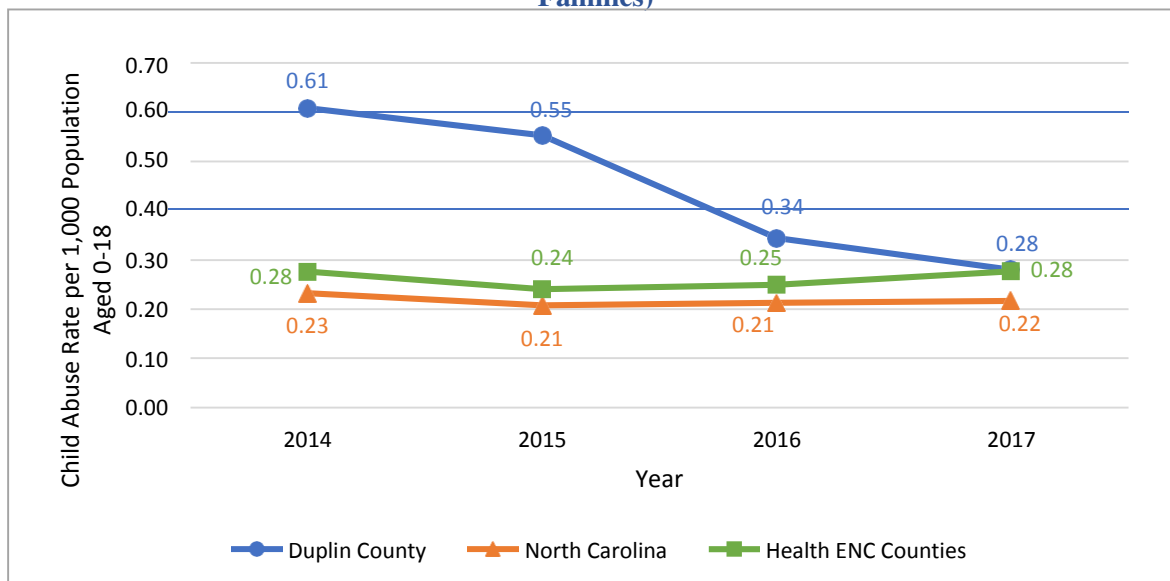
The services that are funded by the JCPC in Duplin County include:

1. Clinical Evaluation and Psychological Assessment
2. Home-Based Family Counseling & Counseling Programs
3. Mediation/Conflict Resolution
4. Restitution
5. Teen Court

### Child Abuse

Child abuse includes physical, sexual and emotional abuse. All types of child abuse and neglect can have long lasting effects throughout life, damaging a child's sense of self, ability to have healthy relationships, and ability to function at home, at work, and at school. Figure 34 shows the child abuse rate per 1,000 population aged 0-18. The child abuse rate in Duplin County has decreased over the past four measurement periods. The 2017 child abuse rate in Duplin County (0.28 per 1,000 population) is slightly higher than the rate in North Carolina (0.22) and the same as the rate in the Health ENC region (0.28).

**Figure 34. Child Abuse Rate**  
(Management Assistance for Child Welfare, Work First, and Food & Nutrition Services in North Carolina & University of North Carolina at Chapel Hill Jordan Institute for Families)



The Child Fatality Task Force (CFTF) is a legislative study commission that examines the causes of child death and makes recommendations to the Governor and General Assembly on how to reduce child death, prevent abuse and neglect, and support the safety and well-being of children. Duplin County's local prevention teams consist of Community Child Protection Team (CCPT) facilitated by Department of Social Services (DSS), who reviews abuse and neglect cases and related deaths, and Child Fatality Prevention Teams (CFPT), facilitated by the Health Department, who review other child deaths. In Duplin County these two teams are blended into one group that meets quarterly. The DSS staff have seen an increase in child abuse and neglect related to parent drug use.

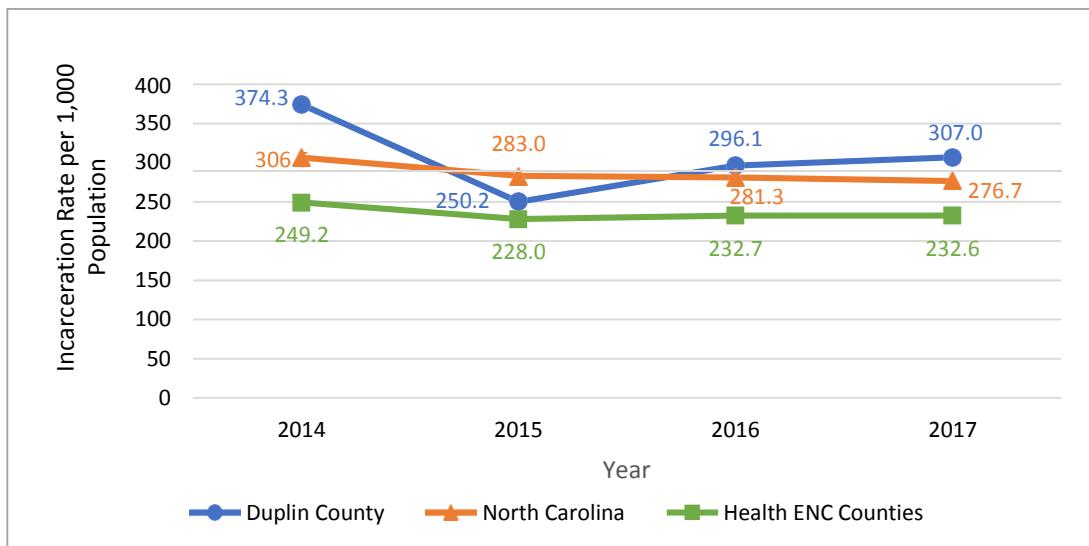
### Incarceration

According to the U.S. Bureau of Justice Statistics, approximately one out of 100 adults in the U.S. are in jail or prison. Conditions in jails and prisons can lead to an increased risk of infectious diseases such as tuberculosis and hepatitis C, as well as assault from other inmates. After incarceration, individuals are likely to face a variety of social issues such as employment discrimination, disruption of family relationships and recidivism.

Figure 35 shows the incarceration rate per 1,000 populations. The incarceration rate in Duplin County has increased over the past three measurement periods. The 2017 incarceration rate in Duplin County (307.0 per 1,000 population) is higher than North Carolina (276.7) and the Health ENC region (232.6).

A large percentage of the local jail population has drug charges of varying degrees per local law enforcement statistics. The Duplin County Substance Use Coalition is a community group that includes LLE, healthcare, Social Service agencies, non-profits, government officials, EMS, faith based, recovery groups, court officials and public members. This group is working on the process to implement alternative sentencing for the population arrested for possession of limited amount of drugs. The NC Harm Reduction Coalition promotes LEAD (Law enforcement assisted diversion), and this has decreased incarceration of people with drug addiction issues and refers into treatment programs in surrounding counties.

**Figure 35. Incarceration Rate (North Carolina Department of Public Safety)**



## Access to Healthcare, Insurance and Health Resources Information

Medical costs in the United States are very high. 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 may not seek treatment until the condition is more advanced, and therefore more difficult and costly to treat.

### Health Insurance

Figure 36 shows the percent of people aged 0-64 years old that have any type of health insurance coverage. The rate for Duplin County, 79.9%, is lower than the rate for North Carolina (87.8%) and the Health ENC region (87.2). Approximately 20% of the population in Duplin County is uninsured.

**Figure 36. Persons with Health Insurance (Small Area Health Insurance Estimates, 2016)**

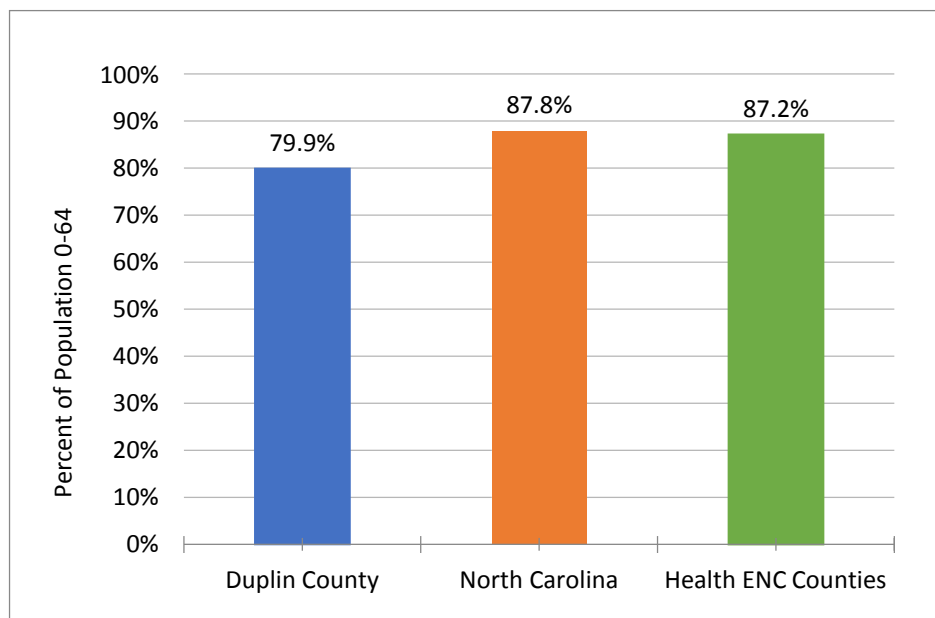
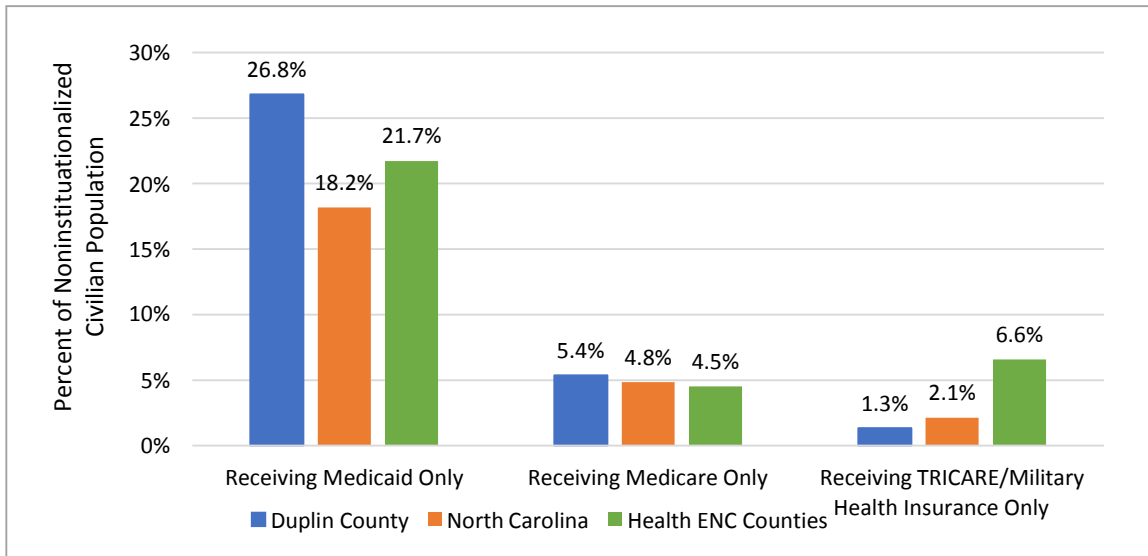


Figure 37 shows the percent of the population only receiving health insurance through Medicaid, Medicare, or military healthcare (TRICARE). Duplin County has a higher percent of people receiving Medicaid (26.8%) than North Carolina (18.2%) and Health ENC counties (21.7%). The percent of people receiving military health insurance is lower in Duplin County (1.3%), as compared to North Carolina (2.1%) and Health ENC counties (6.6%).

**Figure 37. Persons Only Receiving Health Insurance through Medicaid, Medicare or Military Healthcare (American Community Survey, 2012-2016)**



### Health Resources

Listed below are the main medical practices within Duplin County. Due to limited resources many residents seek care and/or referred to specialists outside of the county. A complete list of current healthcare resources as of 2018 are available in Appendix D.

Vidant Duplin Hospital <https://www.vidanthealth.com/Locations/Hospitals/Vidant-Duplin-Hospital> provides various specialty clinics, see website.

#### Primary Care Offices

- Duplin County Health Department, Kenansville [dchealth@duplincountync.com](mailto:dchealth@duplincountync.com)
- Vidant Medical, Wallace <https://www.vidanthealth.com/Locations>
- Goshen Medical Center, FQRHC <http://www.goshenmedical.org/>
- Rose Hill Medical, Rose Hill – Community Health

#### Center Pediatric Offices

- Duplin County Health Department
- Vidant Pediatrics- Kenansville
- Goshen Medical Center- Faison
- Kinston Pediatrics- Beulaville
- Kids Care –

#### Wallace Women's Health/

#### Maternity

- Duplin County Health Department
- Vidant Women's Health-

#### Kenansville Urgent Care

- MediQuick- Kenansville
- Wallace Urgent Care- Wallace

## Civic Activity

Exercising the right to vote allows a community to choose elected officials and hold them accountable. Voting ensures that all citizens have the opportunity to voice their opinions on issues such as the use of tax dollars, civil rights and foreign policy. By voting, individuals shape their communities and influence the next generation of society. A high level of voter turnout indicates that citizens are involved and interested in who represents them in the political system.

### Political Activity

Figure 38 shows the voting age population, or percent of the population aged 18 years and older. Duplin County has a lower percent of residents of voting age (75.5%) than North Carolina (77.3%) and Health ENC counties (76.7%).

**Figure 38. Voting Age Population (American Community Survey, 2012-2016)**

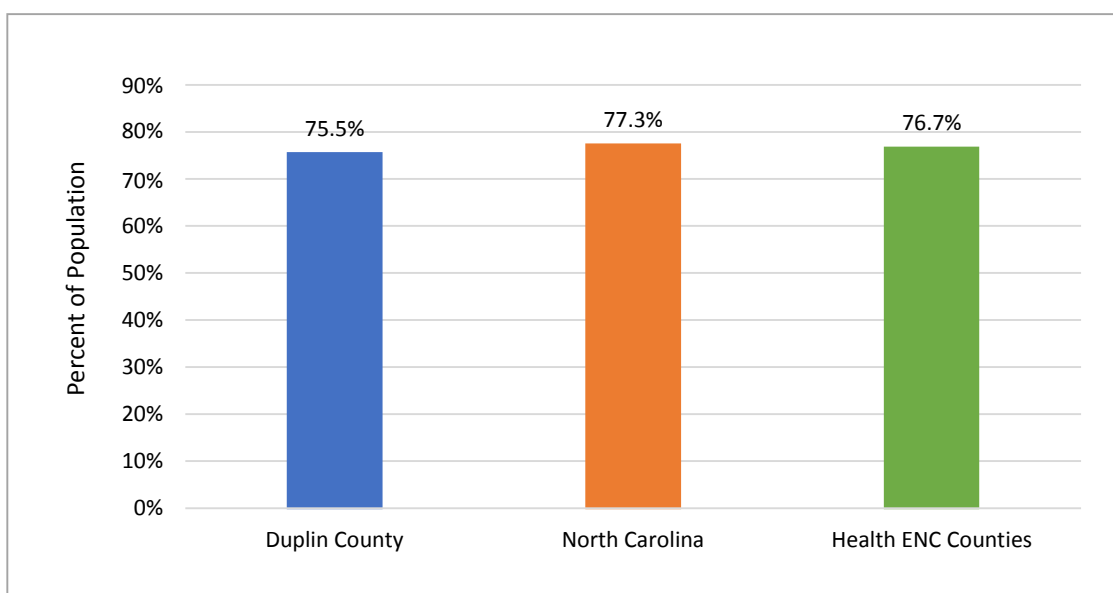
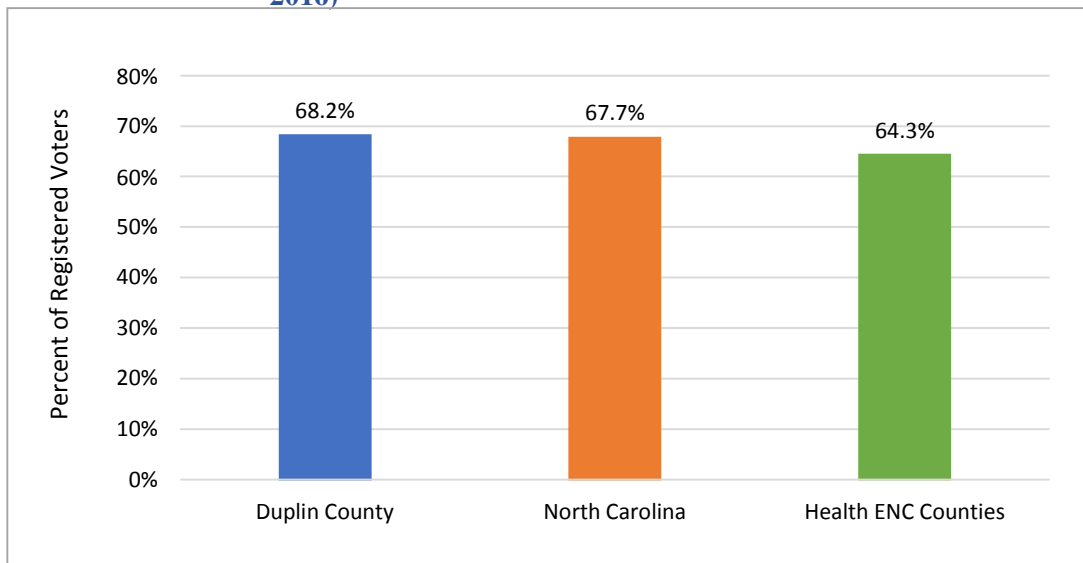


Figure 39 shows the percent of registered voters who voted in the last presidential election. The rate in Duplin County was 68.2%, which is slightly higher than the state value (67.7%) and higher than Health ENC counties (64.3%).

**Figure 39. Voter Turnout in the Last Presidential Election (North Carolina State Board of Elections, 2016)**



#### Governance

The county is governed by the five members of the Duplin County Board of Commissioners. They are elected officials who serve for four-year terms. A professional county manager serves under the direction of the County Commissioners. Duplin County has operated under the County Manager form of government since 1979.

#### NC General Assembly

Representative Jimmy Dixon  
Senator Brent Jackson

#### US Senate and House of Representatives

Congressman 7<sup>th</sup> District: David Rouzer  
Senator Richard Burr  
Senator Tom Tillis

# Findings

## Secondary Data Scoring Results

Table 9 shows the data scoring results for Duplin County by topic area. Topics with higher scores indicate greater need. Access to Health Services is the poorest performing health topic for Duplin County, followed by Diabetes, Transportation, Education and Social Environment.

**Table 10. Secondary Data Scoring Results by Topic Area**

<b>Health and Quality of Life Topics</b>	<b>Score</b>
Access to Health Services	2.09
Diabetes	2.08
Transportation	2.07
Education	2.00
Social Environment	1.91

\*See Appendix B for additional details on the indicators within each topic area

## Primary Data

### Community Survey

Figure 40 shows the list of community issues that were ranked by residents as most affecting the quality of life in Duplin County. Low-income/Poverty was the most frequently selected issue and was ranked by 46.2% of survey respondents, followed by Drugs/Substance Abuse (19.8%). Survey respondents ranked Social Environment as the third issue most affecting quality of life in Duplin County. Topics associated with Social Environment included related issues such as Discrimination/Racism, Lack of Community Support, Domestic Violence, Neglect and Abuse, Child Abuse and Elder Abuse. For this survey question, English and Spanish survey responses were combined to identify the top significant needs in the community.

**Figure 40. Top Quality of Life Issues, as Ranked by Survey Respondents**

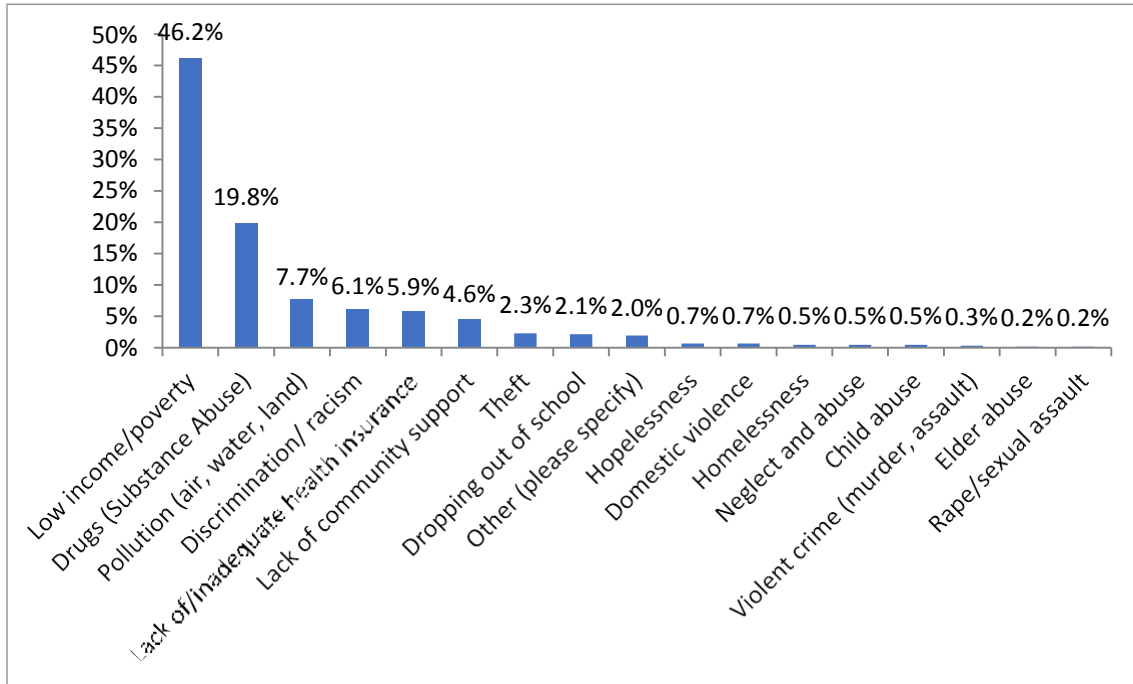
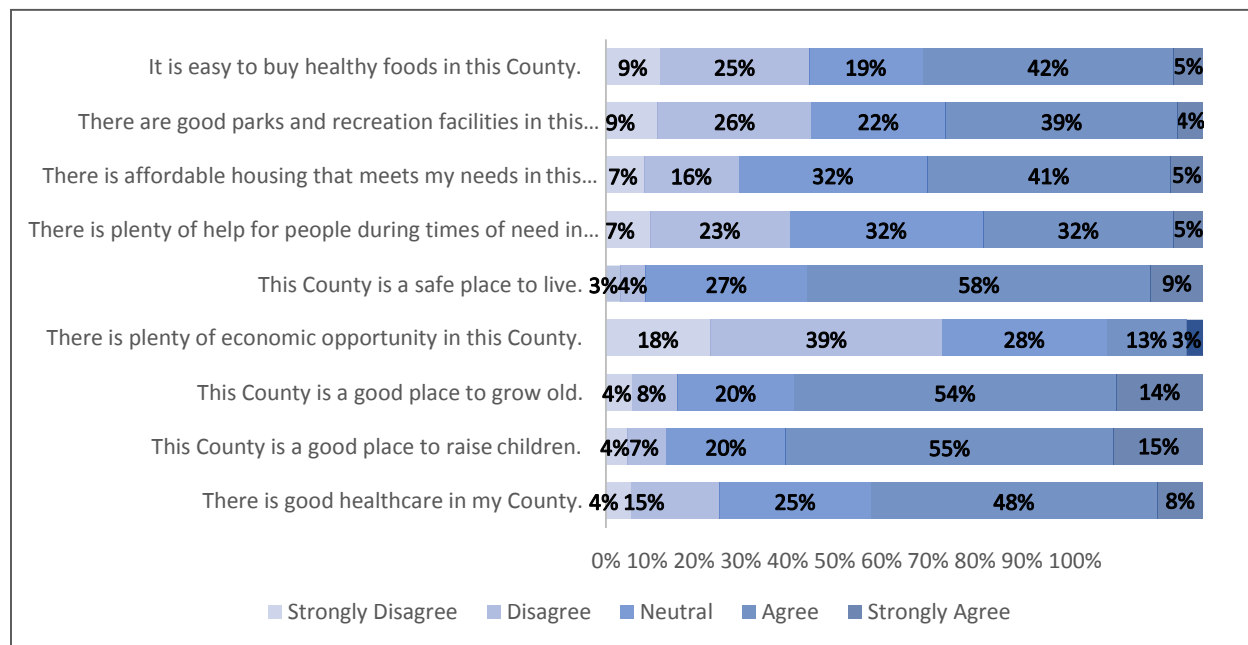


Figure 41 and 42 displays the level of agreement among Duplin County residents in response to nine statements about their community. More than half of English survey respondents agreed or strongly agreed that the county is a safe place to live, a good place to grow old, a good place to raise children and there is good health care. More than half of survey respondents disagreed (18%) or strongly disagreed (39%) that the county has plenty of economic opportunity. Figure 42 displays the Spanish survey respondents level of agreement in response to the same statements. Half or more of Spanish survey respondents agreed or strongly agreed that it easy to buy healthy foods in the county, there is affordable housing that meets their needs, there is plenty of help for people during times of need, the county is a safe place to live, it is a good place to grow old, it is a good place to raise kids and there is good health care.

**Figure 41. Level of Agreement Among Duplin County Residents in Response to Nine Statements about their Community - English**



**Figure 42. Level of Agreement Among Duplin County Residents in Response to Nine Statements about their Community - Spanish**

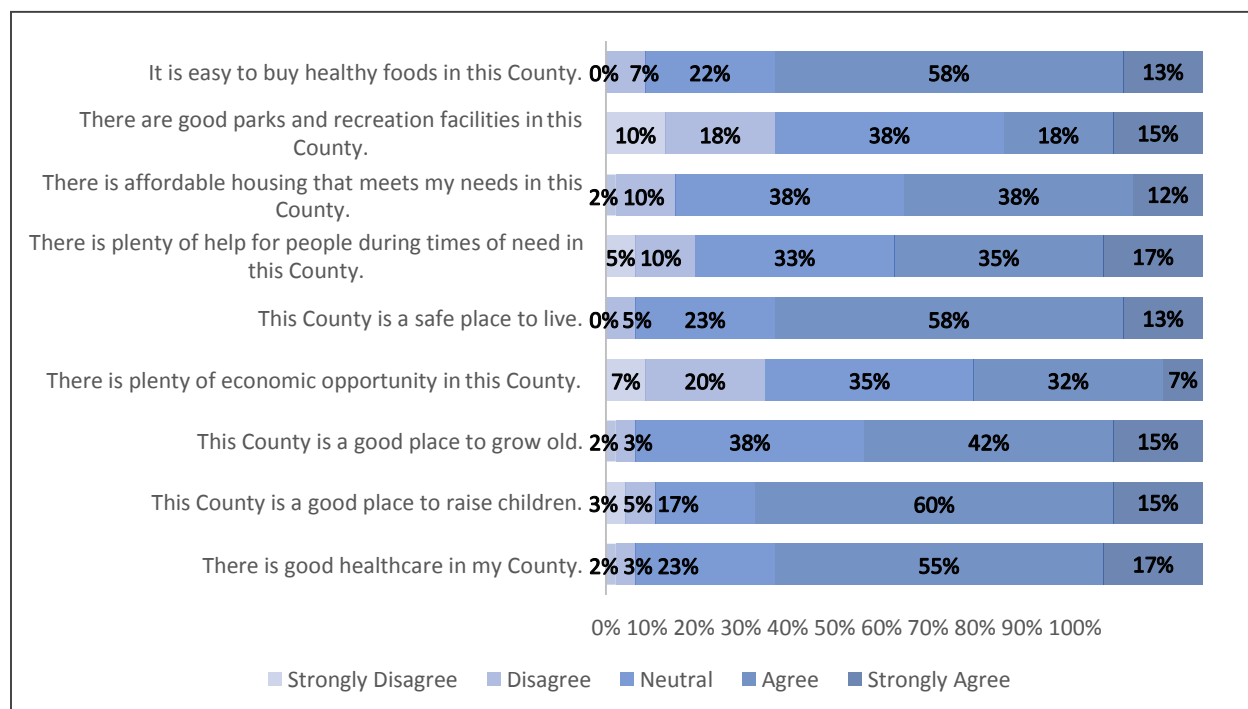
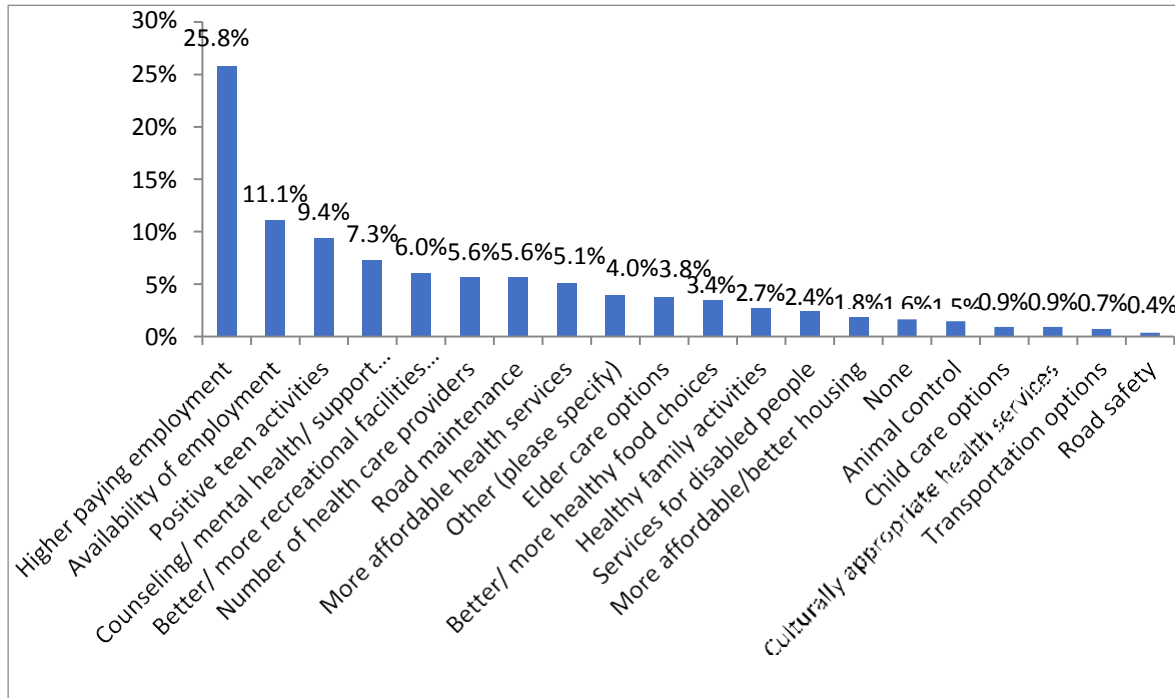


Figure 43 and 44 shows the list of services that were ranked by residents as needing the most improvement in Duplin County. Higher paying employment was the most frequently selected issue by both English and Spanish survey respondents.

**Figure 43. Services Needing the Most Improvement, as Ranked by Survey Respondents-English**



**Figure 44. Services Needing the Most Improvement, as Ranked by Survey Respondents-Spanish**

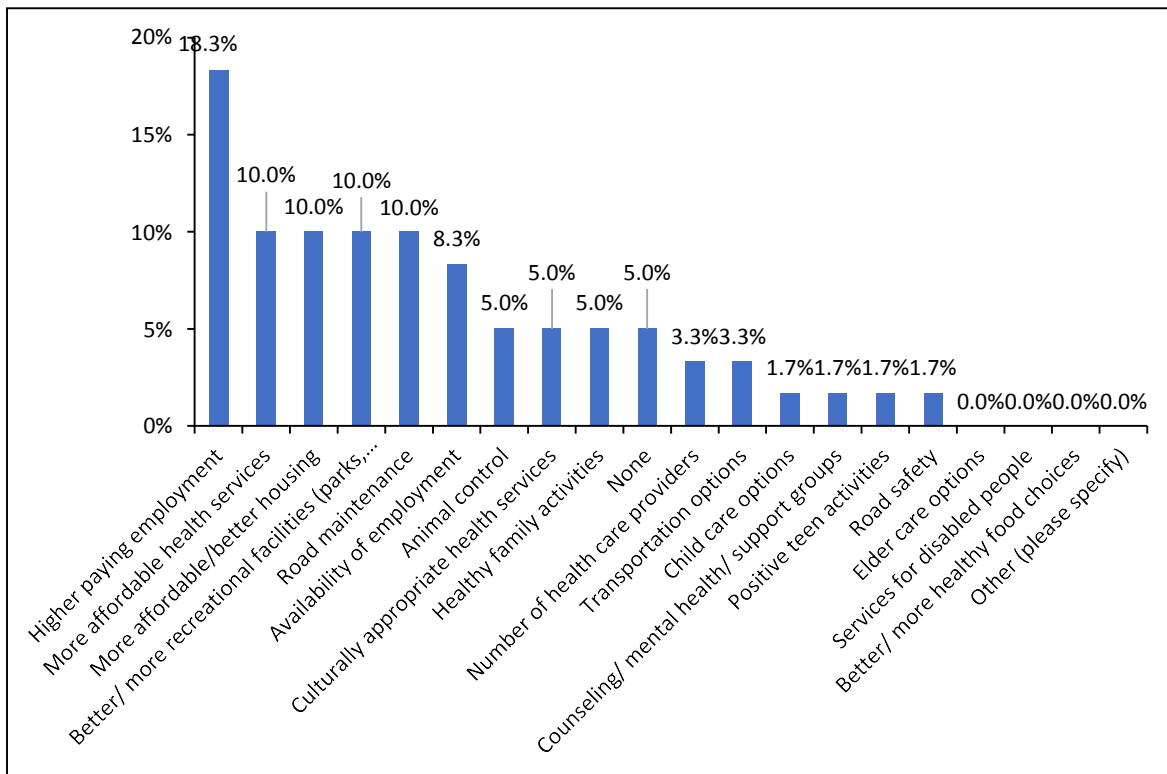
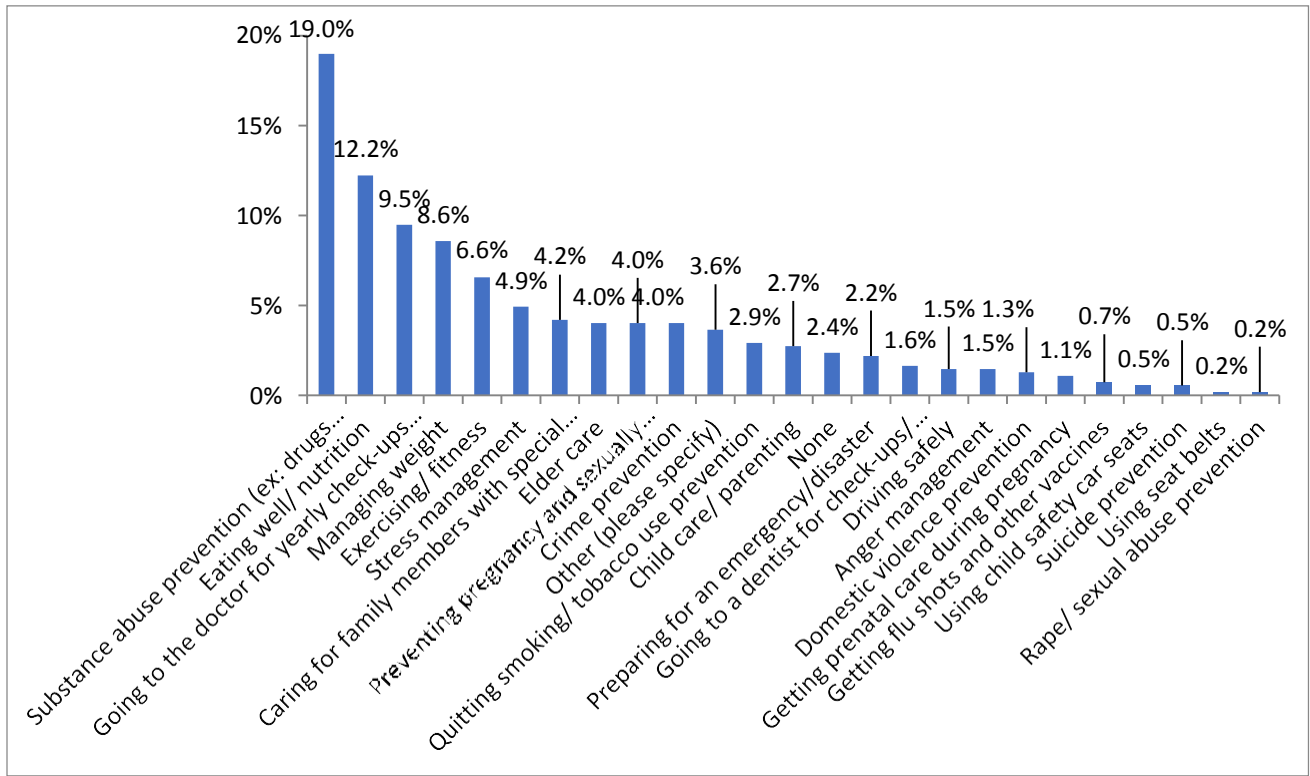
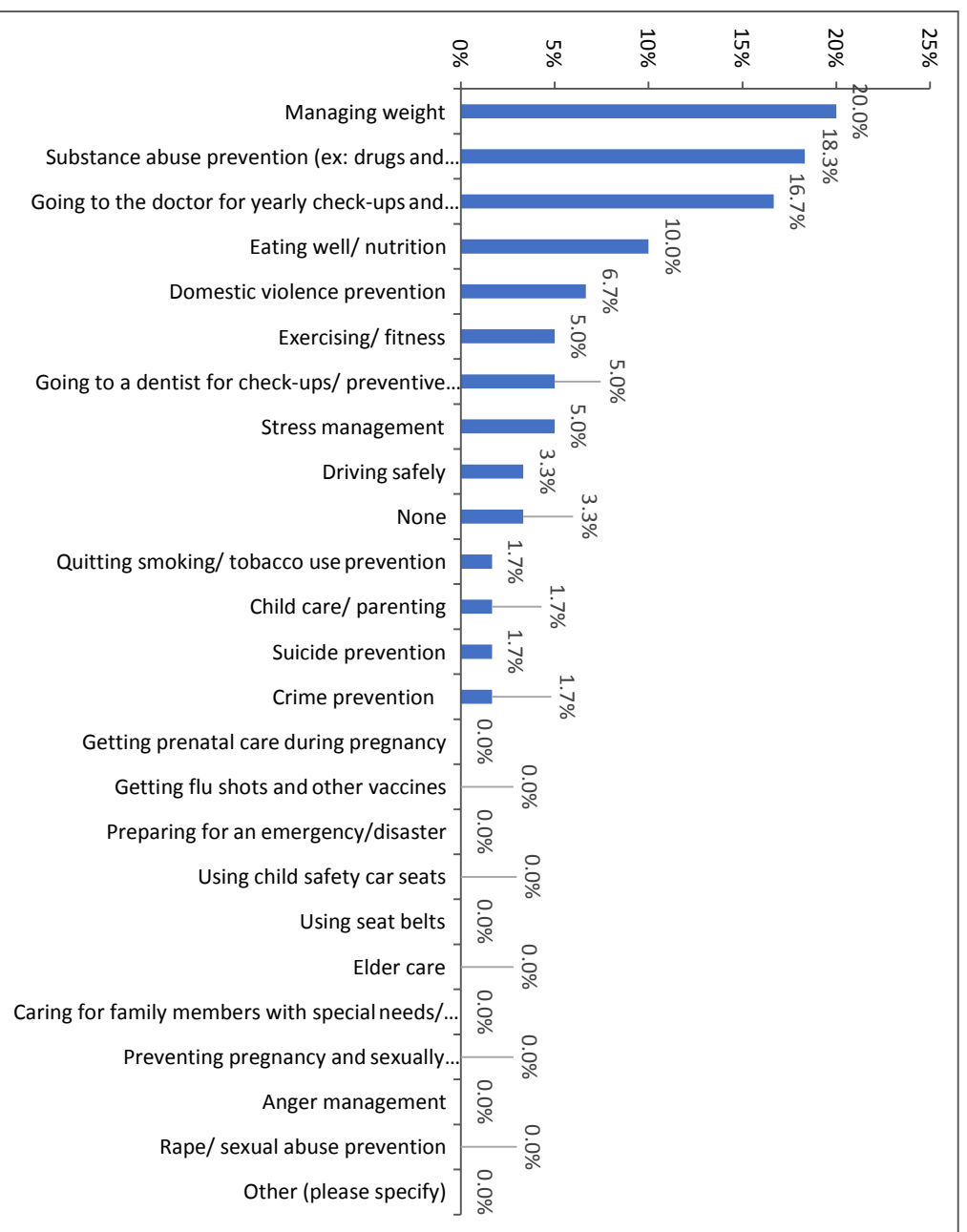


Figure 45 and 46 show a list of health behaviors that were ranked by residents as topics that Duplin County residents need more information about. Substance abuse prevention was the most frequently selected issue by English survey respondents (19%) followed by Eating Well/Nutrition (12.2%). Figure 47 shows that Spanish survey respondents selected Managing Weight as their first selection (20%) followed by Substance Abuse Prevention (18.3%).

**Figure 45. Health Behaviors that Residents Need More Information About, As Ranked by Survey Respondents - English**



**Figure 46. Health Behaviors that Residents Need More Information About, As Ranked by Survey Respondents - Spanish**



### Focus Group Discussions

Table 11 shows the focus group results for Duplin County by topic area or code. Topics with higher frequency (referring to the number of times a particular topic was mentioned in the context of needs/concerns or barriers/challenges to achieving health) indicate greater need. Access to Health Services was the most frequently discussed need among focus group participants, followed by Older Adults & Aging, Exercise, Nutrition, & Weight, Economy, Health Care Navigation/Literacy and Transportation. Topics that had a frequency more than ten were incorporated into the significant needs list.

**Table 11. Focus Group Results by Topic Area**

<b>Topic Area (Code)</b>	<b>Frequency</b>
Access to Health Services	28
Older Adults & Aging	17
Exercise, Nutrition & Weight	14
Economy	12
Health Care Navigation/Literacy	9
Transportation	7

## Data Synthesis

All forms of data have strengths and limitations. In order to gain a comprehensive understanding of the significant health needs for Duplin County, findings from the secondary data, community survey and focus group discussions were compared and analyzed for areas of overlap. The top needs from each data source were identified using the criteria displayed in Table 12.

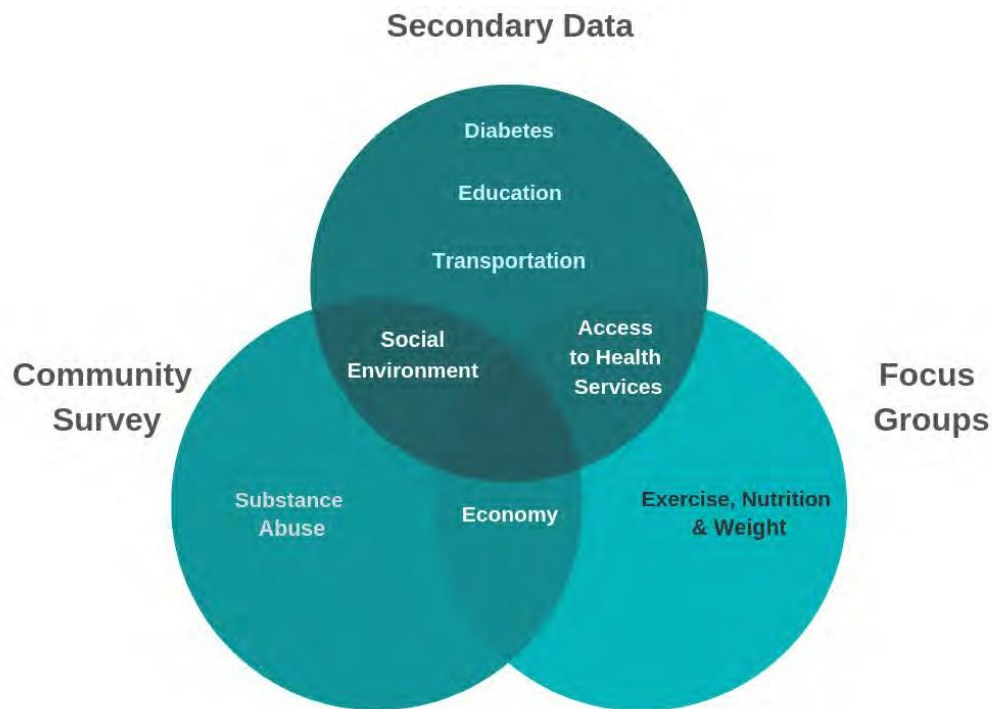
**Table 12. Criteria for Identifying the Top Needs from each Data Source**

<b>Data Source</b>	<b>Criteria for Top Need</b>
Secondary Data	Topics receiving highest data score
Community Survey	Community issues ranked by survey respondents as most affecting the quality of life*
Focus Group Discussions	Topics discussed most frequently by participants in context of <u>needs/concerns or barriers/challenges to achieving health</u>

\*Community Survey Q4: Please look at this list of community issues. In your opinion, which one issue most affects the quality of life in this County?

The top needs from each data source were incorporated into a Venn Diagram (Figure 47). Community issues ranked by survey respondents were categorized to align with the health and quality of life topic areas displayed in Table 13. Figure 47 displays the top needs from each data source in the Venn diagram.

**Figure 47. Data Synthesis**



Across all three data sources, there is strong evidence of need to address Access to Health Services, Economy and Social Environment. As seen in the survey results and focus group discussion analysis cultivated additional topics not ranked as top priorities in the secondary data findings. A mixed-methods approach is a strength when assessing a community as a whole. This process ensures robust findings through statistical analysis of health indicators and examination of constituent's perceptions of community health issues.

*Topic Areas Examined in This Report*

The topic areas with the highest secondary data scores are explored in-depth in this report.

**Table 13. Topic Areas Examined In-Depth in this Report**







Access to Health Services*
Diabetes*
Economy
Education*
Exercise, Nutrition & Weight
Social Environment*
Substance Abuse
Transportation*

Findings related to topics that were ranked high in the community, but did not surface in the secondary data findings, are addressed in this report in the section Other Significant Health Needs. These additional topics include Economy and Substance Abuse. Older Adults and Aging are discussed in the section Highly Impacted Populations.

#### Navigation Within Each Topic

Findings are organized by topic area. Within each topic, key issues are summarized followed by a review of secondary and primary data findings. Special emphasis is placed on populations that are highly impacted, such as older adults, race/ethnic groups or low-income populations. Figures, tables and extracts from quantitative and qualitative data substantiate findings. Each topic includes a table with key indicators from the secondary data scoring results. The value for Duplin County is displayed alongside relevant comparisons, gauges and icons which are color-coded with green indicating good, red indicating bad and blue indicating neutral. Table 13 describes the gauges and icons used to evaluate the secondary data.

**Table 14. Description of Gauges and Icons used in Secondary Data Scoring**

Gauge or Icon	Description
	Green represents the "best" 50th percentile.
	Yellow represents the 50th to 25th quartile
	Red represents the "worst" quartile.
	There has been a non-significant increase/decrease over time.
	There has been a significant increase/decrease over time.
	There has been neither a statistically significant increase nor decrease over time.

# Diabetes









## Key Issues

- Diabetes amongst adults over 20 years old is a top concern for Duplin County
- Diabetes amongst the Medicare population is higher in Duplin county than in the state and U.S.
- The age-adjusted death rate due to diabetes a poor performing indicator when compared to other counties in the state and U.S.

## Secondary Data

The secondary data scoring results reveal Diabetes is a top need in Duplin County with a score of 2.08. Additional analysis is performed to find specific indicators that contribute to this topic area of concern, and the highest scoring indicators are shown in Table 14.

**Table 15. Data Scoring Results for Diabetes**

Score	Indicator (Year) (Units)	Duplin County	North Carolina	U.S.	North Carolina Counties	U.S. Counties	Trend
2.3	Diabetes: Medicare Population (2015) (percent)	34.9	28.4	26.5			
2.5	Adults 20+ with Diabetes (2014) (percent)	14.7	11.1	10			
2.33	Age-Adjusted Death Rate due to Diabetes (2012-2016) (deaths/ 100,000 population)	28.7	23	21.1			

\*See Appendix B for full list of indicators included in each topic area

Diabetes is a clear area of concern for Duplin County based on the three highest scoring indicators within the topic area. The highest scoring indicator with in this topic area is adults over the age of 20 with diabetes. For Duplin County, 14.7% of the population in 2014 have diabetes, which is higher than in the North Carolina (11.1%) and the U.S. (10%). The age-adjusted death rate due to diabetes for Duplin County in 2012-2016 is 28.7 deaths per 100,000 populations, which is higher than the rate for North Carolina (23.0 deaths /100,000 population) and the U.S. overall (21.1 deaths /100,000 population). There been a significant increasing trend over time in the age-adjusted death rate due to diabetes indicator. Additionally, the indicator score for Diabetes within the Medicare Population for Duplin County is 2.3 with a value of 34.9% of the population in 2015. This is higher than the rate in both North Carolina (28.4% of the population) and the United States (26.5% of the population).

### Primary Data

Although Diabetes is not explicitly listed in some of the community survey questions, results indicated that managing weight, eating well/nutrition and exercising/fitness were topics that people wanted more information about in the community. Eating well/nutrition, exercising/fitness and managing weight were high ranking health behaviors that people in both the English and Spanish surveys felt that they needed more information about in Duplin County.

**“How important it is to take your diabetes medication. To stay on top of it.”**

*-Focus Group Participant*

During the focus group discussions, diabetes was raised seven times as a top health issue in the community. The most pressing area related to diabetes mentioned by focus group participants was the need for more education about managing diabetes and specifically the importance of taking prescribed medications.

### Highly Impacted Populations

Secondary data indicates that populations at risk for poor outcomes are adults over 20 years old, the Medicare population and uninsured adults. Primary data reveals that 65.5% of Spanish survey respondents have no health insurance and have a lower education level. Literacy levels and health literacy are not necessarily the same thing but both have an impact on health. Adults living below the poverty level have lower health literacy than adults living above the poverty level. Literacy levels and health literacy have shown to translate into higher medical costs, increased ED visits and decrease access to care.

## Access to Health Services







### Key Issues

- Dentist, Primary Care and Mental Health provider rates are a top concern and lower than in the state and U.S.
- Duplin County does not meet the Healthy North Carolina 2020 goals for insurance coverage
- Preventable hospital stays are high for the Medicare population in the community

### Secondary Data

Access to Health Services is the highest scoring topic in Duplin County with a data score of 2.09. This category includes indicators related to provider rates in relation to the population which impacts people's ability to access timely medical services as well as insurance coverage and preventable hospital stays. Some of the poorly performing indicators related to the health care access is displayed in Table . The highest scoring indicators, and of most concern, are the Primary Care Provider Rate (23.7 providers /100,000 population) with a score of 2.5, Dentist Provider Rate (23.7 providers /100,000 population) with a score of 2.3 and Mental Health Provider Rate (62.7 providers /100,000 population) with a score of 2.25. All three provider rates are lower in Duplin County are lower than in the state and U.S which likely have concerning impacts to access to health services in the community. 79.9% of the population in Duplin County have health insurance in 2016 which is lower than in the state (87.8%) and does not meet the Healthy North Carolina 2020 goal of 92% of the population. Finally, Preventable Hospital Stays within the Medicare population is 59.1 discharges per 1,000 Medicare enrollees which is also higher than in the state and U.S. However, there is a significant decreasing trend over time for this indicator representing that there is positive change occurring.

**Table 16. Data Scoring Results for Access to Health Services**

Score	Indicator (Year) (Units)	Duplin County	North Carolina	U.S	North Carolina Counties	U.S. Counties	Trend	Healthy NC 2020	HP 2020
2.5	Primary Care Provider Rate (2015) (providers/100,000 population)	23.7	70.6	75.5				-	-
2	Preventable Hospital Stays: Medicare Population (2014) (discharges/1,000 Medicare enrollees)	59.1	49	49.9				-	-

2.25	Mental Health Provider Rate (2017) (providers/100,000 population)	62.7	215.5	214.3				-	-
2.03	Persons with Health Insurance (2016) (percent)	79.9	87.8	-				92	100
2.3	Dentist Rate (2016) (dentists/100,000 population)	23.7	54.7	67.4				-	-

\*See Appendix B for full list of indicators included in each topic area

### Primary Data

According to survey results, counseling/mental health/support groups was ranked fourth and number of health providers was ranked sixth amongst the highest ranked services needing improvement for English survey respondents. Spanish survey respondents selected more affordable health services as the second highest ranked service needing improvement in the community. 65.5% of Spanish survey respondents have no health insurance of any kind compared to 2.5% of English survey respondents. 5% of Spanish respondents selected culturally appropriate health services a service needing improvement in the community (<1% English Survey).

13% of English survey respondents and 10% of Spanish respondents reported having a problem getting the health care that they needed. Of those respondents who did experience a problem, English survey respondents reported having the most difficulty getting health care from a general practitioner (39%), a specialist (29%) or a dentist (26%). Spanish respondents reported having the most difficulty getting health care from a dentist (67%) or a general practitioner (50%). The top reasons preventing English survey respondents from getting the health care that they needed was insurance not covering what they needed (32%) and not being able to get an appointment (31%). 86% of Spanish survey respondents were unable to get the health care that they needed was due to not having health insurance. 54.1% of English survey respondents were able to see most of their medical providers in Duplin County while 13.9% sought care in New Hanover County and 13.6% sought care in Wayne County. 83.3% of Spanish survey respondents were able to see most of their medical providers in Duplin County while 11.7% sought care in Wayne County.

"Community outreach is tough. It's great when BP screening and such are offered to the community. But it's the homebound that don't get to experience these services. Home health is important."

-Focus Group Participant

Focus group participants shared their struggles with accessing health services in the community. Some participants expressed that it is due to a lack of specialty providers in Duplin County. Participants described additional barriers to accessing health services including financial constraints, not having adequate or any health insurance, hours of operation of most clinics and difficulty with attaining transportation to get to medical facilities. Many participants felt that adding more clinic locations and adding hours of operation, improving urgent care centers and mobile health units could alleviate community issues related to access to health care services. Access to mental health and mental health providers was not discussed in the focus group sessions but secondary data demonstrates a gap in services

#### Highly Impacted Populations

Data scoring revealed that the Medicare population are a highly impacted population related to preventable hospital stays. Primary data sources identified highly impacted populations as the Hispanic/Latino population and senior citizens that are homebound or fixed income.

## Transportation

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#### Key Issues

- Workers do not commute to work via public transportation in the community
  - The percentage of households that do not have access to a vehicle is lower in Duplin County than in the state and U.S.
- 

#### Secondary Data

Transportation received a data score of 2.07 and is an area of concern for Duplin County. Some of the poorest performing indicators related to Transportation are displayed in Table 16, 0% of workers reported commuting to work via public transportation in 2012-2016 and 1.5% of workers walk to work in 2012-2016. Duplin County does not meet the Healthy People 2020 goals of 5.5% of workers commuting by public transportation and 3.1% of workers walking to work. There is an indication of a great need for addressing this issue in the community since 8.3% of households also do not have access to a vehicle. In addition, 5.7% of households do not have access to a car and also have low access to a grocery store. The mean travel time to work in Duplin County is 26.8 minutes 36.3% of solo drivers have a long commute to work which are both indicators that are higher than in the state and U.S.

**Table 17. Data Scoring Results for Environment**

Score	Indicator (Year) (Units)	Duplin County	North Carolina	U.S.	North Carolina Counties	U.S. Counties	Trend	Healthy NC 2020	HP 2020
2.1	Households without a Vehicle (2012-2016) (percent)	8.3	6.3	9					
2.65	Workers Commuting by Public Transportation (2012-2016) (percent)	0	1.1	5.1				-	-
1.95	Households with No Car and Low Access to a Grocery Store (2015) (percent)	5.7	-	-				-	5.5
2.4	Mean Travel Time to work (2012-2016) (minutes)	26.8	24.1	26.1				-	-
2.25	Solo Drivers with a Long Commute (2012-2016) (percent)	36.3	31.3	34.7				-	-
2.35	Workers who Walk to Work (2012-2016) (percent)	1.5	1.8	2.8				-	3.1

*\*See Appendix B for full list of indicators included in each topic area*

#### Primary Data

According to survey results, transportation did not rank as one of the top services individuals in Duplin County feel need the most improvement compared to other community issues in both English and Spanish survey results (<1% English survey, 3.3% Spanish survey).

Transportation was discussed ten times in the Focus Group sessions. Most participants raised transportation in context of senior citizens experiencing challenges getting to and from medical facilities. One participant felt that veterans are impacted by a lack of access to transportation.

"We have a lot of veterans in this area, but we not have any help such as transportation."

*-Focus Group Participant*

### Highly Impacted Populations

Focus group participants identified senior citizens and veterans as groups highly impacted by Transportation. In a rural community transportation affects all residents. Common transportation barriers for residents of Duplin include long travel distances, lack of vehicle, transportation cost, inadequate infrastructure, and adverse policies affecting travel. Each of these obstacles can keep a patient from accessing the providers, which in turn could impair overall health. Lack of transportation can also exacerbate other social determinants of health. For example, individuals who cannot get from one place to another likely cannot easily access a grocery store, creating food insecurity, get to a job or to school.

Current County Transportation system is limited to the hours of 5am -5pm Monday through Friday. The office hours are 8-5p. There are no routine bus routes or bus stops. The policy is that the person needing a ride must call the office, at least 2 days before the ride is needed for in-county travel. For out-of-county travel to a medical appointment, it must be arranged at least 3 days before the scheduled appointment. There are set days when the buses are scheduled to go to Greenville, Raleigh etc. and this because an issue if the client has an appointment on an odd day. Though Medicaid/ Medicare may cover the cost of travel, those residents without insurance will have to pay cash at the time of the pick-up.

## Education

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### Key Issues

- Fewer people have a high school degree or higher in Duplin County than in the state or U.S.
  - Higher education attainment is lower in Duplin county than in the state and U.S.
  - 4<sup>th</sup> grade math proficiency is an area of concern within the Education topic area
- 

### Secondary Data

The secondary data scoring results identified Education as a top need in Duplin County with a score of 2.00. Additional analysis is performed to find specific indicators that contribute to this area of concern, and these indicators are identified with high indicator data scores, shown in Table 17. 72% of people over the age of twenty-five have a high school degree or higher and 10.3% of those over age twenty-five have a bachelor's degree or higher in the community in 2012-2016. For both indicators, Duplin County performs poorer than the state or U.S. overall. In addition, 38.9% of Duplin County 4<sup>th</sup> graders are proficient in math compared to 58.6% in North Carolina.

**Table 18. Data Scoring Results for Education**

Score	Indicator (Year) (Units)	Dupli n Count y	North Carolina	U.S.	North Carolin a Countie s	U.S. Counties	Trend	Healthy NC 2020	HP 2020
2.3	People 25+ with a High School Degree or Higher (2012-2016) (percent)	72	86.3	87				-	-
2.5	People 25+ with a Bachelor's Degree or Higher (2012-2016) (percent)	10.3	29	30.3				-	-
2	High School Graduation (2016-2017) (percent)	81.3	86.5	-				94.6	87
2.05	4th Grade Students Proficient in Math (2016-2017) (percent)	38.9	58.6	-				-	-

*\*See Appendix B for full list of indicators included in each topic area*

### Primary Data

According to survey results, education did not rank as one of the top issues impacting quality of life in Duplin County compared to other issues in the community. Education was not discussed at length in the Focus Group sessions, however, two participants shared that they felt the education system was a problem in their community.

### Highly Impacted Populations

Education level is critical to the social and economic development and impacts the population health. Education may also impact health literacy. Research demonstrates almost half of adults who did not graduate from high school had low health literacy. Some of the greatest disparities in health literacy occur among racial and ethnic minority groups from different cultural backgrounds and those who do not speak English as a first language.

## Social Environment













### Key Issues

- The percentage of the population below the poverty level is higher in Duplin County in than in North Carolina and the U.S.
- Children, Young Children and Adults over 65 are highly impacted populations within this topic area

### Secondary Data

From the secondary data scoring results, Social Environment was identified to be a top need in Duplin County. Social Environment received a score of 1.91. Indicators within this topic area are related to income, poverty level, potential isolation due to living conditions and education attainment which relates to employment and potential job satisfaction. There are many high scoring indicators of concern which are highlighted in Table 18. Several indicators within this topic area overlap with other topic areas such as Transportation, Economy and Education. 27.6% of people within Duplin County live below the poverty level which is higher than in North Carolina (16.8%) and the U.S. (15.1%). In addition, 41.2% of children and 48.7% of young children live below the poverty level. Related to social isolation, 29.9% of people over the age of 65 live alone in Duplin County. Linguistic isolation within the county is higher in Duplin County (6.7%) than in North Carolina (2.5%) and the U.S. (4.5%). However, there is a significant decreasing trend for linguistic isolation over time. Mean travel time to work is significantly increasing over time in Duplin County (26.8 minutes) and is higher than the state and U.S. mean travel time to work.

**Table 19. Data Scoring Results for Social Environment**

Score	Indicator (Year) (Units)	Duplin County	North Carolina	U.S.	North Carolina Counties	U.S. Counties	Trend	Healthy NC 2020	HP 2020
2.65	People Living Below Poverty Level (2012-2016) (percent)	27.6	16.8	15.1				12.5	-
2.4	Children Living Below Poverty Level (2012-2016) (percent)	41.2	23.9	21.2				-	-
2.55	Single-Parent Households (2012-2016) (percent)	41.7	35.7	33.6				-	-
2.3	Per Capita Income (2012-2016) (dollars)	17960	26779	29829				-	-

2.3	People 65+ Living Alone (2012-2016) (percent)	29.9	26.8	26.4				-	-
2.5	Young Children Living Below Poverty Level (2012-2016) (percent)	48.7	27.3	23.6				-	-
2.3	People 25+ with a High School Degree or Higher (2012-2016) (percent)	72	86.3	87				-	-
2.5	People 25+ with a Bachelor's Degree or Higher (2012-2016) (percent)	10.3	29	30.3				-	-
2.4	Mean Travel Time to Work (2012-2016) (minutes)	26.8	24.1	26.1				-	-
2.1	Linguistic Isolation (2012-2016) (percent)	6.7	2.5	4.5				-	-

*\*See Appendix B for full list of indicators included in each topic area*

### Primary Data

Amongst both English and Spanish survey respondents, 5.9% of survey participants felt that lack of community support was a top issue affecting the quality of life in the community. 30% of English survey respondents and 15% of Spanish survey respondents disagreed or strongly disagreed that there is help for people during times of need in their community.

Among community survey respondents, positive teen activities were ranked third and better or more recreational facilities was ranked fifth of the services needing improvement in the community by English survey respondents. Spanish survey respondents selected better or more recreational facilities fourth amongst services needing improvement in the community. A portion of both English and Spanish survey participants disagreed or strongly disagreed that there are good parks and recreation facilities in the community (35% English survey, 28% Spanish survey).

### Highly Impacted Populations

The social environment refers to the immediate physical and social setting in which all people live. It includes the culture that the individual was educated or live sin and the people and institutions with whom they interact. The five key areas of social determinate so f health 1) Economic Stability, 2) Education, 3) Social and Community Context, 4) Health and Health Care, 5) Neighborhood and Built Environment.

## Mortality

Knowledge about the leading causes of death in a population is critical to understanding how to target interventions to maximize population health. Table 20 shows the leading causes of mortality in Duplin County, North Carolina, and Health ENC Counties in 2014-2016, where the rate is age-adjusted to the 2000 U.S. standard population and is given as an age-adjusted death rate per 100,000 population.

**Table 20. Leading Causes of Mortality in Duplin County, North Carolina, and Health ENC Counties (2014-2016, CDC WONDER)**

Duplin County				North Carolina			Health ENC Counties		
Rank	Cause	Deaths	Rate*	Cause	Deaths	Rate*	Cause	Deaths	Rate*
1	Heart Diseases	364	166.3	Cancer	58,187	165.1	Cancer	12,593	177.5
2	Cancer	358	158.7	Heart Diseases	54,332	159	Heart Diseases	12,171	178.8
3	Cerebrovascular Diseases	130	60.8	Chronic Lower Respiratory Diseases	15,555	45.1	Cerebrovascular Diseases	3,247	48.5
4	Accidental Injuries	99	51.9	Accidental Injuries	15,024	48.2	Accidental Injuries	3,136	50.1
5	Chronic Lower Respiratory Diseases	94	42.4	Cerebrovascular Diseases	14,675	43.6	Chronic Lower Respiratory Diseases	3,098	44.9
6	Diabetes	70	32.6	Alzheimer's Disease	11,202	34.2	Diabetes	2,088	29.9
7	Kidney Diseases	38	17.6	Diabetes	8,244	23.6	Alzheimer's Disease	1,751	27.3
8	Septicemia	37	17.7	Influenza and Pneumonia	5,885	17.5	Influenza and Pneumonia	1,148	17.2
9	Alzheimer's Disease	30	14.7	Kidney Diseases	5,614	16.5	Kidney Diseases	1,140	16.8
10	Hypertension	28	12.6	Septicemia	4,500	13.1	Septicemia	1,033	15.1

*\*Age-adjusted death rate per 100,000 population*

## Other Significant Health Needs

### Economy

#### Secondary Data

From the secondary data scoring results, Economy receives a score of 1.79 and was the seventh most pressing health need in Duplin County. Top related indicators include: People Living 200% Above Poverty Level (2.70), People Living Below Poverty Level (2.65), Families Living Below Poverty Level (2.50), Young Children Living Below Poverty Level (2.50), Children Living Below Poverty Level (2.40), Students Eligible for the Free Lunch Program (2.35), Child Food Insecurity Rate (2.30), Per Capita Income (2.30), Severe Housing Problems (2.25), Median Household Income (2.10), People 65+ Living Below Poverty Level (2.10), Median Housing Unit Value (2.08) and Food Insecurity Rate (2.00).

#### Primary Data

Community survey participants were asked to rank the issue that most negatively impacts their community's quality of life. Both poverty and the economy were the top issues identified in Duplin County that negatively impact quality of life, selected by 46.1% of survey participants.

Community survey participants were also asked to weigh-in on areas of community services that needed the most improvement. With the highest share of responses, higher paying employment ranked first (25.8% English survey, 18.3% Spanish survey). Availability of employment was selected by 11.1% of English survey respondents and 8.3% of Spanish survey respondents. In addition, 10% of Spanish survey respondents selected more affordable health services and 10% selected more affordable/better housing as services needing improvement.

"Help the middle class. Just because they have jobs does not mean they can afford everything. People still struggle."

-Focus Group Participant

The top economic concern among focus group participants not being able to afford the cost of health services and medications. Participants shared personal stories about not being able to pay for co-pays and choose between paying for medications or other bills. One participant was concerned about being able to afford to fix their air conditioning which impacts their breathing issues. Another participant expressed that even those who may be employed may also be struggling but it may be less visible.

### Substance Abuse

#### Secondary Data

From the secondary data scoring results, Substance Abuse received a score of 1.61 and was the thirteenth most pressing health need in Duplin County. Top related indicators include: Adults who Smoke (2.70) and Alcohol-Impaired Driving Deaths (2.50).

#### Primary Data

Community survey participants ranked substance abuse (19.8%) as the second most important issue affecting quality of life in Duplin County. Additionally, 19% of English survey respondents and 18.3% of Spanish survey respondents reported wanting to learn more about substance abuse prevention.

8% of English survey participants reported currently using tobacco products and 7% of Spanish respondents reported use. More English survey participants reported having been exposed to secondhand smoke in the last year than Spanish survey respondents (12% Spanish, 41% English). Of

those who indicated that they had been exposed to secondhand smoke, 57% of Spanish respondents were exposed at their workplace. English participants ranked home as the mostly likely place to be exposed to secondhand smoke (36%) followed closely by ‘other’ locations (35%). When examining the ‘other’ open-ended responses, most people listed other people’s homes or outdoor events and venues as locations.

Over 80% of participants across both surveys reported zero incidences of having had 4/5 or more drinks on an occasion in the past 30 days. Reported illicit drug use amongst survey participants in the past 30-days was very low, the clear majority reporting no illegal drug use (100% English, 98% Spanish). 100% of Spanish respondents and 98% of English respondents reported no use of prescription drugs they did not have a prescription for.

Substance Abuse was not discussed at length in the focus group sessions. For those participants that did identify substance abuse as a problem in the community, they primarily felt that tobaccos and alcohol use were top issues. Two participants were concerned about adolescents and young adults access to substances.

In response to the increasing opioid overdose deaths in North Carolina, many counties formed a taskforce or coalition to gather the community together to address this epidemic. Duplin County formed a Substance Use Coalition in 2017. The coalition has been starting to educating community leaders, identifying current and needed resources, and looking at the local data on drug use. Though Duplin County has had few overdose deaths, the manufacturing of methamphetamine, misuse of prescription pain medications, and tobacco use remain high substance use issues. The use of drugs by adolescents including alcohol, tobacco, including e-cigs is a priority to area in the Coalition’s strategic plan for 2019.

## A Closer Look at Highly Impacted Populations

Several subpopulations emerged from the primary and secondary data for their disparities in access to care, risk factors, and health outcomes. This section focuses on these subpopulations and their unique needs.

### Disparities by Age, Gender and Race/Ethnicity

Secondary data are further assessed to determine health disparities for race/ethnic, age, or gender groups. Table identifies indicators in which a specific population subgroup differs significantly and negatively from the overall population in Duplin County, with significance determined by non-overlapping confidence intervals.

**Table 21. Indicators with Significant Race/Ethnic, Age, or Gender Disparities**

Health Indicator	Group(s) Disparately Affected*
People Living Below Poverty Level	18-24, 6-11, <6, Hispanic or Latino, Other
Families Living Below Poverty Level	Hispanic or Latino, Other, Two or More Races
People 25+ with a Bachelor's Degree or Higher	Male, Black or African American, Other
Young Children Living Below Poverty Level	Black or African American
Children Living Below Poverty Level	Black or African American, Hispanic or Latino, Other
People 25+ with a High School Degree or Higher	25-34, Other
Per Capita Income	Asian, Black or African American, Hispanic or Latino, Other, Two or More Races
Median Household Income	Black or African American, Hispanic or Latino
People 65+ Living Below Poverty Level	Black or African American
Bladder Cancer Incidence Rate	Male
All Cancer Incidence Rate	Male
Workers who Drive Alone to Work	55-59, Female, White, non-Hispanic
Prostate Cancer Incidence Rate	Black

\*See [HealthENC.org](http://HealthENC.org) for indicator values for population subgroups

The list of indicators with significant disparities should be interpreted with caution. Indicators beyond those displayed in Table may also negatively impact a specific subgroup; however, not all data sources provide subpopulation data, so it is not possible to draw conclusions about every indicator used in the secondary data analysis.

## **Geographic Disparities**

Geographic disparities are identified using the SocioNeeds Index®. Zip code 284533, with an index value of 96.8, has the highest socioeconomic need within Duplin County, potentially indicating poorer health outcomes for its residents. See the [SocioNeeds Index®](#) for more details, including a map of Duplin County zip codes and index values.

## Conclusion

The Community Health Needs Assessment utilized a comprehensive set of secondary data indicators measuring the health and quality of life needs for Duplin County. The assessment was further informed with input from Duplin County residents through a community survey and focus group discussions that included participants from broad interests of the community. The data synthesis process identified eight significant health needs: Access to Health Services, Diabetes, Economy, Education, Exercise, Nutrition & Weight, Social Environment, Substance Abuse and Transportation.

Primary and Secondary data identifies the following groups as at-risk or populations with health disparities:

- The uninsured and under-insured
- Persons living in poverty
- Minorities
- Persons with poor access to transportation, because travel may be necessary to reach certain healthcare providers
- The elderly
- Children, rates of neglect and abuse increasing and increase in children placed in foster care due to parental drug use

The prioritization process identified four focus areas:

1. **Chronic Disease Prevention & Management:** Focus on Healthy Lifestyles and Weight Management; Nutrition Education; Dental Care with a focus on children and adolescents.
2. **Access to Care:** Physical & Mental Health Care Services; Focus on After Hours Care; Primary Care & Specialty Care Available; Dental Care; Pediatric & Adolescent Care; and Transportation issues which impact access.
3. **Disaster Recovery & Mitigation:** Focus on recovery from previous hurricanes, as well as mitigating actions to prevent / minimize future damage from natural disasters. Focus on mental health issues, especially among youth.
4. **Substance Use:** Youth & Adult; Special focus on youth use of alcohol, tobacco and other drugs. Adult incarcerations related to substance use and providing treatment options instead of incarceration.

Following this process, Duplin County will outline how it plans to address these health needs in its implementation plans.

We hope to incorporate any feedback on this report into the next CHNA process. Please send your feedback and comments to Duplin County Health Department at 910-296-2130.

## Appendix A. Impact Since Prior CHNA

Health Priority Category Identified in Preceding CHNA	Planned Activities to Address Health Needs Identified in Preceding Implementation Strategy	Was Activity Implemented (Yes/No)	Outcomes of Initiatives
Access To Care	<b>Goal:</b>  <b>To improve access to health care especially for the uninsured/underinsured patient population.</b>	Yes	<ul style="list-style-type: none"> <li>• VDUP continued to maintain quality healthcare services.</li> <li>• Attained/maintained Certified Primary Stroke Care Center status as one measure of excellence offered to our community.</li> <li>• Collaborated with Vidant Medical Group to help recruit additional primary care and specialty providers to help keep care local. Recruitment of two OB/GYN physicians, along with the addition of one primary care physician and one surgeon were added to the providers available to our community.</li> <li>• Continued to grow our faith-based Partnership: HealTHY Neighbor faith-based partnership continues to offer screenings in our community and establish new partnerships of other faith-based organizations and churches.</li> <li>• Developed a diabetes program for the community. VDUP now offers the services for a Registered Dietician in the community. The dietician oftentimes accompanies the screening team in Community Health free screenings as well as seeing patients at the VMG medical practices and at the hospital.</li> <li>• VDUP continued to provide financial counselors and to offer charity care to patients who are unable to pay due to financial hardships. Free cholesterol, blood pressure and blood glucose screenings are offered throughout the year in the county. Education and referrals are given to the participants accordingly.</li> </ul>

Health Priority Category Identified in Preceding CHNA	Planned Activities to Address Health Needs Identified in Preceding Implementation Strategy	Was Activity Implemented (Yes/No)	Outcomes of Initiatives
<b>Access To Care - continued</b>			<ul style="list-style-type: none"> <li>• Actively served on the Duplin Population Health Community Coalition which works to address the most critical needs in Duplin County - including access to care. VDUP continues to serve and participate in the Population Health Coalition.</li> <li>• Collaborated with Duplin County Health Department to help the community access to health care services locally.</li> <li>• Funded local programs related to access to care through the Vidant Duplin Foundation's Community Benefit Grants Initiative. VDUP's foundation continues to award grants to various community organizations who facilitate access to care programs.</li> </ul>
<b>Substance Abuse/ Mental Health</b>	<b>Goal:</b> <b>To improve access to services for mental health and substance abuse patients.</b>	<b>Yes</b>	<ul style="list-style-type: none"> <li>• VDUP provides an inpatient behavior health unit.</li> <li>• Collaborated with mental health services in the region. Actively participates with Eastpointe Mental Health services and the Duplin County Substance Abuse Coalition as well as a working relationship with other local mental health counselors.</li> <li>• VDUP offers a comprehensive care management and transitional care program including care management, care coordination, primary care and pharmaceutical assistance program referrals.</li> <li>• Continued to collaborate with public health-oriented organizations in and around Duplin County and partners with the Duplin County Health Department to establish services for the under- and uninsured.</li> <li>• Participated in the Geriatric/Adult Mental Health Specialty Team (GAST) program.</li> <li>• Funded local programs related to substance abuse/mental health through the Vidant Duplin Foundation's Community Benefit Grants Initiative. VDUP has offered funding support related to substance abuse/mental health through grants.</li> </ul>

Health Priority Category Identified in Preceding CHNA	Planned Activities to Address Health Needs Identified in Preceding Implementation Strategy	Was Activity Implemented (Yes/No)	Outcomes of Initiatives
<b>Chronic Disease</b>	<p><b>Goal:</b></p> <p><b>To improve outcomes and quality of life for adults with chronic illness (i.e. diabetes, heart disease, stroke, hypertension, chronic lung).</b></p>	<b>Yes</b>	<ul style="list-style-type: none"> <li>• Provided education on chronic disease prevention and management as and healthy living. Speaking engagements to faith congregations, civic groups, community events, Pink Power for Breast Cancer in October and Heart Truth Women’s Heart Event in February. 2016: 2126 persons served 2017: 2139 persons served 2018: 2511 persons served</li> <li>• Continued to provide community screenings at no-cost to our participants to inform them of “Know Your Numbers”. Educational counseling of their results was offered as well as follow-up conversations. Diabetes, Cholesterol, Blood Pressure: 2016: 1463 persons screened 2017: 1192 persons screened 2018: 1261 persons screened</li> <li>• Continued to support and grow faith-based health partnerships within Duplin county. Our HealTHY Neighbors partnership and other church communities outreach continues to be a successful venue in reaching diverse populations within the faith-based communities. 2016: 234 persons served for education events/screenings 2017: 161 persons served for education events/screenings 2018: 289 persons served for education events/screenings</li> <li>• Continued to educate the community about a variety of topics related to chronic disease management, prevention and awareness through news articles, social media, bulletin board education, printed materials and also in-house educational booths through the Body-Mind-Wellness Council.</li> </ul>

Health Priority Category Identified in Preceding CHNA	Planned Activities to Address Health Needs Identified in Preceding Implementation Strategy	Was Activity Implemented (Yes/No)	Outcomes of Initiatives
<b>Chronic Disease - continued</b>			<ul style="list-style-type: none"> <li>Continued to utilize our Community Health program to plan, organize and oversee community education opportunities and to be the liaison between Vidant Duplin Hospital with churches, schools, civic organizations and seek opportunities to share ways to improve overall community health and wellness.</li> <li>Continued to collaborate with public health-oriented organizations in and around Duplin County. VDUP partners with the Duplin County Health Department to screen and offer education opportunities to the county and conduct health needs assessments and education and is a member of the Coastal Carolina Health Alliance.</li> <li>Funded local programs related to chronic disease through the Vidant Duplin Foundation's Community Benefit Grants Initiative. Funding continues for healthy living programs managed by Duplin County Cooperative Extension, Duplin County Health Department, North Duplin County Schools, Duplin Partners for Health, Faison Recreation and Wellness Center, Food Bank of Central and Eastern North Carolina, Duplin County Partnership for Children and other agencies as identified. VDUP's foundation continues to award grants to various community organizations who facilitate healthy eating and physical activity for area children and adults.</li> </ul>

Health Priority Category Identified in Preceding CHNA	Planned Activities to Address Health Needs Identified in Preceding Implementation Strategy	Was Activity Implemented (Yes/No)	Outcomes of Initiatives
<b>Prevention/Healthy Lifestyles</b>	<b>Goal:</b>  <b>To educate adults and children on the benefits of physical activity and nutrition and provide resources to improve general health and fitness.</b>	<b>Yes</b>	<ul style="list-style-type: none"> <li>• Collaborated with public health-oriented organizations improving general health and fitness in Duplin County. VDUP continues to collaborate with local agencies, schools, grant funded programs and industry and provided no-cost health screenings for adults.</li> <li>• Worked with local places of worship to promote healthy living/lifestyles through HealTHY Neighbor faith-based partnership. VDUP offers screenings and education events to our faith-based partners on a regular basis. Presentations on Disease Management, Healthy Lifestyles and Prevention, and written literature was provided to the participants as well.</li> <li>• Continued to offer screenings to Duplin County School employees and other service groups (i.e., local fire departments, police departments, town employees, EMS). VDUP offers free cholesterol, blood pressure and blood glucose screenings to service groups and Duplin County School employees annually.</li> <li>• Continued to participate in system-wide wellness initiatives and offer to our employees for promotion of healthy lifestyles. VDUP continues to offer an employee workout facility, “The Fitness Factory”, which is opened 24/7 for team members. Health initiatives are offered via Vidant Health in which team members can participate in to promote healthy living, healthy choices, movement and healthy eating.</li> <li>• Provided educational booths from the Vidant Duplin Hospital Body-Mind-Wellness Council to employees and visitors. The BMW Council offers bi-monthly health education events to team members and visitors via education booths, quizzes and displays.</li> </ul>

Health Priority Category Identified in Preceding CHNA	Planned Activities to Address Health Needs Identified in Preceding Implementation Strategy	Was Activity Implemented (Yes/No)	Outcomes of Initiatives
<b>Prevention/Healthy Lifestyles - continued</b>	<b>Goal:</b> <b>To educate adults and children on the benefits of physical activity and nutrition and provide resources to improve general health and fitness.</b>	<b>Yes</b>	<ul style="list-style-type: none"> <li>• Promoted healthy eating at all hospital-sponsored functions (internal and external) where food is served and offered healthy options. VDUP continues to offer 75 percent healthy choices and discounted healthy food and continues to promote healthy eating at hospital-sponsored functions.</li> <li>• Fund local programs related to prevention/healthy lifestyle through the Vidant Duplin Foundation's Community Benefit Grants Initiative. Funding continued for healthy living programs managed by Duplin County Cooperative Extension, Duplin County Health Department, North Duplin County Schools, Duplin Partners for Health, Faison Recreation and Wellness Center, Food Bank of Central and Eastern North Carolina, Duplin County Partnership for Children and other agencies as identified. VDUP's foundation continues to award grants to various community organizations who facilitate healthy eating and physical activity for area children and adults.</li> </ul>

**Note:** The IRS requirements state that charitable hospitals must evaluate the impact of the actions taken to address the significant health needs from the previous CHNA report. This information provides outcomes and progress from the 2016 CHNA Implementation Strategy. Some of these initiatives were the result of community collaborations. This report does not include all of the initiatives funded by the Vidant Health Foundation Community Benefit Grants Program.

## Appendix B. Secondary Data Scoring

### Overview

Data scoring consists of three stages, which are summarized in Figure:

#### Comparison Score

For each indicator, Duplin County is assigned up to 7 comparison scores based on its comparison to other communities, whether health targets have been met, and the trend of the indicator value over time. Comparison scores range from 0-3, where 0 indicates the best outcome and 3 indicates the worst outcome (Figure).

#### Indicator Score

Indicator scores are calculated as a weighted average of comparison scores. Indicator scores range from 0-3, where 0 indicates the best outcome and 3 indicates the worst outcome (Figure).

#### Topic Score

Indicators are then categorized into topic areas. Topic scores are calculated by averaging all relevant indicator scores, with indicators equally weighted. Topic scores range from 0-3, where 0 indicates the best outcome and 3 indicates the worst outcome (Figure). Indicators may be categorized into more than one topic area.

Figure 48. Secondary Data Scoring

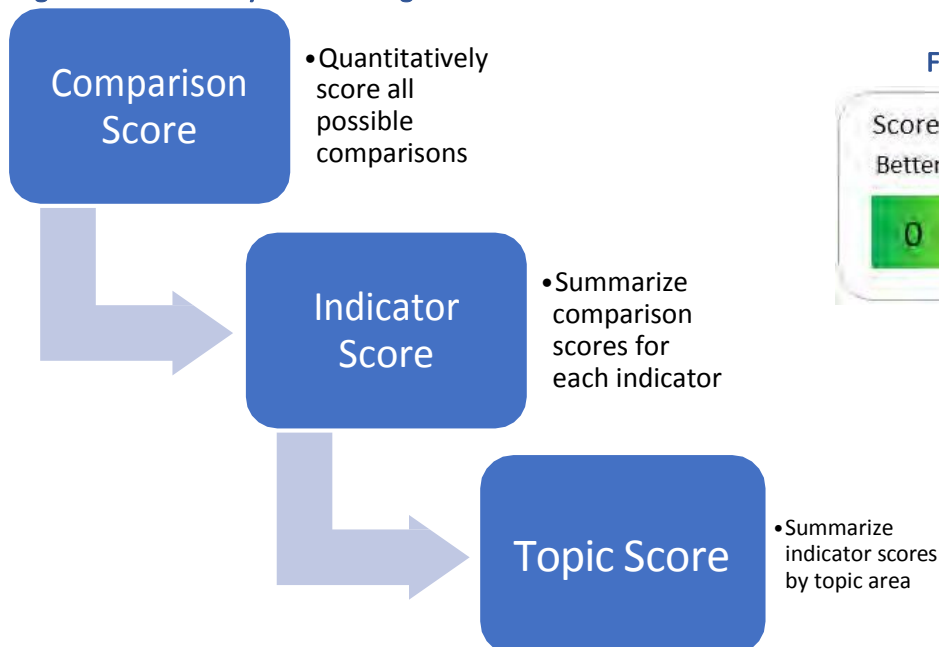
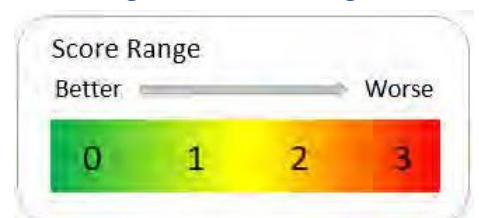


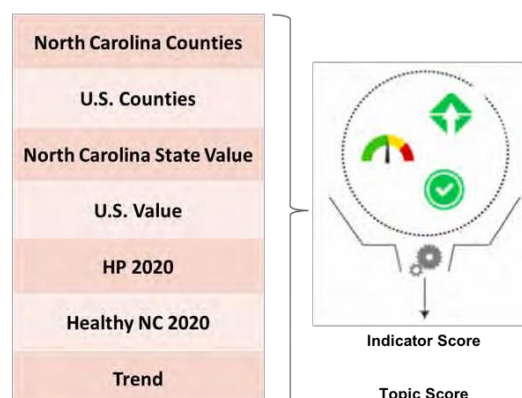
Figure 49. Score Range



## Comparison Scores

Up to 7 comparison scores were used to assess the status of Duplin County. The possible comparisons are shown in Figure and include a comparison of Duplin County to North Carolina counties, all U.S. counties, the North Carolina state value, the U.S. value, Healthy People 2020 targets, Healthy North Carolina 2020 targets, and the trend over time. Availability of each type of comparison varies by indicator and is dependent upon the data source, comparability with data collected for other communities, and changes in methodology over time. The determination of comparison scores for each type of comparison is discussed in more detail below.

Figure 50. Comparisons used in Secondary



### Comparison to a Distribution of North Carolina Counties and U.S. Counties

For ease of interpretation and analysis, indicator data on [HealthENC.org](https://www.healthenc.org) is visually represented as a green-yellow-red gauge showing how Duplin County is faring against a distribution of counties in North Carolina or the U.S. (Figure).

Figure 51. Compare to Distribution Indicator



A distribution is created by taking all county values within the state or nation, ordering them from low to high, and dividing them into four equally sized groups based on their order (Figure). The comparison score is determined by how Duplin County falls within these four groups or quartiles.

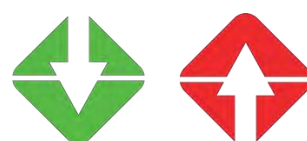
Figure 52. Distribution of County Values



### Comparison to North Carolina Value and U.S. Value

As shown in Figure, the diamond represents how Duplin County compares to the North Carolina state value and the national value. When comparing to a single value, the comparison score is determined by how much better or worse the county value is relative to the comparison value.

Figure 53. Comparison to Single Value



### Comparison to Healthy People 2020 and Healthy North Carolina 2020 Targets

As shown in Figure, the circle represents how Duplin County compares to a target value. Two target values are taken into consideration for this analysis: Healthy People 2020 and Healthy North Carolina

2020. Healthy People 2020<sup>2</sup> goals are national objectives for improving the health of the nation set by the Department of Health and Human Services' (DHHS) Healthy People Initiative. Healthy North Carolina 2020<sup>3</sup> objectives provide a common set of health indicators that the state can work to improve. The North Carolina Institute of Medicine, in collaboration with the Governor's Task Force for Healthy Carolinians; the Division of Public Health, North Carolina Department of Health and Human Services (NC DHHS); the Office of Healthy Carolinians and Health Education, NC DHHS; and the State Center for Health Statistics, NC DHHS, helped lead the development of the Healthy NC 2020 objectives. When comparing to a target, the comparison score is determined by whether the target is met or unmet, and the percent difference between the indicator value and the target value.

**Figure 54. Comparison to Target Value**



### Trend Over Time

As shown in Figure, the square represents the measured trend. The Mann-Kendall statistical test for trend is used to assess whether the value for Duplin County is increasing or decreasing over time and whether the trend is statistically significant. The trend comparison uses the four most recent comparable values for the county, and statistical significance is determined at the 90% confidence level. For each indicator with values available for four time periods, a comparison score is determined by the trend's direction and its statistical significance.

**Figure 55. Trend Over Time**



### Missing Values

Indicator scores are calculated using the comparison scores, availability of which depends on the data source. If an indicator does not have data for a specific comparison type that is included for indicator score calculations, the missing comparison is substituted with a neutral score. When information is unknown due to lack of comparable data, the neutral value assumes that the missing comparison score is neither good nor bad and does not impact the indicator's weighted average.

## Indicator Scoring

Indicator scores are calculated as a weighted average of all included comparison scores. If none of the included comparison types are possible for an indicator, no score is calculated, and the indicator is excluded from the data scoring results.

## Topic Scoring

Indicator scores are averaged by topic area to calculate topic scores. Each indicator may be included in up to three topic areas if appropriate. Resulting scores range from 0-3, where a higher score indicates a greater level of need as evidenced by the data. A topic score is only calculated if it includes at least three indicators.

<sup>2</sup> For more information on Healthy People 2020, see <https://www.healthypeople.gov/>

<sup>3</sup> For more Information on Healthy North Carolina 2020, see: <https://publichealth.nc.gov/hnc2020/>

## Age, Gender and Race/Ethnicity Disparities

When a given indicator has data available for population subgroups – such as age, gender and race/ethnicity – and values for these subgroups include confidence intervals, we are able to determine if there is a significant difference between the subgroup's value and the overall value. A significant difference is defined as two values with non-overlapping confidence intervals. Confidence intervals are not available for all indicators. In these cases, disparities cannot be determined because there is not enough data to conclude whether two values are significantly different from each other.

## Topic Scoring Table

Table shows the Topic Scores for Duplin County, with higher scores indicating a higher need.

**Table 21. Topic Scores for Duplin County**

<b>Health and Quality of Life Topics</b>	<b>Score</b>
Access to Health Services	2.09
Diabetes	2.08
Transportation	2.07
Education	2.00
Wellness & Lifestyle	2.00
Social Environment	1.91
Economy	1.79
Heart Disease & Stroke	1.76
Exercise, Nutrition, & Weight	1.71
Respiratory Diseases	1.69
Older Adults & Aging	1.68
Public Safety	1.65
Substance Abuse	1.61
Environmental & Occupational Health	1.61
County Health Rankings	1.61
Maternal, Fetal & Infant Health	1.59
Mental Health & Mental Disorders	1.59
Other Chronic Diseases	1.50
Environment	1.47
Mortality Data	1.46
Prevention & Safety	1.42
Immunizations & Infectious Diseases	1.41
Women's Health	1.37
Cancer	1.25
Men's Health	1.17

## Indicator Scoring Table

Table (spanning multiple pages) presents the indicator data used in the quantitative data analysis. Indicators are grouped into topic areas and sorted by indicator score, with higher scores indicating a higher need. Duplin County values are displayed alongside various comparison values and the period of measurement. Additional data can be found on [HealthENC.org](http://HealthENC.org).

**Table 22. Indicator Scores by Topic Area**

SCORE	ACCESS TO HEALTH SERVICES	MEASUREMENT PERIOD	UNITS	DUPLIN COUNTY	NORTH CAROLINA	U.S.	HP2020	HEALTHY NC 2020	HIGH DISPARITY*	SOURCE
2.50	Primary Care Provider Rate	2015	providers/ 100,000 population	23.7	70.6	75.5				4
2.30	Dentist Rate	2016	dentists/ 100,000 population	23.7	54.7	67.4				4
2.25	Mental Health Provider Rate	2017	providers/ 100,000 population	62.7	215.5	214.3				4
2.03	Persons with Health Insurance	2016	percent	79.9	87.8		100	92		17
2.00	Preventable Hospital Stays: Medicare Population	2014	discharges/ 1,000 Medicare enrollees	59.1	49	49.9				18
1.80	Non-Physician Primary Care Provider Rate	2017	providers/ 100,000 population	54.3	102.5	81.2				4
1.73	Clinical Care Ranking	2018	ranking	91						4

SCORE	CANCER	MEASUREMENT PERIOD	UNITS	DUPLIN COUNTY	NORTH CAROLINA	U.S.	HP2020	HEALTHY NC 2020	HIGH DISPARITY*	SOURCE
2.50	Cancer: Medicare Population	2015	percent	8.7	7.7	7.8				3
2.23	Cervical Cancer Incidence Rate	2010-2014	cases/ 100,000 females	10.1	7.2	7.5	7.3			7
1.90	Mammography Screening: Medicare Population	2014	percent	62.3	67.9	63.1				18
1.60	Oral Cavity and Pharynx Cancer Incidence Rate	2010-2014	cases/ 100,000 population	12.4	12.2	11.5				7
1.50	Bladder Cancer Incidence Rate	2010-2014	cases/ 100,000 population	18.9	20.1	20.5			Male	7
1.45	Age-Adjusted Death Rate due to Colorectal Cancer	2010-2014	deaths/ 100,000 population	13.6	14.1	14.8	14.5	10.1		7

\*High Disparity includes differences in which subgroups do significantly better or significantly worse than the overall county value. Subgroup values are given in parentheses.

1.45	Lung and Bronchus Cancer Incidence Rate	2010-2014	cases/ 100,000 population	66.9	70	61.2			7
1.35	Age-Adjusted Death Rate due to Lung Cancer	2010-2014	deaths/ 100,000 population	46.4	50.7	44.7	45.5		7
1.25	Age-Adjusted Death Rate due to Breast Cancer	2010-2014	deaths/ 100,000 females	19.8	21.6	21.2	20.7		7
1.20	Age-Adjusted Death Rate due to Cancer	2010-2014	deaths/ 100,000 population	163.3	172	166.1	161.4		7
1.15	All Cancer Incidence Rate	2010-2014	cases/ 100,000 population	422.6	457	443.6		Male	7
1.10	Age-Adjusted Death Rate due to Pancreatic Cancer	2010-2014	deaths/ 100,000 population	10.1	10.8	10.9			7
1.00	Age-Adjusted Death Rate due to Prostate Cancer	2010-2014	deaths/ 100,000 males	20.2	21.6	20.1	21.8		7
0.90	Colorectal Cancer Incidence Rate	2010-2014	cases/ 100,000 population	36.2	37.7	39.8	39.9		7
0.85	Breast Cancer Incidence Rate	2010-2014	cases/ 100,000 females	109.8	129.4	123.5			7
0.75	Liver and Bile Duct Cancer Incidence Rate	2010-2014	cases/ 100,000 population	6.2	7.7	7.8			7
0.75	Prostate Cancer Incidence Rate	2010-2014	cases/ 100,000 males	101.1	125	114.8		Black	7
0.50	Ovarian Cancer Incidence Rate	2010-2014	cases/ 100,000 females	9.4	10.9	11.4			7
0.30	Pancreatic Cancer Incidence Rate	2010-2014	cases/ 100,000 population	10.5	12	12.5			7

SCORE	COUNTY HEALTH RANKINGS	MEASUREMENT PERIOD	UNITS	DUPLIN COUNTY	NORTH CAROLINA	U.S.	HP2020	HEALTHY NC 2020	HIGH DISPARITY*	SOURCE
1.73	Clinical Care Ranking	2018	ranking	91						4
1.73	Health Behaviors Ranking	2018	ranking	90						4
1.73	Morbidity Ranking	2018	ranking	84						4
1.73	Social and Economic Factors Ranking	2018	ranking	78						4
1.43	Mortality Ranking	2018	ranking	39						4
1.28	Physical Environment Ranking	2018	ranking	23						4

SCORE	DIABETES	MEASUREMENT PERIOD	UNITS	DUPLIN COUNTY	NORTH CAROLINA	U.S.	HP2020	HEALTHY NC 2020	HIGH DISPARITY*	SOURCE
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•High Disparity includes differences in which subgroups do significantly better or significantly worse than the overall county value. Subgroup values are given in parentheses.

2.50	Adults 20+ with Diabetes	2014	percent	14.7	11.1	10				4
2.33	Age-Adjusted Death Rate due to Diabetes	2012-2016	deaths/ 100,000 population	28.7	23	21.1				16
2.30	Diabetes: Medicare Population	2015	percent	34.9	28.4	26.5				3
1.20	Diabetic Monitoring: Medicare Population	2014	percent	88.3	88.8	85.2				18

SCORE	ECONOMY	MEASUREMENT PERIOD	UNITS	DUPLIN COUNTY	NORTH CAROLINA	U.S.	HP2020	HEALTHY NC 2020	HIGH DISPARITY*	SOURCE
2.70	People Living 200% Above Poverty Level	2012-2016	percent	44.8	62.3	66.4				1
2.65	People Living Below Poverty Level	2012-2016	percent	27.6	16.8	15.1		12.5	18-24, 6-11, <6, Hispanic or Latino, Other	1
2.50	Families Living Below Poverty Level	2012-2016	percent	19.7	12.4	11			Hispanic or Latino, Other, Two or More Races	1
2.50	Young Children Living Below Poverty Level	2012-2016	percent	48.7	27.3	23.6			Black or African American	1
2.40	Children Living Below Poverty Level	2012-2016	percent	41.2	23.9	21.2			Black or African American, Hispanic or Latino, Other	1
2.35	Students Eligible for the Free Lunch Program	2015-2016	percent	66.4	52.6	42.6				8
2.30	Child Food Insecurity Rate	2016	percent	24.8	20.9	17.9				5
2.30	Per Capita Income	2012-2016	dollars	17960	26779	29829			Asian, Black or African American, Hispanic or Latino, Other, Two or More Races	1
2.25	Severe Housing Problems	2010-2014	percent	18.1	16.6	18.8				4
2.10	Median Household Income	2012-2016	dollars	35364	48256	55322			Black or African American, Hispanic or Latino	1
2.10	People 65+ Living Below Poverty Level	2012-2016	percent	15	9.7	9.3			Black or African American	1
2.08	Median Housing Unit Value	2012-2016	dollars	88200	157100	184700				1

\*High Disparity includes differences in which subgroups do significantly better or significantly worse than the overall county value. Subgroup values are given in parentheses.

2.00	Food Insecurity Rate	2016	percent	16.1	15.4	12.9				5
1.90	Female Population 16+ in Civilian Labor Force	2012-2016	percent	52.7	57.4	58.3				1
1.80	Households with Supplemental Security Income	2012-2016	percent	7.2	5	5.4				1
1.80	Unemployed Workers in Civilian Labor Force	April 2018	percent	4.1	3.7	3.7				19
1.73	Social and Economic Factors Ranking	2018	ranking	78						4
1.60	Population 16+ in Civilian Labor Force	2012-2016	percent	59.4	61.5	63.1				1
1.28	Persons with Disability Living in Poverty (5-year)	2012-2016	percent	26.9	29	27.6				1
1.23	Median Monthly Owner Costs for Households without a Mortgage	2012-2016	dollars	372	376	462				1
1.10	Homeownership	2012-2016	percent	60.1	55.5	55.9				1
1.10	Renters Spending 30% or More of Household Income on Rent	2012-2016	percent	42.2	49.4	47.3	36.1			1
1.10	SNAP Certified Stores	2016	stores/ 1,000 population	1.1						21
1.08	Median Household Gross Rent	2012-2016	dollars	637	816	949				1
1.08	Mortgaged Owners Median Monthly Household Costs	2012-2016	dollars	1044	1243	1491				1
1.05	Low-Income and Low Access to a Grocery Store	2015	percent	0.9						21
1.05	Total Employment Change	2014-2015	percent	3.1	3.1	2.5				20
0.95	Households with Cash Public Assistance Income	2012-2016	percent	1.9	1.9	2.7				1

SCORE	EDUCATION	MEASUREMENT PERIOD	UNITS	DUPLIN COUNTY	NORTH CAROLINA	U.S.	HP2020	HEALTHY NC 2020	HIGH DISPARITY*	SOURCE
2.50	People 25+ with a Bachelor's Degree or Higher	2012-2016	percent	10.3	29	30.3			Male, Black or African American, Other	1
2.30	People 25+ with a High School Degree or Higher	2012-2016	percent	72	86.3	87			25-34, Other	1
2.05	4th Grade Students Proficient in Math	2016-2017	percent	38.9	58.6					13
2.00	High School Graduation	2016-2017	percent	81.3	86.5		87	94.6		13
1.85	4th Grade Students Proficient in Reading	2016-2017	percent	39.4	57.7					13
1.85	8th Grade Students Proficient in Math	2016-2017	percent	31.5	45.8					13

\*High Disparity includes differences in which subgroups do significantly better or significantly worse than the overall county value. Subgroup values are given in parentheses.

1.85	8th Grade Students Proficient in Reading	2016-2017	percent	39	53.7					13
1.60	Student-to-Teacher Ratio	2015-2016	students/ teacher	15.8	15.6	17.7				8

SCORE	ENVIRONMENT	MEASUREMENT PERIOD	UNITS	DUPLIN COUNTY	NORTH CAROLINA	U.S.	HP2020	HEALTHY NC 2020	HIGH DISPARITY*	SOURCE
2.40	Access to Exercise Opportunities	2018	percent	44.8	76.1	83.1				4
2.25	Severe Housing Problems	2010-2014	percent	18.1	16.6	18.8				4
1.95	Households with No Car and Low Access to a Grocery Store	2015	percent	5.7						21
1.80	Farmers Market Density	2016	markets/ 1,000 population	0						21
1.80	Recreation and Fitness Facilities	2014	facilities/ 1,000 population	0.02						21
1.60	Fast Food Restaurant Density	2014	restaurants/ 1,000 population	0.6						21
1.60	Liquor Store Density	2015	stores/ 100,000 population	6.8	5.8	10.5				20
1.60	PBT Released	2016	pounds	0						22
1.60	Recognized Carcinogens Released into Air	2016	pounds	0						22
1.40	Houses Built Prior to 1950	2012-2016	percent	11.6	9.1	18.2				1
1.35	Grocery Store Density	2014	stores/ 1,000 population	0.2						21
1.28	Drinking Water Violations	FY 2013-14	percent	1.5	4			5		4
1.28	Physical Environment Ranking	2018	ranking	23						4
1.18	Annual Particle Pollution	2013-2015		A						2
1.10	SNAP Certified Stores	2016	stores/ 1,000 population	1.1						21
1.05	Children with Low Access to a Grocery Store	2015	percent	0.5						21
1.05	Low-Income and Low Access to a Grocery Store	2015	percent	0.9						21
1.05	People 65+ with Low Access to a Grocery Store	2015	percent	0.2						21
0.60	Food Environment Index	2018		7.8	6.4	7.7				4

SCORE	ENVIRONMENTAL & OCCUPATIONAL HEALTH	MEASUREMENT PERIOD	UNITS	DUPLIN COUNTY	NORTH CAROLINA	U.S.	HP2020	HEALTHY NC 2020	HIGH DISPARITY*	SOURCE
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\*High Disparity includes differences in which subgroups do significantly better or significantly worse than the overall county value. Subgroup values are given in parentheses.

1.90	Asthma: Medicare Population	2015	percent	8.8	8.4	8.2				3
1.65	Age-Adjusted Hospitalization Rate due to Asthma	2014	hospitalizations/ 10,000 population	96.9	90.9					10
1.28	Physical Environment Ranking	2018	ranking	23						4

SCORE	EXERCISE, NUTRITION, & WEIGHT	MEASUREMENT PERIOD	UNITS	DUPLIN COUNTY	NORTH CAROLINA	U.S.	HP2020	HEALTHY NC 2020	HIGH DISPARITY*	SOURCE
2.65	Adults 20+ who are Obese	2014	percent	35.6	29.6	28	30.5			4
2.40	Access to Exercise Opportunities	2018	percent	44.8	76.1	83.1				4
2.35	Adults 20+ who are Sedentary	2014	percent	31.5	24.3	23	32.6			4
2.35	Workers who Walk to Work	2012-2016	percent	1.5	1.8	2.8	3.1			1
2.30	Child Food Insecurity Rate	2016	percent	24.8	20.9	17.9				5
2.00	Food Insecurity Rate	2016	percent	16.1	15.4	12.9				5
1.95	Households with No Car and Low Access to a Grocery Store	2015	percent	5.7						21
1.80	Farmers Market Density	2016	markets/ 1,000 population	0						21
1.80	Recreation and Fitness Facilities	2014	facilities/ 1,000 population	0.02						21
1.73	Health Behaviors Ranking	2018	ranking	90						4
1.60	Fast Food Restaurant Density	2014	restaurants/ 1,000 population	0.6						21
1.35	Grocery Store Density	2014	stores/ 1,000 population	0.2						21
1.10	SNAP Certified Stores	2016	stores/ 1,000 population	1.1						21
1.05	Children with Low Access to a Grocery Store	2015	percent	0.5						21
1.05	Low-Income and Low Access to a Grocery Store	2015	percent	0.9						21
1.05	People 65+ with Low Access to a Grocery Store	2015	percent	0.2						21
0.60	Food Environment Index	2018		7.8	6.4	7.7				4

SCORE	HEART DISEASE & STROKE	MEASUREMENT PERIOD	UNITS	DUPLIN COUNTY	NORTH CAROLINA	U.S.	HP2020	HEALTHY NC 2020	HIGH DISPARITY*	SOURCE
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•High Disparity includes differences in which subgroups do significantly better or significantly worse than the overall county value. Subgroup values are given in parentheses.

2.43	Age-Adjusted Death Rate due to Cerebrovascular Disease (Stroke)	2012-2016	deaths/ 100,000 population	54.2	43.1	36.9	34.8		16
2.30	Hyperlipidemia: Medicare Population	2015	percent	51.8	46.3	44.6			3
2.30	Hypertension: Medicare Population	2015	percent	66.4	58	55			3
2.10	Heart Failure: Medicare Population	2015	percent	16	12.5	13.5			3
1.85	Ischemic Heart Disease: Medicare Population	2015	percent	26.4	24	26.5			3
1.25	Age-Adjusted Death Rate due to Heart Disease	2012-2016	deaths/ 100,000 population	170	161.3			161.5	16
1.25	Stroke: Medicare Population	2015	percent	3.8	3.9	4			3
0.60	Atrial Fibrillation: Medicare Population	2015	percent	7	7.7	8.1			3

SCORE	IMMUNIZATIONS & INFECTIOUS DISEASES	MEASUREMENT PERIOD	UNITS	DUPLIN COUNTY	NORTH CAROLINA	U.S.	HP2020	HEALTHY NC 2020	HIGH DISPARITY*	SOURCE
2.43	Tuberculosis Incidence Rate	2014	cases/ 100,000 population	6.7	2	3	1			11
1.63	Age-Adjusted Death Rate due to HIV	2012-2016	deaths/ 100,000 population	2.3	2.2	2	3.3			16
1.53	Gonorrhea Incidence Rate	2016	cases/ 100,000 population	147.5	194.4	145.8				11
1.20	HIV Diagnosis Rate	2014-2016	cases/ 100,000 population	10.3	16.1			22.2		11
1.15	Syphilis Incidence Rate	2016	cases/ 100,000 population	3.4	10.8	8.7				9
1.13	Age-Adjusted Death Rate due to Influenza and Pneumonia	2012-2016	deaths/ 100,000 population	15.1	17.8	14.8		13.5		16
1.10	AIDS Diagnosis Rate	2016	cases/ 100,000 population	2.1	7					11
1.08	Chlamydia Incidence Rate	2016	cases/ 100,000 population	369.7	572.4	497.3				11

SCORE	MATERNAL, FETAL & INFANT HEALTH	MEASUREMENT PERIOD	UNITS	DUPLIN COUNTY	NORTH CAROLINA	U.S.	HP2020	HEALTHY NC 2020	HIGH DISPARITY*	SOURCE
2.08	Infant Mortality Rate	2012-2016	deaths/ 1,000 live births	8.3	7.2	6	6	6.3		16
1.63	Babies with Very Low Birth Weight	2012-2016	percent	1.6	1.7	1.4	1.4			15
1.58	Babies with Low Birth Weight	2012-2016	percent	8.4	9	8.1	7.8			15

•High Disparity includes differences in which subgroups do significantly better or significantly worse than the overall county value. Subgroup values are given in parentheses.

1.50	Teen Pregnancy Rate	2012-2016	pregnancies/ 1,000 females aged 15-17	22.7	15.7	36.2			16
1.18	Preterm Births	2016	percent	9.6	10.4	9.8	9.4		15

SCORE	MEN'S HEALTH	MEASUREMENT PERIOD	UNITS	DUPLIN COUNTY	NORTH CAROLINA	U.S.	HP2020	HEALTHY NC 2020	HIGH DISPARITY*	SOURCE
1.75	Life Expectancy for Males	2014	years	74.3	75.4	76.7		79.5		6
1.00	Age-Adjusted Death Rate due to Prostate Cancer	2010-2014	deaths/ 100,000 males	20.2	21.6	20.1	21.8			7
0.75	Prostate Cancer Incidence Rate	2010-2014	cases/ 100,000 males	101.1	125	114.8			Black	7

SCORE	MENTAL HEALTH & MENTAL DISORDERS	MEASUREMENT PERIOD	UNITS	DUPLIN COUNTY	NORTH CAROLINA	U.S.	HP2020	HEALTHY NC 2020	HIGH DISPARITY*	SOURCE
2.55	Poor Mental Health: Average Number of Days	2016	days	4.7	3.9	3.8		2.8		4
2.25	Frequent Mental Distress	2016	percent	15.2	12.3	15				4
2.25	Mental Health Provider Rate	2017	providers/ 100,000 population	62.7	215.5	214.3				4
1.35	Alzheimer's Disease or Dementia: Medicare Population	2015	percent	8.8	9.8	9.9				3
1.15	Depression: Medicare Population	2015	percent	15.4	17.5	16.7				3
0.83	Age-Adjusted Death Rate due to Suicide	2012-2016	deaths/ 100,000 population	9.8	12.9	13	10.2	8.3		16
0.73	Age-Adjusted Death Rate due to Alzheimer's Disease	2012-2016	deaths/ 100,000 population	13.2	31.9	26.6				16

SCORE	MORTALITY DATA	MEASUREMENT PERIOD	UNITS	DUPLIN COUNTY	NORTH CAROLINA	U.S.	HP2020	HEALTHY NC 2020	HIGH DISPARITY*	SOURCE
2.50	Alcohol-Impaired Driving Deaths	2012-2016	percent	34.8	31.4	29.3		4.7		4
2.43	Age-Adjusted Death Rate due to Cerebrovascular Disease (Stroke)	2012-2016	deaths/ 100,000 population	54.2	43.1	36.9	34.8			16
2.33	Age-Adjusted Death Rate due to Diabetes	2012-2016	deaths/ 100,000 population	28.7	23	21.1				16
2.08	Infant Mortality Rate	2012-2016	deaths/ 1,000 live births	8.3	7.2	6	6	6.3		16
1.95	Age-Adjusted Death Rate due to Motor Vehicle Collisions	2012-2016	deaths/ 100,000 population	24.1	14.1					16

•High Disparity includes differences in which subgroups do significantly better or significantly worse than the overall county value. Subgroup values are given in parentheses.

1.93	Age-Adjusted Death Rate due to Homicide	2012-2016	deaths/ 100,000 population	6.2	6.2	5.5	5.5	6.7	16
1.65	Premature Death	2014-2016	years/ 100,000 population	7623.4	7281.1	6658.1			4
1.63	Age-Adjusted Death Rate due to HIV	2012-2016	deaths/ 100,000 population	2.3	2.2	2	3.3		16
1.45	Age-Adjusted Death Rate due to Colorectal Cancer	2010-2014	deaths/ 100,000 population	13.6	14.1	14.8	14.5	10.1	7
1.43	Mortality Ranking	2018	ranking	39					4
1.35	Age-Adjusted Death Rate due to Lung Cancer	2010-2014	deaths/ 100,000 population	46.4	50.7	44.7	45.5		7
1.25	Age-Adjusted Death Rate due to Breast Cancer	2010-2014	deaths/ 100,000 females	19.8	21.6	21.2	20.7		7
1.25	Age-Adjusted Death Rate due to Heart Disease	2012-2016	deaths/ 100,000 population	170	161.3			161.5	16
1.20	Age-Adjusted Death Rate due to Cancer	2010-2014	deaths/ 100,000 population	163.3	172	166.1	161.4		7
1.13	Age-Adjusted Death Rate due to Influenza and Pneumonia	2012-2016	deaths/ 100,000 population	15.1	17.8	14.8		13.5	16
1.10	Age-Adjusted Death Rate due to Pancreatic Cancer	2010-2014	deaths/ 100,000 population	10.1	10.8	10.9			7
1.00	Age-Adjusted Death Rate due to Prostate Cancer	2010-2014	deaths/ 100,000 males	20.2	21.6	20.1	21.8		7
0.83	Age-Adjusted Death Rate due to Suicide	2012-2016	deaths/ 100,000 population	9.8	12.9	13	10.2	8.3	16
0.78	Age-Adjusted Death Rate due to Unintentional Injuries	2012-2016	deaths/ 100,000 population	25.3	31.9	41.4	36.4		16
0.73	Age-Adjusted Death Rate due to Alzheimer's Disease	2012-2016	deaths/ 100,000 population	13.2	31.9	26.6			16
0.70	Death Rate due to Drug Poisoning	2014-2016	deaths/ 100,000 population	8.4	16.2	16.9			4

SCORE	OLDER ADULTS & AGING	MEASUREMENT PERIOD	UNITS	DUPLIN COUNTY	NORTH CAROLINA	U.S.	HP2020	HEALTHY NC 2020	HIGH DISPARITY*	SOURCE
2.70	Chronic Kidney Disease: Medicare Population	2015	percent	22.2	19	18.1				3
2.50	Cancer: Medicare Population	2015	percent	8.7	7.7	7.8				3
2.30	Diabetes: Medicare Population	2015	percent	34.9	28.4	26.5				3
2.30	Hyperlipidemia: Medicare Population	2015	percent	51.8	46.3	44.6				3
2.30	Hypertension: Medicare Population	2015	percent	66.4	58	55				3

\*High Disparity includes differences in which subgroups do significantly better or significantly worse than the overall county value. Subgroup values are given in parentheses.

2.30	People 65+ Living Alone	2012-2016	percent	29.9	26.8	26.4			1
2.10	Heart Failure: Medicare Population	2015	percent	16	12.5	13.5			3
2.10	People 65+ Living Below Poverty Level	2012-2016	percent	15	9.7	9.3		Black or African American	1
1.90	Asthma: Medicare Population	2015	percent	8.8	8.4	8.2			3
1.90	COPD: Medicare Population	2015	percent	12.5	11.9	11.2			3
1.90	Mammography Screening: Medicare Population	2014	percent	62.3	67.9	63.1			18
1.85	Ischemic Heart Disease: Medicare Population	2015	percent	26.4	24	26.5			3
1.35	Alzheimer's Disease or Dementia: Medicare Population	2015	percent	8.8	9.8	9.9			3
1.30	Rheumatoid Arthritis or Osteoarthritis: Medicare Population	2015	percent	29	29.1	30			3
1.25	Stroke: Medicare Population	2015	percent	3.8	3.9	4			3
1.20	Diabetic Monitoring: Medicare Population	2014	percent	88.3	88.8	85.2			18
1.15	Depression: Medicare Population	2015	percent	15.4	17.5	16.7			3
1.05	People 65+ with Low Access to a Grocery Store	2015	percent	0.2					21
0.73	Age-Adjusted Death Rate due to Alzheimer's Disease	2012-2016	deaths/ 100,000 population	13.2	31.9	26.6			16
0.60	Atrial Fibrillation: Medicare Population	2015	percent	7	7.7	8.1			3
0.50	Osteoporosis: Medicare Population	2015	percent	4	5.4	6			3

SCORE	OTHER CHRONIC DISEASES	MEASUREMENT PERIOD	UNITS	DUPLIN COUNTY	NORTH CAROLINA	U.S.	HP2020	HEALTHY NC 2020	HIGH DISPARITY*	SOURCE
2.70	Chronic Kidney Disease: Medicare Population	2015	percent	22.2	19	18.1				3
1.30	Rheumatoid Arthritis or Osteoarthritis: Medicare Population	2015	percent	29	29.1	30				3
0.50	Osteoporosis: Medicare Population	2015	percent	4	5.4	6				3

SCORE	PREVENTION & SAFETY	MEASUREMENT PERIOD	UNITS	DUPLIN COUNTY	NORTH CAROLINA	U.S.	HP2020	HEALTHY NC 2020	HIGH DISPARITY*	SOURCE
2.25	Severe Housing Problems	2010-2014	percent	18.1	16.6	18.8				4

•High Disparity includes differences in which subgroups do significantly better or significantly worse than the overall county value. Subgroup values are given in parentheses.

1.95	Age-Adjusted Death Rate due to Motor Vehicle Collisions	2012-2016	deaths/ 100,000 population	24.1	14.1					16
0.78	Age-Adjusted Death Rate due to Unintentional Injuries	2012-2016	deaths/ 100,000 population	25.3	31.9	41.4	36.4			16
0.70	Death Rate due to Drug Poisoning	2014-2016	deaths/ 100,000 population	8.4	16.2	16.9				4

SCORE	PUBLIC SAFETY	MEASUREMENT PERIOD	UNITS	DUPLIN COUNTY	NORTH CAROLINA	U.S.	HP2020	HEALTHY NC 2020	HIGH DISPARITY*	SOURCE
2.50	Alcohol-Impaired Driving Deaths	2012-2016	percent	34.8	31.4	29.3		4.7		4
1.95	Age-Adjusted Death Rate due to Motor Vehicle Collisions	2012-2016	deaths/ 100,000 population	24.1	14.1					16
1.93	Age-Adjusted Death Rate due to Homicide	2012-2016	deaths/ 100,000 population	6.2	6.2	5.5	5.5	6.7		16
0.98	Violent Crime Rate	2016	crimes/ 100,000 population	215.8	374.9	386.3				12
0.90	Property Crime Rate	2016	crimes/ 100,000 population	1823	2779.7					12

SCORE	RESPIRATORY DISEASES	MEASUREMENT PERIOD	UNITS	DUPLIN COUNTY	NORTH CAROLINA	U.S.	HP2020	HEALTHY NC 2020	HIGH DISPARITY*	SOURCE
2.43	Tuberculosis Incidence Rate	2014	cases/ 100,000 population	6.7	2	3	1			11
1.90	Asthma: Medicare Population	2015	percent	8.8	8.4	8.2				3
1.90	COPD: Medicare Population	2015	percent	12.5	11.9	11.2				3
1.65	Age-Adjusted Hospitalization Rate due to Asthma	2014	hospitalizations/ 10,000 population	96.9	90.9					10
1.45	Lung and Bronchus Cancer Incidence Rate	2010-2014	cases/ 100,000 population	66.9	70	61.2				7
1.35	Age-Adjusted Death Rate due to Lung Cancer	2010-2014	deaths/ 100,000 population	46.4	50.7	44.7	45.5			7
1.13	Age-Adjusted Death Rate due to Influenza and Pneumonia	2012-2016	deaths/ 100,000 population	15.1	17.8	14.8		13.5		16

SCORE	SOCIAL ENVIRONMENT	MEASUREMENT PERIOD	UNITS	DUPLIN COUNTY	NORTH CAROLINA	U.S.	HP2020	HEALTHY NC 2020	HIGH DISPARITY*	SOURCE
2.65	People Living Below Poverty Level	2012-2016	percent	27.6	16.8	15.1		12.5	18-24, 6-11, <6, Hispanic or Latino, Other	1

\*High Disparity includes differences in which subgroups do significantly better or significantly worse than the overall county value. Subgroup values are given in parentheses.

2.55	Single-Parent Households	2012-2016	percent	41.7	35.7	33.6		1
2.50	People 25+ with a Bachelor's Degree or Higher	2012-2016	percent	10.3	29	30.3	Male, Black or African American, Other	1
2.50	Young Children Living Below Poverty Level	2012-2016	percent	48.7	27.3	23.6	Black or African American	1
2.40	Children Living Below Poverty Level	2012-2016	percent	41.2	23.9	21.2	Black or African American, Hispanic or Latino, Other	1
2.40	Mean Travel Time to Work	2012-2016	minutes	26.8	24.1	26.1		1
2.30	People 25+ with a High School Degree or Higher	2012-2016	percent	72	86.3	87	25-34, Other	1
2.30	People 65+ Living Alone	2012-2016	percent	29.9	26.8	26.4		1
2.30	Per Capita Income	2012-2016	dollars	17960	26779	29829	Asian, Black or African American, Hispanic or Latino, Other, Two or More Races	1
2.10	Linguistic Isolation	2012-2016	percent	6.7	2.5	4.5		1
2.10	Median Household Income	2012-2016	dollars	35364	48256	55322	Black or African American, Hispanic or Latino	1
2.08	Median Housing Unit Value	2012-2016	dollars	88200	157100	184700		1
2.03	Persons with Health Insurance	2016	percent	79.9	87.8	100	92	17
1.90	Female Population 16+ in Civilian Labor Force	2012-2016	percent	52.7	57.4	58.3		1
1.73	Social and Economic Factors Ranking	2018	ranking	78				4
1.60	Population 16+ in Civilian Labor Force	2012-2016	percent	59.4	61.5	63.1		1
1.50	Voter Turnout: Presidential Election	2016	percent	68.2	67.7			14
1.40	Social Associations	2015	membership associations/ 10,000 population	10.7	11.5	9.3		4
1.23	Median Monthly Owner Costs for Households without a Mortgage	2012-2016	dollars	372	376	462		1
1.10	Homeownership	2012-2016	percent	60.1	55.5	55.9		1

•High Disparity includes differences in which subgroups do significantly better or significantly worse than the overall county value. Subgroup values are given in parentheses.

1.08	Median Household Gross Rent	2012-2016	dollars	637	816	949				1
1.08	Mortgaged Owners Median Monthly Household Costs	2012-2016	dollars	1044	1243	1491				1
1.05	Total Employment Change	2014-2015	percent	3.1	3.1	2.5				20

SCORE	SUBSTANCE ABUSE	MEASUREMENT PERIOD	UNITS	DUPLIN COUNTY	NORTH CAROLINA	U.S.	HP2020	HEALTHY NC 2020	HIGH DISPARITY*	SOURCE
2.70	Adults who Smoke	2016	percent	22.2	17.9	17	12	13		4
2.50	Alcohol-Impaired Driving Deaths	2012-2016	percent	34.8	31.4	29.3		4.7		4
1.73	Health Behaviors Ranking	2018	ranking	90						4
1.60	Liquor Store Density	2015	stores/ 100,000 population	6.8	5.8	10.5				20
0.70	Death Rate due to Drug Poisoning	2014-2016	deaths/ 100,000 population	8.4	16.2	16.9				4
0.45	Adults who Drink Excessively	2016	percent	13.7	16.7	18	25.4			4

SCORE	TRANSPORTATION	MEASUREMENT PERIOD	UNITS	DUPLIN COUNTY	NORTH CAROLINA	U.S.	HP2020	HEALTHY NC 2020	HIGH DISPARITY*	SOURCE
2.65	Workers Commuting by Public Transportation	2012-2016	percent	0	1.1	5.1	5.5			1
2.40	Mean Travel Time to Work	2012-2016	minutes	26.8	24.1	26.1				1
2.35	Workers who Walk to Work	2012-2016	percent	1.5	1.8	2.8	3.1			1
2.25	Solo Drivers with a Long Commute	2012-2016	percent	36.3	31.3	34.7				4
2.10	Households without a Vehicle	2012-2016	percent	8.3	6.3	9				1
1.95	Households with No Car and Low Access to a Grocery Store	2015	percent	5.7						21
0.80	Workers who Drive Alone to Work	2012-2016	percent	76.2	81.1	76.4			55-59, Female, White, non-Hispanic	1

SCORE	WELLNESS & LIFESTYLE	MEASUREMENT PERIOD	UNITS	DUPLIN COUNTY	NORTH CAROLINA	U.S.	HP2020	HEALTHY NC 2020	HIGH DISPARITY*	SOURCE
2.55	Self-Reported General Health Assessment: Poor or Fair	2016	percent	27.6	17.6	16		9.9		4
2.40	Poor Physical Health: Average Number of Days	2016	days	4.7	3.6	3.7				4

\*High Disparity includes differences in which subgroups do significantly better or significantly worse than the overall county value. Subgroup values are given in parentheses.

2.25	Frequent Physical Distress	2016	percent	15.5	11.3	15			4
1.80	Insufficient Sleep	2016	percent	35.5	33.8	38			4
1.75	Life Expectancy for Males	2014	years	74.3	75.4	76.7	79.5		6
1.73	Morbidity Ranking	2018	ranking	84					4
1.50	Life Expectancy for Females	2014	years	80	80.2	81.5	79.5		6

SCORE	WOMEN'S HEALTH	MEASUREMENT PERIOD	UNITS	DUPLIN COUNTY	NORTH CAROLINA	U.S.	HP2020	HEALTHY NC 2020	HIGH DISPARITY*	SOURCE
2.23	Cervical Cancer Incidence Rate	2010-2014	cases/ 100,000 females	10.1	7.2	7.5	7.3			7
1.90	Mammography Screening: Medicare Population	2014	percent	62.3	67.9	63.1				18
1.50	Life Expectancy for Females	2014	years	80	80.2	81.5		79.5		6
1.25	Age-Adjusted Death Rate due to Breast Cancer	2010-2014	deaths/ 100,000 females	19.8	21.6	21.2	20.7			7
0.85	Breast Cancer Incidence Rate	2010-2014	cases/ 100,000 females	109.8	129.4	123.5				7
0.50	Ovarian Cancer Incidence Rate	2010-2014	cases/ 100,000 females	9.4	10.9	11.4				7

•High Disparity includes differences in which subgroups do significantly better or significantly worse than the overall county value. Subgroup values are given in parentheses.

## Sources

Table displays the list of sources used in secondary data scoring. Number keys are referenced alongside each indicator in the Indicator Scoring Table.

**Table 23. Indicator Sources and Corresponding Number Keys**

Number Key	Source
1	American Community Survey
2	American Lung Association
3	Centers for Medicare & Medicaid Services
4	County Health Rankings
5	Feeding America
6	Institute for Health Metrics and Evaluation
7	National Cancer Institute
8	National Center for Education Statistics
9	National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention
10	North Carolina Department of Health and Human Services
11	North Carolina Department of Health and Human Services, Communicable Disease Branch
12	North Carolina Department of Justice
13	North Carolina Department of Public Instruction
14	North Carolina State Board of Elections
15	North Carolina State Center for Health Statistics
16	North Carolina State Center for Health Statistics, Vital Statistics
17	Small Area Health Insurance Estimates
18	The Dartmouth Atlas of Health Care
19	U.S. Bureau of Labor Statistics
20	U.S. Census - County Business Patterns
21	U.S. Department of Agriculture - Food Environment Atlas
22	U.S. Environmental Protection Agency

## Appendix C. Primary Data

Primary data used in this assessment was collected through a community survey and focus groups. The survey instruments and focus group questions are provided in this Appendix:

- [English Survey](#)
- [Spanish Survey](#)
- [Focus Group Questions](#)

# Eastern North Carolina Community Health Survey 2018

Welcome to the Community Health Survey for Eastern North Carolina!

We are conducting a Community Health Assessment for your county. This assessment is being undertaken by a partnership of 33 counties, hospitals, health systems, and health departments in Eastern North Carolina. It allows these partners to better understand the health status and needs of the community they serve and use the knowledge gained to implement programs that will benefit the community.

We can better understand community needs by gathering voices from the community. This survey allows community members like you to tell us about what you feel are important issues for your community. We estimate that it will take about 20 minutes to complete this ~60 question survey. Your answers to these questions will be kept confidential and anonymous.

Thank you very much for your input and your time! If you have questions about this survey, please contact Will Broughton at [will.broughton@foundationhli.org](mailto:will.broughton@foundationhli.org).

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### Part 1: Quality of Life

*First, tell us a little bit about yourself...*

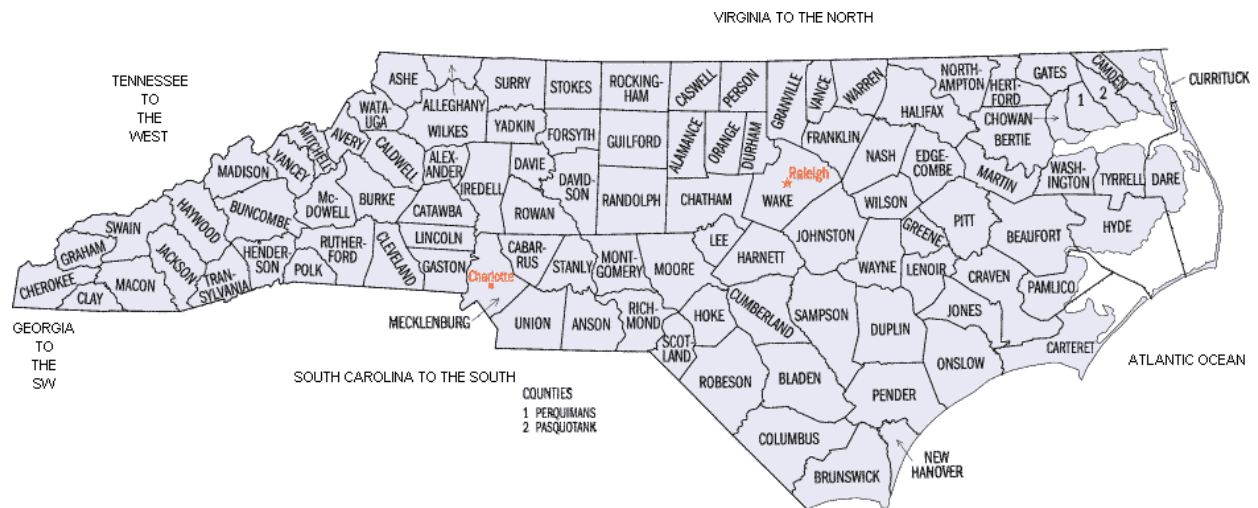
#### **1. Where do you currently live?**

ZIP/Postal Code

## 2. What county do you live in?

<input type="checkbox"/> Beaufort	<input type="checkbox"/> Franklin	<input type="checkbox"/> Onslow
<input type="checkbox"/> Bertie	<input type="checkbox"/> Gates	<input type="checkbox"/> Pamlico
<input type="checkbox"/> Bladen	<input type="checkbox"/> Greene	<input type="checkbox"/> Pasquotank
<input type="checkbox"/> Camden	<input type="checkbox"/> Halifax	<input type="checkbox"/> Pender
<input type="checkbox"/> Carteret	<input type="checkbox"/> Hertford	<input type="checkbox"/> Perquimans
<input type="checkbox"/> Chowan	<input type="checkbox"/> Hoke	<input type="checkbox"/> Pitt
<input type="checkbox"/> Cumberland	<input type="checkbox"/> Hyde	<input type="checkbox"/> Sampson
<input type="checkbox"/> Currituck	<input type="checkbox"/> Johnston	<input type="checkbox"/> Tyrrell
<input type="checkbox"/> Dare	<input type="checkbox"/> Lenoir	<input type="checkbox"/> Washington
<input type="checkbox"/> Duplin	<input type="checkbox"/> Martin	<input type="checkbox"/> Wayne
<input type="checkbox"/> Edgecombe	<input type="checkbox"/> Nash	<input type="checkbox"/> Wilson

## North Carolina County Map



**3. Think about the county that you live in. Please tell us whether you “strongly disagree”, “disagree”, “neutral”, “agree” or “strongly agree” with each of the next 9 statements.**

Statements	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
There is good healthcare in my County.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
This County is a good place to raise children.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
This County is a good place to grow old.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
There is plenty of economic opportunity in this County.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
This County is a safe place to live.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
There is plenty of help for people during times of need in this County.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
There is affordable housing that meets my needs in this County.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
There are good parks and recreation facilities in this County.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
It is easy to buy healthy foods in this County.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## PART 2: Community Improvement

*The next set of questions will ask about community problems, issues, and services that are important to you. Remember your choices will not be linked to you in any way.*

**4. Please look at this list of community issues. In your opinion, which one issue most affects the quality of life in this County? (Please choose only one.)**

- |  |  |  |
|--|--|--|
| <input type="checkbox"/> Pollution (air, water, land)        | <input type="checkbox"/> Discrimination/ racism    | <input type="checkbox"/> Domestic violence               |
| <input type="checkbox"/> Dropping out of school              | <input type="checkbox"/> Lack of community support | <input type="checkbox"/> Violent crime (murder, assault) |
| <input type="checkbox"/> Low income/poverty                  | <input type="checkbox"/> Drugs (Substance Abuse)   | <input type="checkbox"/> Theft                           |
| <input type="checkbox"/> Homelessness                        | <input type="checkbox"/> Neglect and abuse         | <input type="checkbox"/> Rape/sexual assault             |
| <input type="checkbox"/> Lack of/inadequate health insurance | <input type="checkbox"/> Elder abuse               |  |
|  | <input type="checkbox"/> Child abuse               |  |
| <input type="checkbox"/> Hopelessness                        |  |  |
| <input type="checkbox"/> Other (please specify)              |  |  |

**5. In your opinion, which one of the following services needs the most improvement in your neighborhood or community? (Please choose only one.)**

- |  |  |   |
|--|--|---|
| <input type="checkbox"/> Animal control                    | <input type="checkbox"/> Number of health care providers   | <input type="checkbox"/> Positive teen activities   |
| <input type="checkbox"/> Child care options                | <input type="checkbox"/> Culturally appropriate health services                                  | <input type="checkbox"/> Transportation options     |
| <input type="checkbox"/> Elder care options                | <input type="checkbox"/> Counseling/ mental health/ support groups                               | <input type="checkbox"/> Availability of employment |
| <input type="checkbox"/> Services for disabled people      | <input type="checkbox"/> Better/ more recreational facilities (parks, trails, community centers) | <input type="checkbox"/> Higher paying employment   |
| <input type="checkbox"/> More affordable health services   | <input type="checkbox"/> Healthy family activities   | <input type="checkbox"/> Road maintenance           |
| <input type="checkbox"/> Better/ more healthy food choices |  | <input type="checkbox"/> Road safety                |
| <input type="checkbox"/> More affordable/better housing    |  | <input type="checkbox"/> None                       |

☐ Other (please specify)

### PART 3: Health Information

*Now we'd like to hear more about where you get health information...*

**6. In your opinion, which one health behavior do people in your own community need more information about? (Please suggest only one.)**

- |   |  |   |
|---|--|---|
| <input type="checkbox"/> Eating well/<br>nutrition                                      | <input type="checkbox"/> Using child safety<br>car seats   | <input type="checkbox"/> Substance abuse<br>prevention (ex: drugs and<br>alcohol) |
| <input type="checkbox"/> Exercising/ fitness  | <input type="checkbox"/> Using seat belts  | <input type="checkbox"/> Suicide prevention                                       |
| <input type="checkbox"/> Managing weight  | <input type="checkbox"/> Driving safely  | <input type="checkbox"/> Stress<br>management                                     |
| <input type="checkbox"/> Going to a dentist<br>for check-ups/ preventive<br>care        | <input type="checkbox"/> Quitting smoking/<br>tobacco use prevention                               | <input type="checkbox"/> Anger<br>management                                      |
| <input type="checkbox"/> Going to the<br>doctor for yearly check-<br>ups and screenings | <input type="checkbox"/> Child care/<br>parenting  | <input type="checkbox"/> Domestic violence<br>prevention                          |
| <input type="checkbox"/> Getting prenatal<br>care during pregnancy                      | <input type="checkbox"/> Elder care  | <input type="checkbox"/> Crime prevention   |
| <input type="checkbox"/> Getting flu shots<br>and other vaccines                        | <input type="checkbox"/> Caring for family<br>members with special<br>needs/ disabilities          | <input type="checkbox"/> Rape/ sexual<br>abuse prevention                         |
| <input type="checkbox"/> Preparing for an<br>emergency/disaster                         | <input type="checkbox"/> Preventing<br>pregnancy and sexually<br>transmitted disease (safe<br>sex) | <input type="checkbox"/> None   |
| <input type="checkbox"/> Other (please specify)   |  |   |

**7. Where do you get most of your health-related information? (Please choose only one.)**

- |   |  |  |
|---|--|--|
| <input type="checkbox"/> Friends and family     | <input type="checkbox"/> Internet          | <input type="checkbox"/> Employer        |
| <input type="checkbox"/> Doctor/nurse           | <input type="checkbox"/> My child's school | <input type="checkbox"/> Help lines      |
| <input type="checkbox"/> Pharmacist             | <input type="checkbox"/> Hospital          | <input type="checkbox"/> Books/magazines |
| <input type="checkbox"/> Church                 | <input type="checkbox"/> Health department |  |
| <input type="checkbox"/> Other (please specify) |  |  |

**8. What health topic(s)/ disease(s) would you like to learn more about?**

**9. Do you provide care for an elderly relative at your residence or at another residence?**  
*(Choose only one.)*

☐ Yes

☐ No

**10. Do you have children between the ages of 9 and 19 for whom you are the caretaker?**  
*(Includes step-children, grandchildren, or other relatives.) (Choose only one.)*

☐ Yes

☐ No *(if No, skip to question #12)*

**11. Which of the following health topics do you think your child/children need(s) more information about? (Check all that apply.)**

☐ Dental hygiene

☐ Diabetes

☐ Drug abuse

☐ Nutrition

☐ management

☐ Reckless

☐ Eating disorders

☐ Tobacco

☐ driving/speeding

☐ Fitness/Exercise

☐ STDs (Sexually

☐ Mental health

☐ Asthma

☐ Transmitted Diseases)

☐ issues

☐ management

☐ Sexual intercourse

☐ Suicide prevention

☐ Alcohol

☐ Other (please specify)

## PART 4: Personal Health

*These next questions are about your own personal health. Remember, the answers you give for this survey will not be linked to you in any way.*

**12. Would you say that, in general, your health is... (Choose only one.)**

- ☐ Excellent
- ☐ Very Good
- ☐ Good
- ☐ Fair
- ☐ Poor
- ☐ Don't know/not sure

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

	Yes	No	Don't Know
Asthma	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Depression or anxiety	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
High blood pressure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
High cholesterol	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Diabetes (not during pregnancy)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Osteoporosis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Overweight/obesity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Angina/heart disease	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cancer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**14. Which of the following preventive services have you had in the past 12 months? (Check all that apply.)**

- |  |  |   |
|--|--|---|
| <input type="checkbox"/> Mammogram                 | <input type="checkbox"/> Bone density test     | <input type="checkbox"/> Vision screening         |
| <input type="checkbox"/> Prostate cancer screening | <input type="checkbox"/> Physical exam         | <input type="checkbox"/> Cardiovascular screening |
| <input type="checkbox"/> Colon/rectal exam         | <input type="checkbox"/> Pap smear             | <input type="checkbox"/> Dental cleaning/X-rays   |
| <input type="checkbox"/> Blood sugar check         | <input type="checkbox"/> Flu shot              | <input type="checkbox"/> None of the above        |
| <input type="checkbox"/> Cholesterol check         | <input type="checkbox"/> Blood pressure check  |   |
| <input type="checkbox"/> Hearing screening         | <input type="checkbox"/> Skin cancer screening |   |

**15. About how long has it been since you last visited a dentist or dental clinic for any reason? Include visits to dental specialists, such as orthodontists. (Choose only one.)**

- ☐ Within the past year (anytime less than 12 months ago)
- ☐ Within the past 2 years (more than 1 year but less than 2 years ago)
- ☐ Within the past 5 years (more than 2 years but less than 5 years ago)
- ☐ Don't know/not sure
- ☐ Never

**16. In the past 30 days, have there been any days when feeling sad or worried kept you from going about your normal activities? (Choose only one.)**

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

**17. The next question is about alcohol. One drink is equivalent to a 12-ounce beer, a 5 ounce glass of wine, or a drink with one shot of liquor.**

**Considering all types of alcoholic beverages, how many times during the past 30 days did you have 5 or more drinks (if male) or 4 or more drinks (if female) on an occasion?**

<input type="checkbox"/> 0	<input type="checkbox"/> 4	<input type="checkbox"/> 8	<input type="checkbox"/> 12	<input type="checkbox"/> 16	<input type="checkbox"/> 20	<input type="checkbox"/> 24	<input type="checkbox"/> 28
<input type="checkbox"/> 1	<input type="checkbox"/> 5	<input type="checkbox"/> 9	<input type="checkbox"/> 13	<input type="checkbox"/> 17	<input type="checkbox"/> 21	<input type="checkbox"/> 25	<input type="checkbox"/> 29
<input type="checkbox"/> 2	<input type="checkbox"/> 6	<input type="checkbox"/> 10	<input type="checkbox"/> 14	<input type="checkbox"/> 18	<input type="checkbox"/> 22	<input type="checkbox"/> 26	<input type="checkbox"/> 30
<input type="checkbox"/> 3	<input type="checkbox"/> 7	<input type="checkbox"/> 11	<input type="checkbox"/> 15	<input type="checkbox"/> 19	<input type="checkbox"/> 23	<input type="checkbox"/> 27	

☐ Don' t know / not sure

**18. Now we will ask a question about drug use. The answers that people give us about their use of drugs are important for understanding health issues in the county. We know that this information is personal, but remember your answers will be kept confidential.**

**Have you used any illegal drugs within the past 30 days? When we say illegal drugs this includes marijuana, cocaine, crack cocaine, heroin, or any other illegal drug substance. On about how many days have you used one of these drugs? (*Choose only one.*)**

<input type="checkbox"/> 0	<input type="checkbox"/> 4	<input type="checkbox"/> 8	<input type="checkbox"/> 12	<input type="checkbox"/> 16	<input type="checkbox"/> 20	<input type="checkbox"/> 24	<input type="checkbox"/> 28
<input type="checkbox"/> 1	<input type="checkbox"/> 5	<input type="checkbox"/> 9	<input type="checkbox"/> 13	<input type="checkbox"/> 17	<input type="checkbox"/> 21	<input type="checkbox"/> 25	<input type="checkbox"/> 29
<input type="checkbox"/> 2	<input type="checkbox"/> 6	<input type="checkbox"/> 10	<input type="checkbox"/> 14	<input type="checkbox"/> 18	<input type="checkbox"/> 22	<input type="checkbox"/> 26	<input type="checkbox"/> 30
<input type="checkbox"/> 3	<input type="checkbox"/> 7	<input type="checkbox"/> 11	<input type="checkbox"/> 15	<input type="checkbox"/> 19	<input type="checkbox"/> 23	<input type="checkbox"/> 27	

☐ Don' t know / not sure

***(if you responded 0, skip to question #20)***

**19. During the past 30 days, which illegal drug did you use? (*Check all that apply.*)**

- ☐ Marijuana
- ☐ Cocaine
- ☐ Heroin
- ☐ Other (please specify)

**20. During the past 30 days, have you taken any prescription drugs that you did not have a prescription for (such as Oxycontin, Percocet, Demerol, Adderall, Ritalin, or Xanax)? How many times during the past 30 days did you use a prescription drug that you did not have a prescription for? (Choose only one.)**

- |   |                            |                             |                             |                             |                             |                             |                             |
|---|----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| <input type="checkbox"/> 0                      | <input type="checkbox"/> 4 | <input type="checkbox"/> 8  | <input type="checkbox"/> 12 | <input type="checkbox"/> 16 | <input type="checkbox"/> 20 | <input type="checkbox"/> 24 | <input type="checkbox"/> 28 |
| <input type="checkbox"/> 1                      | <input type="checkbox"/> 5 | <input type="checkbox"/> 9  | <input type="checkbox"/> 13 | <input type="checkbox"/> 17 | <input type="checkbox"/> 21 | <input type="checkbox"/> 25 | <input type="checkbox"/> 29 |
| <input type="checkbox"/> 2                      | <input type="checkbox"/> 6 | <input type="checkbox"/> 10 | <input type="checkbox"/> 14 | <input type="checkbox"/> 18 | <input type="checkbox"/> 22 | <input type="checkbox"/> 26 | <input type="checkbox"/> 30 |
| <input type="checkbox"/> 3                      | <input type="checkbox"/> 7 | <input type="checkbox"/> 11 | <input type="checkbox"/> 15 | <input type="checkbox"/> 19 | <input type="checkbox"/> 23 | <input type="checkbox"/> 27 |                             |
| <input type="checkbox"/> Don' t know / not sure |                            |                             |                             |                             |                             |                             |                             |

**21. The next question relates to veteran's health. Have you ever served on active duty in the US Armed Forces (not including active duty only for training in the Reserves or National Guard)? (Choose only one.)**

- ☐ Yes
- ☐ No *(if No, skip to question #23)*

**22. Has a doctor or other health professional ever told you that you have depression, anxiety, or post traumatic stress disorder (PTSD)? (Choose only one.)**

- ☐ Yes
- ☐ No

**23. Now we'd like to know about your fitness. During a normal week, other than in your regular job, do you engage in any physical activity or exercise that lasts at least a half an hour? (Choose only one.)**

- ☐ Yes
- ☐ No *(if No, skip to question #26)*
- ☐ Don't know/not sure *(if Don't know/not sure, skip to question #26)*

**24. Since you said yes, how many times do you exercise or engage in physical activity during a normal week?**

**25. Where do you go to exercise or engage in physical activity? (Check all that apply.)**

- |   |  |
|---|--|
| <input type="checkbox"/> YMCA                     | <input type="checkbox"/> Worksite/Employer       |
| <input type="checkbox"/> Park                     | <input type="checkbox"/> School Facility/Grounds |
| <input type="checkbox"/> Public Recreation Center | <input type="checkbox"/> Home                    |
| <input type="checkbox"/> Private Gym              | <input type="checkbox"/> Place of Worship        |
| <input type="checkbox"/> Other (please specify)   |  |

*Since you responded YES to #23 (physical activity/exercise), skip to question #27.*

**26. Since you said "no", what are the reasons you do not exercise for at least a half hour during a normal week? You can give as many of these reasons as you need to.**

- |   |   |
|---|---|
| <input type="checkbox"/> My job is physical or hard labor | <input type="checkbox"/> Exercise is not important to me. |
|---|---|

☐ I don't have access to a facility that has the things I need, like a pool, golf course, or a track.

☐ I don't have enough time to exercise.

☐ I would need child care and I don't have it.

☐ I don't know how to find exercise partners.

☐ I don't like to exercise.

☐ Other (please specify)

☐ It costs too much to exercise.

☐ There is no safe place to exercise.

☐ I would need transportation and I don't have it.

☐ I'm too tired to exercise.

☐ I'm physically disabled.

☐ I don't know

**27. Not counting lettuce salad or potato products such as french fries, think about how often you eat fruits and vegetables in an average week.**

**How many cups per week of fruits and vegetables would you say you eat? (*One apple or 12 baby carrots equal one cup.*)**

Number of Cups of Fruit

Number of Cups of Vegetables

Number of Cups of 100% Fruit Juice

**28. Have you ever been exposed to secondhand smoke in the past year? (Choose only one.)**

- ☐ Yes
- ☐ No *(if No, skip to question #30)*
- ☐ Don't know/not sure *(if Don't know/not sure, skip to question #30)*

**29. If yes, where do you think you are exposed to secondhand smoke most often? (Check only one.)**

- ☐ Home
- ☐ Workplace
- ☐ Hospitals
- ☐ Restaurants
- ☐ School
- ☐ I am not exposed to secondhand smoke.
- ☐ Other (please specify)

**30. Do you currently use tobacco products? (This includes cigarettes, electronic cigarettes, chewing tobacco and vaping.) (Choose only one.)**

- ☐ Yes
- ☐ No *(if No, skip to question #32)*

**31. If yes, where would you go for help if you wanted to quit? (Choose only one).**

- ☐ Quit Line NC
- ☐ Doctor

- |  |   |
|--|---|
| <input type="checkbox"/> Pharmacy                    | <input type="checkbox"/> I don't know                         |
| <input type="checkbox"/> Private counselor/therapist | <input type="checkbox"/> Not applicable; I don't want to quit |
| <input type="checkbox"/> Health Department           |   |
| <input type="checkbox"/> Other (please specify)      |   |

**32. Now we will ask you questions about your personal flu vaccines. An influenza/flu vaccine can be a "flu shot" injected into your arm or spray like "FluMist" which is sprayed into your nose. During the past 12 months, have you had a seasonal flu vaccine? (Choose only one.)**

- ☐ Yes, flu shot
- ☐ Yes, flu spray
- ☐ Yes, both
- ☐ No
- ☐ Don't know/not sure

### Part 5: Access to Care/Family Health

**33. Where do you go most often when you are sick? (*Choose only one.*)**

- |   |   |
|---|---|
| <input type="checkbox"/> Doctor' s office       | <input type="checkbox"/> Medical clinic     |
| <input type="checkbox"/> Health department      | <input type="checkbox"/> Urgent care center |
| <input type="checkbox"/> Hospital               |   |
| <input type="checkbox"/> Other (please specify) |   |

**34. Do you have any of the following types of health insurance or health care coverage? (*Choose all that apply.*)**

- ☐ Health insurance my employer provides
- ☐ Health insurance my spouse's employer provides
- ☐ Health insurance my school provides
- ☐ Health insurance my parent or my parent's employer provides
- ☐ Health insurance I bought myself
- ☐ Health insurance through Health Insurance Marketplace (Obamacare)
- ☐ The military, Tricare, or the VA
- ☐ Medicaid
- ☐ Medicare
- ☐ No health insurance of any kind

**35. In the past 12 months, did you have a problem getting the health care you needed for you personally or for a family member from any type of health care provider, dentist, pharmacy, or other facility? (Choose only one.)**

- ☐ Yes
- ☐ No *(if No, skip to question #38)*
- ☐ Don't know/not sure

**36. Since you said "yes," what type of provider or facility did you or your family member have trouble getting health care from? You can choose as many of these as you need to.**

- |   |   |   |
|---|---|---|
| <input type="checkbox"/> Dentist                                      | <input type="checkbox"/> Pharmacy/<br>prescriptions | <input type="checkbox"/> Hospital           |
| <input type="checkbox"/> General practitioner                         | <input type="checkbox"/> Pediatrician               | <input type="checkbox"/> Urgent Care Center |
| <input type="checkbox"/> Eye care/<br>optometrist/<br>ophthalmologist | <input type="checkbox"/> OB/GYN                     | <input type="checkbox"/> Medical Clinic     |
|   | <input type="checkbox"/> Health<br>department       | <input type="checkbox"/> Specialist         |
| <input type="checkbox"/> Other (please specify)                       |   |   |

**37. Which of these problems prevented you or your family member from getting the necessary health care? You can choose as many of these as you need to.**

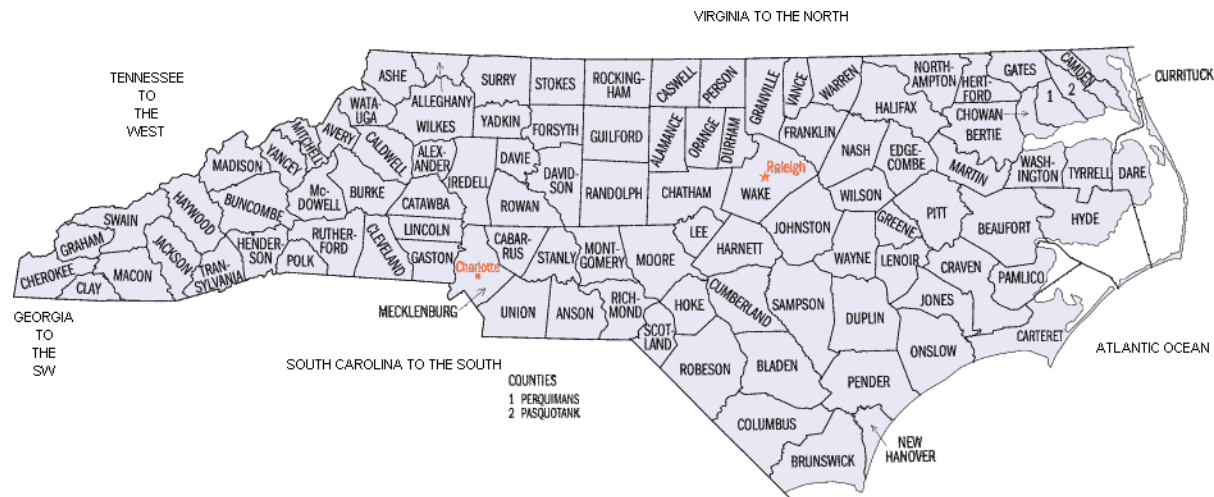
- ☐ No health insurance.
- ☐ Insurance didn't cover what I/we needed.
- ☐ My/our share of the cost (deductible/co-pay) was too high.
- ☐ Doctor would not take my/our insurance or Medicaid.

- ☐ Hospital would not take my/our insurance.
- ☐ Pharmacy would not take my/our insurance or Medicaid.
- ☐ Dentist would not take my/our insurance or Medicaid.
- ☐ No way to get there.
- ☐ Didn't know where to go.
- ☐ Couldn't get an appointment.
- ☐ The wait was too long.
- ☐ The provider denied me care or treated me in a discriminatory manner because of my HIV status, or because I am an LGBT individual.

38. In what county are most of the medical providers you visit located? (*Choose only one.*)

<input type="checkbox"/> Beaufort	<input type="checkbox"/>	<input type="checkbox"/> Martin	<input type="checkbox"/>
<input type="checkbox"/> Bertie	Edgecombe	<input type="checkbox"/> Moore	<input type="checkbox"/> Pitt
<input type="checkbox"/> Bladen	<input type="checkbox"/> Franklin	<input type="checkbox"/> Nash	<input type="checkbox"/> Richmond
<input type="checkbox"/> Brunswick	<input type="checkbox"/> Gates	<input type="checkbox"/> New	<input type="checkbox"/> Robeson
<input type="checkbox"/> Camden	<input type="checkbox"/> Granville	Hanover	<input type="checkbox"/> Sampson
<input type="checkbox"/> Carteret	<input type="checkbox"/> Greene	<input type="checkbox"/>	<input type="checkbox"/> Scotland
<input type="checkbox"/> Chowan	<input type="checkbox"/> Halifax	Northampton	<input type="checkbox"/> Tyrrell
<input type="checkbox"/> Columbus	<input type="checkbox"/> Harnett	<input type="checkbox"/> Onslow	<input type="checkbox"/> Vance
<input type="checkbox"/> Craven	<input type="checkbox"/> Hertford	<input type="checkbox"/> Pamlico	<input type="checkbox"/> Wake
<input type="checkbox"/>	<input type="checkbox"/> Hoke	<input type="checkbox"/>	<input type="checkbox"/> Warren
<input type="checkbox"/>	<input type="checkbox"/> Hyde	Pasquotank	<input type="checkbox"/> Washington
Cumberland	<input type="checkbox"/> Johnston	<input type="checkbox"/> Pender	<input type="checkbox"/> Wayne
<input type="checkbox"/> Currituck	<input type="checkbox"/> Jones	<input type="checkbox"/>	<input type="checkbox"/> Wilson
<input type="checkbox"/> Dare	<input type="checkbox"/> Lenoir	<input type="checkbox"/>	<input type="checkbox"/> The State of
<input type="checkbox"/> Duplin	<input type="checkbox"/>	Perquimans	Virginia
<input type="checkbox"/> Other (please specify)			

North Carolina County Map



**39. In the previous 12 months, were you ever worried about whether your family's food would run out before you got money to buy more? (*Choose only one.*)**

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

**40. If a friend or family member needed counseling for a mental health or a drug/alcohol abuse problem, who is the first person you would tell them to talk to? (*Choose only one.*)**

- |  |   |
|--|---|
| <input type="checkbox"/> Private counselor or therapist    | <input type="checkbox"/> Don't know             |
| <input type="checkbox"/> Support group (e.g., AA, Al-Anon) | <input type="checkbox"/> Doctor                 |
| <input type="checkbox"/> School counselor                  | <input type="checkbox"/> Pastor/Minister/Clergy |
| <input type="checkbox"/> Other (please specify)            |   |

## Part 6: Emergency Preparedness

**41. Does your household have working smoke and carbon monoxide detectors? (Choose only one.)**

- ☐ Yes, smoke detectors only
- ☐ Yes, both
- ☐ Don't know/not sure
- ☐ Yes, carbon monoxide detectors only
- ☐ No

**42. Does your family have a basic emergency supply kit? (These kits include water, non-perishable food, any necessary prescriptions, first aid supplies, flashlight and batteries, non-electric can opener, blanket, etc.)**

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

If yes, how many days do you have supplies for? (Write number of days)

**43. What would be your main way of getting information from authorities in a large-scale disaster or emergency? (Check only one.)**

- |  |  |
|--|--|
| <input type="checkbox"/> Television                  | <input type="checkbox"/> Social networking site                |
| <input type="checkbox"/> Radio                       | <input type="checkbox"/> Neighbors                             |
| <input type="checkbox"/> Internet                    | <input type="checkbox"/> Family                                |
| <input type="checkbox"/> Telephone (landline)        | <input type="checkbox"/> Text message (emergency alert system) |
| <input type="checkbox"/> Cell Phone                  | <input type="checkbox"/> Don't know/not sure                   |
| <input type="checkbox"/> Print media (ex: newspaper) |  |

☐ Other (please specify)

**44. If public authorities announced a mandatory evacuation from your neighborhood or community due to a large-scale disaster or emergency, would you evacuate?**  
(Check only one.)

☐ Yes *(if Yes, skip to question #46)*

☐ No

☐ Don't know/not sure

**45. What would be the main reason you might not evacuate if asked to do so? (Check only one.)**

☐ Lack of transportation

☐ Lack of trust in public officials

☐ Concern about leaving property  
behind

☐ Concern about personal safety

☐ Concern about family safety

☐ Other (please specify)

☐ Concern about leaving pets

☐ Concern about traffic jams and  
inability to get out

☐ Health problems (could not be  
moved)

☐ Don't know/not sure

## Part 7: Demographic Questions

*The next set of questions are general questions about you, which will only be reported as a summary of all answers given by survey participants. Your answers will remain anonymous.*

### **46. How old are you? (Choose only one.)**

- |                                |                                |                                      |
|--------------------------------|--------------------------------|--------------------------------------|
| <input type="checkbox"/> 15-19 | <input type="checkbox"/> 40-44 | <input type="checkbox"/> 65-69       |
| <input type="checkbox"/> 20-24 | <input type="checkbox"/> 45-49 | <input type="checkbox"/> 70-74       |
| <input type="checkbox"/> 25-29 | <input type="checkbox"/> 50-54 | <input type="checkbox"/> 75-79       |
| <input type="checkbox"/> 30-34 | <input type="checkbox"/> 55-59 | <input type="checkbox"/> 80-84       |
| <input type="checkbox"/> 35-39 | <input type="checkbox"/> 60-64 | <input type="checkbox"/> 85 or older |

### **47. What is your gender? (Choose only one.)**

- ☐ Male
- ☐ Female
- ☐ Transgender
- ☐ Gender non-conforming
- ☐ Other

### **48. Are you of Hispanic, Latino, or Spanish origin? (Choose only one).**

- ☐ I am not of Hispanic, Latino or Spanish origin
- ☐ Mexican, Mexican American, or Chicano
- ☐ Puerto Rican
- ☐ Cuban or Cuban American
- ☐ Other Hispanic or Latino (please specify)

**49. What is your race? (Choose only one).**

- ☐ White or Caucasian
- ☐ Black or African American
- ☐ American Indian or Alaska Native
- ☐ Asian Indian
- ☐ Other Asian including Japanese, Chinese, Korean, Vietnamese, and Filipino/a
- ☐ Other Pacific Islander including Native Hawaiian, Samoan, Guamanian/Chamorro
- ☐ Other race not listed here (please specify)

**50. Is English the primary language spoken in your home? (Choose only one.)**

- ☐ Yes
- ☐ No. If no, please specify the primary language spoken in your home.

**51. What is your marital status? (Choose only one.)**

- ☐ Never married/single
- ☐ Married
- ☐ Unmarried partner
- ☐ Divorced
- ☐ Widowed
- ☐ Separated

☐ Other (please specify)

--

**52. Select the highest level of education you have achieved. (Choose only one.)**

- ☐ Less than 9th grade
- ☐ 9-12th grade, no diploma
- ☐ High School graduate (or GED/equivalent)
- ☐ Associate's Degree or Vocational Training
- ☐ Some college (no degree)
- ☐ Bachelor's degree
- ☐ Graduate or professional degree
- ☐ Other (please specify)

**53. What was your total household income last year, before taxes? (Choose only one.)**

- |   |   |
|---|---|
| <input type="checkbox"/> Less than \$10,000   | <input type="checkbox"/> \$35,000 to \$49,999 |
| <input type="checkbox"/> \$10,000 to \$14,999 | <input type="checkbox"/> \$50,000 to \$74,999 |
| <input type="checkbox"/> \$15,000 to \$24,999 | <input type="checkbox"/> \$75,000 to \$99,999 |
| <input type="checkbox"/> \$25,000 to \$34,999 | <input type="checkbox"/> \$100,000 or more    |

**54. Enter the number of individuals in your household (including yourself).**

**55. What is your employment status? (Check all that apply.)**

- ☐ Employed full-time
- ☐ Employed part-time
- ☐ Retired
- ☐ Armed forces
- ☐ Disabled
- ☐ Student
- ☐ Homemaker
- ☐ Self-employed
- ☐ Unemployed for 1 year or less
- ☐ Unemployed for more than 1 year

**56. Do you have access to the Internet at home (including broadband, wifi, dial-up or cellular data)? (Choose only one.)**

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

**57. (Optional) Is there anything else you would like us to know about your community? Please feel free to tell us below.**

[Thank you for your time and participation!](#)

If you have questions about this survey, please contact us at [will.broughton@foundationhli.org](mailto:will.broughton@foundationhli.org).

### Encuesta de salud de la comunidad del Este de Carolina del Norte 2018

¡Bienvenido a la encuesta de salud comunitaria para el Este de Carolina del Norte!

Estamos llevando a cabo una evaluación de salud comunitaria para su condado. Esta evaluación está siendo realizada por una asociación de 33 condados, hospitales, sistemas de salud y departamentos de salud en el Este de Carolina del Norte. Esta evaluación les permite a estos socios comprender mejor el estado de salud y las necesidades de la comunidad a la que sirven y utilizar el conocimiento adquirido para implementar programas que beneficiarán a esta comunidad.

Podemos entender mejor las necesidades de la comunidad reuniendo las voces de los miembros de su comunidad. Esta evaluación permite que los miembros de la comunidad como usted, nos cuente sobre lo que considera son asuntos importantes para su comunidad. De ante mano le agradecemos por los 20 minutos que tomará completar esta encuesta de 57 preguntas. Sus respuestas a estas preguntas se mantendrán confidenciales y anónimas.

¡Muchas gracias por su aporte y su tiempo! Si tiene preguntas sobre esta encuesta, puede enviar un correo electrónico a Will Broughton en [will.broughton@foundationhli.org](mailto:will.broughton@foundationhli.org).

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#### PARTE 1: Calidad de vida

*Primero, cuéntenos un poco sobre usted:*

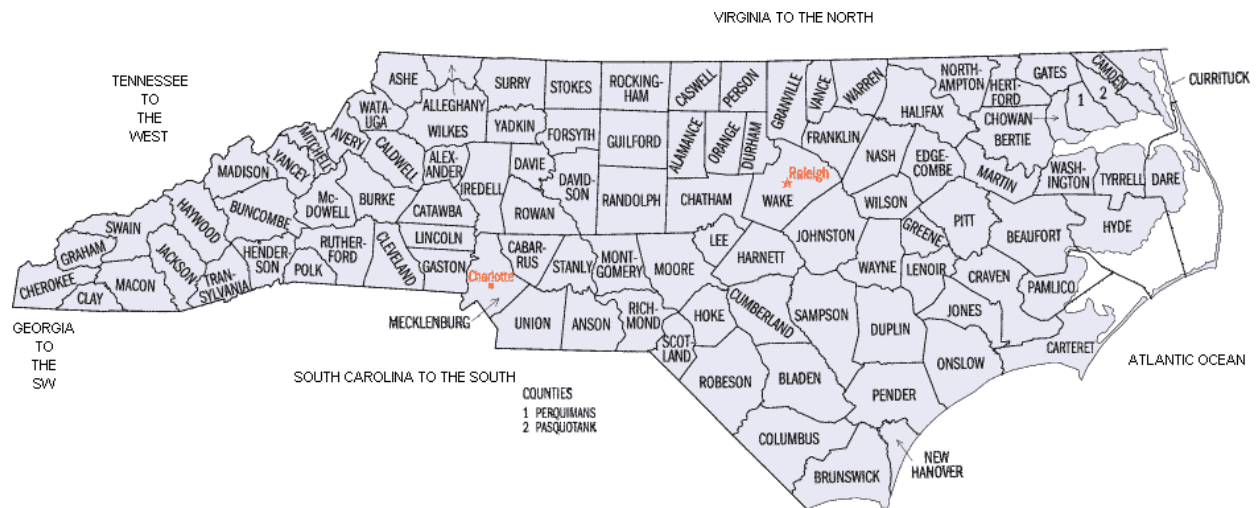
#### **3. ¿Dónde vive actualmente?**

Código postal

#### 4. ¿En qué condado vive?

- |                                     |                                   |                                     |
|-------------------------------------|-----------------------------------|-------------------------------------|
| <input type="checkbox"/> Beaufort   | <input type="checkbox"/> Franklin | <input type="checkbox"/> Onslow     |
| <input type="checkbox"/> Bertie     | <input type="checkbox"/> Gates    | <input type="checkbox"/> Pamlico    |
| <input type="checkbox"/> Bladen     | <input type="checkbox"/> Greene   | <input type="checkbox"/> Pasquotank |
| <input type="checkbox"/> Camden     | <input type="checkbox"/> Halifax  | <input type="checkbox"/> Pender     |
| <input type="checkbox"/> Carteret   | <input type="checkbox"/> Hertford | <input type="checkbox"/> Perquimans |
| <input type="checkbox"/> Chowan     | <input type="checkbox"/> Hoke     | <input type="checkbox"/> Pitt       |
| <input type="checkbox"/> Cumberland | <input type="checkbox"/> Hyde     | <input type="checkbox"/> Sampson    |
| <input type="checkbox"/> Currituck  | <input type="checkbox"/> Johnston | <input type="checkbox"/> Tyrrell    |
| <input type="checkbox"/> Dare       | <input type="checkbox"/> Lenoir   | <input type="checkbox"/> Washington |
| <input type="checkbox"/> Duplin     | <input type="checkbox"/> Martin   | <input type="checkbox"/> Wayne      |
| <input type="checkbox"/> Edgecombe  | <input type="checkbox"/> Nash     | <input type="checkbox"/> Wilson     |

#### Mapa del condado de Carolina del Norte



**3. Piense en el condado en el que vive. Por favor díganos si está "totalmente en desacuerdo", "en desacuerdo", "neutral", "de acuerdo" o "muy de acuerdo" con cada una de las siguientes 9 declaraciones.**

Declaración	Muy en desacuerdo	En desacuerdo	Neutral	De acuerdo	Muy de acuerdo
Hay una buena atención médica en mi condado.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Este condado es un buen lugar para criar niños.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Este condado es un buen lugar para envejecer.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hay buenas oportunidades económicas en este condado.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Este condado es un lugar seguro para vivir.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hay mucha ayuda para las personas durante los momentos de necesidad en este condado.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hay viviendas accesibles que satisfacen mis necesidades en este condado.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hay buenos parques e instalaciones de recreación en este condado.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Es fácil adquirir comidas saludables en este condado.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## PARTE 2: Mejora de la comunidad

*La siguiente serie de preguntas le preguntará sobre problemas y servicios de la comunidad que son importantes para usted. Recuerde que sus respuestas son privadas y no serán relacionadas con usted en ninguna manera.*

**4. Mire esta lista de problemas de la comunidad. En su opinión, ¿qué problema afecta más la calidad de vida en este condado? (Elija solo una respuesta)**

- |  |  |   |
|--|--|---|
| <input type="checkbox"/> Contaminación<br>(aire, agua, tierra)   | <input type="checkbox"/> Discriminación /<br>racismo       | <input type="checkbox"/> Violencia<br>doméstica                 |
| <input type="checkbox"/> Abandono de la<br>escuela               | <input type="checkbox"/> Falta de apoyo de<br>la comunidad | <input type="checkbox"/> Delito violento<br>(asesinato, asalto) |
| <input type="checkbox"/> Bajos ingresos /<br>pobreza             | <input type="checkbox"/> Drogas (Abuso de<br>sustancias)   | <input type="checkbox"/> Robo                                   |
| <input type="checkbox"/> Falta de hogar                          | <input type="checkbox"/> Descuido y abuso                  | <input type="checkbox"/> Violación /<br>agresión sexual         |
| <input type="checkbox"/> Falta de un seguro<br>de salud adecuado | <input type="checkbox"/> Maltrato a<br>personas mayores    |   |
| <input type="checkbox"/> Desesperación                           | <input type="checkbox"/> Abuso infantil                    |   |
| <input type="checkbox"/> Otros (especificar)                     |  |   |

**5. En su opinión, ¿cuál de los siguientes servicios necesita la mayor mejoría en su vecindario o comunidad? (Por favor elija solo uno)**

- |  |   |   |
|--|---|---|
| <input type="checkbox"/> Control Animal      | <input type="checkbox"/> Número de          | <input type="checkbox"/> Actividades        |
| <input type="checkbox"/> Opciones de         | proveedores de atención                     | positivas para                              |
| cuidado infantil                             | médica                                      | adolescentes                                |
| <input type="checkbox"/> Opciones de         | <input type="checkbox"/> Servicios de salud | <input type="checkbox"/> Opciones de        |
| cuidado para ancianos                        | apropiados de acuerdo a                     | transporte                                  |
| <input type="checkbox"/> Servicios para      | su cultura                                  | <input type="checkbox"/> Disponibilidad de  |
| personas con                                 | <input type="checkbox"/> Consejería / salud | empleo                                      |
| discapacidad                                 | mental / grupos de apoyo                    | <input type="checkbox"/> Empleos mejor      |
| <input type="checkbox"/> Servicios de salud  | <input type="checkbox"/> Mejores y más      | pagados                                     |
| más accesibles                               | instalaciones recreativas                   | <input type="checkbox"/> Mantenimiento de   |
| <input type="checkbox"/> Mejores y más       | (parques, senderos,                         | carreteras                                  |
| opciones de alimentos                        | centros comunitarios)                       | <input type="checkbox"/> Carreteras seguras |
| saludables                                   | <input type="checkbox"/> Actividades        | <input type="checkbox"/> Ninguna            |
| <input type="checkbox"/> Más accesibilidad / | familiares saludables                       |   |
| mejores vivienda                             |   |   |
| <input type="checkbox"/> Otros (especificar) |   |   |

### PARTE 3: Información de salud

*Ahora nos gustaría saber un poco más sobre dónde usted obtiene información de salud.*

**6. En su opinión, ¿sobre qué área de salud necesitan más información las personas de su comunidad? (Por favor sugiera solo uno)**

- |  |  |  |
|--|--|--|
| <input type="checkbox"/> Comer bien /<br>nutrición                                 | <input type="checkbox"/> Usar asientos de<br>seguridad para niños  | <input type="checkbox"/> transmisión sexual (sexo<br>seguro)   |
| <input type="checkbox"/> Ejercicio   | <input type="checkbox"/> Usar cinturones de<br>seguridad   | <input type="checkbox"/> Prevención del<br>abuso de sustancias (por<br>ejemplo, drogas y<br>alcohol) |
| <input type="checkbox"/> Manejo del peso   | <input type="checkbox"/> Conducir<br>cuidadosamente  | <input type="checkbox"/> Prevención del<br>suicidio  |
| <input type="checkbox"/> Ir a un dentista<br>para chequeos / cuidado<br>preventivo | <input type="checkbox"/> Dejar de fumar /<br>prevención del uso de<br>tabaco                                 | <input type="checkbox"/> Manejo del estrés   |
| <input type="checkbox"/> Ir al médico para<br>chequeos y exámenes<br>anuales       | <input type="checkbox"/> Cuidado de niños /<br>crianza   | <input type="checkbox"/> Control de la<br>ira/enojo  |
| <input type="checkbox"/> Obtener cuidado<br>prenatal durante el<br>embarazo        | <input type="checkbox"/> Cuidado de<br>ancianos  | <input type="checkbox"/> Prevención de<br>violencia doméstica  |
| <input type="checkbox"/> Recibir vacunas<br>contra la gripe y otras<br>vacunas     | <input type="checkbox"/> Cuidado de<br>miembros de familia con<br>necesidades especiales o<br>discapacidades | <input type="checkbox"/> Prevención del<br>crimen  |
| <input type="checkbox"/> Prepararse para<br>una emergencia /<br>desastre           | <input type="checkbox"/> Prevención del<br>embarazo y<br>enfermedades de                                     | <input type="checkbox"/> Violación /<br>prevención de abuso<br>sexual                                |
|  |  | <input type="checkbox"/> Ninguna   |

☐ Otros (especificar)

**7. De dónde saca la mayor parte de su información relacionada con la salud? (Por favor elija solo una respuesta)**

☐ Amigos y familia

☐ La escuela de mi

☐ Líneas telefónicas

☐ Doctor /

hijo

de ayuda

enfermera

☐ Hospital

☐ Libros / revistas

☐ Farmacéutico

☐ Departamento de

☐ Iglesia

salud

☐ Internet

☐ Empleador

☐ Otros (especificar)

**8. ¿De qué temas o enfermedades de salud le gustaría aprender más?**

**9. ¿Cuida de un pariente anciano en su casa o en otra casa? (Elija solo una).**

☐ Sí

☐ No

**10. ¿Tiene hijos entre las edades de 9 y 19 de los cuales usted es el guardián? (Incluye hijastros, nietos u otros parientes). (Elija solo una).**

☐

Sí

☐

No

*(Si su respuesta es No, salte a la pregunta numero 12)*

**11. ¿Cuáles de los siguientes temas de salud cree que sus hijos necesitan más información?**  
(*Seleccione todas las opciones que corresponden*).

☐

Higiene dental

☐

Manejo de la

☐

Abuso de drogas

☐

Nutrición

☐

diabetes

☐

Manejo

☐

Trastornos de la  
alimentación

☐

Tabaco

☐

imprudente / exceso de  
velocidad

☐

Ejercicios

☐

(enfermedades de

☐

Problemas de

☐

Manejo del asma

☐

transmisión sexual)

☐

salud mental

☐

Relación sexual

☐

Prevención del

☐

Alcohol

☐

suicidio

☐

Otros (especificar)

--

#### PARTE 4: Salud personal

*Las siguientes preguntas son sobre su salud personal. Recuerde, las respuestas que brinde para esta encuesta no serán ligadas con usted de ninguna manera.*

**12. En general, diría que su salud es... (Elija solo una).**

- ☐ Excelente
- ☐ Muy buena
- ☐ Buena
- ☐ Justa
- ☐ Pobre
- ☐ No sé / no estoy seguro

**13. ¿Alguna vez un médico, enfermera u otro profesional de la salud le dijo que tiene alguna de las siguientes condiciones de salud?**

	Sí	No	No lo sé
Asma	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Depresión o ansiedad	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Alta presión sanguínea	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Colesterol alto	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Diabetes (no durante el embarazo)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Osteoporosis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sobrepeso / obesidad	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Angina / enfermedad cardíaca	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cáncer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**14. ¿Cuál de los siguientes servicios preventivos ha tenido usted en los últimos 12 meses?**  
*(Seleccione todas las opciones que corresponden).*

- |  |  |   |
|--|--|---|
| <input type="checkbox"/> Mamografía        | <input type="checkbox"/> Prueba de         | <input type="checkbox"/> Examen de la vista |
| <input type="checkbox"/> Examen de cáncer  | densidad de los huesos                     | <input type="checkbox"/> Evaluación         |
| de próstata                                | <input type="checkbox"/> Examen físico     | cardiovascular (el                          |
| <input type="checkbox"/> Examen de colon / | <input type="checkbox"/> Prueba de         | corazón)                                    |
| recto                                      | Papanicolaou                               | <input type="checkbox"/> Limpieza dental /  |
| <input type="checkbox"/> Control de azúcar | <input type="checkbox"/> Vacuna contra la  | radiografías                                |
| en la sangre                               | gripe                                      | <input type="checkbox"/> Ninguna de las     |
| <input type="checkbox"/> Examen de         | <input type="checkbox"/> Control de la     | anteriores                                  |
| Colesterol                                 | presión arterial                           |   |
| <input type="checkbox"/> Examen de         | <input type="checkbox"/> Pruebas de cáncer |   |
| audición (escucha)                         | de piel                                    |   |

**15. ¿Cuánto tiempo hace desde la última vez que visitó a un dentista o clínica dental por algún motivo? Incluya visitas a especialistas dentales, como ortodoncista. (Elija solo una).**

- ☐ En el último año (en los últimos 12 meses)
- ☐ Hace 2 (más de un año pero menos de dos años)
- ☐ Hace más de 5 años (más de 2 años pero menos de 5 años)
- ☐ No sé / no estoy seguro
- ☐ Nunca

**16. En los últimos 30 días, ¿ha habido algún día que se ha sentido triste o preocupado y le haya impedido realizar sus actividades normales? (Elija solo una).**

- ☐ Sí
- ☐ No
- ☐ No sé / no estoy seguro

**17. La siguiente pregunta es sobre el alcohol. Un trago es equivalente a una cerveza de 12 onzas, una copa de vino de 5 onzas o una bebida con un trago de licor.**

**Considerando todos los tipos de bebidas alcohólicas, ¿cuántas veces durante los últimos 30 días tomó 5 o más bebidas (si es hombre) o 4 o más bebidas (si es mujer) en una ocasión?**

- |                            |                            |                             |                             |                             |                             |                             |                             |
|----------------------------|----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| <input type="checkbox"/> 0 | <input type="checkbox"/> 4 | <input type="checkbox"/> 8  | <input type="checkbox"/> 12 | <input type="checkbox"/> 16 | <input type="checkbox"/> 20 | <input type="checkbox"/> 24 | <input type="checkbox"/> 28 |
| <input type="checkbox"/> 1 | <input type="checkbox"/> 5 | <input type="checkbox"/> 9  | <input type="checkbox"/> 13 | <input type="checkbox"/> 17 | <input type="checkbox"/> 21 | <input type="checkbox"/> 25 | <input type="checkbox"/> 29 |
| <input type="checkbox"/> 2 | <input type="checkbox"/> 6 | <input type="checkbox"/> 10 | <input type="checkbox"/> 14 | <input type="checkbox"/> 18 | <input type="checkbox"/> 22 | <input type="checkbox"/> 26 | <input type="checkbox"/> 30 |
| <input type="checkbox"/> 3 | <input type="checkbox"/> 7 | <input type="checkbox"/> 11 | <input type="checkbox"/> 15 | <input type="checkbox"/> 19 | <input type="checkbox"/> 23 | <input type="checkbox"/> 27 |                             |
- ☐ No sé / no estoy seguro

**18. Ahora le vamos a hacer una pregunta sobre el uso de drogas. Las respuestas que nos dan las personas sobre su uso de drogas son importantes para comprender los problemas de salud en el condado. Sabemos que esta información es personal, pero recuerde que sus respuestas se mantendrán confidenciales.**

**¿Has usado alguna droga ilegal en los últimos 30 días? Cuando decimos drogas, incluimos marihuana, cocaína, crack, heroína o cualquier otra sustancia ilegal. ¿Aproximadamente cuántos días has usado una de estas drogas ilegales? (Elija solo una).**

- |                            |                            |                             |                             |                             |                             |                             |                             |
|----------------------------|----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| <input type="checkbox"/> 0 | <input type="checkbox"/> 4 | <input type="checkbox"/> 8  | <input type="checkbox"/> 12 | <input type="checkbox"/> 16 | <input type="checkbox"/> 20 | <input type="checkbox"/> 24 | <input type="checkbox"/> 28 |
| <input type="checkbox"/> 1 | <input type="checkbox"/> 5 | <input type="checkbox"/> 9  | <input type="checkbox"/> 13 | <input type="checkbox"/> 17 | <input type="checkbox"/> 21 | <input type="checkbox"/> 25 | <input type="checkbox"/> 29 |
| <input type="checkbox"/> 2 | <input type="checkbox"/> 6 | <input type="checkbox"/> 10 | <input type="checkbox"/> 14 | <input type="checkbox"/> 18 | <input type="checkbox"/> 22 | <input type="checkbox"/> 26 | <input type="checkbox"/> 30 |
| <input type="checkbox"/> 3 | <input type="checkbox"/> 7 | <input type="checkbox"/> 11 | <input type="checkbox"/> 15 | <input type="checkbox"/> 19 | <input type="checkbox"/> 23 | <input type="checkbox"/> 27 |                             |
- ☐ No sé / no estoy seguro

*(Si su respuesta es 0, salte a la pregunta numero 20)*

**19. Durante los últimos 30 días, ¿qué droga ilegal ha usado? (Marque todas las que corresponden).**

- ☐ Marihuana
- ☐ Cocaína
- ☐ Heroína
- ☐ Otros (especificar)

**20. Durante los últimos 30 días, ¿ha tomado algún medicamento recetado para el que no tenía una receta (por ejemplo, Oxycontin, Percocet, Demerol, Adderall, Ritalin o Xanax)? ¿Cuántas veces durante los últimos 30 días usó un medicamento recetado para el cual no tenía una receta? (Elija solo una).**

- |                            |                            |                             |                             |                             |                             |                             |                             |
|----------------------------|----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| <input type="checkbox"/> 0 | <input type="checkbox"/> 4 | <input type="checkbox"/> 8  | <input type="checkbox"/> 12 | <input type="checkbox"/> 16 | <input type="checkbox"/> 20 | <input type="checkbox"/> 24 | <input type="checkbox"/> 28 |
| <input type="checkbox"/> 1 | <input type="checkbox"/> 5 | <input type="checkbox"/> 9  | <input type="checkbox"/> 13 | <input type="checkbox"/> 17 | <input type="checkbox"/> 21 | <input type="checkbox"/> 25 | <input type="checkbox"/> 29 |
| <input type="checkbox"/> 2 | <input type="checkbox"/> 6 | <input type="checkbox"/> 10 | <input type="checkbox"/> 14 | <input type="checkbox"/> 18 | <input type="checkbox"/> 22 | <input type="checkbox"/> 26 | <input type="checkbox"/> 30 |
| <input type="checkbox"/> 3 | <input type="checkbox"/> 7 | <input type="checkbox"/> 11 | <input type="checkbox"/> 15 | <input type="checkbox"/> 19 | <input type="checkbox"/> 23 | <input type="checkbox"/> 27 |                             |
- ☐ No sé / no estoy seguro

**21. La siguiente pregunta se relaciona con la salud de una persona que ha servido en las fuerzas Armadas. ¿Alguna vez ha estado en servicio activo en las Fuerzas Armadas de los Estados Unidos (Sin incluir el servicio activo de solo entrenamientos en las Reservas o la Guardia Nacional)? (Elija solo una).**

- ☐ Sí
- ☐ No *(Si su respuesta es No, salte a la pregunta numero 23)*

**22. ¿Alguna vez un médico u otro profesional de la salud le ha dicho que tiene depresión, ansiedad o trastorno por estrés postraumático (TEPT)? (Elija solo una).**

☐

Sí

☐

No

**23. Ahora nos gustaría saber sobre su estado físico. Durante una semana normal, aparte de su trabajo habitual, ¿realiza alguna actividad física o ejercicio que dure al menos media hora? (Elija solo una).**

☐

Sí

☐

No *(Si su respuesta es No, salte a la pregunta numero 26)*

☐

No sé / no estoy seguro *(Si su respuesta es No se / no estoy seguro, salte a la pregunta numero 26)*

**24. Como dijo que sí, ¿cuántas veces hace ejercicio o se involucra en alguna actividad física durante una semana normal?**

**25. ¿A dónde va a hacer ejercicio o participa en actividad físicas? (Marque todas las que corresponden).**

- |   |   |
|---|---|
| <input type="checkbox"/> YMCA                         | <input type="checkbox"/> Sitio de trabajo / Empleador       |
| <input type="checkbox"/> Parque                       | <input type="checkbox"/> Terrenos escolares / instalaciones |
| <input type="checkbox"/> Centro de Recreación Pública | <input type="checkbox"/> Casa                               |
| <input type="checkbox"/> Gimnasio privado             | <input type="checkbox"/> Iglesia                            |
| <input type="checkbox"/> Otros (especificar)          |   |

**Como su respuesta fue Si a la pregunta 23 (actividad física / ejercicio), salte a la pregunta numero 27**

**26. Ya que dijo "no", ¿cuáles son las razones por las que no hace ejercicio por media hora durante una semana normal? Puedes dar tantos de estos motivos como necesite.**

- |  |  |
|--|--|
| <input type="checkbox"/> Mi trabajo es trabajo físico o trabajo duro   | <input type="checkbox"/> Necesitaría cuidado de niños y no lo tengo.   |
| <input type="checkbox"/> El ejercicio no es importante para mí.  | <input type="checkbox"/> No sé cómo encontrar compañeros de ejercicio. |
| <input type="checkbox"/> No tengo acceso a una instalación que tenga las cosas que necesito, como una piscina, un campo de golf o una pista. | <input type="checkbox"/> No me gusta hacer ejercicio                   |
| <input type="checkbox"/> No tengo suficiente tiempo para hacer ejercicio.  | <input type="checkbox"/> Me cuesta mucho hacer ejercicio.              |
|  | <input type="checkbox"/> No hay un lugar seguro para hacer ejercicio.  |

- ☐ Necesito transporte y no lo tengo. ☐ Estoy físicamente deshabilitado.
- ☐ Estoy demasiado cansado para hacer ejercicio. ☐ No lo sé.

☐ Otros (especificar)

**27. Sin contar ensalada de lechuga o productos de papa como papas fritas, piense en la frecuencia con la que come frutas y verduras en una semana normal.**

**¿Cuántas tazas por semana de frutas y vegetales dirías que comes? (*Una manzana o 12 zanahorias pequeñas equivalen a una taza*).**

Cantidad de tazas de fruta

Número de tazas de verduras

Cantidad de tazas de jugo de fruta 100%

**28. ¿Alguna vez estuvo expuesto al humo del cigarro de alguien que fumó cerca de usted durante el último año? (*Elija solo una*).**

- ☐ Sí
- ☐ No (*Si su respuesta es No, salte a la pregunta numero 30*)
- ☐ No sé / no estoy seguro (*Si su respuesta es No se / no estoy seguro, salte a la pregunta numero 30*)

**29. En caso afirmativo, ¿dónde cree que está expuesto al humo de segunda mano con mayor frecuencia? (Marque solo uno)**

- ☐ Casa
- ☐ Lugar de trabajo
- ☐ Hospitales
- ☐ Restaurantes
- ☐ Colegio
- ☐ No estoy expuesto al humo de segunda mano.
- ☐ Otros (especificar)

**30. ¿Actualmente usa algún producto que contiene tabaco? (Esto incluye cigarros, cigarros electrónicos, masticar tabaco o cigarro de vapor.) (Elija solo una).**

- ☐ Sí
- ☐ No *(Si su respuesta es No, salte a la pregunta numero 32)*

**31. En caso afirmativo, ¿a dónde iría en busca de ayuda si quisiera dejar de fumar? (Elija solo una).**

- |   |   |
|---|---|
| <input type="checkbox"/> QUITLINE NC (ayuda por teléfono) | <input type="checkbox"/> Departamento de salud          |
| <input type="checkbox"/> Doctor                           | <input type="checkbox"/> No lo sé                       |
| <input type="checkbox"/> Farmacia                         | <input type="checkbox"/> No aplica; No quiero renunciar |
| <input type="checkbox"/> Consejero / terapeuta privado    |   |
| <input type="checkbox"/> Otros (especificar)              |   |

**32. Ahora le haremos preguntas sobre sus vacunas personales contra la gripe. Una vacuna contra la influenza / gripe puede ser una "inyección contra la gripe" inyectada en su brazo o también el espray "FluMist" que se rocía en su nariz. Durante los últimos 12 meses, ¿se vacunó contra la gripe o se puso el espray "FluMist"? (*Elija solo una*).**

- ☐ Sí, vacuna contra la gripe
- ☐ Sí, FluMist
- ☐ Si ambos
- ☐ No
- ☐ No sé / no estoy seguro

PARTE 5: Acceso a la atención / Salud familiar

**33. ¿A dónde va más a menudo cuando está enfermo? (Elija solo uno)**

- |  |  |
|--|--|
| <input type="checkbox"/> Oficina del doctor    | <input type="checkbox"/> Clínica Médica            |
| <input type="checkbox"/> Departamento de salud | <input type="checkbox"/> Centro de cuidado urgente |
| <input type="checkbox"/> Hospital              |  |
| <input type="checkbox"/> Otros (especificar)   |  |

**34. ¿Tiene alguno de los siguientes tipos de seguro de salud o cobertura de atención médica? (Elija todos los que aplique)**

- ☐ Seguro de salud que mi empleador proporciona
- ☐ Seguro de salud que proporciona el empleador de mi cónyuge
- ☐ Seguro de salud que mi escuela proporciona
- ☐ Seguro de salud que proporciona mi padre o el empleador de mis padres
- ☐ Seguro de salud que compré
- ☐ Seguro de salud a través del Mercado de Seguros Médicos (Obamacare)
- ☐ Seguro Militar, Tricare o el VA
- ☐ Seguro de enfermedad
- ☐ Seguro médico del estado
- ☐ Sin plan de salud de ningún tipo

**35. En los últimos 12 meses, ¿tuvo problemas para obtener la atención médica que necesitaba para usted o para un familiar de cualquier tipo de proveedor de atención médica, dentista, farmacia u otro centro? (Elija solo uno)**

- ☐ Sí
- ☐ No *(Si su respuesta es No, salte a la pregunta numero 38)*
- ☐ No sé / no estoy seguro

**36. Dado que usted dijo "sí", ¿Con cual tipo de proveedor o institución tuvo problemas para obtener atención médica? Puede elegir tantos de estos como necesite.**

- |  |   |   |
|--|---|---|
| <input type="checkbox"/> Dentista  | <input type="checkbox"/> Pediatra                 | <input type="checkbox"/> Centro de atención |
| <input type="checkbox"/> Médico general                                      | <input type="checkbox"/> Ginecologo               | <input type="checkbox"/> urgente            |
| <input type="checkbox"/> Cuidado de los ojos /<br>optometrista / oftalmólogo | <input type="checkbox"/> Departamento<br>de salud | <input type="checkbox"/> Clínica Médica     |
| <input type="checkbox"/> Farmacia / recetas<br>médicas                       | <input type="checkbox"/> Hospital                 | <input type="checkbox"/> Especialista       |
| <input type="checkbox"/> Otros (especificar)                                 |   |   |

**37. ¿Cuáles de estos problemas le impidieron a usted o a su familiar obtener la atención médica necesaria? Puede elegir tantos de estos como necesite.**

- ☐ No tiene seguro medico
- ☐ El seguro no cubría lo que necesitaba

- ☐ El costo del deducible del seguro era demasiado alto
- ☐ El doctor no aceptaba el seguro ni el Medicaid.
- ☐ El hospital no aceptaba el seguro.
- ☐ La farmacia no aceptaba el seguro ni el Medicaid.
- ☐ El dentista no aceptaba el seguro ni el Medicaid.
- ☐ No tengo ninguna manera de llegar allí.
- ☐ No sabía a dónde ir.
- ☐ No pude conseguir una cita.
- ☐ La espera fue demasiado larga.
- ☐ El proveedor me negó atención o me trató de manera discriminatoria debido a mi estado de VIH, o porque soy lesbiana, gay, bisexual o transexual.

38. ¿En qué condado se encuentra la mayoría de los proveedores médicos que visita? (*Elija solo uno*)

<input type="checkbox"/>	Beaufort	<input type="checkbox"/>		<input type="checkbox"/>	
<input type="checkbox"/>	Bertie	<input type="checkbox"/>	Edgecombe	<input type="checkbox"/>	Martin
<input type="checkbox"/>	Bladen	<input type="checkbox"/>	Franklin	<input type="checkbox"/>	Moore
<input type="checkbox"/>	Brunswick	<input type="checkbox"/>	Gates	<input type="checkbox"/>	Nash
<input type="checkbox"/>	Camden	<input type="checkbox"/>	Granville	<input type="checkbox"/>	New
<input type="checkbox"/>	Carteret	<input type="checkbox"/>	Greene	<input type="checkbox"/>	Hanover
<input type="checkbox"/>	Chowan	<input type="checkbox"/>	Halifax	<input type="checkbox"/>	
<input type="checkbox"/>	Columbus	<input type="checkbox"/>	Harnett	<input type="checkbox"/>	Northampton
<input type="checkbox"/>	Craven	<input type="checkbox"/>	Hertford	<input type="checkbox"/>	Onslow
<input type="checkbox"/>		<input type="checkbox"/>	Hoke	<input type="checkbox"/>	Pamlico
<input type="checkbox"/>		<input type="checkbox"/>	Hyde	<input type="checkbox"/>	
<input type="checkbox"/>	Cumberland	<input type="checkbox"/>	Johnston	<input type="checkbox"/>	Pasquotank
<input type="checkbox"/>	Currituck	<input type="checkbox"/>	Jones	<input type="checkbox"/>	Pender
<input type="checkbox"/>	Dare	<input type="checkbox"/>	Lenoir	<input type="checkbox"/>	
<input type="checkbox"/>	Duplin	<input type="checkbox"/>		<input type="checkbox"/>	Perquimans
<input type="checkbox"/>	Otros (especificar)	<input type="checkbox"/>		<input type="checkbox"/>	

<input type="checkbox"/>	Pitt
<input type="checkbox"/>	Richmond
<input type="checkbox"/>	Robeson
<input type="checkbox"/>	Sampson
<input type="checkbox"/>	Scotland
<input type="checkbox"/>	Tyrrell
<input type="checkbox"/>	Vance
<input type="checkbox"/>	Wake
<input type="checkbox"/>	Warren
<input type="checkbox"/>	Washington
<input type="checkbox"/>	Wayne
<input type="checkbox"/>	Wilson
<input type="checkbox"/>	El Estado de
	Virginia

Mapa del condado de Carolina del Norte



**39. En los últimos 12 meses, ¿alguna vez le preocupó saber si la comida de su familia se agotaría antes de obtener dinero para comprar más? (Elija solo uno)**

- ☐ Sí
- ☐ No
- ☐ No sé / no estoy seguro

**40. Si un amigo o miembro de la familia necesita asesoría para un problema de salud mental o de abuso de drogas o alcohol, ¿quién es la primera persona con la que les diría que hablen? (Elija solo uno)**

- |  |   |
|--|---|
| <input type="checkbox"/> Consejero o terapeuta privado | <input type="checkbox"/> No sé                          |
| <input type="checkbox"/> Grupo de apoyo                | <input type="checkbox"/> Doctor                         |
| <input type="checkbox"/> Consejero de la escuela       | <input type="checkbox"/> Pastor o funcionario religioso |
| <input type="checkbox"/> Otros (especificar)           |   |

## PARTE 6: Preparación para emergencias

**41. ¿Tiene en su hogar detectores de humo y monóxido de carbono en funcionamiento?**  
*(Elija solo uno)*

- ☐ Sí, solo detectores de humo
- ☐ Si ambos
- ☐ No sé / no estoy seguro
- ☐ Sí, sólo detectores de monóxido de carbono
- ☐ NO

**42. ¿Su familia tiene un kit básico de suministros de emergencia? (Estos kits incluyen agua, alimentos no perecederos, cualquier receta necesaria, suministros de primeros auxilios, linterna y baterías, abrelatas no eléctrico, cobijas, etc.)**

- ☐ Sí
- ☐ No
- ☐ No sé / no estoy seguro

En caso que sí, ¿cuántos días tiene suministros? (Escriba el número de días)

**43. ¿Cuál sería su forma principal de obtener información de las autoridades en un desastre o emergencia a gran escala? (Marque solo uno)**

- |  |   |
|--|---|
| <input type="checkbox"/> Televisión                  | <input type="checkbox"/> Sitio de red social                                |
| <input type="checkbox"/> Radio                       | <input type="checkbox"/> Vecinos  |
| <input type="checkbox"/> Internet                    | <input type="checkbox"/> Familia  |
| <input type="checkbox"/> Línea de teléfono en casa   | <input type="checkbox"/> Mensaje de texto (sistema de alerta de emergencia) |
| <input type="checkbox"/> Teléfono celular            | <input type="checkbox"/> No sé / no estoy seguro                            |
| <input type="checkbox"/> Medios impresos (periódico) |   |
| <input type="checkbox"/> Otros (especificar)         |   |

**44. Si las autoridades públicas anunciaran una evacuación obligatoria de su vecindario o comunidad debido a un desastre a gran escala o una emergencia, ¿Ustedes evacuarían?**  
*(Elija solo uno)*

- ☐ Sí *(Si su respuesta es Sí, salte a la pregunta numero 46)*
- ☐ No
- ☐ No sé / no estoy seguro

**45. ¿Cuál sería la razón principal por la que no evacuaría si le pidieran que lo hiciera?**  
*(Marque solo uno)*

- |   |  |
|---|--|
| <input type="checkbox"/> Falta de transporte                                | <input type="checkbox"/> Preocupación por la seguridad familiar                              |
| <input type="checkbox"/> La falta de confianza en los funcionarios públicos | <input type="checkbox"/> Preocupación por dejar mascotas                                     |
| <input type="checkbox"/> Preocupación por dejar atrás la propiedad          | <input type="checkbox"/> Preocupación por los atascos de tráfico y la imposibilidad de salir |
| <input type="checkbox"/> Preocupación por la seguridad personal             | <input type="checkbox"/> Problemas de salud (no se pudieron mover)                           |
| <input type="checkbox"/> Otros (especificar)                                | <input type="checkbox"/> No sé / no estoy seguro   |

## PARTE 7: Preguntas demográficas

*La siguiente serie de preguntas son preguntas generales sobre usted, que solo se informarán como un resumen de todas las respuestas dadas por los participantes de la encuesta. Tus respuestas permanecerán en el anonimato.*

**46. ¿Qué edad tiene? (Elija solo uno)**

- |                                |                                |                                   |
|--------------------------------|--------------------------------|-----------------------------------|
| <input type="checkbox"/> 15-19 | <input type="checkbox"/> 40-44 | <input type="checkbox"/> 65-69    |
| <input type="checkbox"/> 20-24 | <input type="checkbox"/> 45-49 | <input type="checkbox"/> 70-74    |
| <input type="checkbox"/> 25-29 | <input type="checkbox"/> 50-54 | <input type="checkbox"/> 75-79    |
| <input type="checkbox"/> 30-34 | <input type="checkbox"/> 55-59 | <input type="checkbox"/> 80-84    |
| <input type="checkbox"/> 35-39 | <input type="checkbox"/> 60-64 | <input type="checkbox"/> 85 o más |

**47. ¿Cuál es tu género? (Elija solo uno)**

- ☐ Masculino
- ☐ Femenino
- ☐ Transgénero
- ☐ Género no conforme
- ☐ Otro

**48. ¿Eres de origen hispano, latino o español? (Elija solo uno)**

- ☐ No soy de origen hispano, latino o español
- ☐ Mexicano, mexicoamericano o chicano
- ☐ Puertorriqueño
- ☐ Cubano o cubano americano
- ☐ Otro - hispano o latino (por favor especifique)

**49. ¿Cuál es su raza? (Elija solo uno)**

- ☐ Blanco
- ☐ Negro o Afroamericano
- ☐ Indio Americano o nativo de Alaska
- ☐ Indio Asiático
- ☐ Otros- Asiáticos, incluidos Japonés, Chino, Coreano, Vietnamita y Filipino Otros
- ☐ isleños del Pacífico, incluidos los nativos de Hawaii, Samoa, Guamanian / Chamorro
- ☐ Otra raza no incluida aquí (especifique)

**50. ¿El inglés es el idioma principal que se habla en su hogar? (Elija solo uno)**

- ☐ Sí
- ☐ No. En caso negativo, especifique el idioma principal que se habla en su hogar.

**51. ¿Cuál es tu estado civil? (Elija solo uno)**

- ☐ Nunca casado / soltero
- ☐ Casado
- ☐ Pareja- soltera
- ☐ Divorciado

- ☐ Viudo
- ☐ Separado
- ☐ Otros (especificar)

**52. Seleccione el nivel más alto de educación que ha alcanzado. (Elija solo uno)**

- ☐ Menos de 9no grado
- ☐ 9-12 grado, sin diploma
- ☐ Graduado de secundaria (o GED / equivalente)
- ☐ Grado Asociado o Formación Profesional
- ☐ Un poco de universidad (sin título)
- ☐ Licenciatura
- ☐ Licenciado o título profesional
- ☐ Otros (especificar)

**53. ¿Cuál fue el ingreso total de su hogar el año pasado, antes de impuestos? (Elija solo uno)**

- |  |  |
|--|--|
| <input type="checkbox"/> Menos de \$10,000   | <input type="checkbox"/> \$35,000 a \$49,999 |
| <input type="checkbox"/> \$10,000 a \$14,999 | <input type="checkbox"/> \$50,000 a \$74,999 |
| <input type="checkbox"/> \$15,000 a \$24,999 | <input type="checkbox"/> \$75,000 a \$99,999 |
| <input type="checkbox"/> \$25,000 a \$34,999 | <input type="checkbox"/> \$100,000 o más     |

**54. Ingrese el número de personas en su hogar (incluyéndose a usted)**

**55. ¿Cuál es su estado laboral? (Seleccione todas las opciones que corresponden).**

- |                                      |                                     |  |
|--------------------------------------|-------------------------------------|--|
| <input type="checkbox"/> Empleado de | <input type="checkbox"/> Empleado a | <input type="checkbox"/> Retirado        |
| tiempo completo                      | tiempo parcial                      | <input type="checkbox"/> Fuerzas Armadas |

- ☐ Discapacitado
- ☐ Estudiante
- ☐ Ama de casa
- ☐ Trabajadores por  
cuenta propia
- ☐ Desempleado 1  
año o menos
- ☐ Desempleado por  
más de 1 año

**56. ¿Tiene acceso al internet en su casa (Esto incluye alta velocidad, wifi, acceso telefónico o datos móviles)? (Elija solo uno)**

- ☐ Sí
- ☐ No
- ☐ No sé / no estoy seguro

**57. (Opcional) ¿Hay algo más que le gustaría que sepamos sobre su comunidad? Por favor, siéntase libre de decirnos a continuación.**

[¡Gracias por su tiempo y participación!](#)

Si tiene preguntas sobre esta encuesta, envíenos un correo electrónico a [will.broughton@foundationhli.org](mailto:will.broughton@foundationhli.org).

## Focus Group Questions

**Participants' Resident County(ies):**

**Focus Group Name / Number:**

**Date Conducted:**

**Location:**

**Start Time:**

**End Time:**

**Number of Participants:**

**Population Type (if applicable):**

**Moderator Name:**

**Moderator Email:**

**Note Taker Name:**

**Note Taker Email:**

### Core Questions

**1. Introduce yourself and tell us what you think is the best thing about living in this community.**

**2. What do people in this community do to stay healthy?**

***Prompt: What do you do to stay healthy?***

**3. In your opinion, what are the serious health related problems in your community? What are some of the causes of these problems?**

**4. What keeps people in your community from being healthy?**

***Prompt: What challenges do you face that keep you from being healthy? What barriers exist to being healthy?***

**5. What could be done to solve these problems?**

***Prompt: What could be done to make your community healthier? Additional services or changes to existing services?***

6. Is there any group not receiving enough health care? If so, what group? And why?

7. Is there anything else you would like us to know?

#### **Additional Questions**

1. How do people in this community get information about health? How do you get information about health?

2. Have you or someone close to you ever experienced any challenges in trying to get healthcare services? If so, what happened?

3. What is the major environmental issue in the county?

4. Describe collaborative efforts in the community. How can we improve our level of collaboration?

5. What are the strengths related to health in your community?

*Prompt: Specific strengths related to healthcare?*

*Prompt: Specific strengths to a healthy lifestyle?*

6. If you had \$100,000 to spend on a healthcare project in the county, how would you spend it?

#### **Key Themes**

**Summarize the top 2-3 themes from this focus group discussion.**

1.

2.

3.

## Appendix D. Community Resources

Link to Community resources – NC 211

North Carolina Division of Workforce Solutions

[https://www.ncworks.gov/admin/gsipub/htmlarea/uploads/CRAG/Duplin\\_County.pdf](https://www.ncworks.gov/admin/gsipub/htmlarea/uploads/CRAG/Duplin_County.pdf)

Contact Duplin County Health Department at 910-296-2130 for a printed list.