

2022



BRUNSWICK COUNTY

COMMUNITY HEALTH NEEDS ASSESSMENT



brunswickcountync.gov/health



910-253-2250



25 Courthouse Drive
Building A
Bolivia, NC 28422

*This report is pending approval and was submitted to the
NC State Center for Health Statistics on March 6, 2023*

This report is available on the Brunswick County Health Services website at:
www.brunswickcountync.gov/health



Contact Brunswick County Health Services at 910-253-2250 or health@brunswickcountync.gov for any comments or questions regarding the 2022 Community Health Needs Assessment



Brunswick County Health Services

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David G. Howard, MPH, Director

Dear Brunswick County Residents,



On behalf of Brunswick County Health Services, I am pleased to present our 2022 Community Health Needs Assessment. This assessment belongs to all of us and will provide guidance for achieving higher levels of community health.

The information in this assessment provides a deeper understanding of residents' opinions and key insights about our health, illness, services, and important information about health risk factors, quality of life, mortality, morbidity, community assets, community change, and essential services.

Over the next four years, we will use this information to plan and implement the Community Health Improvement Plan (CHIP) with detailed goals and objectives aimed at preserving and improving opportunities for healthy living for all walks of life across Brunswick County. As your health director, I am committed to working alongside our staff, partners, and the community toward these goals. Improving our community health is both a community effort through collective initiatives and an individual endeavor, so I invite you to take an active part in pursuing a healthy life.

Thank you to Brunswick County Health Services staff, Doshier Memorial Hospital, Novant Health Brunswick Medical Center, the Steering Committee members, and all our community partners for contributing to the development of this report. And most of all, thank you Brunswick County residents for providing your contributions for this report, we greatly appreciate your time and value your input.

David Howard, MPH
Health Director
Brunswick County Health Services

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Acknowledgements

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- Leigh Lane, Executive Director, Brunswick Wellness Coalition
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- Michelle Bennett, Manager of Community Engagement, Novant Health New Hanover Regional Medical Center
- Tracy Kulik, CEO of Kulik Strategic Advisers, CHNA Author
- Marcos Alcorn, Principal with Kulik Strategic Advisers, CHNA Co-Author

Steering Committee

| Name | Organization |
|-------------------------|--|
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| Jennifer Gates | Brunswick County Health Services |
| Maureen Hubbard | Brunswick County Health Services-WIC |
| Rachel Crowder | Brunswick County Health Services |
| Matt Lenhart | Brunswick County Cooperative Extension |
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| Elsa Armijos | Brunswick County Schools |
| Stephanie Bowen | Brunswick Family Assistance |
| Resea Willis | Brunswick Housing Opportunities |
| Jennifer Sherman | Brunswick Senior Resources |
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| Lynn Herbert Smith | Brunswick Smart Start |
| Yvonne Hatcher | Brunswick Transit |
| Meghann Dennison | Cape Fear Collective |
| Nick Pylypiw | Cape Fear Collective |
| Perita Price | Cedar Grove Community Center |
| Joshua Torbich | Christian Recovery Centers Inc. |
| Father Bill Eberle | Clergy/Community |
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| Teresa Mobley | Coastal Horizons Inc. |
| Andrea Morales-Williams | CommWell Health |
| Chris Vann | CommWell Health |
| Jeri Robinson | Doshier Memorial Hospital |

| Name | Organization |
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| Angie Lawrence | 4-H EFNEP |
| Carl Parker | NAACP Brunswick County |
| Deborah Maxwell | NAACP Healthier Together |
| Sheila Roberts | New Hope Clinic |
| Dana Fisher | North Brunswick Chamber of Commerce |
| Juanita Harper | North Carolina Project Lead |
| Mary Lou Smith | Brunswick Senior Resources |
| Barnes Sutton | Town of Leland |
| Megan Bellamy | Town of Shallotte |
| Jean Toner | Town of St. James |
| Cecelia Peers | Trillium |
| Bill O'Brien | Community Representative |
| Rayshieta Cole | Community Representative |
| Holly Coleman | Community Representative |

BRUNSWICK COUNTY, NC

COMMUNITY HEALTH OPINION SURVEY

Building a *bright* future for our community

- 1 SCAN ME**
- 2 TAKE THE SURVEY**
 The survey is open July 8 - September 2. Your answers will help us improve the health of the community. The survey will take no longer than 15 minutes and your answers will be private.
- 3 SHARE THE SURVEY**
 Share it with your friends, family, and social groups. The survey has an English and Spanish version. It is important we hear from as many residents as possible!

WHAT WE ASK ABOUT:

- ▶ Health issues in your community.
- ▶ Your challenges getting healthy and staying healthy.
- ▶ Your access to health and human service programs.

We need your help!

DOSHER Memorial Hospital NOVA HEALTH

Photo Credit: Amber Merklinger, Brunswick County Communications

Executive Summary

Vision Statement

The Community Health Needs Assessment (CHNA) process will provide a perspective on quality of life, health outcomes, and resources of the community. This process will establish a strong foundation to foster and promote optimal health and wellbeing for all individuals who live in Brunswick County.

Leadership

Local public health agencies in North Carolina (NC) are required to conduct a CHNA at least once every four years through the NC Local Health Department Accreditation Board (G.S. § 130A-34.1). Similarly, the US Affordable Care Act of 2011 requires non-profit hospitals to conduct a CHNA at least every three years. Brunswick County Health Services, Novant Health Brunswick Medical Center, and Doshier Memorial Hospital, partnered to complete one assessment meeting the requirements of NC DHHS, the local Health Department Accreditation Board, and federal Internal Revenue Service. The Brunswick County CHNA team was comprised of leaders from Brunswick County Health Services, Novant Health Brunswick Medical Center, and Doshier Memorial Hospital, various municipalities, civic/not-for-profit agencies, education, health providers, as well as community members, therefore representing the broad interests of the community.

Partnerships/Collaborations

| Partnerships | Number of Partners |
|---------------------------------|---------------------------|
| Public Health Agency | 1 |
| Hospital/Health Care Systems | 2 |
| Behavioral Healthcare Providers | 3 |
| Dental Health Providers | 2 |
| EMS Providers | - |
| FQHCs/Free Clinics | 2 |
| Pharmacy/Pharmacies | 2 |
| Community Organizations | 11 |
| Educational Institutions | 1 |
| Public School System | 1 |
| Municipal Officials | 9 |
| County Departments | 4 |
| Media/Communications Outlet | 2 |
| Community Members | 4 |

Regional/Contracted Services

The consulting firm, Kulik Strategic Advisers Inc. (dba KSA), facilitated the 2022 CHNA process. In conjunction with CHNA Core Team and Steering Committee, KSA facilitated the development of the Community Health Opinion Survey(CHOS) instrument, the statistical sample frame to guide data collection, the discussion guides for the key informant interviews and the focus groups, and data analysis and reports.

Theoretical Framework/Model

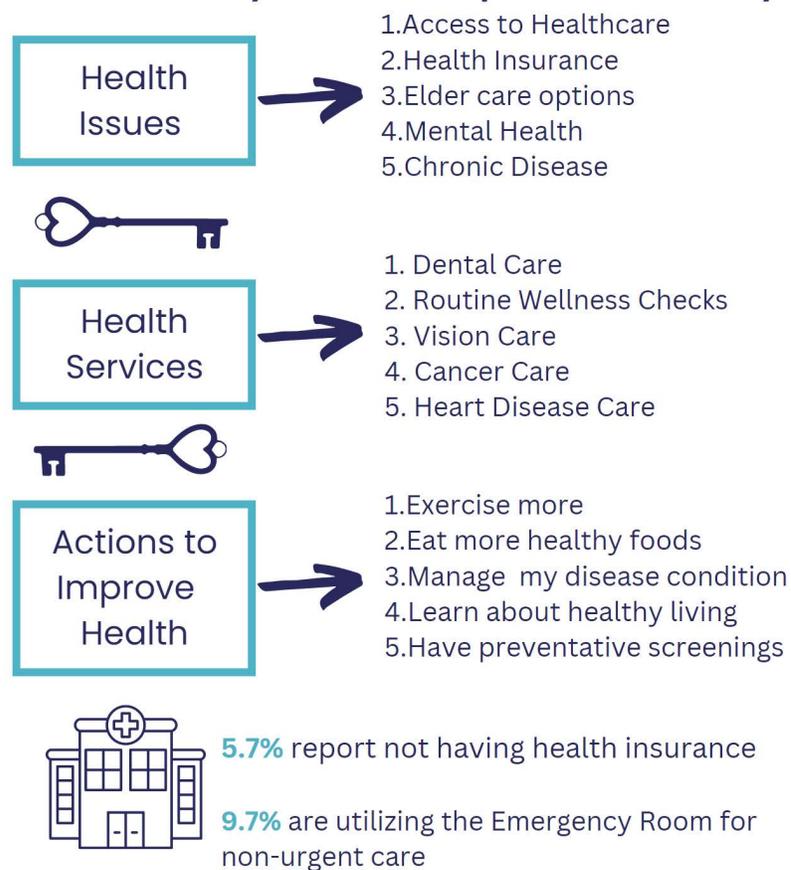
The Community Health Business Model (population health) was used to ensure that a collaboration of entities have a presence in the discussions and implementation plans to address the community needs identified in the assessment. Improved outcomes occur when a variety of organizations and services engage together to examine the needs and possible solutions.

Collaborative Process Summary

The eight-month process, started in May 2022. The steering committee met once per month, while the CHNA core team met biweekly. The materials for primary data research (CHOS survey instrument, key informant interviews, and focus group discussion guides) were developed in June 2022 which was followed by data collection from July-September 2022. In October 2022, secondary data research was reviewed followed by the presentation of primary research findings. The prioritization process took place in November 2022 and the final report CHNA report, infographics was prepared from December 2022-January 2023. The CHNA is an ongoing continuous improvement process that remains community centered and focused on improving the overall health and well-being of Brunswick County Health Services.

Key Findings and Priorities

Key Findings from the Community Health Opinion Survey



*These are the top five rankings by survey participants.
More details of the findings can be found in chapters two and three*

Based on the individuals who participated in the Community Health Opinion Survey, the reported health insurance reflects the demographics and socioeconomics of Brunswick County Health Services population secondary research.

| HEALTH INSURANCE | CHOS RESPONDENTS |
|--|------------------|
| Medicare | 52.6% |
| Private: Employer | 39% |
| Private: Self-Pay | 11% |
| No Insurance | 5.7% |
| Tricare/CHAMPUS) (Civilian Health & Medical Program of US | 3.7% |
| VA (Veteran’s Administration) | 3.3% |
| Medicaid | 2.5% |
| Affordable Care Act | 2.5% |

Based on the analysis of the primary and secondary data the following health needs were identified as:

- Chronic Conditions
- Substance Use
- Mental Health
- Access to Healthcare
- Healthy Homes and Environment
- Maternal and Child Health

Following the presentation of the data, the steering committee members voted on their top three choices for the next Community Health Needs Assessment cycle. The following priority areas that will be incorporated in the planning and creation of the Community Health Improvement Plan (CHIP) are detailed below.

2022 Brunswick County Health Priorities



Chronic Conditions



32% of adults in Brunswick County have a BMI of 30 or greater

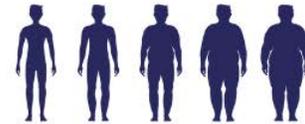


Health Behaviors

Tobacco Use
Excessive Drinking
Poor Nutrition
Physical Inactivity



36.6% of survey respondents ranked Heart Disease Care 5th in most important health service



In 2019, Diabetes accounted for 38.5 deaths/100,000 in Brunswick County

Chronic Disease

In 2019, Heart Disease accounted for 237.4 deaths/100,000 in Brunswick County

Source: North Carolina Vital Statistics 2019 Volume 2: Leading Causes of Death (ncdhhs.gov); published January 2021 and accessed January 13, 2023.
Brunswick, North Carolina. County Health Rankings & Roadmaps. (n.d.). Retrieved January 13, 2023, from <https://www.countyhealthrankings.org/explore-health-rankings/north-carolina/brunswick?year=2022>
Centers for Disease Control and Prevention. (2022, September 8). Promoting health for adults. Centers for Disease Control and Prevention. <https://www.cdc.gov/chronicdisease/resources/publications/factsheets/promoting-health-for-adults.htm>

Access to Healthcare



Healthcare Workforce

4.2 Primary Care Physicians per 10,000 population in Brunswick County (8 : 10,000 in NC)

3.9 Dentists per 10,000 population in Brunswick County (5 : 10,000 in NC)

0.8 Mental Health Providers per 10,000 population in Brunswick County (3.6 : 10,000 in NC)

Community Concerns

Survey and focus group themes:

Insurance affordability



Insure the Uninsured



15.7% of Brunswick County adults are without health insurance

Transportation

3.06% of households have no motor vehicles



↑ Increase in aging population = ↑ Increase in health demands

Source: U.S. Census Bureau, Small Area Health Insurance Estimates, 2019 Brunswick County. NCIOM. (2021, February 11). <https://nciom.org/counties/brunswick-county/>

Behavioral Health



Substance Use

23.2

opiate overdose deaths per 100,000



Mental Health

COVID-19 increased substance use and mental health issues.



Suicide Deaths

14.1

suicide related deaths per 100,000

1 per 1,210

Behavioral health service providers to resident ratio

Services



Survey respondents ranked mental health **7th** in most important health services...



...suicide prevention 15th... drug/alcohol misuse 16th

Source: NC Hospital Association, Special Data Request (ER visits) and North Carolina Public Health, <https://injuryfreenc.ncdhhs.gov/DataSurveillance/poisoning/DEATH-3-UnintentionalOpioidPoisoningsbyCounty-2008-2017.pdf>

Next Steps

Once the CHNA results have been shared with the community, the steering committee and stakeholders will work together to develop the Community Health Improvement Plan for each of the priorities. Each priority will have a result statement, local indicators or measures linking back to Healthy NC 2030 Indicators. Priorities will have evidence-based programs and activities with key performance indicators that show how those programs are making an impact on health behaviors or outcomes in Brunswick County.

Final Community Health Improvement Plan will be posted online at: <https://www.brunswickcountync.gov/health/county-health-reports/>



Chapter One: Demographics

History

On March 9, 1764, the Governor of North Carolina signed the legislative act that created Brunswick County out of New Hanover and Bladen Counties. It was named after the Town of Brunswick, which was named in honor of King George I, who was the Duke of Brunswick and Lunenburg. The County Seat was first located at Brunswick Town, a town founded by Maurice Moore, son of Governor James Moore, located on the west bank of the Cape Fear River. In 1779, the County Seat was moved to Lockwood Folly and in 1808, the County Seat was moved to Smithville, known today as Southport, where it would remain for 167 years.

Brunswick County is the southernmost county in the U.S. state of North Carolina. As of the 2020 census, the population was 144,215. Its population was only 73,143 in 2000, making it one of the fastest growing counties in North Carolina. The service area includes the cities of Bolivia, Leland, Shallotte, Southport, Supply, Calabash, Oak Island, and Ocean Isle Beach, which are all located in Brunswick County.

Geography

Brunswick County, NC has 849.2 square miles of land and is the 6th largest county in North Carolina by total area. Brunswick County is bordered by New Hanover County, NC; Columbus County, NC; Pender County, NC; and Horry County, SC. There are 19 different municipalities, incorporated by towns, cities, and villages:

| Municipalities | | | |
|-----------------------|-----------------|------------------|--------------|
| Bald Head Island | Carolina Shores | Northwest | Southport |
| Belville | Caswell Beach | Oak Island | St. James |
| Boiling Spring Lakes | Holden Beach | Ocean Isle Beach | Sunset Beach |
| Bolivia (County Seat) | Leland | Sandy Creek | Varnamtown |
| Calabash | Navassa | Shalotte | |

Many unincorporated communities make up the valuable roots of Brunswick County. Listed below is a sample.

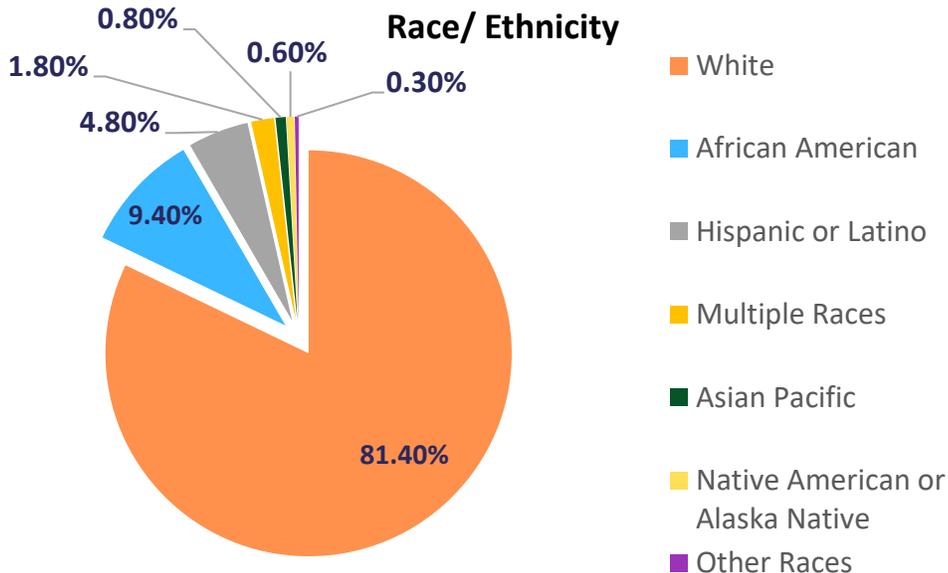
| Unincorporated Communities | | | |
|----------------------------|-------------------|-------------|---------------|
| Ash | Brunswick Station | Civietown | Piney Grove |
| Bell Swamp | Camp Branch | Grissettown | Supply |
| Bonaparte Landing | Cedar Grove | Longwood | Sunset Harbor |
| Boone's Neck | Cedar Hill | Phoenix | Winnabow |

Growth and Density

The population density for this area is estimated at 162 persons per square mile, this is greater than the national average population density of 92 persons per square mile. According to the United States Census Bureau, between 2010 and 2020 the population in the area grew by 29,261 persons, an increase of 27.2% compared to 9.5% for the State of North Carolina. The combined population change by race and ethnicity. In Brunswick County, an increase in the Multi-Race – Non-Hispanics of 224.1% compared to the State of North Carolina at 161.2%. A population in Brunswick County that saw a reduction was in the African American community by 6.0%. In the state of North Carolina, the group that saw a reduction was American Indian or Alaska Native by 7.3%. Between 2017 and 2018, North Carolina grew by nearly 87,000 new residents from net in-migration from other states and countries. Most people moving to North Carolina in 2017 moved here from elsewhere within the United States: 314,000 or 85% of all in-migrants to North Carolina. The top states were Florida (32K), Virginia (29K), South Carolina (29K), New York (29K), and California (20K). Brunswick County (6.6K) had the third largest population gains from net migration in 2017 of any North Carolina County, after Wake and Mecklenburg. While Brunswick is technically part of the Myrtle Beach metropolitan area—and borders on New Hanover County (Wilmington)—most of its growth is from its appeal as a retirement destination, not from suburban spillover. This influx displaced many residents, particularly along coastal boundaries. This growth brings dramatic aging of the overall population, with many of new residents lacking family or social support. The social isolation manifests in loneliness, alcohol use, and a higher burden of chronic disease. This places a strain on the local healthcare systems related to chronic disease and behavioral health. As retirees age, the female fraction increases, and dependence on social supports increases.

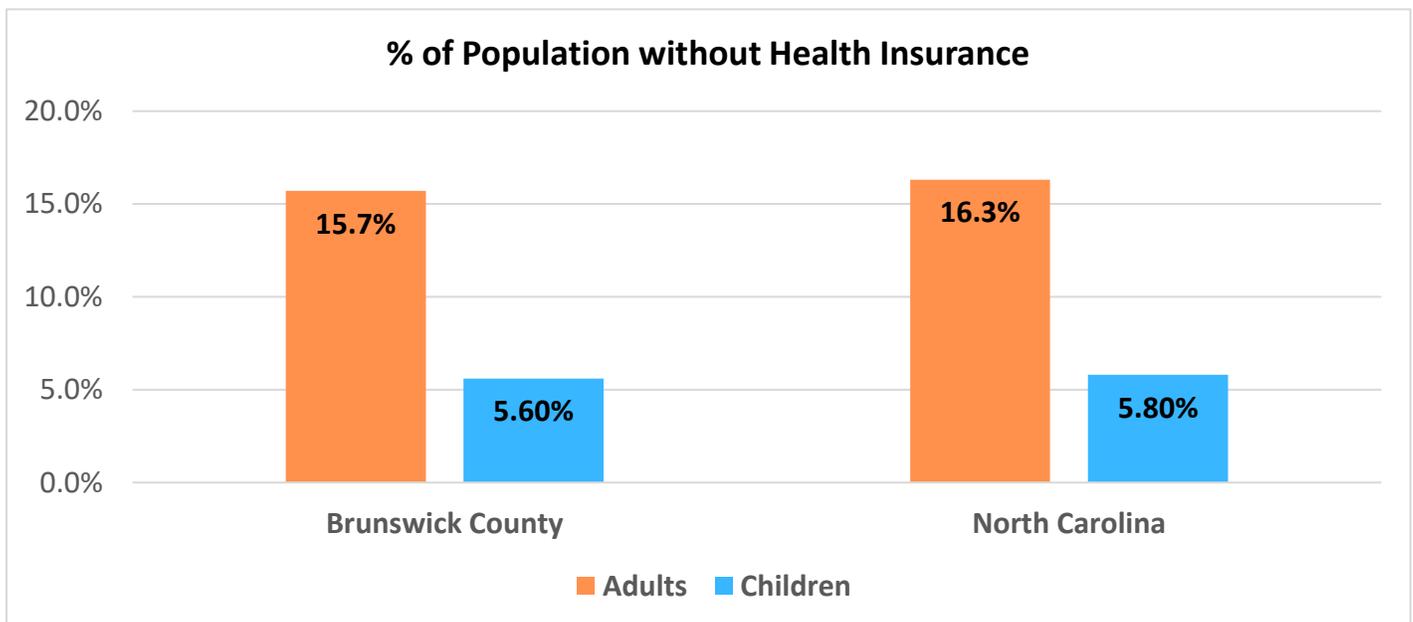
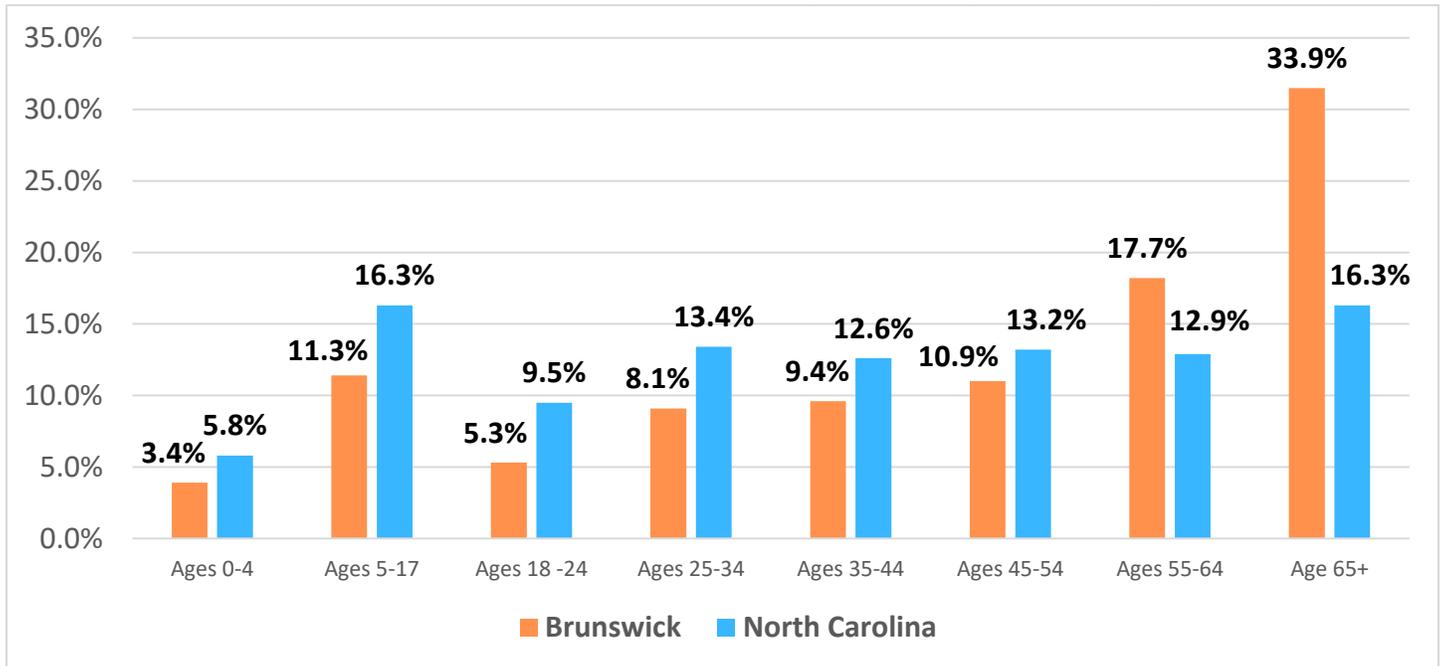
Population

Brunswick County has a population of 144,215 in 2020 compared to the total North Carolina population of 10,551,162. The chart below depicts the breakdown of the population by race/ethnicity.



Age Distribution

A notable feature of Brunswick County is the higher age group representation. Almost 45% (44.8%) of the population is 60 years and above, a statistic that continues to grow with significant in-migration of retirees.



Data Source: U.S. Census Bureau, American Community Survey, 2016-2020

Disability

Approximately 16% (16.27%) or 22,167 residents are disabled. This subgroup requires targeted outreach and services by providers. Brunswick County's disabled rate is higher when compared to 13.39% in North Carolina and 12.69% in the United States. More males than females (17% to 13%) are disabled in Brunswick County, unlike North Carolina and the United States, where the percentage is roughly even.

Education

Almost one-third (29.4%) of Brunswick County's population holds a bachelor's degree or higher compared to 34.9% in North Carolina. Educational attainment in Brunswick County is:

- High school degree or equivalent – 29.1%
- Some college, no degree – 21.9%
- Associate's degree – 11.6%
- Bachelor's degree – 18.9%
- Graduate degree – 10.5%

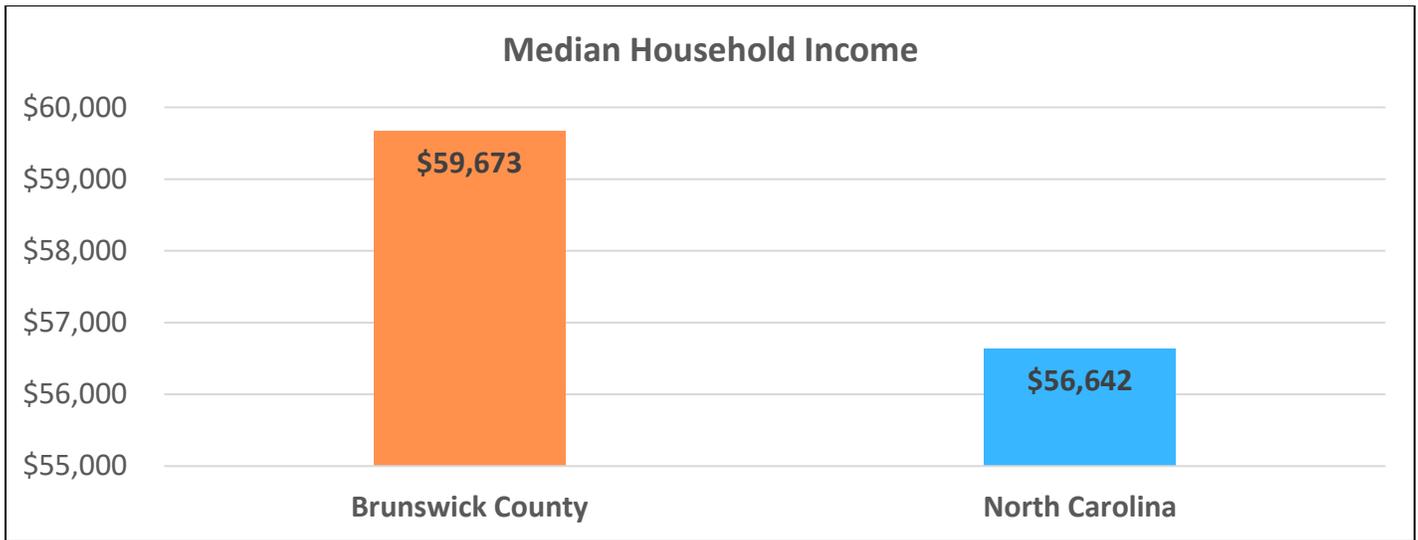
Economy

Retail trade is the largest employment sector in Brunswick County, accounting for 16% of employment, while accommodation and food services represent 14%, government 13%, health care and social assistance 12%, public administration 7%, arts, entertainment, and recreation 5%, administrative and waste services 5%, construction 6%, real estate 3%, utilities 5%, wholesale trade 2% and manufacturing 4%. Various other employment sectors make up the remaining 8%.

Listed below are Brunswick Counties top five employers.

1. Brunswick County Board of Education
2. County of Brunswick
3. Wal-Mart Associates Inc.
4. Progress Energy Service Co
5. Food Lion

Data Source: North Carolina Department of Commerce, *5 largest employers by County, 2020*



Median Household Income includes the householder and all other individuals 15 years old and over in the household, whether they are related to the householder or not.

| POVERTY | BRUNSWICK COUNTY | | | NORTH CAROLINA | | | UNITED STATES | | |
|---|------------------|-------|-------|----------------|-------|-------|---------------|-------|-------|
| Adults living at or below 100% of the Federal Poverty Level (dire) | 15,137 | | | 1,411,939 | | | 40,910,326 | | |
| % Adults living at or below 100% FPL | 11.1% | | | 14.0% | | | 12.8% | | |
| DISPARITY | | | | | | | | | |
| % Adults living at or below 100% FPL by Race/Ethnicity | W | B | H | W | B | H | W | B | H |
| | 10.0% | 16.8% | 27.9% | 10.8% | 21.4% | 23.9% | 10.6% | 22.1% | 18.3% |
| Children living at or below 100% of the Federal Poverty Level (dire) – 0-17 year of age | 3,574 | | | 452,423 | | | 12,598,699 | | |
| % Children living at or below 100% FPL | 17.2% | | | 20.0% | | | 17.5% | | |
| DISPARITY | | | | | | | | | |
| % Children living at or below 100% FPL by Race/Ethnicity | W | B | H | W | B | H | W | B | H |
| | 13.0% | 27.4% | 35.7% | 11.3% | 31.9% | 32.3% | 10.6% | 31.8% | 24.7% |
| % Adults living at or below 200% FPL | 26.6% | | | 37% | | | 33% | | |
| % Children living at or below 200% FPL | 41.4% | | | 42.8% | | | 38.9% | | |

Source: U.S. Census Bureau, American Community Survey, 2016-2020 – W – White; B – Black; H – Hispanic.

| BRUNSWICK COUNTY DEMOGRAPHICS | TOTAL # | TOTAL % |
|--------------------------------------|----------------|----------------|
| Age | | |
| Under 5 years | 4,940 | 3.4% |
| 5-9 years | 5,867 | 4.1% |
| 10-14 years | 5,478 | 3.8% |
| 15-19 years | 4,861 | 3.4% |
| 20-24 years | 7,668 | 5.3% |
| 25-29 years | 5,529 | 3.8% |
| 30-34 years | 6,261 | 4.3% |
| 35-40 years | 7,421 | 5.1% |
| 40-44 years | 6,146 | 4.3% |
| 45-49 years | 6,318 | 4.4% |
| 50-54 years | 9,324 | 6.5% |
| 55-59 years | 9,772 | 6.8% |
| 60-64 years | 15,695 | 10.9% |
| 65+ | 48,935 | 33.9% |
| Gender | | |
| Male | 68,790 | 47.7% |
| Female | 75,425 | 52.3% |
| Race/Ethnicity | | |
| White | 118,256 | 82% |
| Black | 14,422 | 10% |
| Asian Pacific | 1,154 | 0.8% |
| Native American | 1,154 | 0.8% |
| Multi-Race | 2,596 | 1.8% |
| Hispanic | 7,067 | 4.9% |
| Poverty Level | 16,152 | 11.2% |
| Language other than English | 7,067 | 4.9% |
| Uninsured | 19,469 | 13.5% |
| Township | | |
| Lockwood Folly | 35,018 | 24% |
| Northwest | 16,014 | 11% |
| Shalotte | 33,250 | 23% |
| Smithville | 16,019 | 11% |
| Town Creek | 40,215 | 28% |
| Waccamaw | 3,699 | 3% |
| TOTAL | 144,215 | 100% |

Chapter Two: Introduction and Overview

Purpose

Local Health Departments in North Carolina are required to conduct a comprehensive Community Health Needs Assessment (CHNA) every four years to maintain local health department accreditation. As part of the Patient Protection and Affordable Care Act of 2010, not-for-profit hospitals are also now required to conduct a CHNA once every three years.

Building from that process, Brunswick County Health Services, Doshier Memorial Hospital, and Novant Health Brunswick Medical Center collaborated on the 2022 Brunswick County CHNA to update existing data and receive feedback from the community. This work included the 2022 Community Health Opinion Survey with 795 resident responses, 48 key informant interviews, and 2 focus groups involving 36 residents for a total of 879 community touches. The project was facilitated by Kulik Strategic Advisers with bimonthly sessions of leadership from the three sponsors to review data collection tools, response, and primary and secondary data from June through September. Actual information was assembled in draft reports in October with the finalization of Priorities in November and final reports in December 2022. No incentives were offered to elicit resident survey responses.

Overview of Community Health Needs Assessment Process

The Community Health Needs Assessment process gathers population health data that county health departments, hospitals, community groups can use to:

- Identify key health needs/Issues.
- Develop strategies and improvement plans based upon data aim to improve the quality of life.
- Maximize resources in a community to improve health.

The chart on the next page provides a timeline that summarizes the CHNA process.

MAY

Project Start- 2022

- Identification and recruitment of steering committee members
- Review community engagement outreach and data collection strategies (initial focus on key informant interviews)
- Project launch on May 26th with steering committee, core team and CHNA consultant

JUNE

- Review, edit, and finalize the community health opinion survey tool and process
- Finalize focus group discussion guide
- Review publicly available data to identify community health needs
- Schedule key informant interviews
- Schedule and complete survey collection training
- Confirm sample frames by organization

**JULY-
SEPTEMBER**

- Disseminate and collect the community health opinion survey
- Complete literature review
- Complete profiles (demographics, socioeconomic, Health)
- Complete key informant interviews
- Facilitate focus groups

OCTOBER

- Analyze data, synthesize themes from focus group, interviews, and survey results
- Findings & Recommendations
- Priority setting with the Steering Committee
- Write the Community Health Needs Assessment document

**NOVEMBER
- FEBRUARY**

- Review and revise the Community Health Needs Assessment
- Present the Community Health Needs Assessment
- Share findings via online and Community Town Halls

Project End-2023

Primary Data Collection



Key Informant Interviews



A total of 48 Key Informant Interviews were conducted with input from:

- Municipal leadership
- Brunswick County Health Services
- Novant Health Brunswick Medical Center
- Doshier Memorial Hospital
- Social service providers
- Community Based Organizations



Resident Surveys



A total of **795** Community Health Opinion Surveys were completed
208% of the target of 382 has been achieved



Focus Groups



Total of 36 participants

15 Participants - Coastal Horizons

- 6 Female (2 African American and 4 White)
- 9 Male (1 African American, 6 White and 2 Latino)

21 Participants-Cedar Grove

- 12 Female (11 African American and 1 White)
- 9 Males (All African American)

A thorough presentation of both secondary and primary findings is available in Appendix 2.

Statistical Sample Frame

A statistical sample frame reflects the intended population to be reached in the primary data collection phase through the Community Health Opinion Survey. In 2021, the population of Brunswick County was 144,215, the sample frame is based on the population 18 and up (124,930), is shown in detail in the table below. A statistically representative sample of the population was surveyed, originally planned to represent a 95% confidence interval and a 5% margin of error equating to 382 participants. The actual response of 795 surveys represents a 97% confidence interval and a 3.5% margin of error.

| SAMPLE FRAME FOR BRUNSWICK COUNTY, NORTH CAROLINA CHNA (2022-2024) | | | | | |
|--|----------------|-------------|--|-----------------------------------|-------------|
| DEMOGRAPHIC | TOTAL # | TOTAL % | | ACTUAL #/ % of Survey Completions | |
| Age | | | | | |
| Under 5 years | 4,940 | 3.4% | | | |
| 5-9 years | 5,867 | 4.1% | | | |
| 10-14 years | 5,478 | 3.8% | | | |
| 15-19 years | 4,861 | 3.4% | | 32 | 4.0% |
| 20-24 years | 7,668 | 5.3% | | 45 | 5.7% |
| 25-29 years | 5,529 | 3.8% | | 33 | 4.2% |
| 30-34 years | 6,261 | 4.3% | | 36 | 4.5% |
| 35-40 years | 7,421 | 5.1% | | 45 | 5.7% |
| 40-44 years | 6,146 | 4.3% | | 37 | 4.7% |
| 45-49 years | 6,318 | 4.4% | | 38 | 4.8% |
| 50-54 years | 9,324 | 6.5% | | 63 | 7.9% |
| 55-59 years | 9,772 | 6.8% | | 74 | 9.3% |
| 60-64 years | 15,695 | 10.9% | | 97 | 12.2% |
| 65+ | 48,935 | 33.9% | | 295 | 37.1% |
| Gender | | | | | |
| Male | 68,790 | 47.7% | | 241 | 30.3% |
| Female | 75,425 | 52.3% | | 554 | 69.7% |
| Race/Ethnicity | | | | | |
| White | 118,256 | 82% | | 641 | 80.6% |
| Black | 14,422 | 10% | | 84 | 10.5% |
| Asian Pacific | 1,154 | 0.8% | | 6 | 0.8% |
| Native American | 1,154 | 0.8% | | 9 | 1.1% |
| Multi-Race | 2,596 | 1.8% | | 14 | 1.8% |
| Hispanic | 7,067 | 4.9% | | 41 | 5.2% |
| Other Indicators | | | | | |
| Poverty Level | 16,152 | 11.2% | | 89 | 11.2% |
| Language other than English | 7,067 | 4.9% | | 39 | 4.9% |
| TOTAL | 144,215 | 100% | | 795 | 100% |

Key Informant Interview Summary

(see full details in Appendix 3)

Top health priorities facing Brunswick County residents by themes:

- Access to Healthcare/Insurance Affordability
- Mental Health (status and services)
- Knowledge and Access of Community Resources
- Obesity

Top social determinants of health (barriers) facing Brunswick County residents by themes:

- Transportation
- Cost-burdened Households
- Access to affordable, nutritional foods
- Income/Poverty
- Digital Inequalities

When considering mental stressors or trauma-related impact of COVID-19 on Brunswick County residents, the largest concern was mental health and substance misuse. The fear and uncertainty around the virus were elevated over the course of the past two years. The isolation, particularly on the senior and disabled populations, caused depression and anxiety. This put additional strain on the mental and behavioral health care systems.

When discussing the strengths of the community that contribute to the overall health of the residents, the following 'bright spots' were mentioned:

- Community-based organizations that provide safety net services
- Strong churches in the community that provide food pantries
- The local free clinic and Federally Qualified Health Center (FQHC)
- Collaborative efforts of Brunswick County, Doshier Memorial Hospital and Novant-Brunswick Medical Center
- Brunswick Resiliency Taskforce
- Brunswick Wellness Committee
- Parks and Recreation
- Beaches

Key informants were asked if only one community problem were to be identified and resolved, the most common replies were:

- Access to affordable insurance coverage, expansion of Medicaid, creation of more sliding scale fee services
- Housing stock (for more marginalized populations)
- Increase clinical workforce, specifically the number of general practitioners as well as certain specialists (orthopedics, internists)

- Transportation and building the capacity of the existing system in the more populous region while researching more concierge style transportation options for the rural areas of the county.
- Mental health and substance misuse. Providing more education and prevention, reducing the stigma, and increasing the number of providers

When envisioning the future of Brunswick County, five to ten years from now, respondents indicated that the future of Brunswick County should include:

- An inclusive community
- Equitable and affordable health and mental health care access
- A place where everyone has the opportunity to thrive
- More equitable distribution of resources and community assets

Two key informants who work with the Hispanic and Migrant populations added the following barriers that impact this population specifically:

- Inability to get documentation and identification
- Transience, they go where the work is, children move frequently causing interruption in their education
- No translation services (children are often translators for their household)

Focus Groups Summary

(See full details in Appendix 4)

Transportation

Participants reported traveling from different areas of the County to be at required meeting at Coastal Horizons. Transportation is a barrier for individuals accessing services. Two-thirds or 10 out of the 15 participants got a ride from a family member or friend who was waiting for them.

The group expressed that the current public transportation system is designed to provide services to the elder community and is not available to anyone else.

Affordable and reliable ride/transportation is hard to come by. Most people get a ride from a friend or family member.

Brunswick Transit System (BTS) is hard to navigate, and some didn't fully understand whom they served and for what reason BTS could be used. All individuals present had their cars.

Healthcare

The group expressed the need to access affordable primary care and affordable dental care.

Primary Care

A few individuals reported utilizing the emergency room as their source of non-urgent primary care. The group discussed the lack of available primary care physicians in the area and the need for specialty care physicians.

The consensus is that people in the area get health checkups every 6 to 12 months.

Access to the medical center can be an issue, it is perceived that this resource is the place to get the best care possible though they don't like wait times in the Emergency Department.

The groups agreed that it is ideal if healthcare providers look like us and are representative of our population and experience. The current deficit of primary care providers makes that goal less than attainable, with the need to have someone who is relatable and understands our health challenges.

The group discussed the need for mental health professionals. Mental health resources are not abundant and accessible.

Dental Care

A few participants expressed that dental care is difficult to locate and if, accessed, is not affordable.

The participants need more information on public and health services available in Brunswick County.

Housing

Housing is an area of concern for most of the individuals that participated in the focus groups. They discussed the poor housing conditions in which they live, in addition to, the need for affordable quality housing. A few members talked about being on the "government waiting list for housing assistance" with frustration with the process and the long wait for housing assistance.

Vouchers to support subsidized housing are very limited and hard to attain. There is a long waitlist; when a slot opens, it is gone in minutes.

There is a difference between affordable housing and decent/safe housing compared to housing units that can be accessed using housing vouchers.

Homeless people sleep in their cars more often than we think and Brunswick County doesn't have a shelter. The group expressed the need for a homeless shelter in the community.

Homelessness, low and no-income people need financial counseling and a safe place to stay and store their belongings while being sheltered or temporarily housed.

Some felt that homelessness in the Cedar Grove Community was not an issue, and that this community is a good working-class community with stable housing.

Employment

Over half (8 out of the 15 individuals or 53%) of focus group participants are employed full-time. Three are retired and four are in the process of seeking employment. They reported difficulty finding a job due to transportation and distances in the area.

COVID-19 IMPACTS

COVID-19 exacerbated substance use and mental health issues. Some individuals believe substance/drug issues are not a big deal in Cedar Grove.

COVID-19 caused anxiety and stress to flourish in many people which affects health outcomes and behaviors.

One man stated the health care system cost/billing was challenging to navigate and understand during the COVID-19 pandemic. For example, he needed to get tested for COVID-19 and his only option at the time was to go to Emergency Department. It ended up costing him \$400 out of pocket just to test out in the waiting room. This didn't make sense or seem justifiable when he could have gotten a free test at other testing sites.

Some expressed information needs and transparency on emerging health threats/diseases like Monkeypox and the new COVID-19 variants.

Secondary data

All secondary data collected by Kulik Strategic Advisors(KSA) during this Community Health Needs Assessment process is benchmarked and compared to the State of North Carolina and the United States. It must be stated that most data sources, especially secondary research on demographics, socioeconomics, and health status, do not typically provide data at the zip code level. Our consultants have supplied secondary data, where available.

Sources used in secondary research included:

- 1) North Carolina Cancer Profiles, 2014-2018
- 2) North Carolina Workforce Profiles, 2020
- 3) Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, 2019
- 4) Centers for Disease Control and Prevention, Behavioral Risk Factors Surveillance System, 2019
- 5) Centers for Disease Control and Prevention, CDC-National Vital Statistics System, 2016-2020
- 6) Centers for Medicare & Medicaid Services, CMS-Chronic Conditions Warehouse, 2018
- 7) US Department of Transportation, National Highway Traffic Safety Administration, Fatality Analysis Reporting System, 2015-2019
- 8) U.S. Census Bureau, Small Area Health Insurance Estimates, 2019 & County Business Patterns, 2020
- 9) U.S. Census Bureau, American Community Survey, 2016-2020
- 10) US Department of Agriculture, Food Research Atlas, 2019 and Food and Nutrition Service, USDA_SNAP Retail Locations, 2021
- 11) NC Hospital Association, Special Data Request (ER visits) and North Carolina Public Health, <https://injuryfreenc.ncdhhs.gov/DataSurveillance/poisoning/DEATH-UnintentionalOpioidPoisoningsbyCounty-2008-2017.pdf>
- 12) America's Health Rankings analysis of CDC, Behavioral Risk Factor Surveillance System, United Health Foundation, AmericasHealthRankings.org

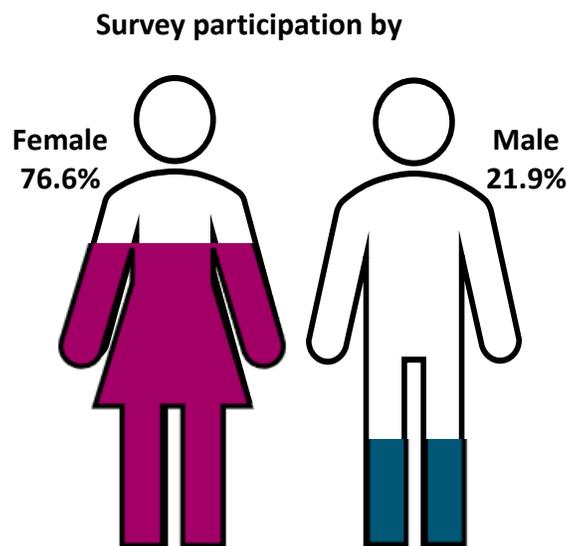
Chapter Three: Findings of the Community Health Needs Assessment

Overview

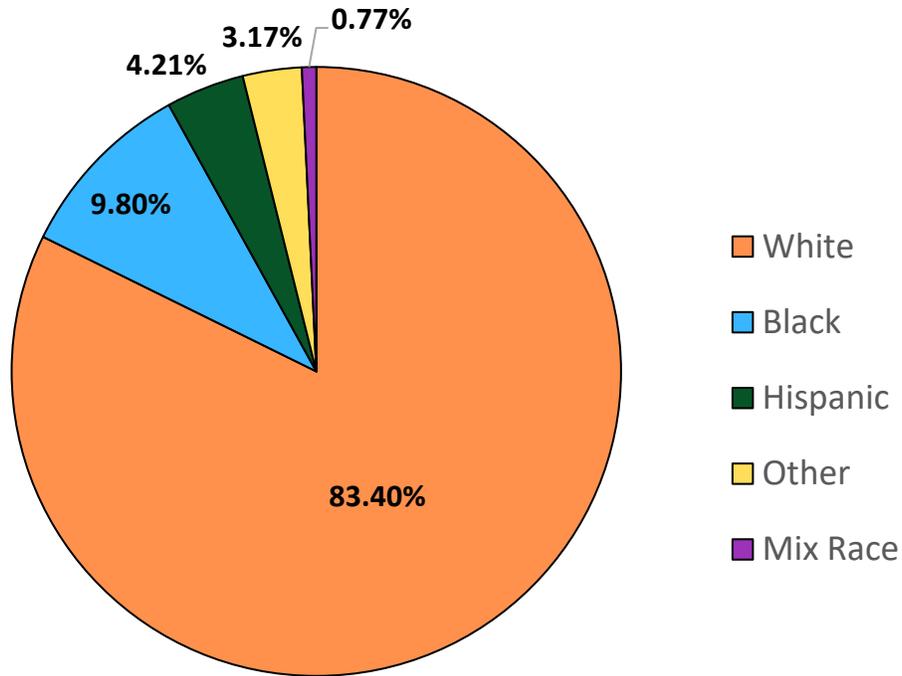
The Community Health Needs Assessment process consisted of collecting and analyzing primary data and secondary data. Primary data consists of administration of the Community Health Opinion Survey, Key Informant Interviews, and Focus Groups. Secondary data consists of compiling and analyzing various publicly available statistics from local, state, and national sources. The data collected was then compared to the State of North Carolina and United States indicators and data. Healthy Communities NC is data dashboard that aligns local secondary data to the Healthy NC 2030 indicators to support and empower goal setting and program measurements at the local level. It is imperative that Brunswick County connects associates its local priorities and data to the indicators and targets of this state initiative to improve quality of life and health outcomes in Brunswick County and North Carolina. Throughout this chapter, a variety of data tables will have a narrative to illustrate its association with the Healthy NC 2030 indicators.

Community Health Opinion Survey Participation

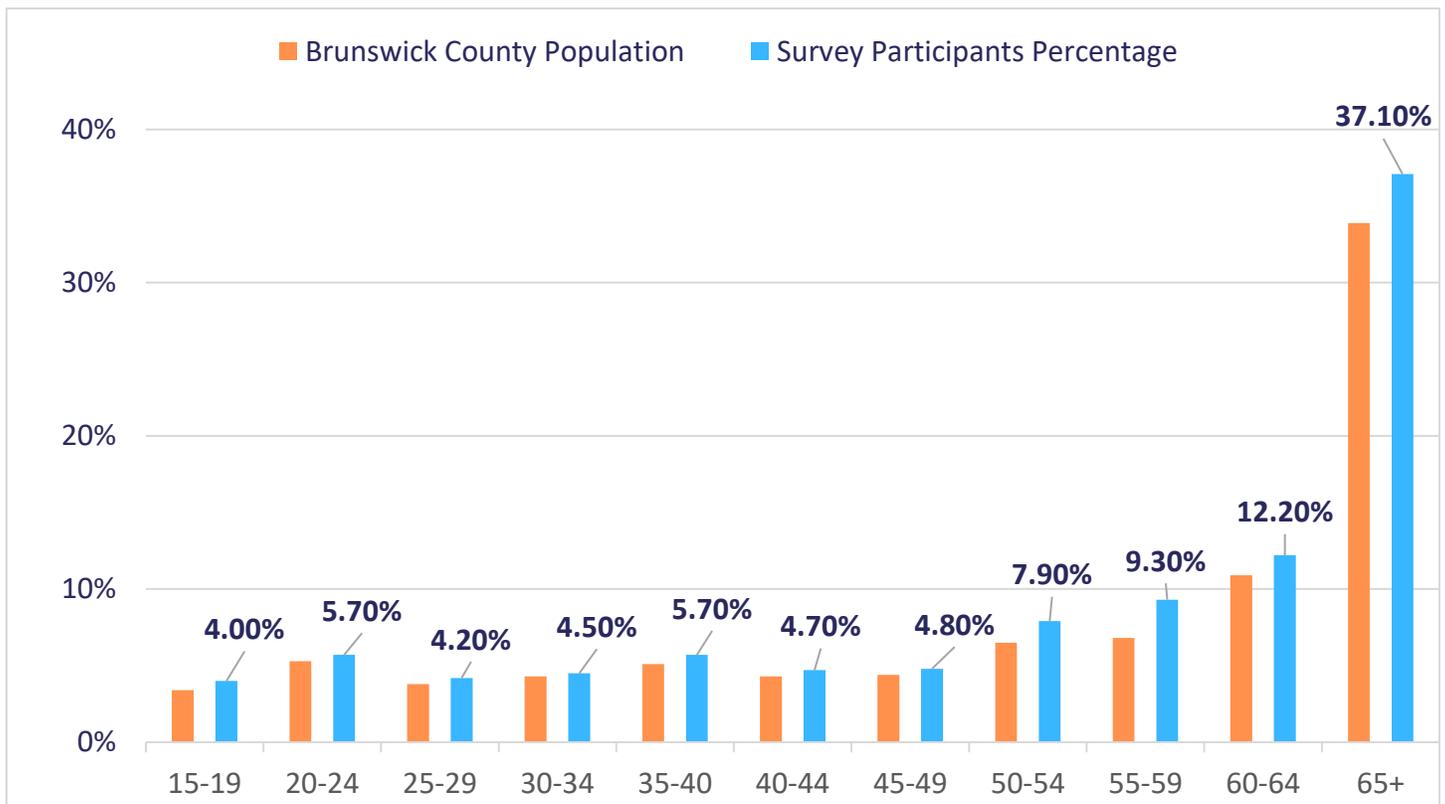
For the Community Health Opinion Survey to achieve a statistically representative sample of the population with a 95% confidence interval and a 5% margin of error, 382 people needed to complete the survey. The actual survey response rate was 208% above the target. 795 Brunswick County residents completed the survey which strengthened the statistical sample to a 97% confidence interval and a 3% margin of error. The following graphics shows survey participation by sex, race, and age.



Survey Participation by Race/ Ethnicity



Survey Participation Percentage by Age



Primary Research: Community Health Opinion Survey Findings

Primary research consists of the opinions of residents’ personal health and the health of the county collected by Community Health Opinion Survey (CHOS), key informant interviews and focus groups. There were 795 community health opinion survey completions which strengthened the statistical sample with a 97% confidence interval which can accurately reflects the characteristics and opinion of the county. The primary research is divided into the following categories: access to care, maternal child health, behavioral health, social indicators, and transportation.

**Question #9 How do you rate the importance of the following HEALTH ISSUES for Brunswick County?
(Select Below)**

| N=795 | |
|---|---|
| 1. Access to Healthcare – 695 (87.4%) | 9. Respite for Caregivers – 450 (56.6%) |
| 2. Health Insurance – 599 (75.3%) | 10. Dental Health – 441 (55.5%) |
| 3. Elder Care Options – 569 (71.6%) | 11. Pregnancy & Infant Wellness – 439 (55.2%) |
| 4. Mental Health – 543 (68.3%) (Counseling/Support Groups) | 12. Teen Births – 438 (55.1%) |
| 5. Chronic Disease – 523 (65.8%) | 13. Infant Mortality – 387 (48.7%) |
| 6. Child/Adult Immunizations – 495 (62.3%) | 14. Family Planning – 381 (47.9%) |
| 7. Cancer – 493 (62.0%) | 15. Child Obesity/Physical Activity – 381 (47.9%) |
| 8. Health Resource Information – 472 (59.4%) | 16. Asthma/Lung disease – 340 (42.8%) |
| | 17. Low Birth-Weight Babies – 338 (42.5%) |

**Question #34 What types of health services are most important to you?
(Select the top 5 most important to you)**

| N=786 | |
|---|---|
| 1. Dental Care – 498 (62.9%) | 11. Weight Loss Support – 181 (23.0%) |
| 2. Routine Wellness – 464 (59.8%) | 12. Emergency Preparedness – 167 (21.2%) |
| 3. Vision Care – 356 (45.9%) | 13. Colorectal/ Cancer Screening – 126 (16.0%) |
| 4. Cancer Care – 320 (41.3%) | 14. Telehealth – 84 (10.7%) |
| 5. High Blood Pressure Management – 284 (36.1%) | 15. Suicide Prevention – 79 (10%) |
| 6. Heart Disease Care – 280 (36.0%) | 16. Drug/Alcohol Misuse – 55 (7.0%) |
| 7. Mental Health/Depression – 274 (34.8%) | 17. Maternal/Infant Services – 50 (6.4%) |
| 8. Alzheimer’s/Dementia Care – 211 (26.8%) | 18. Tobacco/Vaping Cessation – 36 (4.6%) |
| 9. Diabetes Care – 209 (26.6%) | 19. Other – 34* (4.3%) |
| 10. Disease Outbreak Prevention – 206 (26.2%) | 20. Sexually Transmitted Disease Care – 21 (2.7%) |
| | 21. HIV/AIDS Care & Medications – 15 (1.9%) |
| * Other: Natural Health (2), In-Home Care/ Assistance, Pulmonary Care, Osteoporosis, Geriatric/Caregiver Support Options, Kidney Disease Care, Autism Options like ABA, (Applied Behavioral Analysis), Spine Health, Access to Abortion, Internist, COPD (Chronic Obstructive Pulmonary Disease), Parkinson’s Care, Mobility, Hearing | |

Access to Care – Primary Research:

Question #9: How do you rate the importance of the following HEALTH issues for Brunswick County?

1. Access to Healthcare –87.4%
2. Health Insurance – 75.3%
3. Elder Care Options – 71.6%
4. Mental Health – 68.3%
5. Chronic Disease – 65.8%

Question #34: What types of health services are most important to you?

1. Dental Health –62.9%
2. Routine Wellness Checks – 59.8%
3. Vision Care – 45.9%
4. Cancer Care – 41.3%
5. Heart Disease Care – 36.0%

Question #24 Where do you go to get healthcare services when you are sick?

| RESPONSE | # RESPONSES | % OF RESPONSES |
|---|-------------|----------------|
| Doctor’s Office | 712 | 90.6% |
| Urgent Care | 117 | 14.9% |
| Emergency Room | 67 | 8.5% |
| Community Health Center/Free Clinic | 24 | 3.1% |
| VA Clinic | 20 | 2.5% |
| I do not seek care when I am sick | 20 | 2.5% |
| Other (see below) | 12 | 1.5% |
| Health Department | 6 | 0.8% |
| TOTAL | 786 | |
| <i>Other: Naturopath, New Hope Clinic</i> | | |

Question #25 Which Hospital do you primarily use for care?

| RESPONSE | # RESPONSES | % OF RESPONSES |
|--|-------------|----------------|
| NH Brunswick Medical Center | 356 | 46.4% |
| NH New Hanover Regional Medical Center | 205 | 26.7% |
| Dosher Memorial Hospital | 153 | 19.9% |
| McLeod Seacoast Hospital | 55 | 7.2% |
| Other (see below) | 55 | 7.2% |
| Grand Strand Medical Center | 21 | 2.7% |
| TOTAL | 768 | |
| <i>Other: Cape Fear Memorial (21), Forsyth Medical Center (14), Duke Medical Center (10), Columbus Regional Healthcare (5), Novant Health Charlotte Medical Center (5)</i> | | |

Question #26 In the past year have you gone to the Emergency Room for non-urgent care?

| RESPONSE | # RESPONSES | % OF RESPONSE |
|--------------|-------------|---------------|
| YES | 76 | 9.7% |
| NO | 701 | 89.4% |
| Unsure | 7 | 0.9% |
| TOTAL | 784 | |

Question #27 Where do you go when you need dental care?

| RESPONSE | # RESPONSES | % OF RESPONSES |
|--|-------------|----------------|
| Private Dentist's Office | 668 | 85.2% |
| I can't afford dental care | 48 | 6.1% |
| East Carolina University Dental Clinic | 29 | 3.7% |
| Other (see below) | 28 | 3.6% |
| I don't seek dental care | 23 | 2.9% |
| Community Health Center/Free Clinic | 14 | 1.8% |
| TOTAL | 784 | |

Other: New Hope Clinic (21), Haven't been in years/fear pain (5), Haven't found a dentist I like yet (2)

Question #28 Which of the following tests/screenings do you include in your health care?

| RESPONSE | # RESPONSES | % OF RESPONSES |
|-------------------------------|-------------|----------------|
| Annual physical or well check | 703 | 89.4% |
| Blood pressure check | 695 | 88.4% |
| Cholesterol screening | 647 | 82.3% |
| Dental cleaning/X-rays | 640 | 81.4% |
| Vision screening | 637 | 81.0% |
| A1Cor fasting blood sugar | 530 | 67.4% |
| Mammogram | 486 | 61.8% |
| Colonoscopy | 419 | 53.3% |
| Other (see below) | 45 | 5.7% |
| None | 26 | 3.3% |
| TOTAL | 786 | |

Other: Pap smear (21), COVID (10), Cancer (5), Thyroid (3), Bone density (2), Obstetrics (2), CT Scan (2)

Question #29 What health insurance do you have (select all that apply)?

| RESPONSE | # RESPONSES | % OF RESPONSES |
|---------------------------------------|-------------|----------------|
| Medicare or Medicare Supplement | 414 | 52.6% |
| Private Health Insurance/Employer | 307 | 39.0% |
| Private Health Insurance/Self | 85 | 10.8% |
| I do not have health insurance | 45 | 5.7% |
| Tricare/CHAMPUS | 29 | 3.7% |
| Veterans' Administration Benefits | 26 | 3.3% |
| Medicaid | 20 | 2.5% |
| Affordable Care Act | 20 | 2.5% |
| Other (see below) | 16 | 2.0% |
| TOTAL | 787 | |
| <i>Other: Spouse's Insurance - 16</i> | | |

Question #30 In the past year, what challenges have you had in getting prescription medications (select all that apply)?

| RESPONSE | # RESPONSES | % OF RESPONSES |
|---|-------------|----------------|
| Did not have challenges | 548 | 70.0% |
| Too expensive (total cost or co-pay) | 129 | 16.5% |
| Insurance did not cover | 105 | 13.4% |
| Other (see below) | 39 | 5.0% |
| Pharmacy hours inconvenient | 29 | 3.7% |
| Did not have health insurance | 27 | 3.5% |
| TOTAL | 782 | |
| <i>Other: Doughnut hole (12), prescription medication provided by New Hope Clinic (10), Rising medication costs (8), Unable to communicate with doctor office/pharmacy (7), doctor's delay in acting (2).</i> | | |

Question #32 How would you rate your overall health?

| RESPONSE | # RESPONSES | % OF RESPONSES |
|--------------|-------------|----------------|
| Excellent | 97 | 12.3% |
| Very Good | 320 | 40.7% |
| Good | 298 | 37.9% |
| Fair | 66 | 8.4% |
| Poor | 6 | 0.8% |
| TOTAL | 787 | |

Question #23 Is your medical care provided in a way that respects your culture?

| RESPONSE | # RESPONSES | % OF RESPONSES |
|--------------|-------------|----------------|
| YES | 750 | 96.6% |
| NO | 24 | 3.1% |
| TOTAL | 774 | |

Question #35 Where do you get health information?

| RESPONSE | # RESPONSES | % OF RESPONSES |
|---|-------------|----------------|
| Doctor/Health Professional | 730 | 93.4% |
| Internet | 480 | 61.4% |
| Friends or Family | 235 | 30.1% |
| Newspaper/Magazine | 151 | 19.3% |
| Television | 121 | 15.5% |
| Health Department | 109 | 13.9% |
| Social Media | 94 | 12.0% |
| Hospital Newsletter | 86 | 11.0% |
| Other (see below) | 42 | 5.4% |
| Library | 29 | 3.7% |
| Radio | 22 | 2.8% |
| TOTAL | 782 | |
| <i>Other: AARP (20), Retired RN or MD (15), Insurance company (7)</i> | | |

Maternal Child Health – Primary Research:

Question #9: How do you rate the importance of the following HEALTH issues for Brunswick County?

- 6. Child/Adult Immunizations - 495 (62.3%)
- 11. Pregnancy & Infant Wellness – 439 (55.2%)
- 12. Teen Births – 438 (55.1%)
- 13. Infant Mortality – 387 (48.7%)
- 14. Family Planning – 381 (47.9%)
- 15. Child Obesity/Physical Activity – 381 (47.9%)
- 17. Low Birth-Weight Babies – 338 (42.5%)

Question #34: What types of health services are most important to you?

- 17. Maternal/Infant Services – 50 (6.4%)

Behavioral Health – Primary Research:

Question #9: How do you rate the importance of the following HEALTH issues for Brunswick County?

4. Mental Health – 543 (68.3%) (Counseling/Support Groups)

Question #34: What types of health services are most important to you?

7. Mental Health/Depression – 274 (34.8%)

15. Suicide Prevention – 79 (10%)

16. Drug/Alcohol Misuse – 55 (7.0%)

18. Tobacco/Vaping Cessation – 36 (4.6%)

Question #37: Thinking about your mental health, which includes stress, depression, anxiety, and problems managing emotions, how many days during the past month was your mental health ‘NOT GOOD’?

| DAY RANGE | # RESPONSES | % OF RESPONSES |
|------------------|--------------------|-----------------------|
| 0-5 days | 609 | 78.9% |
| 6-10 days | 80 | 10.4% |
| 11-15 days | 40 | 5.2% |
| 16-20 days | 23 | 2.9% |
| 21 days or more | 20 | 2.6% |
| TOTAL | 772 | |

Question #38 Have you had a traumatic childhood event?

| RESPONSE | # RESPONSES | % OF RESPONSES |
|-----------------|--------------------|-----------------------|
| YES | 231 | 29.6% |
| NO | 549 | 70.4% |
| TOTAL | 780 | |

Question #39 If you answered YES to Question #38, has that negatively impacted your mental health?

| RESPONSE | # RESPONSES | % OF RESPONSES |
|-----------------|--------------------|-----------------------|
| YES | 139 | 60.2% |
| NO | 92 | 29.8% |
| TOTAL | 231 | |

Question #42 Where would you go if you needed help for your mental health and wellness?

| RESPONSE | # RESPONSES | % OF RESPONSES |
|---|-------------|----------------|
| Primary Care Doctor | 459 | 58.7% |
| Psychologist or specialist | 242 | 31.0% |
| Private counselor or therapist | 226 | 28.9% |
| Friend or Family | 134 | 17.1% |
| Work (Employee Assistance Program) | 34 | 4.4% |
| Crisis Hotline | 32 | 4.1% |
| Other (see below) | 27 | 3.5% |
| Hospital | 23 | 2.9% |
| Support Groups | 22 | 2.8% |
| School Counselor | 5 | 0.6% |
| TOTAL | 782 | |
| <i>Other: Caretaker's Support Group, I don't know where to go</i> | | |

Question #40 Have you used any of the following illicit drugs in the past year?

| RESPONSE | # RESPONSES | % OF RESPONSES |
|--|-------------|----------------|
| None of the above | 671 | 86.9% |
| Marijuana | 63 | 8.2% |
| Other (see below) | 17 | 2.2% |
| Cocaine or Crack | 15 | 2.0% |
| Methamphetamines | 6 | 0.8% |
| TOTAL | 772 | |
| <i>Other: Prescription drugs but not prescribed to me, Glue, Inhalants</i> | | |

Question #41 Have you taken medication not prescribed to you or in a way other than prescribed in the past year?

| RESPONSE | # RESPONSES | % OF RESPONSES |
|----------------------|-------------|----------------|
| YES | 19 | 2.4% |
| NO | 759 | 96.5% |
| Don't' Know/Not Sure | 6 | 0.8% |
| Prefer Not to Answer | 2 | 0.3% |
| TOTAL | 786 | |

Question #44 Please tell us whether you ‘strongly agree’, ‘agree’, ‘disagree’ or ‘strongly disagree’ with the next few statements about substance use services.

| STATEMENT | STRONGLY AGREE | AGREE | NEUTRAL | DISAGREE | STRONGLY DISAGREE | DON'T KNOW | TOTAL |
|---|----------------|-------|---------|----------|-------------------|------------|------------|
| In Brunswick County, substance use services are affordable | 12 | 54 | 89 | 66 | 38 | 519 | 778 |
| | 1.5% | 6.9% | 11.4% | 8.5% | 4.9% | 66.7% | |
| In Brunswick County, substance use services are accessible and easy to find | 13 | 69 | 82 | 75 | 50 | 491 | 780 |
| | 1.7% | 8.9% | 10.5% | 9.6% | 6.4% | 63.0% | |
| In Brunswick County, substance use services are high quality | 12 | 37 | 110 | 46 | 36 | 537 | 778 |
| | 1.5% | 4.8% | 14.1% | 5.9% | 4.6% | 69.0% | |

Question #43 In the past year, what prevented you from getting mental health care or substance use treatment?

| RESPONSE | # RESPONSES | % OF RESPONSES |
|---|-------------|----------------|
| Does not apply/Didn't need it | 468 | 63.2% |
| Diagnosed, but did not seek mental health or substance use care | 94 | 11.3% |
| Cost was too high (private pay, co-pay, or deductible) | 59 | 8.0% |
| Not enough providers | 58 | 7.8% |
| Didn't know where to go | 55 | 7.4% |
| Other (see below) | 54 | 7.3% |
| Health insurance didn't cover | 35 | 4.7% |
| Guilt or Shame about mental health/substance use issue | 33 | 4.5% |
| Work interferes with appointment times | 28 | 3.8% |
| Don't believe treatment will help | 25 | 3.4% |
| Provider doesn't accept my insurance | 23 | 3.1% |
| Not ready to face the problem | 23 | 3.1% |
| No transportation | 11 | 1.5% |
| TOTAL | 741 | |
| <i>Other: Therapist left area (34), Work repercussions (20)</i> | | |

Question #31 Do you currently use any cigarettes, tobacco, nicotine products or chew tobacco?

| RESPONSE | # RESPONSES | % OF RESPONSES |
|--------------|-------------|----------------|
| YES | 60 | 7.7% |
| NO | 724 | 92.4% |
| TOTAL | 784 | |

Environmental Risk Factors – Primary Research:

Question #45 Below is a list of Environmental Risks that may be found in Brunswick County. Please review each risk and select whether you feel that risk is the Most Urgent, Most Challenging, or Most Resource-Intense to Correct.

| MOST URGENT | MOST CHALLENGING | MOST RESOURCE INTENSE TO CORRECT |
|--------------------------------|--|---|
| (1) Safe drinking water – 79% | (1) Accidents – 49% | (1) Trail, playgrounds, and parks where you live –38% |
| (2) Water pollution - 68% | (2) Pesticides – 48% | (2) Indoor air pollution-37% |
| (3) Over-Development -58% | (3) Indoor air pollution-45% | (3) Coastal climate change- 25% |
| (4) Coastal climate change-45% | (4) Outdoor air pollution-43% | (4) Clean air – 25% |
| (5) Housing – 44% | (5) Waste disposal – 41% | (5) Waste disposal – 24% |
| (6) Violence -43% | (6) Personal safety-40% | (6) Outdoor air pollution -24% |
| (7) Clean air – 42% | (7) Violence – 37% | (7) Pesticides – 23% |
| (8) Personal safety – 41% | (8) Trails, playground, parks where you live – 36% | (8) Housing – 22% |
| (9) Clean air – 41% | (9) Housing – 34% | (9) Violence – 18% |
| (10) Waste disposal – 35% | (10) Clean air – 33% | (10) Personal safety – 17% |

Social Network – Primary Research:

Question #46: Share with us how often you?

| Share how often you: | NEVER | RARELY | SOMETIMES | OFTEN | ALWAYS |
|--|--------|--------|-----------|--------|--------|
| Talk on the phone with family, friends, neighbors | 1.02% | 5.75% | 25.32% | 44.12% | 23.79% |
| Get together with friends or relatives | 0.51% | 9.35% | 29.07% | 46.35% | 14.72% |
| Go to church or religious services | 26.16% | 22.94% | 18.04% | 14.56% | 18.30% |
| Join in social activities such as clubs, volunteer groups, athletic or school groups | 13.92% | 20.36% | 27.96% | 25.00% | 12.76% |
| Chat on the internet or via social media | 13.14% | 14.18% | 27.06% | 33.38% | 12.24% |

Transportation Availability – Primary Research:

Question #8: How do you rate the importance of the following community issues for Brunswick County?

| N=792 |
|--|
| 1. Child maltreatment – 589 (74.4%) |
| 2. Domestic/Sexual Violence – 555 (70.0%) |
| 3. Violent Crime – 507 (64.0%) |
| 4. Educational Opportunities – 494 (62.4%) |
| 5. Services for Disabled – 485 (61.2%) |
| 6. Discrimination/Racism – 471 (59.5%) |
| 7. Poverty – 470 (59.3%) |
| 8. Homelessness – 395 (49.9%) |
| 9. Transportation – 380 (48.0%) |
| 10. High paying jobs – 341 (43.1%) |
| 11. Culturally appropriate – 317 (40.0%) |
| 12. Positive youth services – 1 (.13%) |
| 13. Family focused – 1 (.13%) |

Question #18: What form of transportation do you use most often?

| FORM OF TRANSPORTATION | # | % |
|-------------------------------------|------------|---------------|
| Personally owned/family vehicle | 760 | 96.3% |
| Family member/friend’s vehicle | 17 | 2.2% |
| Uber/LYFT/Concierge driver services | 9 | 1.1% |
| Public transportation | 3 | 0.4% |
| TOTAL | 789 | 100.0% |

Question #19: In the past year, has lack of transportation kept you from going to medical appointments, other appointments, or work?

| LACK OF TRANSPORTATION KEPT YOU? | # | % |
|----------------------------------|------------|---------------|
| Yes | 34 | 4.3% |
| No | 752 | 95.7% |
| TOTAL | 786 | 100.0% |

Secondary Data: Local, State, National Data Sources

Publicly available data is provided with a comparison of Brunswick County to North Carolina and the United States. Data sources and date range are listed for each indicator, with disparities by gender, age, race/ethnicity provided, where applicable. The secondary data source definitions come from: Healthy People 2030, Health Affairs, The Milbank Quarterly.

County Health Rankings

The County Health Rankings and Roadmap program is an annual ranking process developed by the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute. This program measures health of counties nationwide and ranks them within their states. Out of 100 counties (with one being the best), Brunswick County ranked 26 for Health Outcomes and ranked 24 for Health Factors in 2022. Since 2020, Health Outcomes improved by ten ranks and Health Factors improved by three ranks.

| BRUNSWICK COUNTY HEALTH RANKINGS & ROADMAPS | |
|--|---|
| <p>Out of 100 Counties, Brunswick County Ranks</p> <p>#26 – Health Outcomes #24 – Health Factors #11 – Clinical Care #11 – Physical Environment #20 – Quality of Care #21 – Health Behaviors #33 – Quality of Life #55 – Social Determinants</p> <p><u>Areas of Strength:</u></p> <p>Health Indicators</p> <ul style="list-style-type: none"> • Preventable Hospital Stays • Mammography Screening • Flu vaccinations <p>Social Determinants:</p> <ul style="list-style-type: none"> • High School Completion • Income Inequality <p>Environmental Health:</p> <ul style="list-style-type: none"> • Air pollution | <p><u>Areas to Explore:</u></p> <p>Life Expectancy/ Years of Potential Life Lost</p> <ul style="list-style-type: none"> • Life Expectancy • Premature Death <p>Health Indicators</p> <ul style="list-style-type: none"> • Sexually Transmitted Infections • Low Birth Weight Infants • Teen Births • Mental Health ER Visits <p>Health Behaviors</p> <ul style="list-style-type: none"> • Adult Smoking • Excessive Drinking • Opiate Poisoning Deaths • Alcohol-Impaired driving deaths • Injury deaths <p>Social Determinants:</p> <ul style="list-style-type: none"> • Uninsured (Adults & Children) • Unemployment • Social Associations • Child Care • Disconnected Youth |

Source: University of Wisconsin Population Health Initiative, County Health Rankings

<https://www.countyhealthrankings.org/explore-health-rankings/north-carolina/brunswick>

Morbidity and Mortality – Secondary Research:

Brunswick County’s leading causes of death in 2019 are displayed below with a comparison to the five-year death trend showing mortality rates per 100,000 population and age-adjusted rates.

| TYPE | # | Rate- 2019 | # 2015-2019 | Rate/100,000 | Age-Adjusted |
|---|--------------|-------------------|--------------------|---------------------|---------------------|
| CANCER | 379 | 265.4 | 1,820 | 276.1 | 149.0 |
| HEART DISEASE | 339 | 237.4 | 1,618 | 245.5 | 146.7 |
| CANCER-TRACHEA/BRONCHUS | 102 | 71.4 | 550 | 83.5 | 42.0 |
| CHRONIC LOWER RESPIRATORY DISEASE | 93 | 65.1 | 476 | 72.2 | 40.4 |
| CEREBROVASCULAR DISEASE | 93 | 65.1 | 440 | 66.8 | 39.4 |
| UNINTENTIONAL INJURY OR ACCIDENT | 69 | 48.3 | 325 | 49.3 | 50.8 |
| ALZHEIMER’S DISEASE | 60 | 42.0 | 243 | 36.9 | 24.0 |
| DIABETES | 55 | 38.5 | 197 | 29.9 | 18.1 |
| POISONING | 47 | 32.6 | 211 | 40.6 | |
| DRUG OVERDOSE DEATHS | 44 | 24.3 | | | |
| CANCER-ANUS | 39 | 27.3 | 148 | 22.5 | 13.1 |
| MOTOR VEHICLE ACCIDENTS | 31 | 21.7 | 113 | 17.1 | 19.1 |
| SEPTICEMIA | 27 | 18.9 | 99 | 15.0 | 8.6 |
| SUICIDE | 25 | 17.5 | 93 | 14.1 | 13.7 |
| PNEUMONIA & INFLUENZA | 25 | 17.5 | 112 | 17.0 | 10.4 |
| CANCER-BREAST | 23 | 20.8 | 111 | 32.4 | 17.5 |
| NEPHRITIS, NEPHROTIC SYNDROME AND NEPHROSIS | 23 | 16.1 | 129 | 19.6 | 11.6 |
| CANCER-PROSTATE | 22 | 32.3 | 90 | 28.5 | 18.0 |
| CHRONIC LIVER DISEASE/CIRRHOSIS | 17 | 11.9 | 89 | 13.5 | 9.1 |
| HOMICIDE | 11 | 7.7 | 29 | 4.4 | 5.0 |
| INFANT DEATHS | 5 | 4.9 | 32 | 6.3 | |
| ALL OTHER | 92 | | | | |
| TOTAL | 1,621 | 1,135.0 | 7,401 | 1,122.9 | 707.8 |

Source: [North Carolina Vital Statistics 2019 Volume 2: Leading Causes of Death \(ncdhhs.gov\)](https://www.ncdhhs.gov/vital-statistics/2019-volume-2); published January 2021 and accessed October 12, 2022.

Chronic Diseases – Secondary Research:

Cancer

| Cancer Incidence (new cases) 2014-2018 | BRUNSWICK COUNTY | NORTH CAROLINA | UNITED STATES |
|--|------------------|----------------|---------------|
| New Cases | 1,082 | 56,784 | 1,703,249 |
| Cancer Incidence Rate (per 100,000 population) | 473.0 | 468.9 | 448.6 |
| White: New Cancer cases | 471.6 | 465.6 | 451 |
| Black: New Cancer cases | 432.4 | 460.7 | 444.9 |

Source: State Cancer Profiles, 2014-2018

Cancer cases by type

| Cancer Incidence (new cases) by Type 2014-2018 | Brunswick County | Cancer incidence rate per 100,000 | Cancer Incidence (new cases) by Type 2014-2018 | North Carolina | Cancer incidence rate per 100,000 |
|--|------------------|-----------------------------------|--|----------------|-----------------------------------|
| 1. Lung & Bronchus (all stages) | 163 | 65.3 | 1. Breast (all stages) | 8,713 | 136.5 |
| 2. Breast (all stages) | 154 | 134.3 | 2. Lung & Bronchus (all stages) | 8,252 | 66.3 |
| 3. Prostate (all stages) | 142 | 104.9 | 3. Prostate (all stages) | 7,140 | 119.3 |
| 4. Colon & Rectum (all stages) | 81 | 38.6 | 4. Colon & Rectum (all stages) | 4,391 | 36.8 |
| 5. Melanoma of the Skin (all stages) | 80 | 33.8 | 5. Melanoma of the Skin (all stages) | 3,044 | 26.0 |

Source: State Cancer Profiles, 2014-2018

Diabetes

| Diabetes Incidence (new cases) 2014-2018 | BRUNSWICK COUNTY | NORTH CAROLINA | UNITED STATES |
|--|------------------|----------------|---------------|
| Adults with Diagnosed Diabetes (Age 20+) | 14,317 | 812,564 | 24,189,620 |
| Age-Adjusted Diabetes Rate | 8.2% | 9.0% | 9.0% |
| Males with Diabetes | 7,158 | 394,075 | 12,120,715 |
| Males: Diabetes % | 8.6% | 9.4% | 9.5% |
| Females with Diabetes | 7,159 | 418,485 | 12,068,861 |
| Female: Diabetes % | 7.8% | 8.8% | 8.5% |

Source: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, 2019

Heart disease

| Coronary Heart Disease (CHD) Deaths, 2016-2020 | BRUNSWICK COUNTY | | NORTH CAROLINA | | UNITED STATES | |
|---|-------------------------|----------------|-----------------------|----------------|----------------------|----------------|
| Five-year total deaths from CHD | 1,018 | | 51,983 | | 1,838,830 | |
| CHD Crude Death Rate (per 100,000) | 147.6 | | 100.2 | | 112.5 | |
| CHD Age-Adjusted Death Rate (Per 100,000) | 83.0 | | 82.9 | | 91.5 | |
| Gender Disparity, CHD | Males | Females | Males | Females | Males | Females |
| CHD Age-Adjusted Death Rate (Per 100,000) | 113.9 | 56.5 | 116.9 | 56.8 | 125.3 | 64.6 |
| Race/Ethnic Disparity, CHD | W | B | W | B | W | B |
| Age-Adjusted CHD Deaths, By Race/Ethnicity | 83.4 | 97.4 | 83.6 | 89.0 | 93.8 | 108.1 |

Source: Centers for Disease Control and Prevention, CDC-National Vital Statistics System, 2016-2020 W – White; B - Black

| Heart Disease Medicare Fee-For-Service Beneficiaries, 2018 | BRUNSWICK COUNTY | NORTH CAROLINA | UNITED STATES |
|---|-------------------------|-----------------------|----------------------|
| Medicare FFS Beneficiaries with Heart Disease | 8,319 | 284,907 | 8,979,902 |
| Heart Disease Rate | 24.5% | 24.5% | 26.8% |

Source: Centers for Medicare & Medicaid Services, CMS-Chronic Conditions Warehouse, 2018

Hypertension

| Hypertension Medicare Fee-For-Service Beneficiaries, 2018 | BRUNSWICK COUNTY | NORTH CAROLINA | UNITED STATES |
|--|-------------------------|-----------------------|----------------------|
| Medicare FFS Beneficiaries with High Blood Pressure | 21,073 | 697,259 | 19,162,770 |
| High Blood Pressure Rate | 62.1% | 60.0% | 57.2% |

Source: Centers for Medicare & Medicaid Services, CMS-Chronic Conditions Warehouse, 2018

Asthma

| Asthma | BRUNSWICK COUNTY | | NORTH CAROLINA | | UNITED STATES | |
|--|-------------------------|------------------|-----------------------|------------------|----------------------|------------------|
| Medicare FFS Beneficiaries with Asthma | 1,411 | | 55,316 | | 1,665,694 | |
| Asthma Rate | 4.2% | | 4.8% | | 5.0% | |
| Disparity by Age | Below 65 | 65 years+ | Below 65 | 65 years+ | Below 65 | 65 years+ |
| | 7.2% | 3.9% | 7.6% | 4.2% | 7.5% | 4.5% |

Source: Centers for Medicare & Medicaid Services, CMS-Chronic Conditions Warehouse, 2018

Risk Factors Related to Chronic Disease – Secondary Research:

Alcohol Use

| Alcohol Use (18 years+) | BRUNSWICK COUNTY | NORTH CAROLINA | UNITED STATES |
|--|-------------------------|-----------------------|----------------------|
| Adults reporting excessive drinking | 22,233 | 1,353,411 | 50,612,058 |
| % Of Adults reporting excessive drinking | 18.92% | 16.54% | 19.79% |
| Percent of Adults Binge Drinking in the Past 30 days | 12.80% | 15.44% | 16.70% |

Source: Centers for Disease Control & Prevention, Behavioral Risk Factor Surveillance System, 2019

Definitions: Excessive drinking: Percentage of men who report more than two drinks per day for men or more than one per day for women. Binge drinking: Percentage of the population who report at least one binge drinking episode involving five or more drinks for men or four or more for women in a 2-hour period over the past 30 days.

Excessive alcohol use is a public health concern in North Carolina. Excessive alcohol use can put people at risk for many harmful health outcomes including chronic conditions (like liver disease and cancer), motor vehicle crashes, injuries, and violence. According to the [Healthy NC 2030 Excessive Drinking Indicator](#), the target is to reduce the percentage of adults reporting excessive drinking to 12.0% by 2030. The percent of adults who report excessive drinking rate in Brunswick County continues to surpass NC average. To improve this indicator, Brunswick County can share resources and strategies advised by the [NC Injury and Violence Prevention Branch](#) while working collaboratively with local law enforcement, local decision and policy makers, and behavioral health providers.

Tobacco Use

| Current Tobacco Use (18 years+) | BRUNSWICK COUNTY | NORTH CAROLINA | UNITED STATES |
|---|-------------------------|-----------------------|----------------------|
| Adults reporting current tobacco use (crude rate) | 16.90% | 18.15% | 15.30% |
| % Of adults reporting current tobacco use (age-adjusted rate) | 18.70% | 18.65% | 15.70% |

Source: Centers for Disease Control & Prevention, Behavioral Risk Factor Surveillance System, 2019

According to the [Healthy NC 2030 Tobacco Use Indicator](#), the target is to reduce the percentage of adults who use tobacco to 15% by 2030. According to the data table above Brunswick County is close to the 2030 target indicator. Brunswick County can share resources and implement proven strategies advised by the [NC Tobacco Prevention and Control Branch](#) to help tobacco users quit and also prevent initiation of tobacco use.

Physical Inactivity

| Physical Inactivity | BRUNSWICK COUNTY | NORTH CAROLINA | UNITED STATES |
|--|------------------|----------------|---------------|
| Adults with no leisure time physical activity | 16,422 | 1,775,644 | 54,200,862 |
| % Of adults with no leisure time physical activity | 20.1% | 21.8% | 22.0% |
| Gender Disparity | | | |
| Males with no leisure time physical activity | 11,780 | 794,551 | 24,675,186 |
| Males: % with no leisure time physical activity | 19.4% | 20.6% | 20.8% |
| Females with no leisure time physical activity | 14,642 | 981,102 | 29,525,666 |
| Female: % with no leisure time physical activity | 20.7% | 22.9% | 23.1% |

Source: Centers for Disease Control & Prevention, National Center for Chronic Disease Prevention and Health Promotion, 2019

Regular physical activity is one of the most important ways that people of all ages can improve their health. Physical activity can help delay, prevent, or manage many chronic diseases. The physical inactivity data table above is correlated with the [Healthy NC 2030 Access to Exercise Opportunities Indicator](#). The Healthy NC 2030 target seeks to increase access to exercise opportunities from 73% to 92% by 2030. In 2019, the percent of the population that had access to exercise opportunities in Brunswick County was 79%. Strategies to promote physical activity include informational, behavioral, social, environmental, and policy approaches. As Brunswick County population continues to grow county and municipal leaders can plan and incorporate safe, accessible exercise opportunities into Comprehensive Land Use Plans and Parks and Recreation Master Plans.

Obesity

| Obesity | BRUNSWICK COUNTY | NORTH CAROLINA | UNITED STATES |
|--------------------------------|------------------|----------------|---------------|
| Adult Overweight (18+) | 36.1% | 41.9% | 38.6% |
| Adult Obesity (18+) | 26.0% | 27.8% | 22.4% |
| Overweight Adolescents (10-17) | 13.2% | 14.6% | 15.1% |
| Obese Adolescents (10-17) | 14.2% | 13.4% | 19.7% |

Source: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, 2019 & Adolescent: CDC, Division of Adolescent and School Health.

Risk Factors Related to Maternal Child Health – Secondary Research:

MATERNAL AGE

During 2018-2020 (average) in the United States, preterm birth rates were highest for women ages 40 and older (14.4%), followed by women under age 20 (10.4%), ages 30-39 (10.3%) and ages 20-29 (9.6%).

SMOKING

In 2020, 14.8% of women of childbearing age reported smoking in the United States. Smoking is a significant factor contributing to preterm births.

MULTIPLE BIRTHS

In the United States in 2020, 8.4% of singleton births were preterm, compared to 60.9% of multiple births. Multiple births represent 3.2% of live births in the United States. Current multifetal pregnancy is one of the most consistently identified risk factors for preterm birth.

BIRTH SPACING

Birth spacing, or inter-pregnancy interval, is the timing between live birth and the beginning of the next pregnancy. Birth spacing of less than 18 months increases the risk of preterm birth and other adverse outcomes. In United States, 31.5% of pregnancies with a prior live birth have a birth spacing of less than 18 months (2018-2020 average).

OBESITY

While obesity does not directly cause preterm birth, it does increase rates of medical complications (e.g., hypertension, diabetes) that contribute to preterm birth. In the United States, 31.1% of women of childbearing age were obese in 2020.

HEALTH INSURANCE COVERAGE

In 2020, about 1 in 9 women of childbearing age (11.6%) was uninsured in the United States. Health care before, during, and after pregnancy can help identify and manage conditions that contribute to preterm birth.

Infant Mortality

| Infant Deaths | BRUNSWICK COUNTY | | | NORTH CAROLINA | | | UNITED STATES | | |
|--|-------------------------|----------|----------|-----------------------|----------|----------|----------------------|----------|----------|
| Infant deaths (within 1 year) per 1,000 live births. | 9 | | | 803 | | | 19,582 | | |
| Infant Death rate | 5.4 | | | 6.9 | | | 5.6 | | |
| DISPARITY | W | B | H | W | B | H | W | B | H |
| Infant Deaths by Race/Ethnicity | 3 | 5 | 1 | 297 | 366 | 112 | 8,603 | 5,821 | 5,770 |
| Infant Death Rate | 4.1 | 7.0 | 1.4 | 4.8 | 12.8 | 5.8 | 4.5 | 10.6 | 5.0 |

Source: North Carolina Vital Statistics System and Centers for Disease Control, National Vital Statistics, 2014-2020.

W – White; B – Black; H – Hispanic

According to the [Healthy NC 2030 Infant Mortality Indicator](#), the target for infant mortality rate is 6.0 per 1,000 live births. Brunswick County is doing better in this measure but is worth emphasizing and addressing why Black/African Americans experience more infant deaths than White/Caucasians. Brunswick County can focus strategies and services to address the maternal child health risk factors outlined above with an emphasis on health equity.

Pre-Term Births

| Pre-Term Births | BRUNSWICK COUNTY | | | NORTH CAROLINA | | | UNITED STATES | | |
|------------------------------------|------------------|------|------|----------------|-------|------|---------------|-------|------|
| % Live Births Born Pre-term | 4.5% | | | 10.8% | | | 5.6% | | |
| DISPARITY | W | B | H | W | B | H | W | B | H |
| % Pre-Term Birth by Race/Ethnicity | 4.2% | 6.3% | 3.7% | 9.4% | 14.2% | 9.5% | 9.2% | 14.2% | 9.8% |

Source: North Carolina Vital Statistics System and Centers for Disease Control and Prevention, National Vital Statistics System, 2014-2020 W – White; B – Black; H - Hispanic Definition: A pre-term birth is defined as a live birth before 37 completed weeks gestation.

Late Entry into Prenatal Care

| Late Entry into Prenatal Care | BRUNSWICK COUNTY | | | NORTH CAROLINA | | | UNITED STATES | | |
|--|------------------|--|--|----------------|--|--|---------------|--|--|
| No or Late Prenatal Care (after first Trimester) | 25.6% | | | 24% | | | 19.3% | | |

Source: <https://schs.dph.ncdhhs.gov/schs/births/babybook/2021/brunswick.pdf> W – White; B – Black; H - Hispanic

Teen Births

| Teen Births (15-19) Infants | BRUNSWICK COUNTY | | | NORTH CAROLINA | | | UNITED STATES | | |
|---|------------------|------|------|----------------|------|------|---------------|------|------|
| Teen Birth Rate (per 1,000 live births) | 25.6 | | | 20.8 | | | 19.3 | | |
| DISPARITY | W | B | H | W | B | H | W | B | H |
| Teen Births by Race/ Ethnicity | 24.3 | 23.5 | 37.8 | 14.6 | 27.2 | 28.2 | 13.5 | 28.2 | 29.6 |

Source: Centers for Disease Control and Prevention, CDC-National Vital Statistics System, 2014-2020.

W – White; B – Black; H – Hispanic

Birth Attendants

| Birth Attendants | BRUNSWICK COUNTY | NORTH CAROLINA | UNITED STATES |
|--|------------------|----------------|---------------|
| OBGYNs, family medicine, physicians Certified Nurse Midwives per 10,000 population | 7.7 | 4.2 | 8.8 |

Sources: <https://nhealthworkforce.sirs.nc.edu>, 2019 <https://www.cesareanrates.org/>

Low Birth Weight Infants

| Low Birth Weight Infants | BRUNSWICK COUNTY | NORTH CAROLINA | UNITED STATES |
|----------------------------|------------------|----------------|---------------|
| Total Live Births | 7,143 | 836,612 | 26,896,859 |
| Low Birth Weight Births | 661 | 77,245 | 2,203,029 |
| Low Birth Rate, Percentage | 9.3% | 9.2% | 8.2% |
| DISPARITY | | | |
| Non-Hispanic White | 8.8% | 7.5% | 6.9% |
| Non-Hispanic Black | 13.5% | 14.4% | 13.6% |
| Hispanic | 8.0% | 7.3% | 7.3% |

Source: University of Wisconsin Population Health Initiative, County Health Rankings, 2014-2020

Source: <https://schs.dph.ncdhhs.gov/schs/births/babybook/2021/brunswick.pdf>

Definition: Infant weighed less than 2,500 grams (5 lbs., 8 ounces) at birth.

The data tables above is a correlated with the [Healthy NC 2030 Early Prenatal Care Indicator](#). Early Prenatal is an essential part of in improving birth outcomes, increase full-term births and birth weights. It is worth emphasizing and addressing that why Hispanic, Black/African Americans women have lower percentages of prenatal care as well as higher teen birth rates. Brunswick County can provide outreach and education to women of childbearing age in underserved and at-risk populations. Health care access and expansion of Medicaid could also be systemic strategies to improve these indicators.

Behavioral Health – Secondary Research:

Mental Health and Substance Use, 2017

| MH/Substance Use ER Visits | BRUNSWICK COUNTY | NORTH CAROLINA | UNITED STATES |
|---|-------------------------|-----------------------|----------------------|
| MH/Substance Use ER Visits per 100,000 population | 1,880.9 | 1,902.3 | 26,896,859 |
| Opiate Poisoning Deaths per 100,000 population | 23.2 | 15.3 | 11.8 |

Source: NC Hospital Association, Special Data Request (ER visits) and North Carolina Public Health,

<https://injuryfreenc.ncdhhs.gov/DataSurveillance/poisoning/DEATH-3-UnintentionalOpioidPoisoningsbyCounty-2008-2017.pdf>

Rates of Depression

| Rates of Depression | BRUNSWICK COUNTY | NORTH CAROLINA | UNITED STATES |
|--|-------------------------|-----------------------|----------------------|
| Rates of Depression per 100,000 population (Adults, 18+) | 21.2% | 20.8% | 19.5% |

Source: America's Health Rankings analysis of CDC, Behavioral Risk Factor Surveillance System, United Health Foundation, [AmericasHealthRankings.org](https://americashealthrankings.org), accessed 2022.

The behavioral health data above is correlated with the [Healthy NC 2030 Drug Overdose Deaths Indicator](#) and the [Suicide Indicator](#). Across NC, drug overdose death rates continue increasing for both males and females, but the rate of increase is higher for males. Brunswick County should continue to be vigilant by implementing proven harm reduction, treatment, and prevention strategies to reduce the burden substance use disorders in the county.

Brunswick County Social Determinants of Health

Social Determinants of Health (SDOH) are the conditions in the environments where people are born, live, learn, work, play, worship, and age that affect a wide range of health functioning, and quality-of-life outcomes and risks. SDOH can be grouped into the 5 domains as seen in the figure below. Research shows that the social determinants can be more important than health care or lifestyle choices in influencing health. For example, numerous studies suggest that SDOH account for between 30-55% of health outcomes. In addition, estimates show that the contribution of sectors outside health to population health outcomes exceeds the contribution from the health sector. *Please note, some of the following social determinants of health categories incorporate primary data to provide a holistic data picture with the indicators.*

Social Determinants of Health



Social Determinants of Health
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 Healthy People 2030

Healthy People 2030, U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion. Retrieved 02/20/2023, from <https://health.gov/healthypeople/objectives-and-data/social-determinants-health>

Education

| LEVEL OF EDUCATIONAL ATTAINMENT | BRUNSWICK COUNTY | NORTH CAROLINA | UNITED STATES |
|---------------------------------|------------------|----------------|---------------|
| No high school diploma | 8.0% | 11.5% | 11.5% |
| High school diploma only | 29.1% | 25.5% | 26.7% |
| Some college | 21.9% | 21.1% | 20.3% |
| Associate's degree | 11.6% | 9.9% | 8.6% |
| Bachelor's degree | 18.9% | 20.4% | 20.2% |
| Graduate degree | 10.5% | 11.6% | 12.7% |

Source: U.S. Census Bureau, American Community Survey, 2016-2020

| ACCESS: EDUCATIONAL OPPORTUNITIES | BRUNSWICK COUNTY | NORTH CAROLINA | UNITED STATES |
|--|------------------|----------------|---------------|
| High-Quality Child Care (% of kids in 4- or 5-star childcare) | 84.0% | 73.0% | |
| <i>Source: 2019 NC Division of Child Development and Early Education</i> | | | |
| % Of third-grade students reading at grade level | 55.7% | 57.8% | |
| % Of high school students who graduate on time | 83.8% | 86.5% | 87.7% |
| <i>Source: 2020 www.ncpublicschools.org/accountability/reporting/</i> | | | |
| Chronic Absenteeism | 17.4% | 14.8% | 15.9% |
| <i>Source: U.S. Department of Education, Civil Rights Data Collection, 2017-2018</i> | | | |
| Homeless Children and Youth | 1.90% | 1.80% | 2.77% |
| <i>Source: U.S. Department of Education, ED Facts, 2019-2020</i> | | | |
| Disconnected or Opportunity Youth (16-19, not in school and not employed) | 380 | 40,308 | 1,153,005 |
| Percent of Disconnected or Opportunity Youth | 8.2% | 7.2% | 6.8% |
| <i>Source: US Census Bureau, American Community Survey, 2016-2020</i> | | | |

The data table above is correlated with the [Healthy NC 2030 Third Grade Reading Proficiency Indicator](#). Children with low reading proficiency are more likely to drop out of high school, acquire low paying jobs that limit access to health care, and have increased risks for numerous adverse health outcomes. Brunswick County is at 55.7% in this indicator which is two percentage points below the NC average. The Healthy NC 2030 target is to have 80% of children reading at a proficient level or above based on third grade End-of-Grade exams in North Carolina.

| LIMITED ENGLISH PROFICIENCY | BRUNSWICK COUNTY | NORTH CAROLINA | UNITED STATES |
|---|------------------|----------------|---------------|
| Limited English Proficiency (age 5+) | 2,043 | 434,577 | 25,312,024 |
| <i>Source: US Census Bureau, American Community Survey, 2016-2020</i> | | | |
| | 1.6% | 4.4% | 8.3% |

Access to Healthcare

| ACCESS: UNINSURED | BRUNSWICK COUNTY | NORTH CAROLINA | UNITED STATES |
|--|------------------|----------------|---------------|
| Uninsured Adults (18-64 years)-2019 | 15.7% | 15.5% | 14.5% |
| Uninsured Children (0-17 years)-2019 | 6.6% | 5.4% | 5.7% |
| Population receiving Medicaid, 2016-2020 | 16.6% | 20.1% | 22.0% |

Source: U.S. Census Bureau, Small Area Health Insurance Estimates, 2019

The data table above is correlated with the [Healthy NC 2030 Uninsured Indicator](#). Access to quality health care services is vital to improving quality of life and health outcomes for all people. Currently 15.5% of adults in NC under 65 years of are without health insurance with Brunswick County having a similar rate. The Healthy NC 2030 target is to reduce this rate to 8% by 2030. Expansion of community health worker programs and Medicaid could help with this indicator across the state.

Neighborhood and Environment

| ENVIRONMENT | BRUNSWICK COUNTY | NORTH CAROLINA | UNITED STATES |
|--|------------------|----------------|---------------|
| Air Pollution (avg daily density of fine particulate matter, micrograms/cubic meter) Source: CDC-National Environmental Public Health, 2016 | 8.5 | 9.8 | 8.3 |
| Broadband Access Source: National Broadband Map, June 2021 | 97.7% | 97.8% | 97.7% |
| Liquor Stores- Establishments per 100,000 population Source: U.S. Census Bureau, County Business Patterns, 2020 | 8.05 | 6.08 | 10.47 |
| Recreation & Fitness Facilities Source: U.S. Census Bureau, County Business Patterns, 2020 | 11 | 635 | 34,692 |
| | 12 | 1,350 | 39,562 |
| Drought Severity, Weeks in Drought, Any Percentage Source: U.S. Drought Monitor, 2017-2019 | 3.78% | 8.81% | 13.21% |

| TRANSPORTATION | BRUNSWICK COUNTY | NORTH CAROLINA | UNITED STATES |
|---|------------------|----------------|---------------|
| Total Households | 59,416 | 4,031,592 | 122,354,219 |
| Households with no motor vehicle | 1,821 | 223,909 | 10,344,521 |
| Percent of households with no motor vehicle | 3.06% | 5.55% | 8.45% |

Source: U.S. Census Bureau, American Community Survey, 2016-2020

| WATER AND SANITATION FACILITIES | BRUNSWICK COUNTY | NORTH CAROLINA | UNITED STATES |
|--|------------------|----------------|---------------|
| Occupied Housing Units | 59,416 | 4,031,592 | 122,354,219 |
| Housing Units Lacking Complete Plumbing Facilities | 134 | 12,023 | 460,275 |
| Percent of Housing Units Lacking Complete Plumbing | 0.23% | 0.30% | 0.38% |

Source: U.S. Census Bureau, American Community Survey, 2016-2020

| FOOD INSECURITY | BRUNSWICK COUNTY | | | NORTH CAROLINA | | | UNITED STATES | | |
|---|------------------|-------|-------|-------------------|-------|-------|---------------------|-------|-------|
| Estimated Population that is Food Insecure, 2016 | 16,360 | | | 1,565,910 | | | 13.8 million | | |
| % Population that is Food Insecure, 2016 | 13.7% | | | 15.4% | | | 10.5% | | |
| DISPARITY | | | | | | | | | |
| | W | B | H | W | B | H | W | B | H |
| % Of the Population that is Food Insecure by Racial/Ethnic Group | 5.6% | 20.1% | 16.2% | 7.8% | 22.1% | 15.0% | 7.9% | 19.1% | 15.6% |
| Food Desert Population | 10,696 | | | 1,593,822 | | | 39,074,974 | | |
| <i>Source: US Department of Agriculture, Food Research Atlas, 2019</i> | 2 census tracts | | | 353 census tracts | | | 9,293 census tracts | | |
| Grocery Stores | 23 | | | 1,959 | | | 62,268 | | |
| Grocery Store establishments per 100,000 population | 16.83 | | | 18.77 | | | 18.79 | | |
| Fast Food Restaurants | 112 | | | 8,083 | | | 251,533 | | |
| Fast Food establishments per 100,000 population | 81.94 | | | 76.95 | | | 75.89 | | |
| <i>Source: U.S. Census Bureau, County Business Patterns, 2020</i> | | | | | | | | | |
| SNAP Authorized Food Stores | 124 | | | 8,986 | | | 248,526 | | |
| SNAP Authorized Food Store establishments per 100,000 population | 8.32 | | | 8.48 | | | 7.47 | | |
| <i>Source: U.S. Department of Agriculture, Food and Nutrition Service, USDA SNAP Retail Locations, 2021</i> | | | | | | | | | |

Sources of Food Insecure: https://www.feedingamerica.org/sites/default/files/research/map-the-meal-gap/2016/overall/NC_AllCounties_CDs_MMG_2016.pdf?s_src=WXXX1MTMG&s_subsrc=https%3A//www.feedingamerica.org/research/map-the-meal-gap/data-by-county-in-each-state.html%3Freferrer%3Dhttp%3A//map.feedingamerica.org/

W – White; B – Black; H – Hispanic.

According to the [Healthy NC 2030 Limited Access to Health Foods Indicator](#), access to foods that support healthy eating patterns contributes to an individual’s health throughout his or her life. Evidence also shows that poor nutrition and an unhealthy diet are risk factors for high blood pressure, diabetes, and cancer.

Brunswick County has 2 census tracts and approximately 11,000 people living in a food desert along with 16,500 residents who are food insecure which by percentage is better than the NC average. Transportation and distance to sources of healthy foods impact low-income and rural communities, especially older adults living in rural communities. As Brunswick County population continues to grow it can be mindful of equitable, food-oriented development that drives economic growth in low-income and historically marginalized communities.

Social and Community Context

People's relationships and interactions with family, friends, co-workers, and community members can have a major impact on their health and well-being.

Primary Data:

| Share how often you: | NEVER | RARELY | SOMETIMES | OFTEN | ALWAYS |
|--|--------|--------|-----------|--------|--------|
| Talk on the phone with family, friends, neighbors | 1.02% | 5.75% | 25.32% | 44.12% | 23.79% |
| Get together with friends or relatives | 0.51% | 9.35% | 29.07% | 46.35% | 14.72% |
| Go to church or religious services | 26.16% | 22.94% | 18.04% | 14.56% | 18.30% |
| Join in social activities such as clubs, volunteer groups, athletic or school groups | 13.92% | 20.36% | 27.96% | 25.00% | 12.76% |
| Chat on the Internet or via social media | 13.14% | 14.18% | 27.06% | 33.38% | 12.24% |

Economic Stability

| INCOME LEVEL | BRUNSWICK COUNTY | NORTH CAROLINA | UNITED STATES |
|------------------------------------|------------------|----------------|---------------|
| Per Capita Income | \$34,528 | \$31,993 | \$35,384 |
| Median Household Income | \$59,673 | \$56,642 | \$64,994 |
| Average Family Income | \$76,620 | \$79,620 | \$91,547 |
| Income Equality (GINI Coefficient) | 0.44 | 0.48 | 0.48 |

Source: U.S. Census Bureau, American Community Survey, 2016-2020 **DEFINITIONS:** **Per Capita Income** is the reported income from wages and salaries as well as income from self-employment, interest or dividends, public assistance, retirement, and other sources. Per capita income is the average (mean) income for residents in the defined area. **Median Household Income** is the income of the household including that of all individuals 15 years old and over in the household, whether related to the head of household or not. Because many households consist of only one person, the average household income is usually less than the average family income. **GINI Coefficient** indicates income equality. A value of 1 indicates perfect inequality and zero is perfect equality.

| EMPLOYMENT STATUS | BRUNSWICK COUNTY | NORTH CAROLINA | UNITED STATES |
|---|------------------|----------------|---------------|
| Labor Force Participation Rate (age 16+) | 118,971 | 8,352,255 | 261,649,873 |
| Percent of Labor Force Participation Rate (age 16+) | 48.2% | 61.2% | 63.0% |
| Unemployment | 2,749 | 199,869 | 6,326,504 |
| Percent Unemployment | 4.8% | 3.9% | 3.8% |
| Disconnected or Opportunity Youth (16-19, not in school and not employed) | 380 | 40,308 | 1,153,005 |
| Percent of Disconnected or Opportunity Youth | 8.2% | 7.2% | 6.8% |

Source: US Census Bureau, American Community Survey, 2016-2020

| HOUSING CONDITIONS AND COST | BRUNSWICK COUNTY | NORTH CAROLINA | UNITED STATES |
|--|------------------|----------------|---------------|
| Households <i>Source: US Census Bureau, American Community Survey, 2016-2020</i> | 59,416 | 4,031,592 | 122,354,219 |
| Substandard Housing with 1 or more conditions | 16,150 | 1,124,108 | 38,476,032 |
| Percent of Substandard Housing <i>Source: US Census Bureau, American Community Survey, 2016-2020</i> | 27.2% | 27.9% | 31.5% |
| Cost-Burdened Households (30%+ of annual income to housing expenses) | 16,092 | 1,099,976 | 37,128,748 |
| Percent of Cost-Burdened Households <i>Source: US Census Bureau, American Community Survey, 2016-2020</i> | 27.1% | 27.3% | 30.4% |
| Evictions (of Renter-Occupied Housing) <i>Source: Eviction Lab, 2019</i> | 2.2% | 4.6% | 2.3% |

Primary Data: 63 or 8% of CHOS respondents worried about losing housing in the past year. From the secondary research, 59,416 total households are in Brunswick County, of which 16,092 or 27% are ‘cost-burdened’ according to the U.S. Housing and Urban Development (HUD) definition of 30% or more of annual income dedicated to housing costs. The breakdown of cost-burdened is 4,910 rental (31%), 9,034 owner-occupied with mortgage (56%) and 2,148 or 13% among owner-occupied housing without mortgage.



Substandard Housing Units, Percent of Total by Tract, ACS 2016-20

- Over 34.0%
- 28.1 - 34.0%
- 22.1 - 28.0%
- Under 22.1%
- No Data or Data Suppressed
- Brunswick County, NC

Disparities in Social Determinants of Health

When segmented by race and ethnicity, Black/African American residents tend to skew more vulnerable than other population groups. A vulnerable population are people who may be more susceptible than the general population to risk factors that lead to poor health outcomes. Vulnerable populations are a type of at-risk population, typically one that relates to discrimination/prejudice based on race/ethnicity, socio-economic status, gender, cultural factors, and age groups. The data below shows secondary and primary research specific to the Black/African American population in Brunswick County.

| LIFE EXPECTANCY | BRUNSWICK COUNTY | | | NORTH CAROLINA | | | UNITED STATES | | |
|--|-------------------------|----------|----------|-----------------------|----------|----------|----------------------|----------|----------|
| Life Expectancy | 76.5 | | | 77.6 | | | 76.1 | | |
| DISPARITY | | | | | | | | | |
| Life Expectancy by Race/Ethnicity | W | B | H | W | B | H | W | B | H |
| Age of Expected Death by Race/Ethnicity | 78.4 | 72.0 | 77 | 80.1 | 71.6 | 76.9 | 76.4 | 70.8 | 77.6 |
| Years of Potential Life Lost | 16,150 | | | 1,124,108 | | | 38,476,032 | | |
| Premature Deaths | 8,400 | | | 5,600 | | | 8,000 | | |
| DISPARITY | | | | | | | | | |
| Years of Potential Life Lost by Race/Ethnicity | W | B | H | W | B | H | W | B | H |
| Rate of Potential Life Lost per 100,000 population by Race/ Ethnicity | 8,728 | 8,874 | 4,863 | 7,560 | 10,880 | 4,533 | 7,171 | 11,451 | 5,628 |
| Source: Centers for Disease Control, National Vital Statistics System, 2018-2020 W – White; B – Black; H - Hispanic | | | | | | | | | |

| ACCESS TO HEALTH CARE | BRUNSWICK COUNTY | BLACK RESIDENTS |
|--|-------------------------|------------------------|
| Uninsured Adults (18-64 years)-2019 | 15.7% | 16.5% |
| Uninsured Children (0-17 years)-2019 | 6.6% | 11.4% |
| Population receiving Medicaid, 2016-2020 | 16.6% | 21% |

Source: U.S. Census Bureau, Small Area Health Insurance Estimates, 2019

The following populations are underserved when it comes to access to health care resource. Underserved population groups include population groups that health services and other services typically underserve or traditionally do not adequately reach. This may be due to a lack of services or providers available or as a result of financial, literacy, language, access, cultural, or other barriers.

The rates of uninsured children are especially high among Hispanic children, undocumented children, and children in families with lower incomes. More than half of American Indian/Alaska Native, Black, multi-racial, and Hispanic children rely on Medicaid and CHIP as their source of health coverage.

| FOOD INSECURITY | BRUNSWICK COUNTY, NC | BLACK RESIDENTS |
|-----------------------------|-----------------------------|------------------------|
| Food Insecure | 13.7% | 20.1% |
| Food Desert Population | 10,696 | 2,597 |
| Grocery Stores | 23 | 2 |
| Fast Food Restaurants | 112 | |
| SNAP Authorized Food Stores | 124 | |

Source: US Department of Agriculture, Food Research Atlas, 2019

Black families are nearly two times as likely to be food insecure compared to any other racial/ethnic group. For about a third of these households, access to food was so limited that their eating patterns were disrupted, and food intake was reduced, according to the Community Health Opinion Survey.

| HOUSING | BRUNSWICK COUNTY | BLACK RESIDENTS |
|---|-------------------------|------------------------|
| Substandard Housing with 1 or more conditions | 27.2% | 31.3% |
| Cost-Burdened Households | 27.1% | 31.1% |
| <i>Source: US Census Bureau, American Community Survey, 2016-2020</i> | | |
| Evictions | 2.2% | 4% |
| <i>Source: Eviction Lab, 2019</i> | | |

Chapter Four: Priorities

Overview

Once the primary and secondary data was collected and analyzed, the next step was to solicit input from the steering committee on which of the priority topic areas can and should be addressed in the coming three years. Community engagement is essential to the success of the health improvement process in public health, so gathering community support and resources is an essential part of the priority-setting process.

The Community Health Needs Assessment (CHNA) Core Group used themes that emerged from both the primary and secondary data, including comparisons to state and national data sets, and Healthy North Carolina 2030 to develop a list of six priority topic areas from the health assessment process. These were:

- Chronic Conditions (Heart Disease and Diabetes)
- Substance Use
- Mental Health
- Access to Healthcare
- Healthy Homes and Environment
- Maternal and Child Health

A summary of the findings from the CHNA was presented and discussed with the steering committee. Members were asked to vote on priorities using a virtual survey to rank the priorities from highest to lowest with these factors in mind, magnitude, seriousness, and feasibility. Once the priority ranking survey results were collected and analyzed the following priorities were approved by the Community Health Needs Assessment Core Group and the steering committee.

2022 Brunswick County Health Priorities



Next Steps

Following the review and approval of the Community Health Needs Assessment (CHNA) and Community Health Improvement Plan(CHIP), two steps occur:

1. Communicate the findings of the Community Health Needs Assessment to the general community in Brunswick County, and where possible, to vulnerable subgroups.
2. Engage community partners and stakeholders to develop the CHIP. The CHIP identifies three key strategies or priorities to address identified needs and issues related to the individual or community health of residents in Brunswick County. The CHIP is further detailed to identify goals and tasks related to a baseline performance metrics (derived from primary and secondary research) and compared to a target metrics (defined as meeting a Healthy North Carolina 2030 or Healthy People 2030 goal). The action steps and related performance metrics are separated by short-term (1 year), medium (2 years), and long-term (3 years-plus) timeframes with identified resources, responsible parties, and monitoring activities. Finally, the annual updates to the CHIP and the CHNA will take place in a document called the State of the County Health Report which typically is published in April each year.

Chapter Five: Resources

Existing Resource

The community health needs assessment process was instrumental in helping to gain a deeper understanding of residents' opinions and feelings about health, illness, services, and strategies to address these concerns. Brunswick County Health Services seeks to ensure that all residents receive appropriate health care and health resources by compiling and sharing the following health resources. A copy of the Health Services Resource Quick Guide can be found on the following page.

For a more up-to-date and comprehensive listing of Brunswick County resources, see the list below.

- [Brunswick County Health Resource Assistance Quick Guide](#)
- [NC 211 Comprehensive Local/State Wide Resourced Data Base](#)
- [Helpful Links and Resources - Brunswick Wellness Coalition](#)

Resource Gaps

Despite the availability of numerous health resources, there are gaps that need to be addressed in Brunswick County. The following list of resource gaps were identified through the focus groups and key informant interviews:

- Transportation
- Affordable housing
- Access to behavioral health services and providers
- Access to medical healthcare

Resource Assistance Quick Guide



| | |
|---|-------------------------|
| County Government Gobierno del Condado | |
| Brunswick County Government | Bolivia; 1-800-442-7033 |

| | |
|-------------------------------------|-----------------------|
| Veterans Veteranos | |
| Brunswick County Veterans Service | Bolivia; 910-253-2233 |

| | |
|---|----------------------------------|
| Housing/Shelter Vivienda/Refugio | |
| Brunswick Housing Opportunities | Bolivia; 910-253-0699 |
| Habitat for Humanity | Supply; 910-454-0007 |
| Brunswick County Public Housing Agency | Bolivia; 910-253-2222 |
| Brunswick County Homeless Coalition | Ocean Isle Beach; 1-888-519-5362 |
| Hope Harbor Home, Inc. | Bolivia; 910-754-5856 |

| | |
|---|-----------------------|
| Rent/Utilities Alquiler/Utilidades | |
| Brunswick County Social Services | Bolivia; 910-253-2077 |
| Low Income Home Energy Assistance Program (LIHEAP) | Bolivia; 910-253-2122 |

| | |
|--|---|
| Clothing/Goods Ropa/Mercancia | |
| Hope Chest Thrift Store | Supply/Bolivia; 910-842-6950 Oak Island; 910-278-7781 Leland; 910-371-0058 |
| Habitat for Humanity ReStore | Wilmington; 910-762-4793 Southport; 910-457-1772 Leland; 910-338-3648 Ocean Isle Beach; 910-579-8346 |

| | |
|---|--|
| Helpful Links Enlaces Útiles | |
| Our Community Link | www.OurCommunityLink.com |
| NC 2-1-1 | www.nc211.org |
| Brunswick County Government | www.brunswickcountync.gov |
| United Way: Cape Fear Region | www.uwcf.org |

| | |
|---|--|
| Food/Food Pantries Alimentos/Despensas de Comida | |
| Wings Ministry, Inc. | Shallotte; 910-512-7643 |
| Brunswick County Health Services: Women, Infants, and Children (WIC) | Bolivia; 910-253-2288 Leland; 910-253-2877 Shallotte; 910-253-2878 |
| Food & Nutrition Assistance (Food Stamps) | Bolivia; 910-253-2250 |
| Brunswick Family Assistance Center | Shallotte; 910-754-4766 |
| Brunswick Islands Baptist Church | Supply; 910-842-8969 |
| Camp United Methodist Church | Shallotte; 910-754-4840 |
| Ocean View United Methodist Church | Oak Island; 910-278-5973 |
| Seaside United Methodist Church | Sunset Beach; 910-579-5753 |
| Salvation & Deliverance Church | Leland; 910-655-9600 |
| Shoreline Baptist Church | Southport; 910-457-1909 |
| St. Brendan's Catholic Church | Shallotte; 910-754-8544 |
| Towncreek Vision | Leland; 910-477-48405 |

| | |
|--|-------------------------|
| Transportation Transporte | |
| Brunswick Transit System | Shallotte; 910-253-7800 |

| | |
|--|---|
| Senior Center/Meals Centro de Mayores/Alimentos | |
| Brunswick Senior Resources, Inc. 910-754-2300 | Brunswick Center-Leland Brunswick Center-Shallotte Brunswick Center-Southport Brunswick Center-Supply Oak Island Senior Site Town Creek Senior Site Calabash Senior Site Boiling Spring Lakes Senior Site Ash Senior Site |

| Medical Care/Clinical Care Cuidado Médico/Cuidado Clínico |  |
|--|---|
| Novant Health Brunswick Medical Center | Bolivia; 910-721-1000 |
| Dosher Memorial Hospital | Southport; 910-457-3800 |
| Brunswick County Health Services | Bolivia; 910-253-2250 |
| CommWell Health | Bolivia; 1-877-935-5255 Shalotte; 1-877-935-5255 |
| New Hope Clinic | Boiling Spring Lakes; 910-845-5333 |
| Goshen Medical Center, Inc. | Southport; 910-457-0070 |

| Dental Care Cuidado Dental |  |
|---|---|
| CommWell Health | Ocean Isle Beach; 910-579-9600 |
| New Hope Clinic | Boiling Spring Lakes; 910-845-5333 |
| ECU School of Dental Medicine | Bolivia; 910-253-9000 |

| Mental Health/Substance Abuse Salud Mental/Abuso de Sustancias |  |
|---|---|
| Coastal Horizons Center, Inc. | Shalotte; 910-754-4515 |
| Coastal Southeastern United Care | Bolivia; 910-253-5801 Shalotte; 910-755-5222 |
| Trillium: 24-Hour Access to Care Line | 1-877-685-2415 |
| Access Point Kiosk: Brunswick County Social Services | Bolivia; 910-253-2077 |
| Novant Psychiatric | Shalotte; 910-721-4200 |

| Support Groups Grupos de Apoyo |  |
|---|---|
| Alcoholics Anonymous | 24 Hour Hotline; 910-794-1840 www.wilmingtonaa.us |
| Brunswick Family Assistance Agency | Shalotte; 910-754-4766 Leland; 910-408-1700 |
| Hope Harbor Home, Inc. | 24 Hour Crisis Hotline; 910-754-5856 Supply; 910-754-5726 |
| Narcotics Anonymous | 800-407-7195 |

Created June 2018
Updated May 2022
Brunswick County Health Services

| Home Health Salud en el Hogar |  |
|--|---|
| Brunswick Senior Resources, Inc. | Call for locations; 910-754-2300 |
| Assisted Care Home Health, Inc. | Leland; 910-332-2341 |
| Coastal Companion Care | Southport; 910-457-5300 |
| Liberty Home Health | Supply; 910-754-8133 |

| Medication Drop Boxes Cajas de Depositar Medicamentos |  |
|--|---|
| Brunswick County Sheriff's Office- Main | Bolivia; 910-253-2777 |
| Brunswick County Sherriff's Office- Substation | Calabash; 910-579-7030 Belville; 910-269-6679 |
| Boiling Spring Lakes Police Department | Boiling Spring Lakes; 910-845-2247 |
| Leland Police Department | Leland; 910-371-1100 |
| Ocean Isle Beach Police Department | Ocean Isle Beach; 910-579-4221 |
| Shalotte Police Department | Shalotte; 910-754-6008 |
| Sunset Beach Police Department | Sunset Beach; 910-579-2151 |

| Employment Opportunities Oportunidades de Empleo |  |
|---|---|
| Brunswick County Career Center | Shalotte; 910-754-6120 |
| Brunswick County Social Services | Bolivia; 910-253-2077 |

| Education/Training Educación/Formación |  |
|---|--|
| Brunswick County Public Schools | Bolivia; 910-253-2900 |
| Brunswick Community College | Bolivia; 910-755-7300 |
| Community in Schools of Brunswick County, Inc. | Southport; 910-351-8007 |
| Brunswick County Literacy Council | Supply; 910-754-7323 |

| Childcare Guarderia |  |
|--|---|
| Brunswick County Social Services | Bolivia; 910-253-2077 |
| Brunswick County Partnership for Children, Smart Start | Shalotte; 910-754-3166 |



Brunswick County 2022 Community Health Assessment Community Profile

September 22, 2022

Brunswick County



Brunswick

TOTAL POPULATION

144,215



MEDIAN HOUSEHOLD

INCOME
\$59,763



BACHELOR'S DEGREE

OR HIGHER
29.5%



TOTAL HOUSING

UNITS
92,178



UNINSURED ADULTS

15.68%



State of North
Carolina

TOTAL POPULATION

10,386,227



MEDIAN HOUSEHOLD

INCOME
\$56,642



BACHELOR'S DEGREE

OR HIGHER
32.0%



TOTAL HOUSING

UNITS
4,687,122



UNINSURED ADULTS

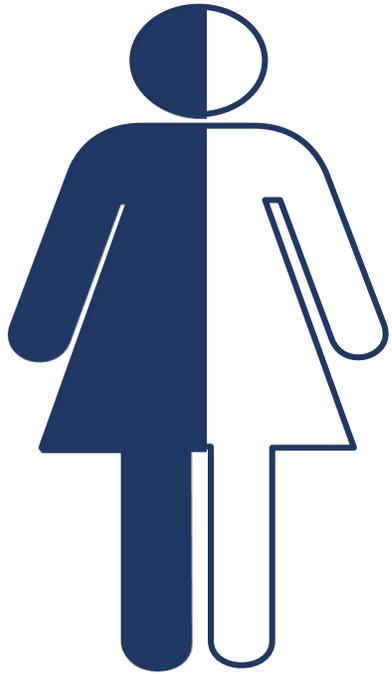
16.3%

Brunswick County has 144,215 people live in the 850.08 square mile report area defined for this assessment according to the U.S. Census Bureau American Community Survey 2016-20 5-year estimates. The population density for this area, estimated at 162 persons per square mile, is greater than the national average population density of 92 persons per square mile.

Demographics

Demographics – Sex/ Age of Brunswick County

Brunswick County has a total population of 144,215 with an increase in population of 29,261 residents (27.2%) from 2010 to 2020.



FEMALE

Median Age is 56

52.0% - Brunswick

51.4% - North Carolina

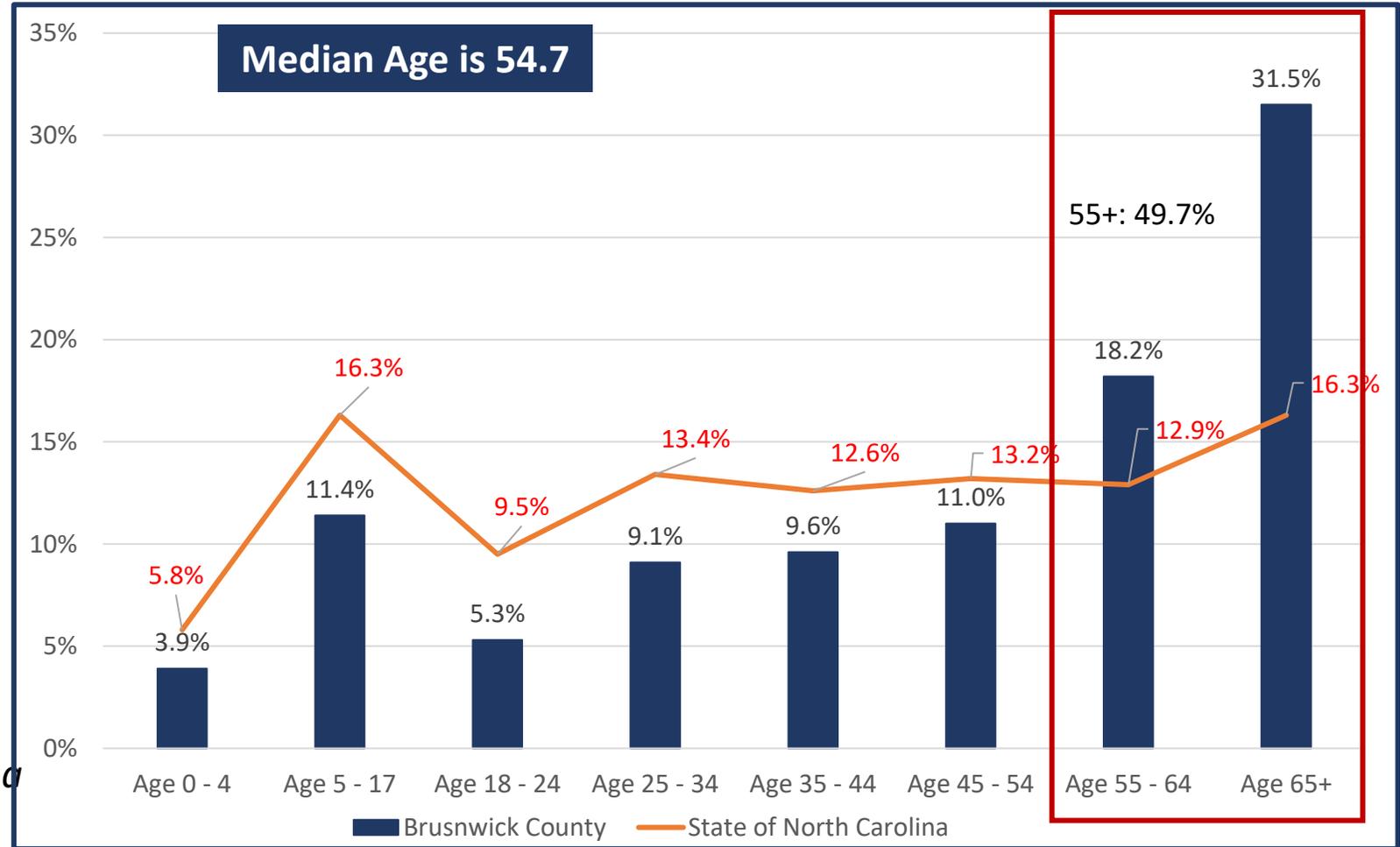


MALE

Median Age is 53.1

48.0% - Brunswick

48.7% - North Carolina



Demographics – Race & Ethnicity of Brunswick

| | <i>Brunswick County</i> | <i>NORTH CAROLINA</i> |
|--|------------------------------------|----------------------------------|
| WHITE | 81.4% | 62.6% |
| AFRICAN AMERICAN | 9.4% | 21.0% |
| ASIAN | 0.5% | 2.9% |
| NATIVE AMERICAN OR ALASKA NATIVE | 0.6% | 1.0% |
| NATIVE HAWAIIAN OR PACIFIC ISLANDER | - | 0.1% |
| OTHER RACE | 0.3% | 0.3% |
| MULTIPLE RACES | 3.0% | 2.5% |
| HISPANIC OR LATINO | 4.8% | 9.5% |

Red font indicates a Brunswick County lower percentage than North Carolina.

Green font indicates a Brunswick County higher percentage than North Carolina.

Black font is virtually the same as North Carolina.

Demographics – Languages in the Brunswick County

95.1%

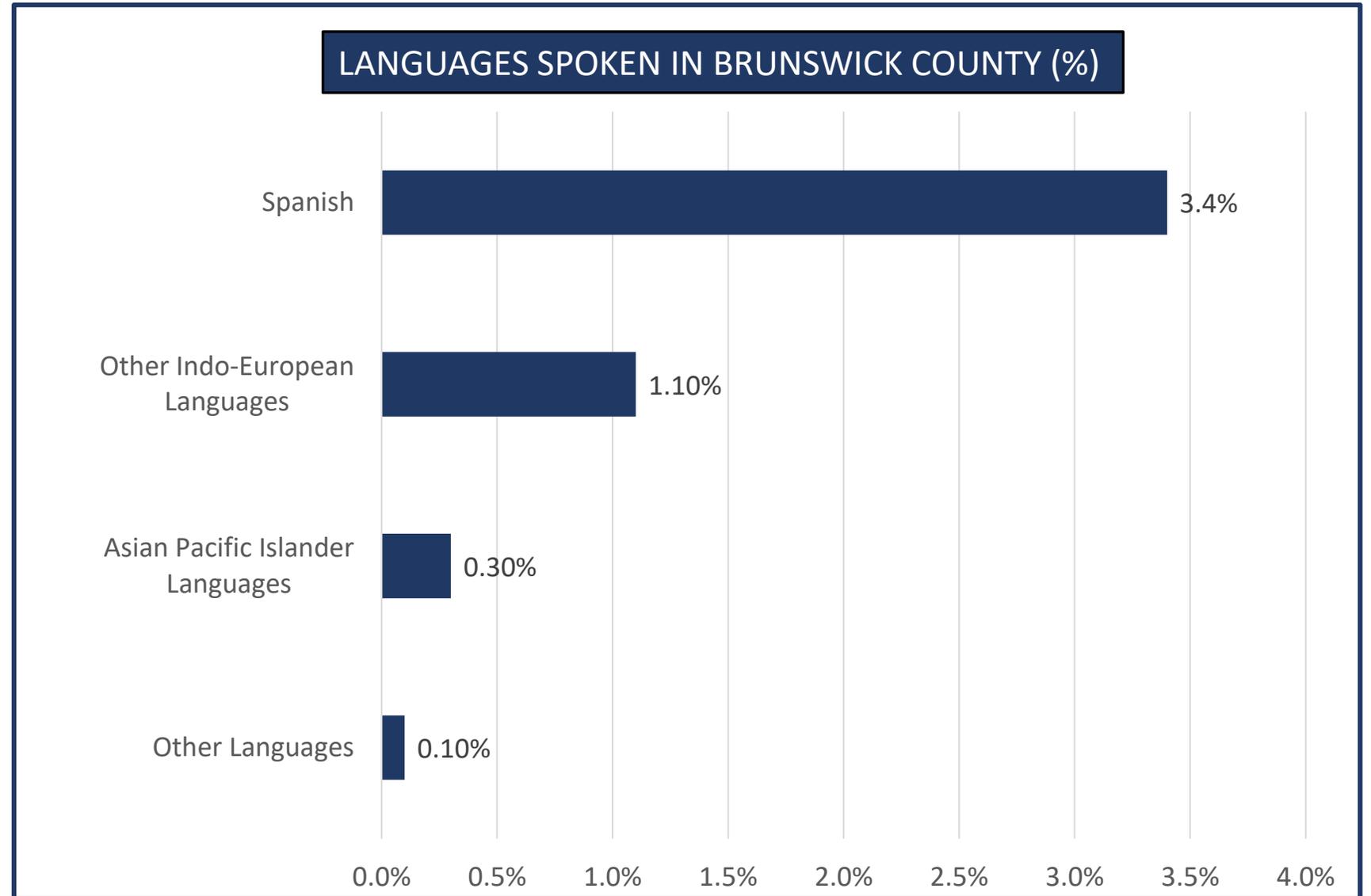
Speak English at home in Brunswick

4.9%

Speak a language other than English at home in Brunswick

12.4%

Speak a language other than English at home in Brunswick County



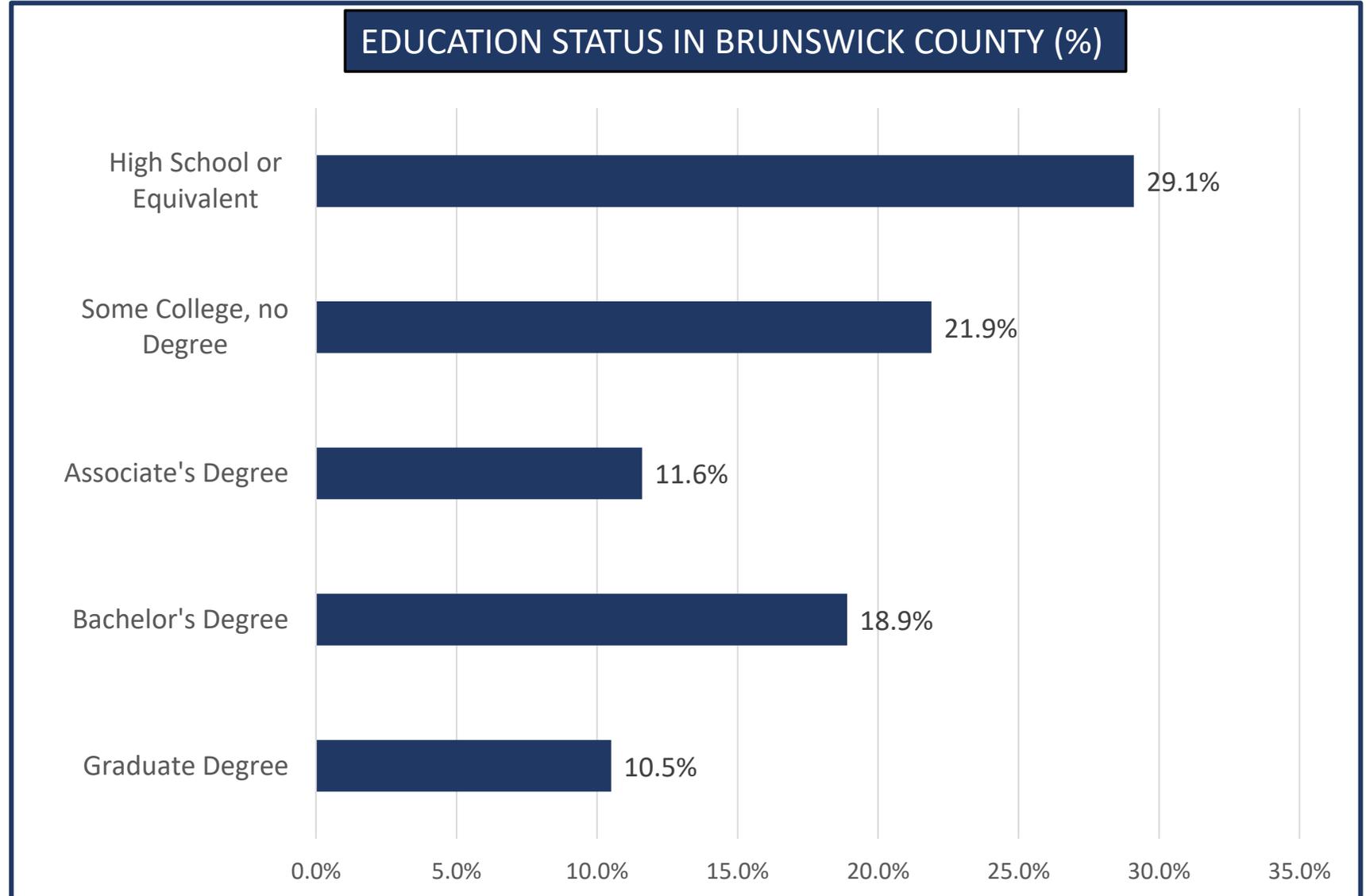
Demographics – Education in Brunswick County

29.6%

Bachelor's Degree or Higher in Brunswick County

34.9%

Bachelor's Degree or Higher in North Carolina



Demographics – Families with Children

59,416

Total Households in Brunswick County

69%

Total Family Households in Brunswick County

27%

Total Families with Children (Under Age 18) in Brunswick County

4,031,592

Total Households in North Carolina

65%

Total Family Households in North Carolina

46%

Total Households in North Carolina

Social & Economic Factors

Socioeconomics – Poverty

FEDERAL POVERTY LEVEL (FPL)

27.4%

Live in households with income below the 200% Federal Poverty Level (FPL) in Brunswick County

\$53,000 or Less

Income for a household of four.

\$25,760 or Less

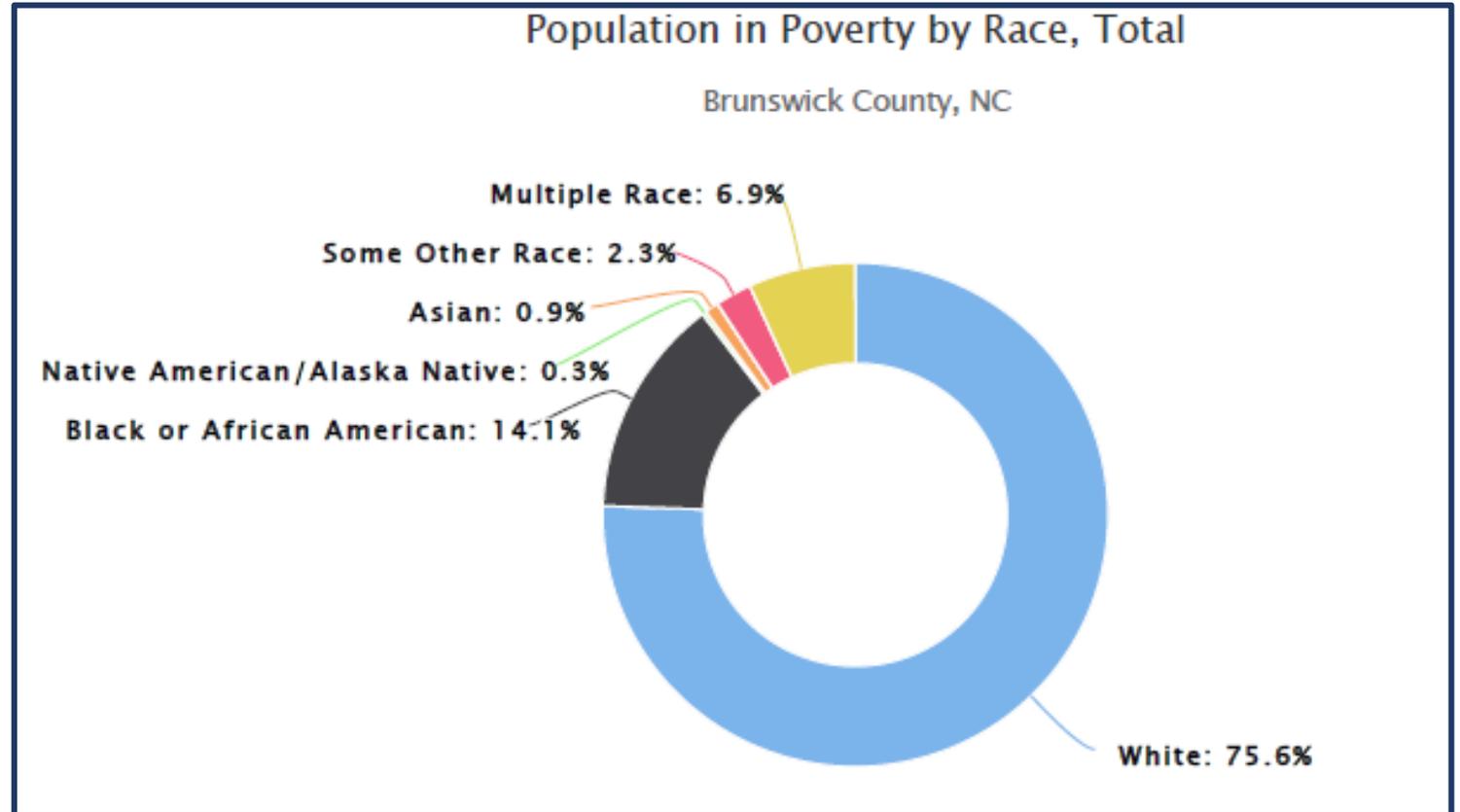
Income for an individual living alone.



12.5% of Females in Brunswick County live in households with incomes below the Federal Poverty Level (FPL) vs. 15.3% for North Carolina



9.6% of Males in Brunswick County live in households with income below the Federal Poverty Level (FPL) vs. 12.6% for North Carolina



Socioeconomics – Child Poverty

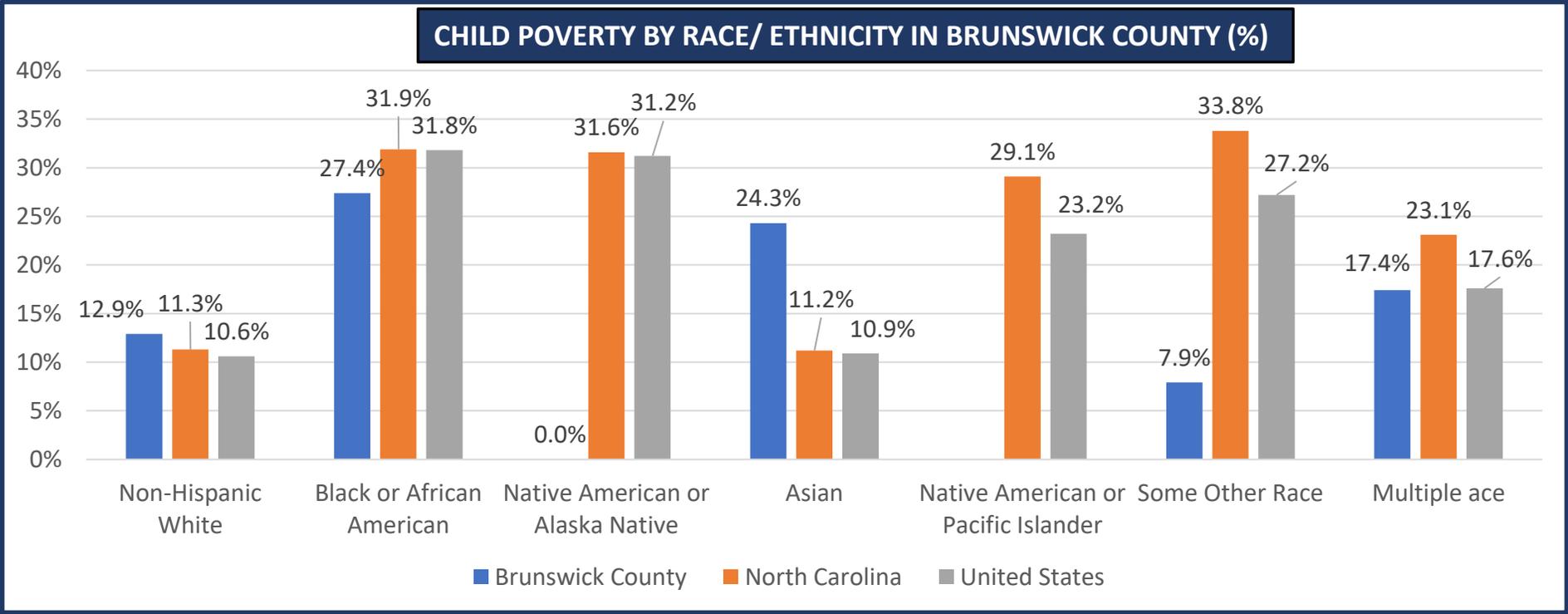
CHILD POVERTY

41.1%

Children aged 0 – 17 live in a household with income below the Federal Poverty Level in Brunswick County

42.8%

Children aged 0 – 17 live in a household with income below the Federal Poverty Level in North Carolina



SCHOOL LUNCH PROGRAM

99.5%

of public-school students are eligible for free or reduced-price lunch program in Brunswick County

54.2%

of public-school students are eligible for free or reduced-price lunch program in North Carolina

Socioeconomics – Income and Employment

MEDIAN HOUSEHOLD INCOME

\$59,763

Median Household Income in Brunswick County

\$56,642

Median Household Income in North Carolina

EMPLOYMENT

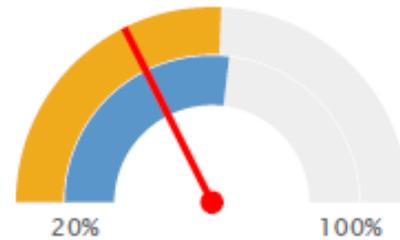
48.2%

Labor Force Participation Rate or Employment in Brunswick County

61.2%

Labor Participation rate or Employment in North Carolina

Labor Force Participation Rate



- Brunswick (48.21%)
- North Carolina (61.21%)
- United States (62.97%)

UNEMPLOYMENT

5.2%

Unemployment rate in Brunswick

4.1%

Unemployment rate in North Carolina

Unemployment Rate



- Brunswick County (5.2%)
- North Carolina (4.1%)
- United States (3.9%)

Socioeconomics – Housing

- HUD definition of 'Cost Burdened' – 1/3 or more of annual income goes to Housing expenses



TOTAL HOUSING
UNITS
92,178



TOTAL HOUSEHOLDS
59,416

Brunswick:

35.5%

VACANCY RATE

\$264,054

AVERAGE HOUSE COST

NORTH
CAROLINA :

13.9%

\$234,153

HOUSING COST BURDEN

27.1%

Cost Burden
Households in
Brunswick County

13.7%

Severe Cost Burden
Households in
Brunswick County

27.3%

Cost Burden
Households in
North Carolina

12.0%

Severe Cost Burden
Households in North
Carolina

RENT COST

\$984

Median Gross Rent in Brunswick
County

\$932

Median Gross Rent in North
Carolina

14.3%

Residents in Brunswick County have
Sever Housing Problems

2.2%

Eviction Rate in Brunswick County

4.6%

Eviction Rate in North Carolina

Socioeconomics – Transportation

HOUSEHOLDS WITH NO MOTOR VEHICLE

3.1%

Households with no motor vehicles in Brunswick County

5.6%

Households with no motor vehicles in North Carolina

COMMUTE TO WORK

79.9%

Population that commutes to work daily in Brunswick County

5.4%

Population that commutes over 60 minutes in Brunswick County

0.8%

Population using public transit for work commute in Brunswick County

0.8%

Workers commuting by walking or biking in Brunswick County

79.3%

Population that commutes to work daily in North Carolina

6.4%

Population that commutes over 60 minutes in North Carolina

1.0%

Population using public transit for work in North Carolina

1.9%

Workers commuting by walking or biking in North Carolina

Health Behaviors

Health Behaviors

In 2019, Brunswick County was ranked the following out of 100 counties in North Carolina

44 Rank

88 Rank

82 Rank

DRUG OVERDOSE DEATHS

24.3

Deaths per 100,000 people in Brunswick County

18

Healthy NC State 2030 Target per 100,000 people

TOBACCO USE

18.7%

Adults Currently Smoking in Brunswick County

18.7%

Adults Currently Smoking in North Carolina

EXCESSIVE DRINKING

13.6%

Adults report binge or heavy drinking in Brunswick County

12%

Healthy NC State Target

Health Behaviors – Teen Births

25.6

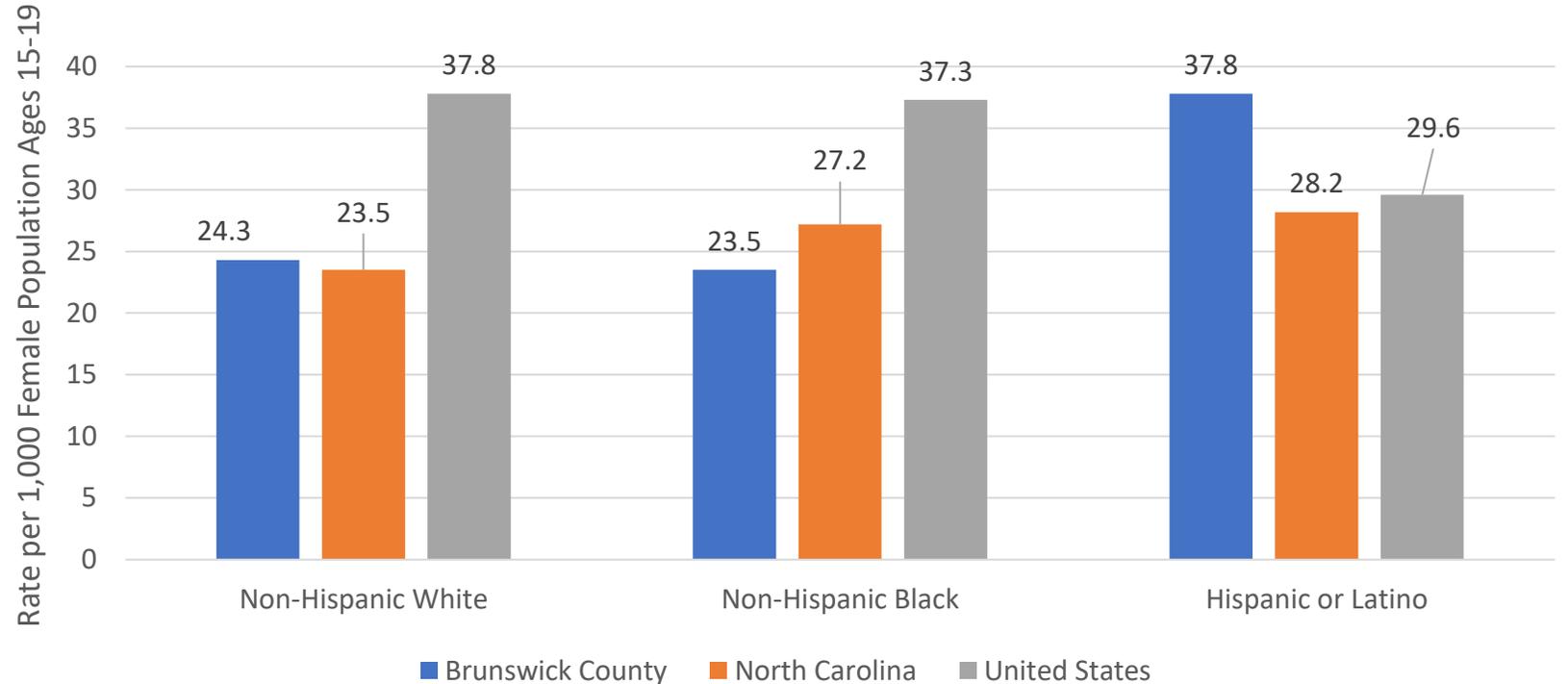
Per 1,000 Female Population
Age 15-19 in Brunswick County

20.8

Per 1,000 Female Population
Age 15-19 in North Carolina

*County Health Rankings
7-year average*

TEEN BIRTH RATE PER 1,000 FEMALE POPULATIN AGE 15-19 BY RACE/ ETHNICITY



5.6

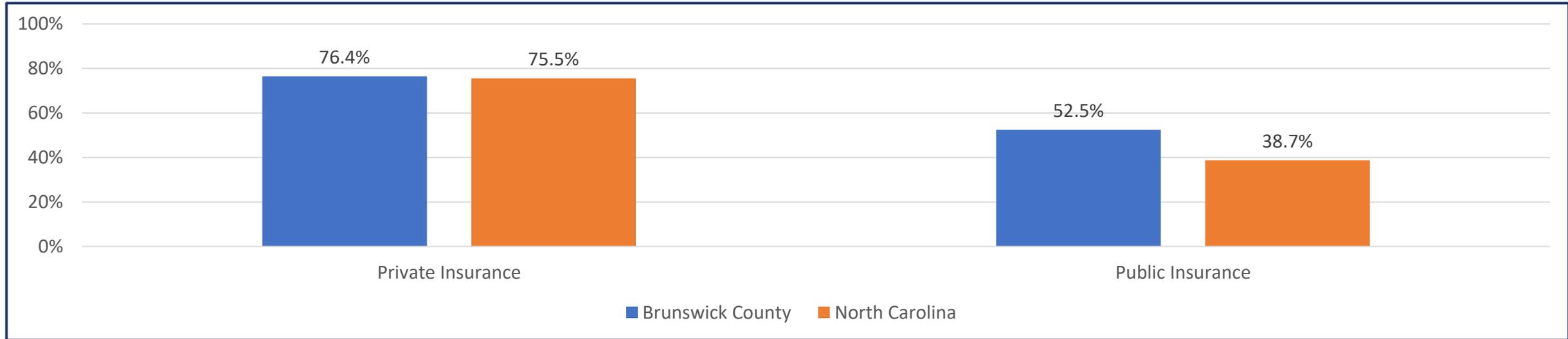
Per 1,000 Female Population
Age 15-19 in Brunswick
County

12.9

Per 1,000 Female Population
Age 15-19 in North Carolina

Clinical Care

Clinical Care – Health Insurance



UNINSURED POPULATION

15.7%

Uninsured Adults in Brunswick County

5.6%

Uninsured Children in Brunswick County

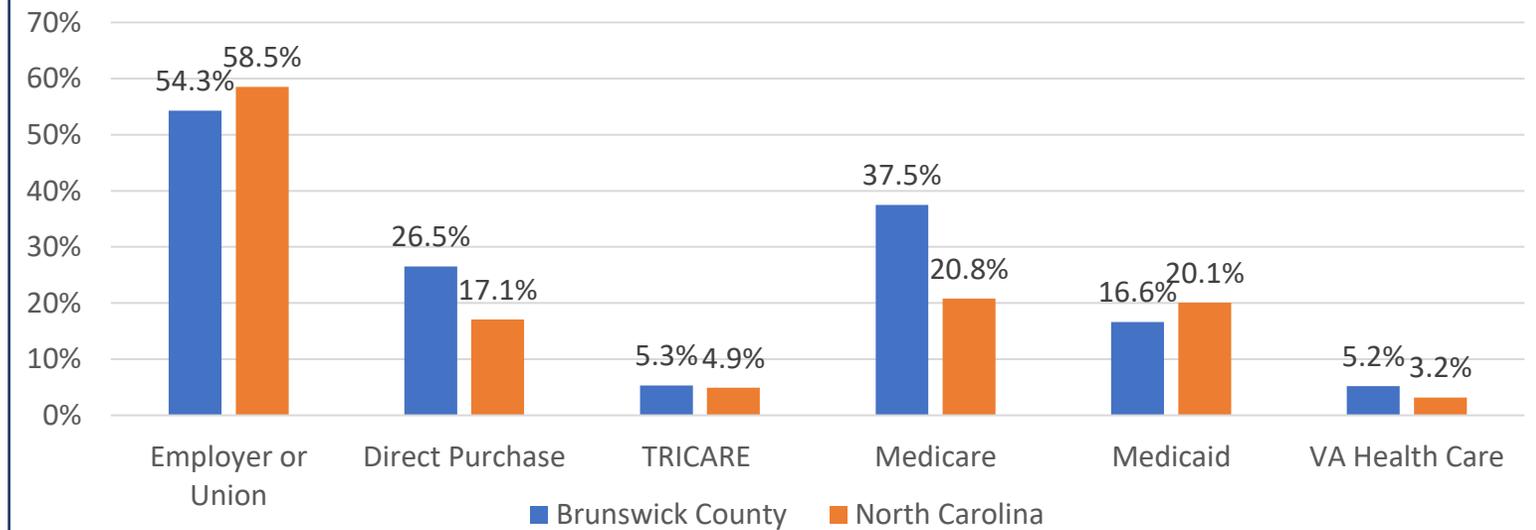
16.3%

Uninsured Adults in North Carolina

5.8%

Uninsured Children in North Carolina

POPULATION WITH INSURANCE BY PROVIDER



Questions

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Appendix 2: Presentation of Integrated Primary and Secondary



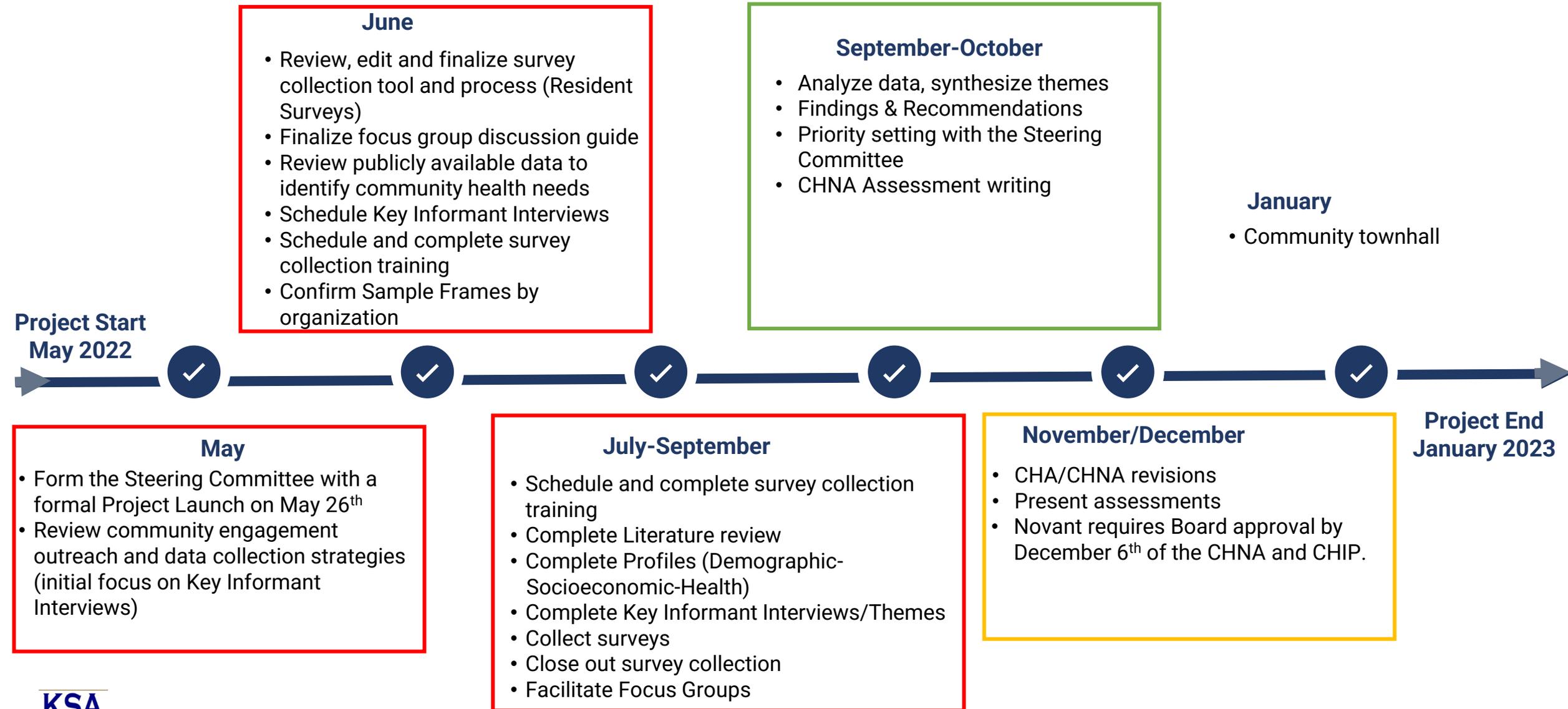
Brunswick County 2022 Community Health Assessment Primary and Secondary Data

October 27, 2022

Agenda

- Review Timeline
- Community Health Status Opinion Survey
 - Demographics
 - Health Indicators
 - Social Indicators
- Prioritization
- Next Steps

Project Timeline



Brunswick County



Brunswick

TOTAL POPULATION

144,215



MEDIAN HOUSEHOLD

INCOME
\$59,763



BACHELOR'S DEGREE

OR HIGHER
29.4%



TOTAL HOUSING

UNITS
92,178



UNINSURED

15.7% - Adults
5.6% - Children



State of North
Carolina

TOTAL POPULATION

10,551,162



MEDIAN HOUSEHOLD

INCOME
\$56,642



BACHELOR'S DEGREE

OR HIGHER
32.0%



TOTAL HOUSING

UNITS
4,687,122



UNINSURED

16.3% - Adults
5.8% - Children

RESIDENT SURVEY RESPONSE: 795

Brunswick County has 144,215 people living in the 850.08 square mile report area defined for this assessment according to the U.S. Census Bureau American Community Survey 2015-2019 5-year estimates. The population density for this area, estimated at 169 persons per square mile, is greater than the national average population density of 92 persons per square mile.

Sample Frame Status Update

| TOWNSHIP | POPULATION (2020) | % 2020 | POPULATION (2016) | % (2016) | HOUSEHOLDS (2016) | SAMPLE FRAME (STATISTICAL & OVER-SAMPLE) | | | |
|---------------------|----------------------|-------------|----------------------|-------------|----------------------|---|------------|------------|------------|
| Lockwood Folly (LF) | 35,018 | 24.3% | 25,716 | 21.6% | 11,411 | 93 | 97 | 121 | 146 |
| Northwest (NW) | 16,014 | 11.1% | 13,638 | 11.4% | 4,961 | 42 | 44 | 56 | 67 |
| Shallotte (SH) | 33,250 | 23.1% | 27,861 | 23.4% | 12,960 | 88 | 92 | 115 | 138 |
| Smithville (SM) | 16,019 | 11.1% | 15,361 | 12.9% | 7,050 | 44 | 44 | 56 | 67 |
| Town Creek (TC) | 40,215 | 27.9% | 32,597 | 27.4% | 12,824 | 111 | 112 | 139 | 167 |
| Waccamaw (WC) | 3,659 | 2.6% | 3,994 | 3.4% | 1,356 | 10 | 10 | 13 | 15 |
| TOTAL | 144,215 | 100% | 119,167 | 100% | 50,562 | 382 | 400 | 500 | 600 |

| | |
|---|--|
| LOCKWOOD FOLLY | |
| Towns: Holden Beach, Oak Island, Shallotte, St. James, Varnamtown | |
| Zip Codes: 28462, 28465, 28470 | |
| NORTHWEST | |
| Towns: Belville, Leland, Navassa, Sandy Creek | |
| Zip Codes: 28436, 28451, 28456 | |
| SHALLOTTE | |
| Towns: Calabash, Carolina Shores, Ocean Isle Beach, Shallotte, Sunset Beach, Winnabow | |
| Zip Codes: 28467, 28468, 28469 | |
| SMITHVILLE | |
| Towns: Caswell Beach, Oak Island, St. James, Bald Head Island | |
| Zip Codes: 28461 | |
| TOWN CREEK | |
| Towns: Boiling Spring Lakes, Bolivia, Leland | |
| Zip Codes: 28422, 28451, 28479 | |
| WACCAMAW | |
| Town: Shallotte | |
| Zip Codes: 28420, 28452, 28470 | |

Sample Frame Status Update

| SAMPLE FRAME FOR BRUNSWICK COUNTY, NORTH CAROLINA CHNA | | | | | | | |
|--|----------------|-------------|--------------------------|------------|------------|------------|-------------|
| DEMOGRAPHIC | TOTAL # | TOTAL % | SAMPLE n=382/400/500/600 | | | SAMPLE % | |
| Age | | | | | | | |
| 0-5 years | 5,336 | 3.7% | 14 | | | 3.7% | |
| 6-18 years | 21,120 | 14.7% | 56 | | | 14.7% | |
| 19-64 | 70,655 | 49% | 187 | | | 49% | |
| 65+ | 47,014 | 32.6% | 125 | | | 32.6% | |
| Gender | | | | | | | |
| Male | 68,790 | 47.7% | 181 | | | 47.7% | |
| Female | 75,425 | 52.3% | 199 | | | 52.3% | |
| Race/Ethnicity | | | | | | | |
| White | 118,256 | 82% | 312 | | | 82% | |
| Black | 14,422 | 10% | 38 | | | 10% | |
| Asian Pacific | 1,154 | 0.8% | 3 | | | 0.8% | |
| Native American | 1,154 | 0.8% | 3 | | | 0.8% | |
| Multi-Race | 2,596 | 1.8% | 7 | | | 1.8% | |
| Hispanic | 7,067 | 4.9% | 19 | | | 4.9% | |
| Poverty Level | | | | | | | |
| Poverty Level | 16,152 | 11.2% | 43 | | | 11.2% | |
| Language other than English | | | | | | | |
| Language other than English | 7,067 | 4.9% | 19 | | | 4.9% | |
| Uninsured | | | | | | | |
| Uninsured | 19,469 | 13.5% | 52 | | | 13.5% | |
| Township | | | | | | | |
| | | | SAMPLE FRAME # | | | | |
| Lockwood Folly | 35,018 | 24% | 93 | 97 | 121 | 146 | 24% |
| Northwest | 16,014 | 11% | 42 | 44 | 56 | 67 | 11% |
| Shalotte | 33,250 | 23% | 88 | 92 | 115 | 138 | 23% |
| Smithville | 16,019 | 11% | 42 | 44 | 56 | 67 | 11% |
| Town Creek | 40,215 | 28% | 107 | 112 | 139 | 167 | 28% |
| Waccamaw | 3,699 | 3% | 10 | 10 | 13 | 15 | 3% |
| TOTAL | 144,215 | 100% | 382 | 400 | 500 | 600 | 100% |



Key Informant Interviews

48 Key Informant Interviews were conducted with input from:

- Township leadership
- Brunswick County Health Services
- Novant Health Brunswick Medical Center
- Doshier Memorial Hospital
- Social Service providers
- Community Based Organizations
- Healthcare providers



Resident Surveys

795 Resident Surveys or 190% of the target of 382 has been achieved.



Focus Groups

- **Total of 36 participants**
- 15 Participants - Coastal Horizons
 - 6 Female (2 African American and 4 White)
 - 9 Male (1 African American, 6 White and 2 Latino)
- 21 Participants
 - 12 Female (11 African American and 1 White)
 - 9 Males (All African American)

By Zip Code

The warmer colors indicate the highest responses to the Resident Survey. All Township % meet the Sample Frame reflecting their proportion of Brunswick County's population.

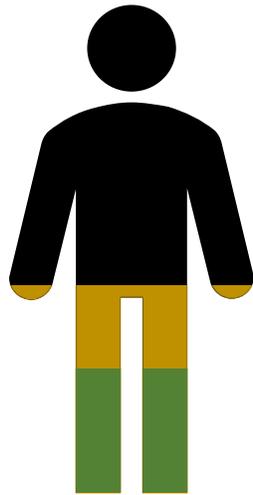


Demographics – Sex/ Age of Brunswick County

SEX/GENDER



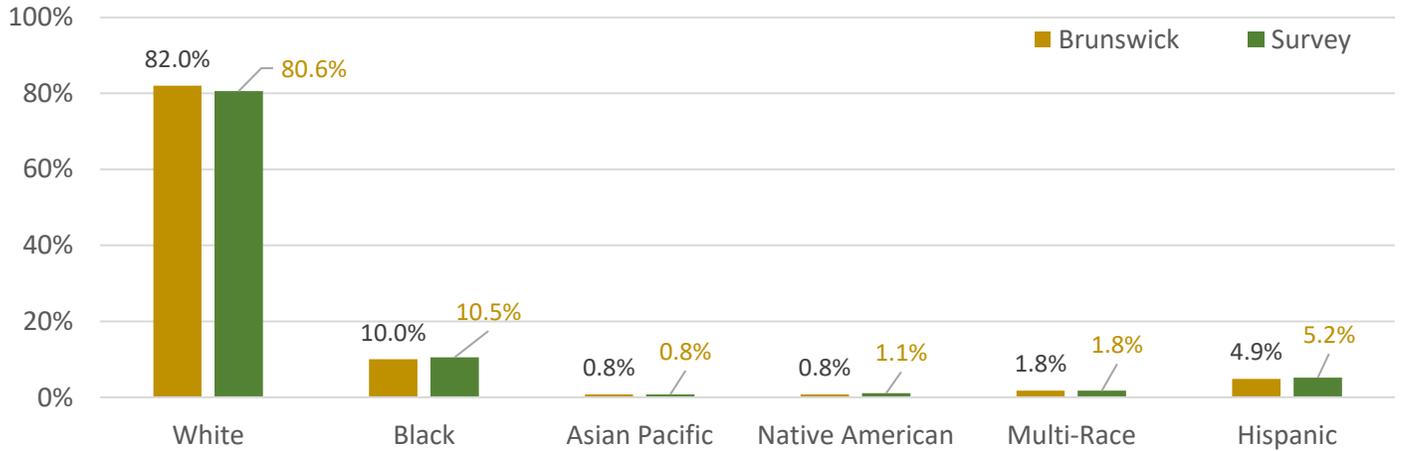
FEMALE
 Median Age is 56
 69.7% - Survey Response
 52.3% - Brunswick
 51.4% - North Carolina



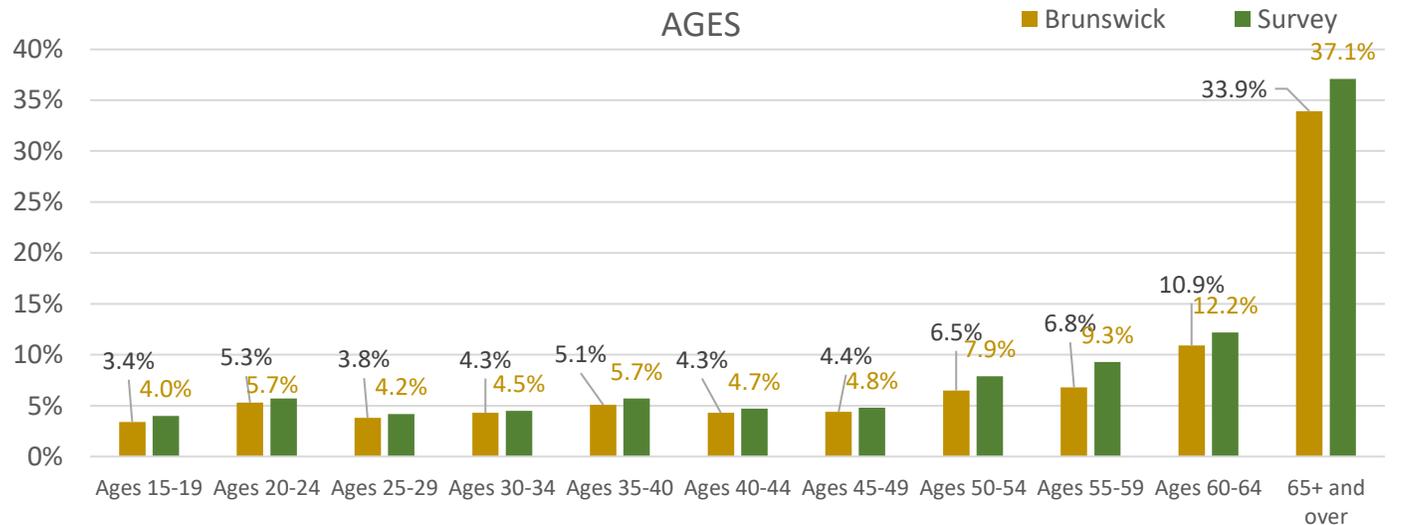
MALE
 Median Age is 53.1
 30.3% - Survey Response
 47.7% - Brunswick
 48.7% - North Carolina

8 would not respond: 1%

RACE/ETHNICITY



AGES



Health Indicators – Chronic Disease - Cancer

| Cancer Incidence (new cases) 2014-2018 | Brunswick County, NC | State of North Carolina | United States |
|--|----------------------|-------------------------|---------------|
| New Cases | 1,082 | 56,784 | 1,703,249 |
| Cancer Incidence Rate (per 100,000 population) | 473.0 | 468.9 | 448.6 |
| White: New Cancer cases | 471.6 | 465.6 | 451 |
| Black: New Cancer cases | 432.4 | 460.7 | 444.9 |

Source: State Cancer Profiles, 2014-2018

41.3% of CHOS respondents reported Cancer care as the most important service.

| Cancer Incidence (new cases) by Type 2014-2018 | Brunswick County, NC | Cancer incidence rate per 100,000 | Cancer Incidence (new cases) by Type 2014-2018 | State of North Carolina | Cancer incidence rate per 100,000 |
|--|----------------------|-----------------------------------|--|-------------------------|-----------------------------------|
| 1. Lung & Bronchus (all stages) | 163 | 65.3 | 1. Breast (all Stages) | 8,713 | 136.5 |
| 2. Breast (all Stages) | 154 | 134.3 | 2. Lung & Bronchus (all stages) | 8,252 | 66.3 |
| 3. Prostate (all stages) | 142 | 104.9 | 3. Prostate (all stages) | 7,140 | 119.3 |
| 4. Colon & Rectum (all stages) | 81 | 38.6 | 4. Colon & Rectum (all stages) | 4,391 | 36.8 |
| 5. Melanoma of the Skin (all stages) | 80 | 33.8 | 5. Melanoma of the Skin (all stages) | 3,044 | 26.0 |

Source: State Cancer Profiles, 2014-2018

Health Indicators – Chronic Disease - Diabetes

| Diabetes Incidence (new cases) 2014-2018 | Brunswick County, NC | State of North Carolina | United States |
|--|----------------------|-------------------------|---------------|
| Adults with Diagnosed Diabetes (Age 20+) | 14,317 | 812,564 | 24,189,620 |
| Age-Adjusted Diabetes Rate | 8.2% | 9.0% | 9.0% |
| Males with Diabetes | 7,158 | 394,075 | 12,120,715 |
| Males: Diabetes % | 8.6% | 9.4% | 9.5% |
| Females with Diabetes | 7,159 | 418,485 | 12,068,861 |
| Female: Diabetes % | 7.8% | 8.8% | 8.5% |

Source: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, 2019

26.6% of CHOS Respondents reported Diabetes Care as the most important service.

Health Indicators – Chronic Disease – Heart Disease

| Coronary Heart Disease Deaths, 2016-2020 | Brunswick County, NC | | State of North Carolina | | United States | |
|--|----------------------|---------|-------------------------|---------|---------------|---------|
| Five-year total deaths from CHD | 1,018 | | 51,983 | | 1,838,830 | |
| CHD Crude Death Rate (per 100,000) | 147.6 | | 100.2 | | 112.5 | |
| CHD Age-Adjusted Death Rate (per 100,000) | 83.0 | | 82.9 | | 91.5 | |
| Gender Disparity, CHD | Males | Females | Males | Females | Males | Females |
| CHD Age-Adjusted Death Rate (per 100,000) | 113.9 | 56.5 | 116.9 | 56.8 | 125.3 | 64.6 |
| Race/Ethnic Disparity, CHD | White | Black | White | Black | White | Black |
| Age-Adjusted CHD Deaths, By Race/Ethnicity | 83.4 | 97.4 | 83.6 | 89.0 | 93.8 | 108.1 |

Source: Centers for Disease Control and Prevention, CDC-National Vital Statistics System, 2016-2020

| Heart Disease Medicare Fee-For-Service Beneficiaries, 2018 | Brunswick County, NC | State of North Carolina | United States |
|--|----------------------|-------------------------|---------------|
| Medicare FFS Beneficiaries with Heart Disease | 8,319 | 284,907 | 8,979,902 |
| Heart Disease Rate | 24.5% | 24.5% | 26.8% |

Source: Centers for Medicare & Medicaid Services, CMS-Chronic Conditions Warehouse, 2018

| Hypertension Medicare Fee-For-Service Beneficiaries, 2018 | Brunswick County, NC | State of North Carolina | United States |
|---|----------------------|-------------------------|---------------|
| Medicare FFS Beneficiaries with High Blood Pressure | 21,073 | 697,259 | 19,162,770 |
| High Blood Pressure Rate | 62.1% | 60.0% | 57.2% |

Source: Centers for Medicare & Medicaid Services, CMS-Chronic Conditions Warehouse, 2018

36% of CHOS Respondents reported Heart Disease as the most important service.

36.1% of CHOS Respondents reported High Blood Pressure as the most important service.

Health Indicators – Chronic Disease – Asthma

| Asthma | Brunswick County, NC | | State of North Carolina | | United States | |
|--|----------------------|-----------|-------------------------|-----------|---------------|-----------|
| Medicare FFS Beneficiaries with Asthma | 1,411 | | 55,316 | | 1,665,694 | |
| Asthma Rate | 4.2% | | 4.8% | | 5.0% | |
| Asthma Disparity by Age | Below 65 | 65 years+ | Below 65 | 65 years+ | Below 65 | 65 years+ |
| | 7.2% | 3.9% | 7.6% | 4.2% | 7.5% | 4.5% |

Source: Centers for Medicare & Medicaid Services, CMS-Chronic Conditions Warehouse, 2018

42.8% of CHOS Respondents reported Asthma/Lung Disease Care as the most important service.

Health Indicators – Risk Factors for Chronic Disease – Alcohol Use

| Alcohol Use (18 years+) | Brunswick County, NC | State of North Carolina | United States |
|--|----------------------|-------------------------|---------------|
| Adults reporting excessive drinking | 22,233 | 1,353,411 | 50,612,058 |
| % of Adults reporting excessive drinking | 18.92% | 16.54% | 19.79% |
| Percent of Adults Binge Drinking in the Past 30 days | 12.80% | 15.44% | 16.70% |

Source: Centers for Disease Control & Prevention, Behavioral Risk Factor Surveillance System, 2019

Definitions:

- **Excessive drinking:** Percentage of men who report more than two drinks per day for men or more than one per day for women.
- **Binge drinking:** Percentage of the population who report at least one binge drinking episode involving five or more drinks for men or four or more for women in a 2-hour period over the past 30 days.

Health Indicators – Risk Factors for Chronic Disease – Tobacco Use

| Current Tobacco Use (18 years+) | Brunswick County, NC | State of North Carolina | United States |
|---|----------------------|-------------------------|---------------|
| Adults reporting current tobacco use (crude rate) | 16.90% | 18.15% | 15.30% |
| % of Adults reporting Current tobacco use (age-adjusted rate) | 18.70% | 18.65% | 15.70% |

Source: Centers for Disease Control & Prevention, Behavioral Risk Factor Surveillance System, 2019

Health Indicators – Risk Factors for Chronic Disease – Physical Inactivity

| Physical Inactivity | Brunswick County, NC | State of North Carolina | United States |
|--|----------------------|-------------------------|---------------|
| Adults with no leisure time physical activity | 16,422 | 1,775,644 | 54,200,862 |
| % of Adults with no leisure time physical activity | 20.1% | 21.8% | 22.0% |
| Gender Disparity | | | |
| Males with no leisure time physical activity | 11,780 | 794,551 | 24,675,186 |
| Males: % with no leisure time physical activity | 19.4% | 20.6% | 20.8% |
| Females with no leisure time physical activity | 14,642 | 981,102 | 29,525,666 |
| Female: % with no leisure time physical activity | 20.7% | 22.9% | 23.1% |

Source: Centers for Disease Control & Prevention, Behavioral Risk Factor Surveillance System, 2019

Health Indicators – Risk Factors for Chronic Disease – Obesity

| Obesity ¹ | Brunswick County, NC | | | State of North Carolina | | | United States | | |
|---|-----------------------------|--------------|-----------------|--------------------------------|--------------|-----------------|----------------------|--------------|-----------------|
| Adult Obesity (18+) | 26.0% | | | 32.8% | | | 41.9% | | |
| Overweight and Obese Adolescents (10-17) | 24.2% | | | 30.7% | | | 19.7% | | |
| Obesity Disparity by Child/Adolescents and by Age ² | | | | | | | 2-5 years | 6-11 | 12-18 |
| | 20.2% | | | 22.4% | | | 12.7% | 20.7% | 22.2% |
| Obesity Disparity by Child/Adolescents and Race/Ethnicity | White | Black | Hispanic | White | Black | Hispanic | White | Black | Hispanic |
| | 17.2% | 26.9% | 28.3% | 18.1% | 29.2% | 28.6% | 16.6% | 24.8% | 26.2% |

Sources: Centers for Disease Control & Prevention, Behavioral Risk Factor Surveillance System, 2019
Centers for Disease Control & Prevention, National Center for Health Statistics, 2020

Health Indicators – Access to Healthcare - Uninsured

| ACCESS: UNINSURED | Brunswick County, NC | North Carolina | U.S. |
|--|----------------------|----------------|-------|
| Uninsured Adults (18-64 years)-2019 | 15.7% | 15.5% | 14.5% |
| Uninsured Children (0-17 years)-2019 | 6.6% | 5.4% | 5.7% |
| Population receiving Medicaid, 2016-2020 | 16.6% | 20.1% | 22.0% |

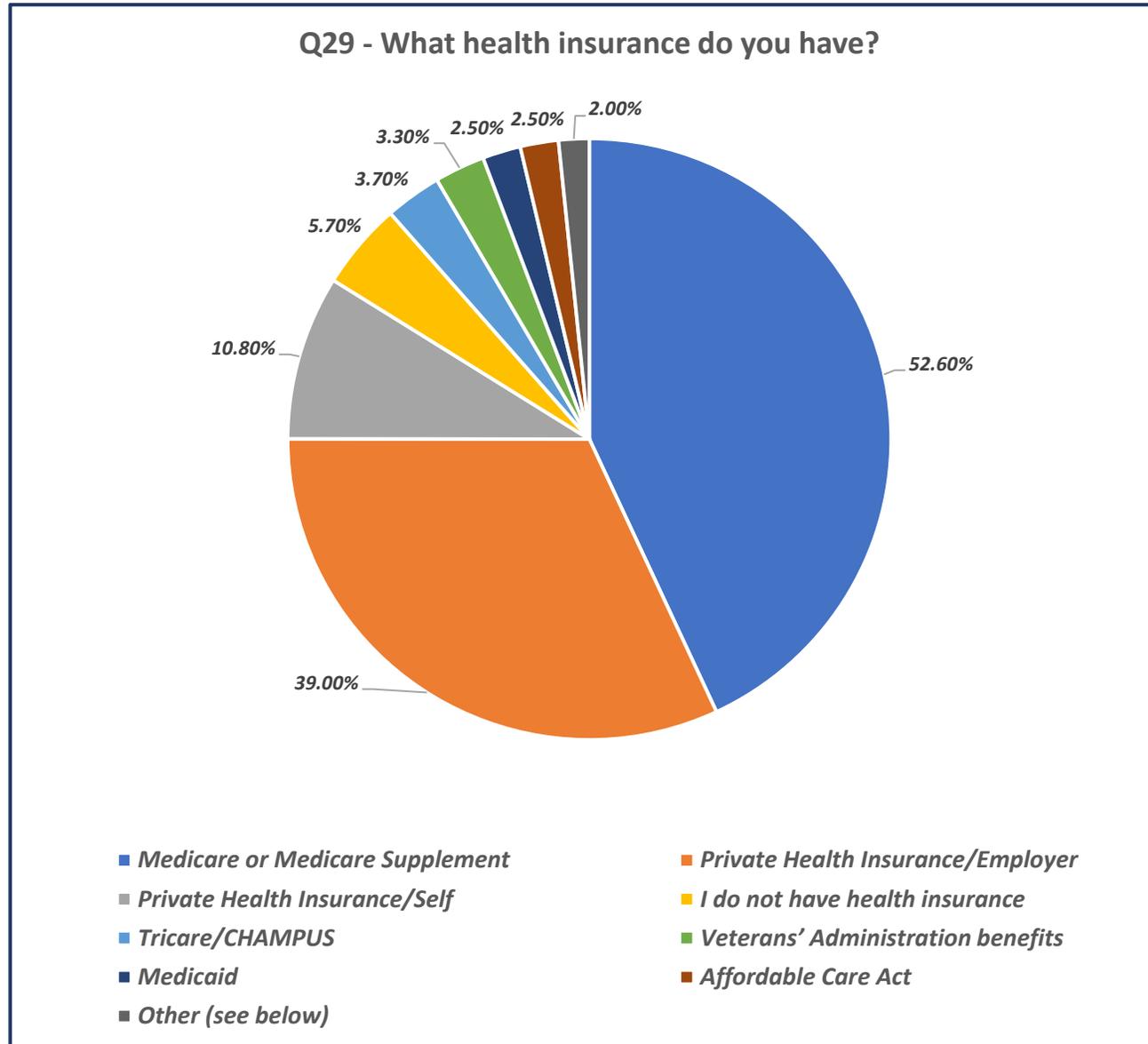
Source: U.S. Census Bureau, Small Area Health Insurance Estimates, 2019

| ACCESS: UNINSURED | BRUNSWICK COUNTY (ALL) | 28420 (Ash) | 28452 (Longwood) | 28462 (Supply) | 28470 (Shalotte) | 28472 (Whiteville) |
|---------------------------------|------------------------|-------------|------------------|----------------|------------------|--------------------|
| % Uninsured Adults | 15.7% | 15.7% | 15.7% | 15.7% | 15.7% | 20.6% |
| % Uninsured Children | 6.6% | 5.6% | 5.6% | 5.6% | 5.6% | 6.2% |
| % Population receiving Medicaid | 16.6% | 25.2% | 54.1% | 21.0% | 27.2% | 33.7% |

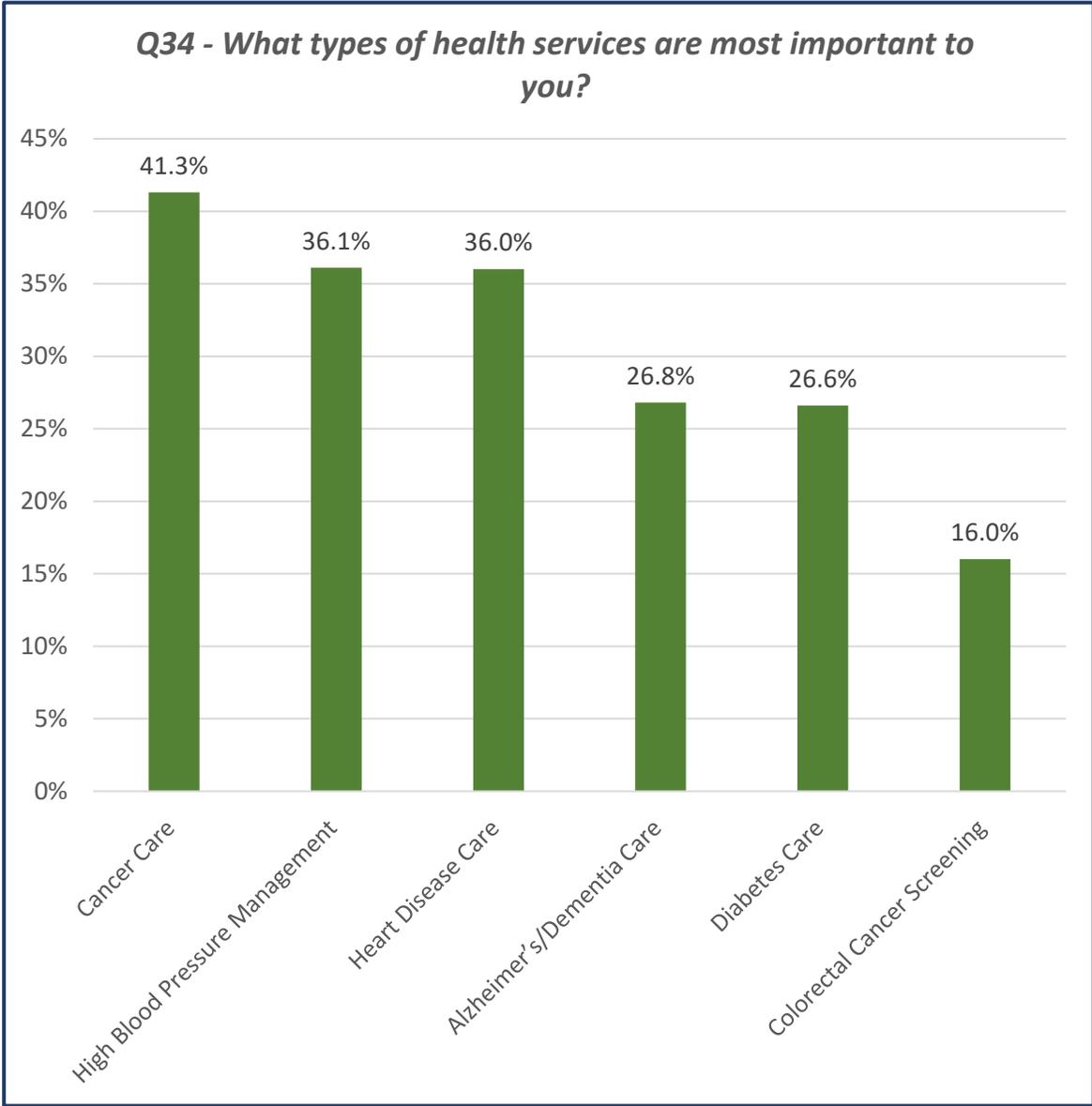
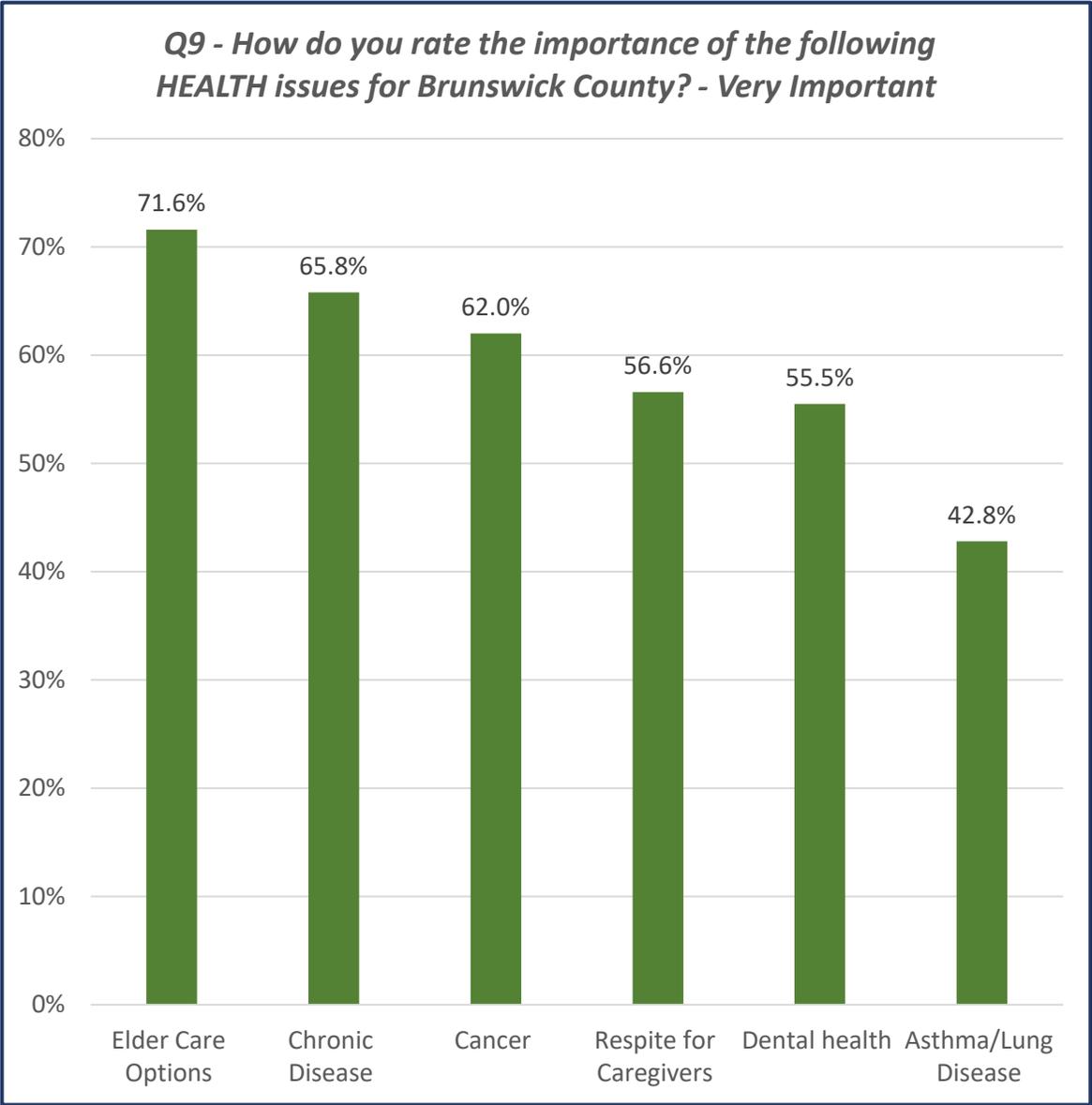
Disparities:

- The rates of uninsured children are especially high among Hispanic children, undocumented children, and children in families with lower incomes.
- More than half of American Indian/Alaska Native, Black, multi-racial, and Hispanic children rely on Medicaid and CHIP as their source of health coverage.

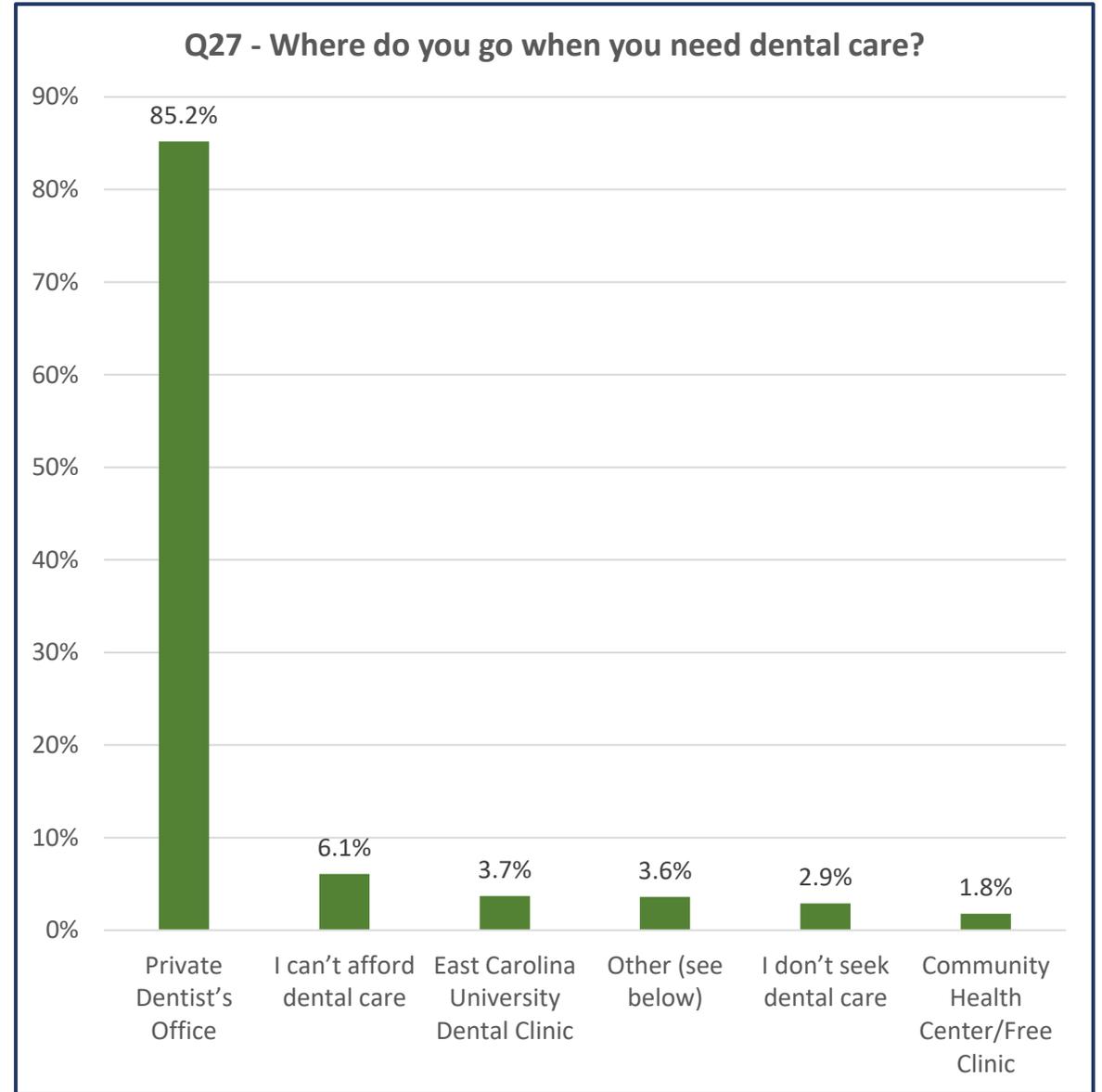
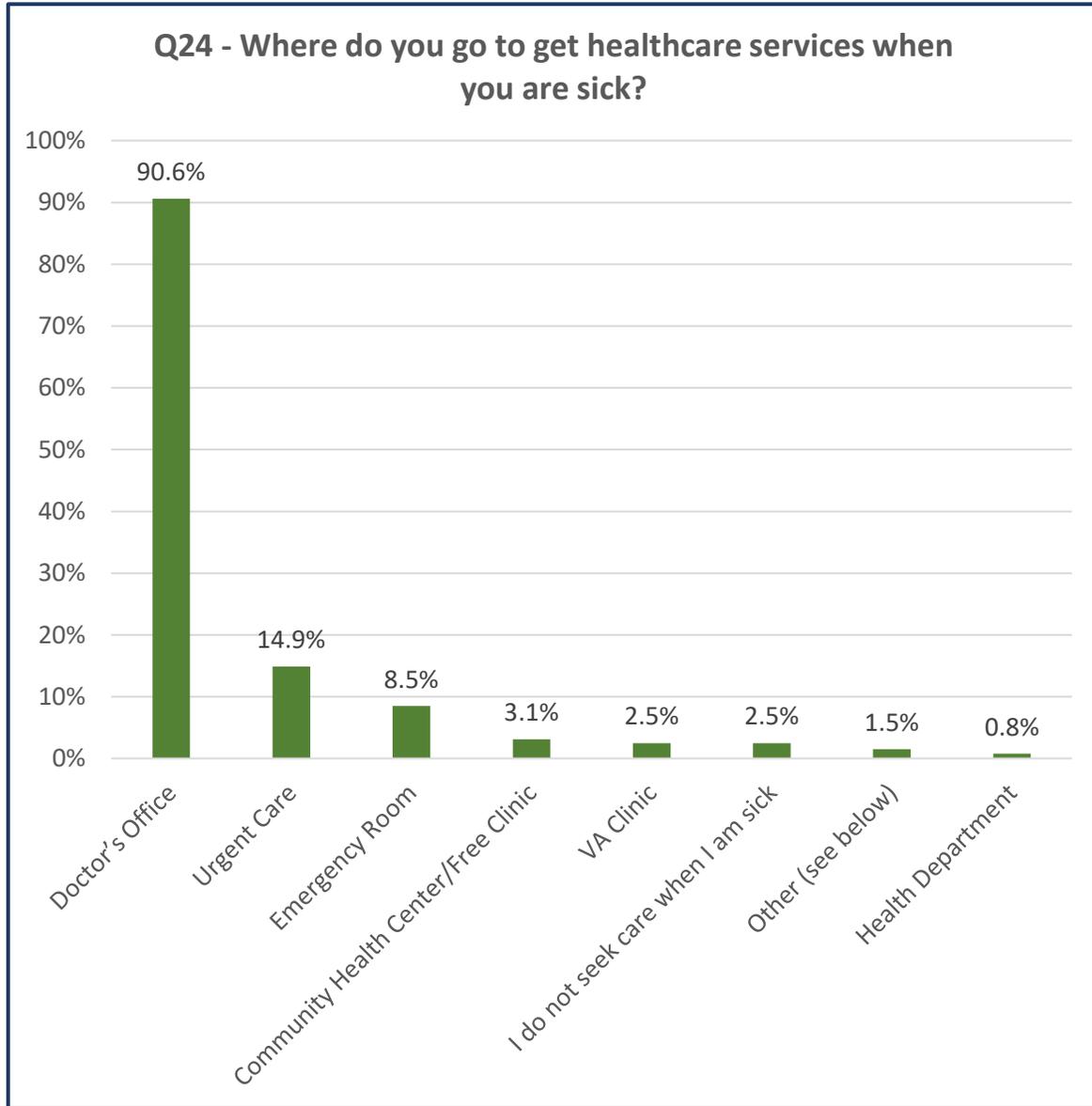
Health Services – Insurance – Primary Research



Health Indicators – Important Health Issues and Health Services – Primary Research

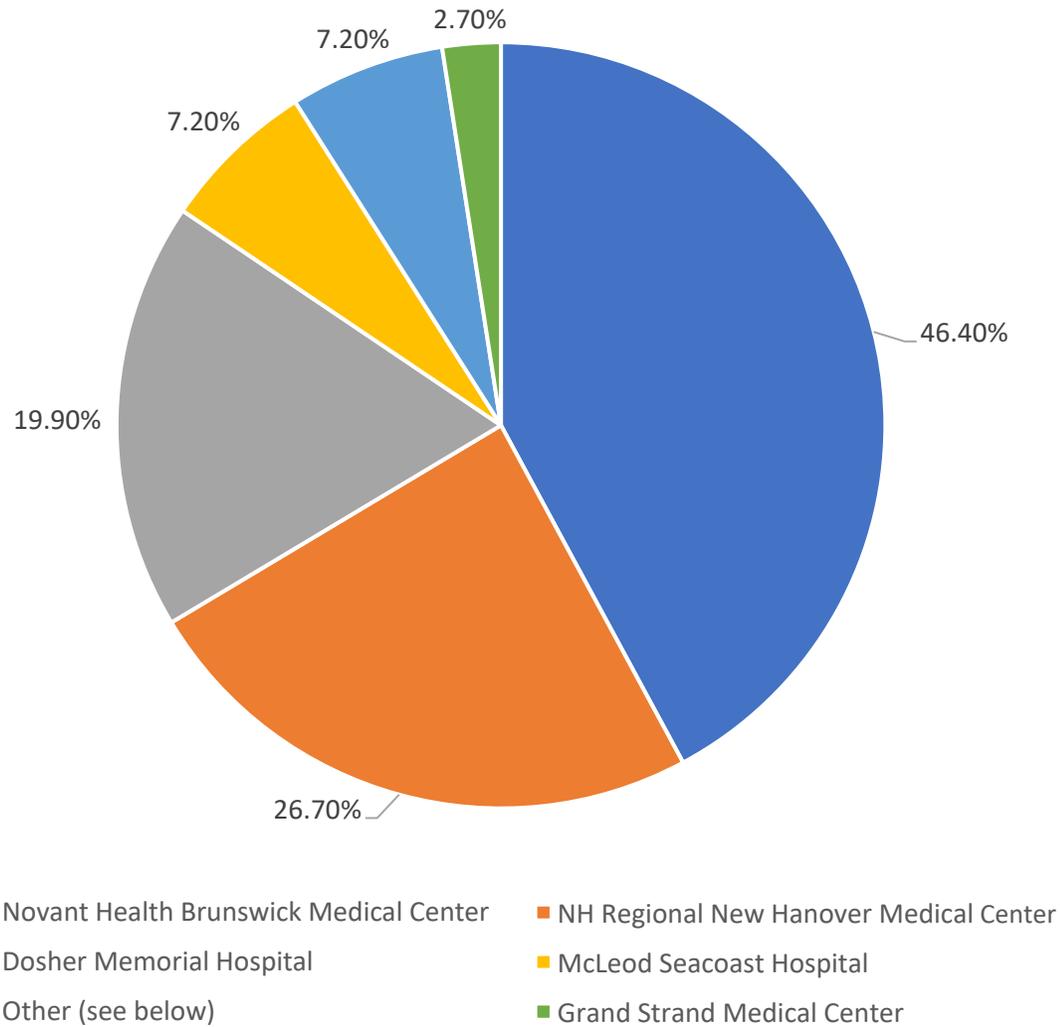


Health Indicators – Access to Healthcare – Primary Research

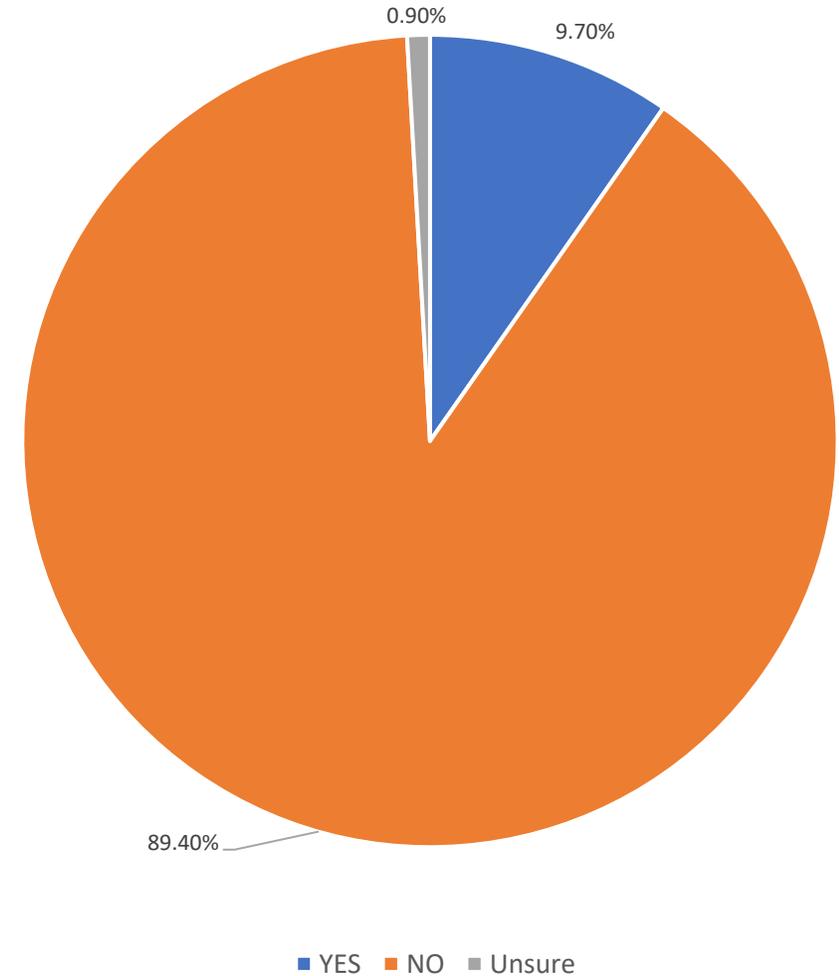


Health Services – Hospital Utilization – Primary Research

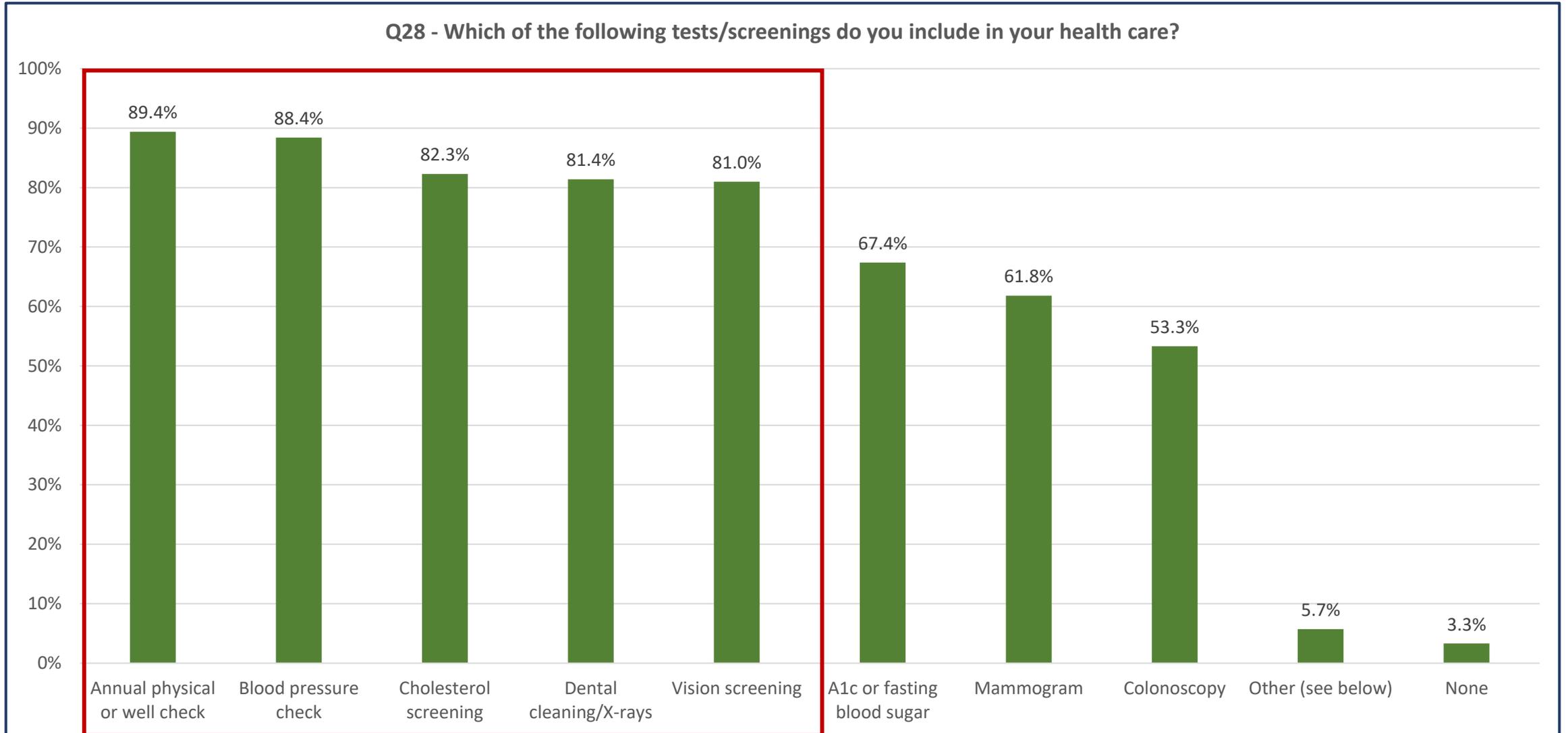
Q25 - Which Hospital do you primarily use for care?



Q26 - In the past year have you gone to the Emergency Room for non-urgent care?



Health Services – Preventable Screening – Primary Research



Health Services – Maternal Child Health

| Infant Deaths | Brunswick County, NC | | | State of North Carolina | | | United States | | |
|--|----------------------|-------|----------|-------------------------|-------|----------|---------------|-------|----------|
| Infant deaths (within 1 year) per 1,000 live births. | 9 | | | 803 | | | 19,582 | | |
| Infant Death rate | 5.4 | | | 6.9 | | | 5.6 | | |
| DISPARITY | White | Black | Hispanic | White | Black | Hispanic | White | Black | Hispanic |
| Infant Deaths by Race/Ethnicity | 3 | 5 | 1 | 297 | 366 | 112 | 8,603 | 5,821 | 5,770 |
| Infant Death Rate | 4.1 | 7.0 | 1.4 | 4.8 | 12.8 | 5.8 | 4.5 | 10.6 | 5.0 |

Source: North Carolina Vital Statistics System and Centers for Disease Control, National Vital Statistics, 2014-2020

| Pre-Term Births | Brunswick County, NC | | | State of North Carolina | | | United States | | |
|------------------------------------|----------------------|-------|----------|-------------------------|-------|----------|---------------|-------|----------|
| % Live Births born Pre-term | 4.5% | | | 10.8% | | | 5.6% | | |
| DISPARITY | White | Black | Hispanic | White | Black | Hispanic | White | Black | Hispanic |
| Pre-Term Birth % by Race/Ethnicity | 4.2% | 6.3% | 3.7% | 9.4% | 14.2% | 9.5% | 9.2% | 14.2% | 9.8% |

Source: North Carolina Vital Statistics System and Centers for Disease Control, National Vital Statistics, 2014-2020

| Late Entry into Prenatal Care | Brunswick County, NC | | | State of North Carolina | | | United States | | |
|--|----------------------|-------|----------|-------------------------|-------|----------|---------------|-------|----------|
| No or Late Prenatal Care (after first Trimester) | 25.6 | | | 24% | | | 19.3 | | |
| DISPARITY | White | Black | Hispanic | White | Black | Hispanic | White | Black | Hispanic |
| Teen births by Race/ Ethnicity | 24.3 | 23.5 | 37.8 | 14.6 | 27.2 | 28.2 | 13.5 | 28.2 | 29.6 |

Source: <https://schs.dph.ncdhhs.gov/schs/births/babybook/2021/brunswick.pdf>

Health Services – Maternal Child Health

Definition: Infant weighed less than 2,500 grams (5 pounds, 8 ounces) at birth.

| Low Birth Weight Infants | Brunswick County | North Carolina | United States |
|--------------------------|------------------|----------------|---------------|
| Total Live Births | 7,143 | 836,612 | 26,896,859 |
| Low Birth Weight Births | 661 | 77,245 | 2,203,029 |
| LBW Rate, Percentage | 9.3% | 9.2% | 8.2% |
| DISPARITY | | | |
| Non-Hispanic White | 8.8% | 7.5% | 6.9% |
| Non-Hispanic Black | 13.5% | 14.4% | 13.6% |
| Hispanic | 8.0% | 7.3% | 7.3% |

Source: University of Wisconsin Population Health Initiative, County Health Rankings, 2014-2020

Source: <https://schs.dph.ncdhhs.gov/schs/births/babybook/2021/brunswick.pdf>

| Teen Births (15-19) Infants | Brunswick County, NC | | | State of North Carolina | | | United States | | |
|---|----------------------|-------|----------|-------------------------|-------|----------|---------------|-------|----------|
| Teen Birth Rate (per 1,000 live births) | 25.6 | | | 20.8 | | | 19.3 | | |
| DISPARITY | White | Black | Hispanic | White | Black | Hispanic | White | Black | Hispanic |
| Teen births by Race/ Ethnicity | 24.3 | 23.5 | 37.8 | 14.6 | 27.2 | 28.2 | 13.5 | 28.2 | 29.6 |

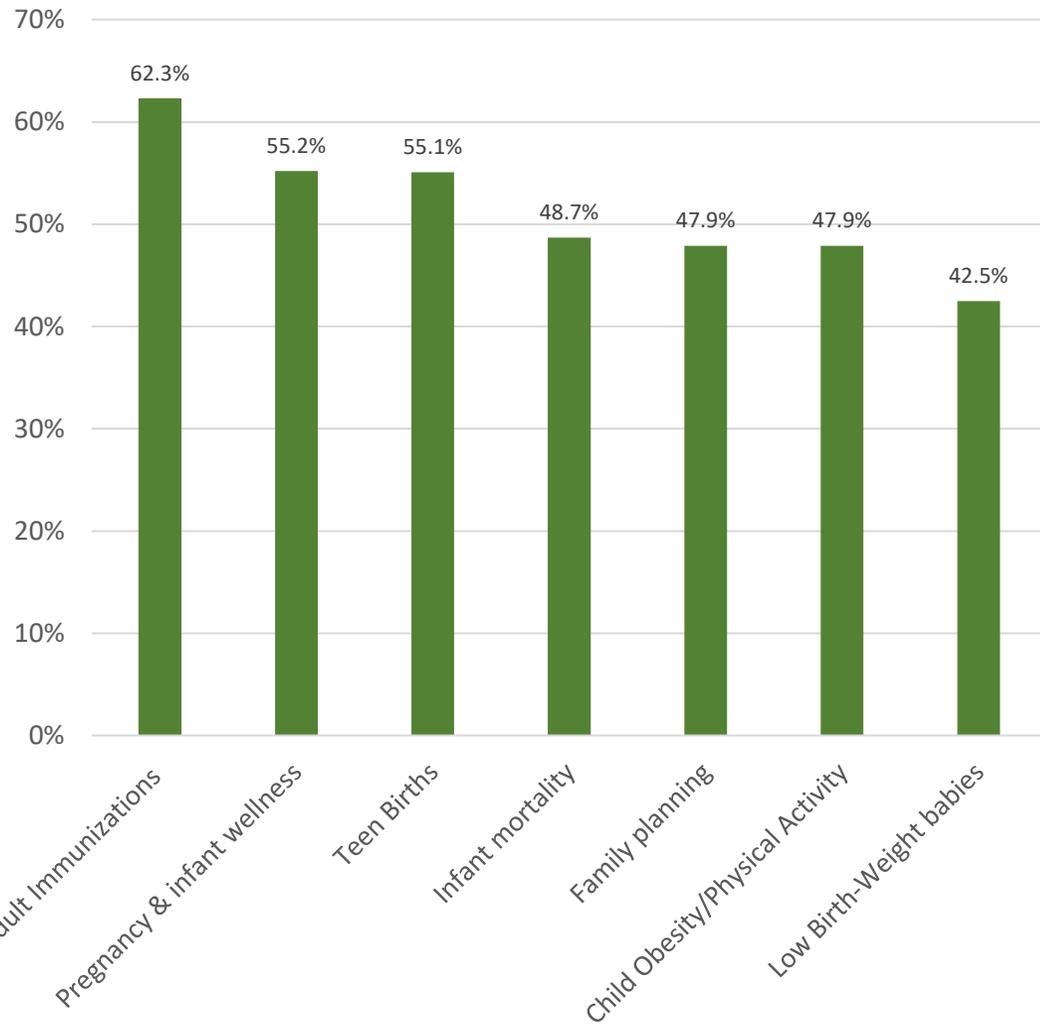
Source: Centers for Disease Control and Prevention, CDC-National Vital Statistics System, 2014-2020.

Health Services – Maternal Child Health – Risk Factors

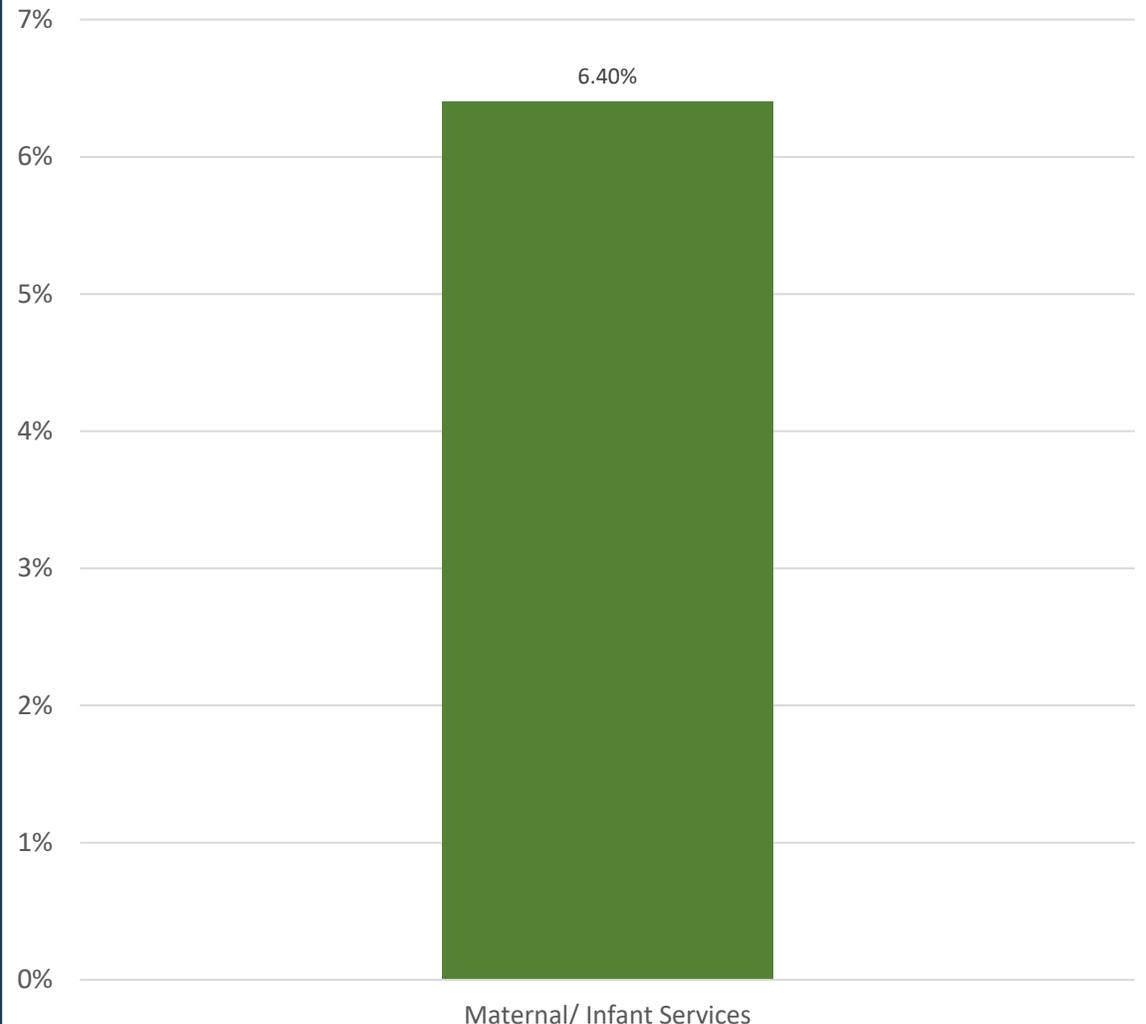
| MATERNAL AGE | SMOKING | MULTIPLE BIRTHS | BIRTH SPACING | OBESITY | HEALTH INSURANCE COVERAGE |
|---|---|---|---|---|--|
| <p>During 2018-2020 (average) in the United States, preterm birth rates were highest for women ages 40 and older (14.4%), followed by women under age 20 (10.4%), ages 30-39 (10.3%) and ages 20-29 (9.6%).</p> | <p>In 2020, 14.8% of women of childbearing age reported smoking in the United States. Smoking is a significant factor contributing to preterm births.</p> | <p>In the United States in 2020, 8.4% of singleton births were preterm, compared to 60.9% of multiple births. Multiple births represent 3.2% of live births in the United States. Current multifetal pregnancy is one of the most consistently identified risk factors for preterm birth.</p> | <p>Birth spacing, or inter-pregnancy interval, is the timing between live birth and the beginning of the next pregnancy. Birth spacing of less than 18 months increases the risk of preterm birth and other adverse outcomes. In United States, 31.5% of pregnancies with a prior live birth have a birth spacing of less than 18 months (2018-2020 average).</p> | <p>While obesity does not directly cause preterm birth, it does increase rates of medical complications (e.g., hypertension, diabetes) that contribute to preterm birth. In the United States, 31.1% of women of childbearing age were obese in 2020.</p> | <p>In 2020, about 1 in 9 women of childbearing age (11.6%) was uninsured in the United States. Health care before, during, and after pregnancy can help identify and manage conditions that contribute to preterm birth.</p> |

Health Services – Maternal Child Health – Primary Research

Q9 - How do you rate the importance of the following HEALTH issues for Brunswick County? - Important



Q34 - What types of health services are most important to you?



Health Indicators – Mental Health

| MH/Substance Use ER Visits | Brunswick County | North Carolina | United States |
|---|------------------|----------------|---------------|
| MH/Substance Use ER Visits per 100,000 population | 1,880.9 | 1,902.3 | 26,896,859 |
| Opiate Poisoning Deaths | 23.2 | 15.3 | 11.8 |

Source: NC Hospital Association, Special Data Request (ER visits) and North Carolina Public Health, <https://injuryfreenc.ncdhhs.gov/DataSurveillance/poisoning/DEATH-UnintentionalOpioidPoisoningsbyCounty-2008-2017.pdf>

| Rates of Depression | Brunswick County | North Carolina | United States |
|--|------------------|----------------|---------------|
| Rates of Depression per 100,000 population (Adults, 18+) | 21.2% | 20.8% | 19.5% |

Source: America's Health Rankings analysis of CDC, Behavioral Risk Factor Surveillance System, United Health Foundation, AmericasHealthRankings.org, accessed 2022.

Health Indicators – Mental Health – Social Network – Primary Research

Question 45: Share with us how often you?

| Share how often you: | NEVER | RARELY | SOMETIMES | OFTEN | ALWAYS |
|--|--------|--------|-----------|--------|--------|
| Talk on the phone with family, friends, neighbors | 1.02% | 5.75% | 25.32% | 44.12% | 23.79% |
| Get together with friends or relatives | 0.51% | 9.35% | 29.07% | 46.35% | 14.72% |
| Go to church or religious services | 26.16% | 22.94% | 18.04% | 14.56% | 18.30% |
| Join in social activities such as clubs, volunteer groups, athletic or school groups | 13.92% | 20.36% | 27.96% | 25.00% | 12.76% |
| Chat on the Internet or via Social Media | 13.14% | 14.18% | 27.06% | 33.38% | 12.24% |

Health Indicators – Mental Health

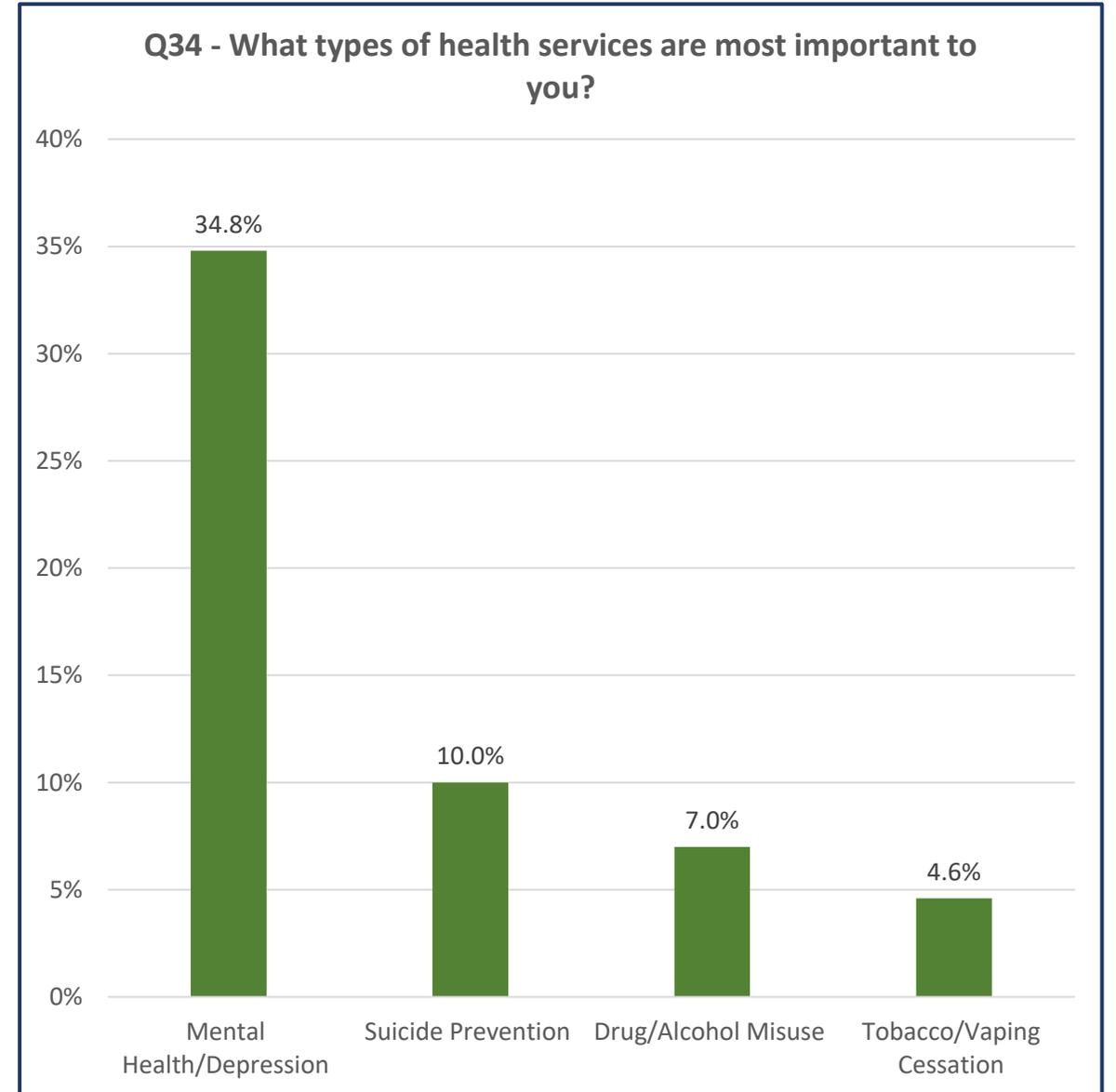
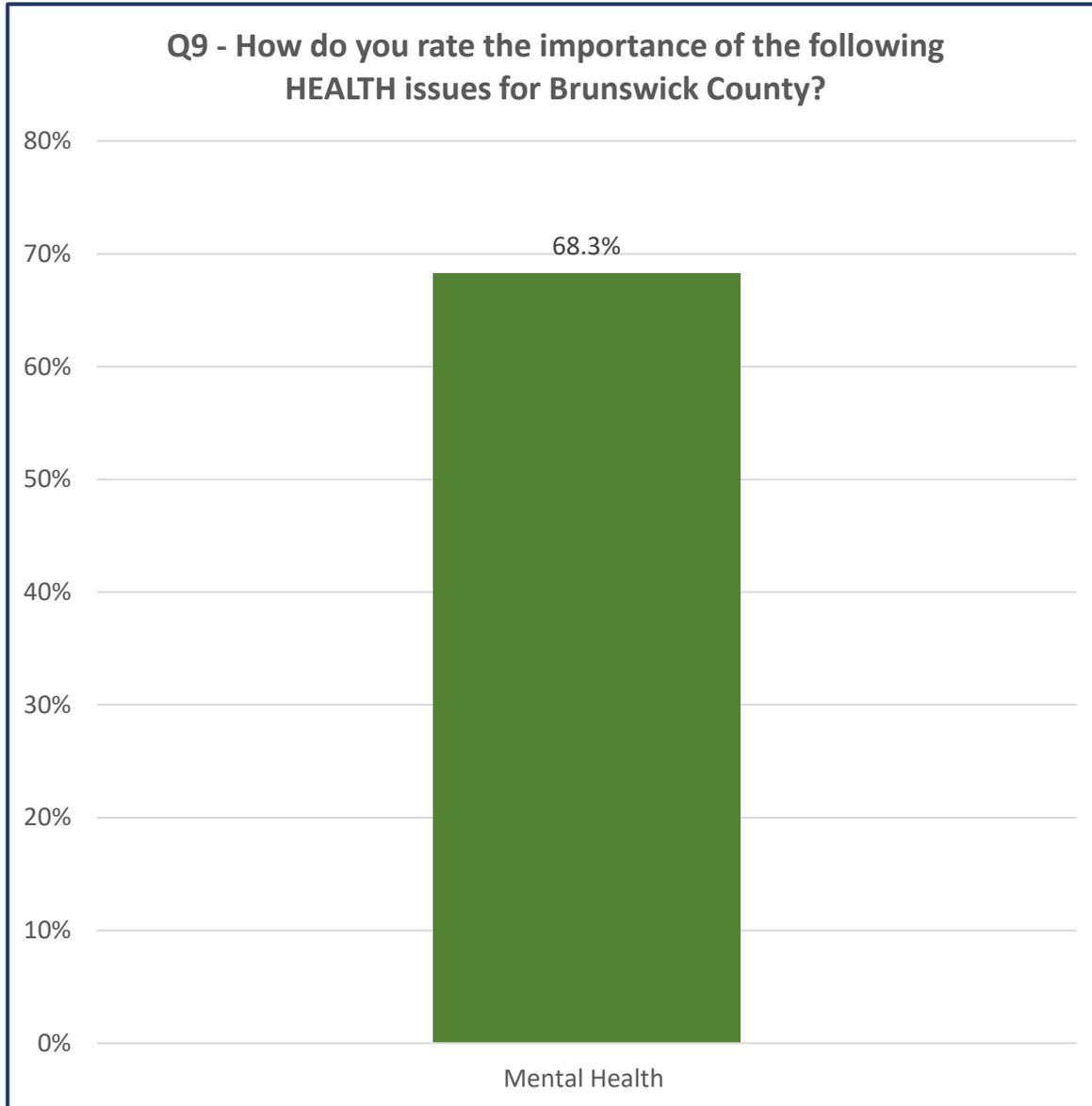
Q44 - Please tell us whether you 'strongly agree', 'agree', 'disagree' or 'strongly disagree' with the next few statements about substance use services.

| STATEMENT | STRONGLY AGREE | AGREE | NEUTRAL | DISAGREE | STRONGLY DISAGREE |
|---|----------------|-------|---------|----------|-------------------|
| In Brunswick County, substance use services are affordable | 1.50% | 6.90% | 11.40% | 8.50% | 4.90% |
| In Brunswick County, substance use services are accessible and easy to find | 1.70% | 8.90% | 10.50% | 9.60% | 6.40% |
| In Brunswick County, substance use services are high quality | 1.50% | 4.80% | 14.10% | 5.90% | 4.60% |

Q43 - In the past year, what prevented you from getting mental health care or substance use treatment?

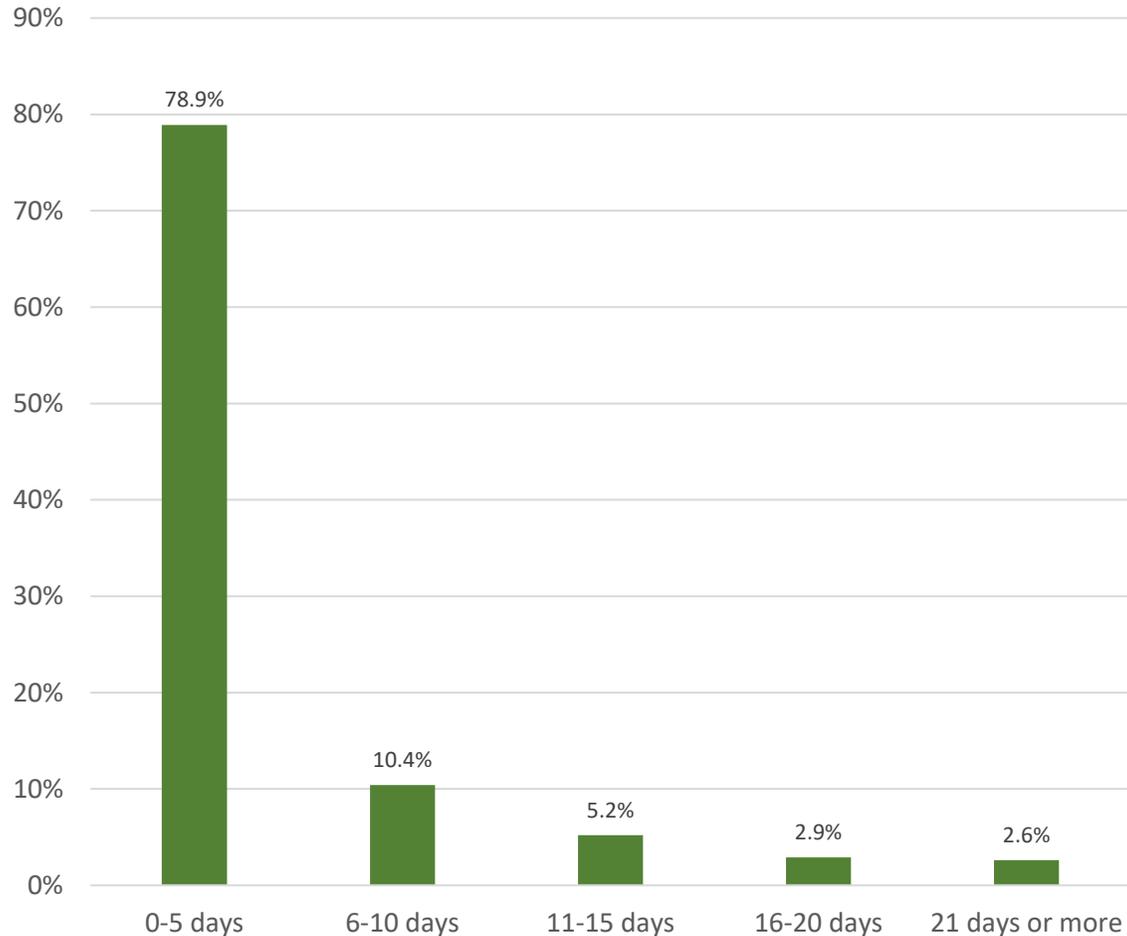
| STATEMENT | PERCENTAGE |
|---|------------|
| Does not apply/Didn't need it | 63.20% |
| Diagnosed, but did not seek mental health or substance use care | 11.30% |
| Cost was too high (private pay, co-pay or deductible) | 8.00% |
| Not enough providers | 7.80% |
| Didn't know where to go | 7.40% |
| Other (see below) | 7.30% |
| Health insurance didn't cover | 4.70% |
| Guilt or Shame about mental health/substance use issue | 4.50% |
| Work interferes with appointment times | 3.80% |
| Don't believe treatment will help | 3.40% |
| Provider doesn't accept my insurance | 3.10% |
| Not ready to face the problem | 3.10% |
| No transportation | 1.50% |

Health Indicators – Mental Health – Primary Research

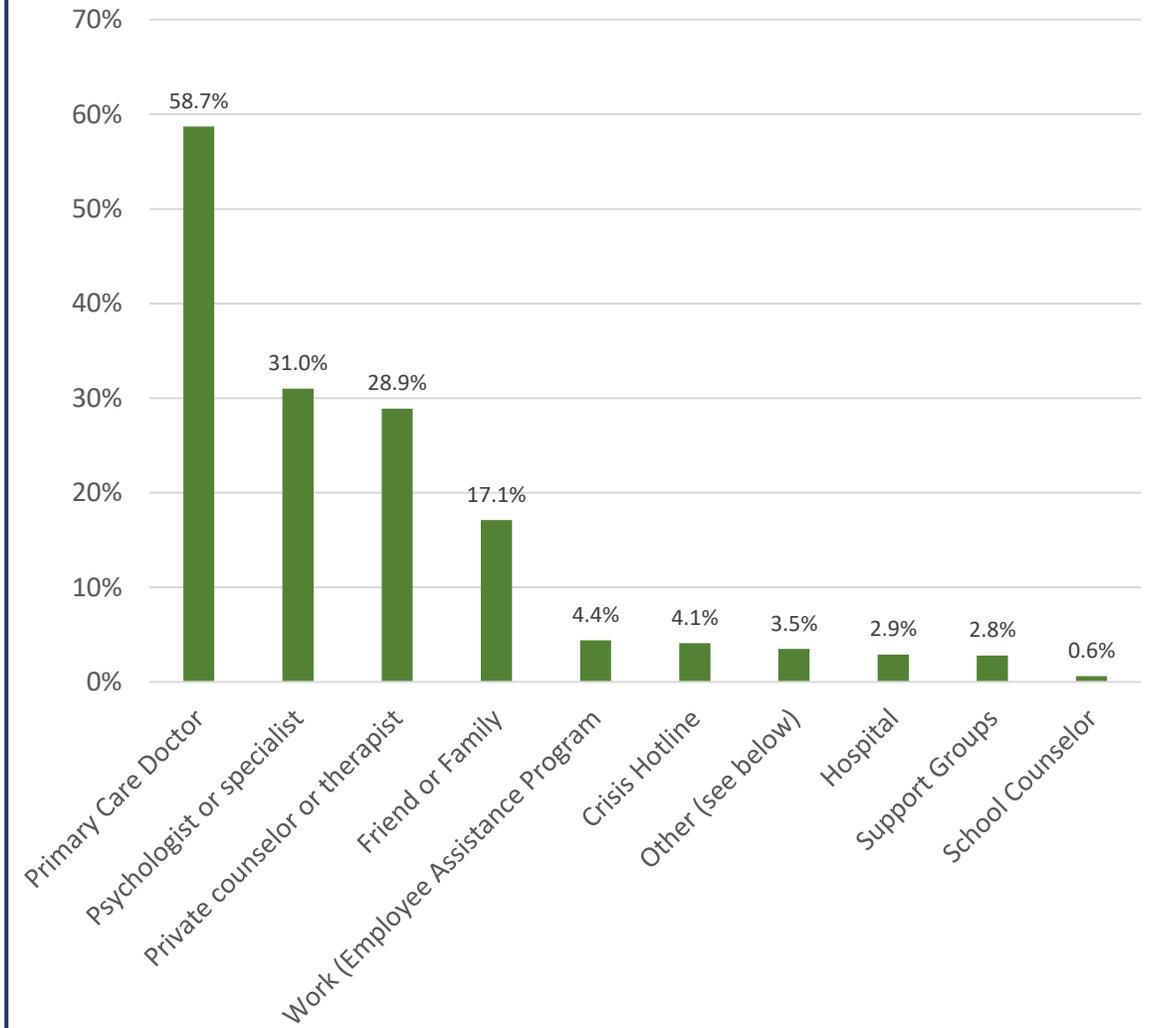


Health Indicators – Mental Health – Primary Research

Q37 - Thinking about your mental health, which includes stress, depression, anxiety, and problems managing emotions, how many days during the past month was your mental health 'NOT GOOD'?

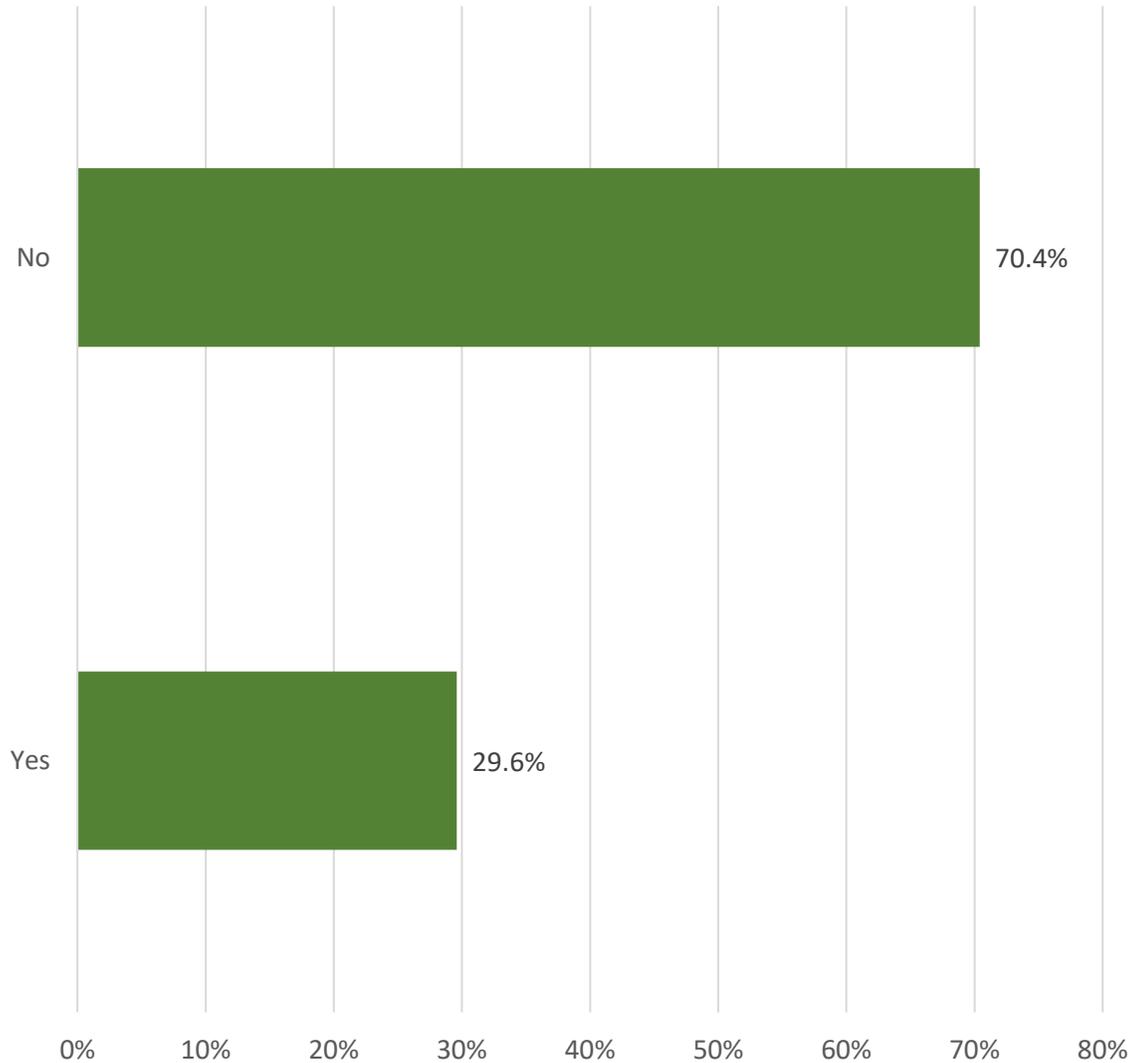


Q42 - Where would you go if you needed help for your mental health and wellness?

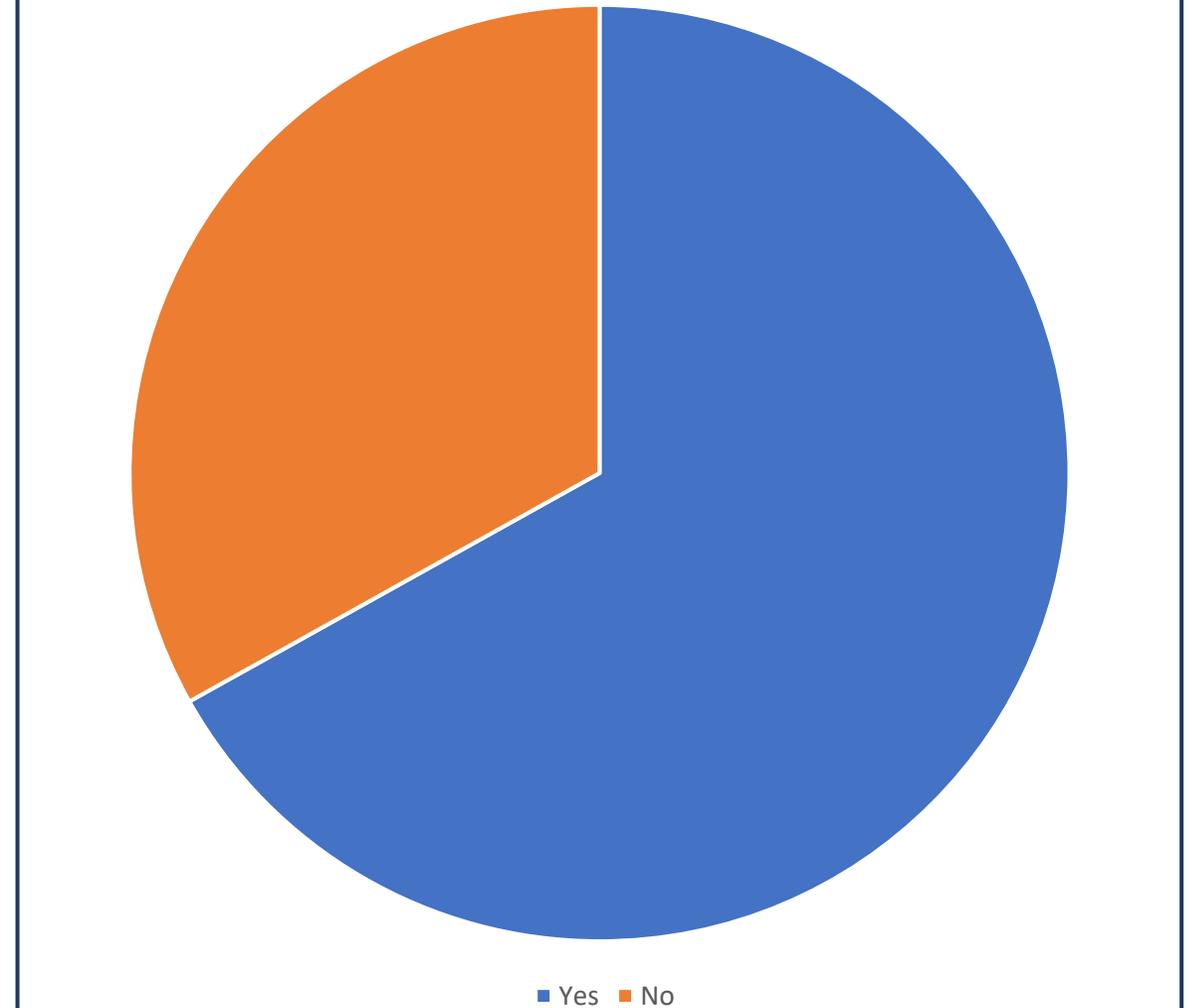


Health Indicators – Mental Health – Primary Research

Q38 Have you had a traumatic childhood event?

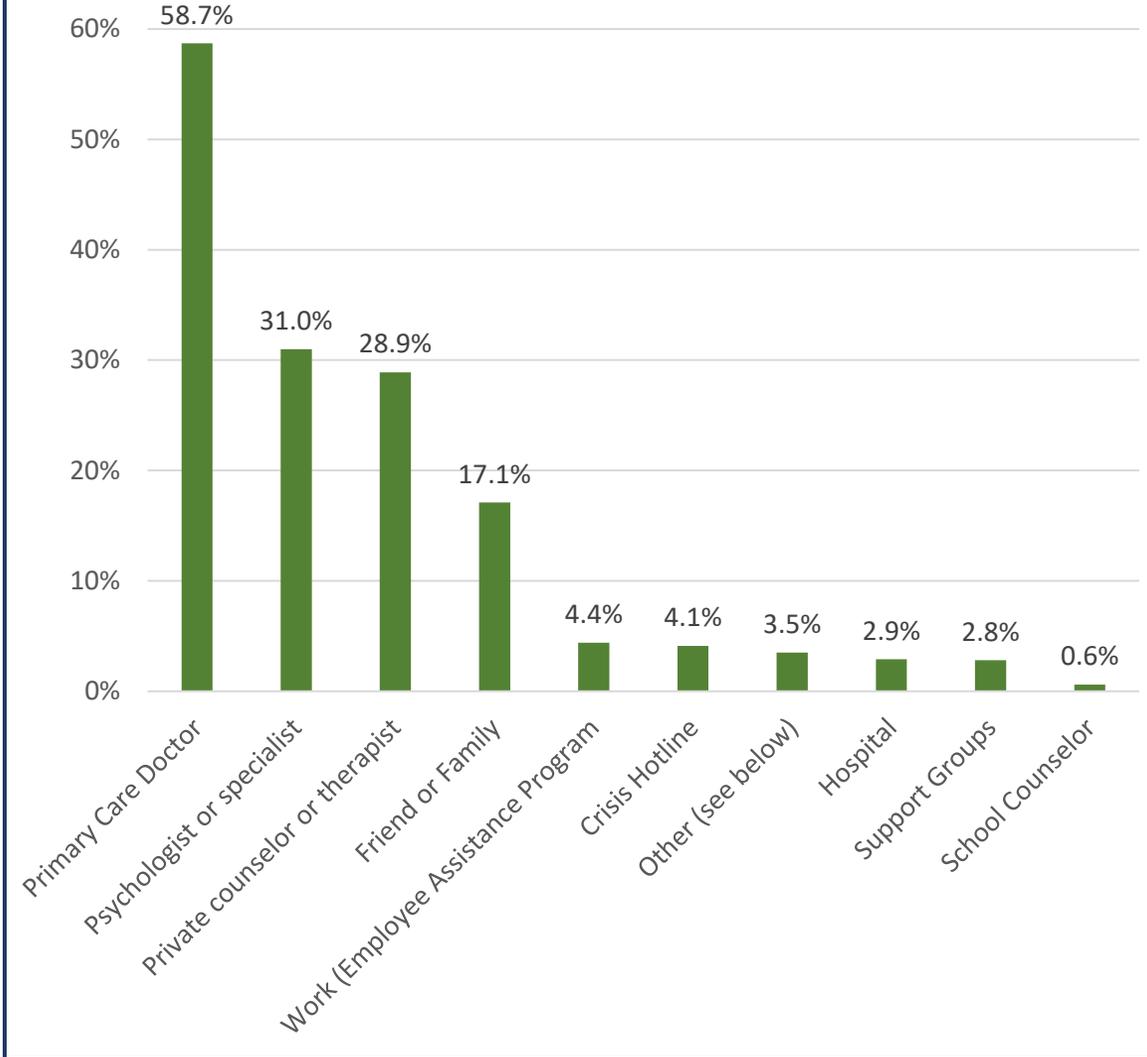


Q39 If you answered YES to Question #38, has that negatively impacted your mental health?

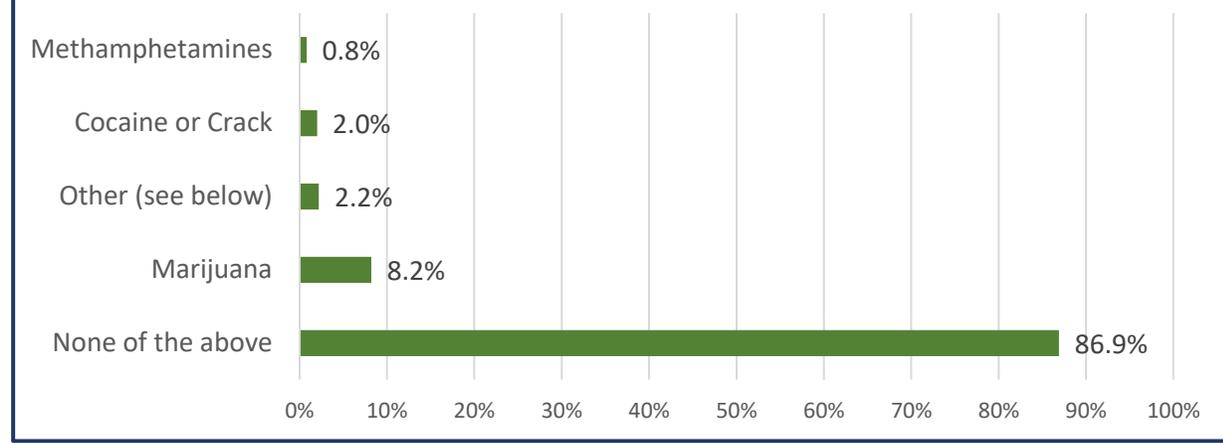


Health Indicators – Mental Health – Primary Research

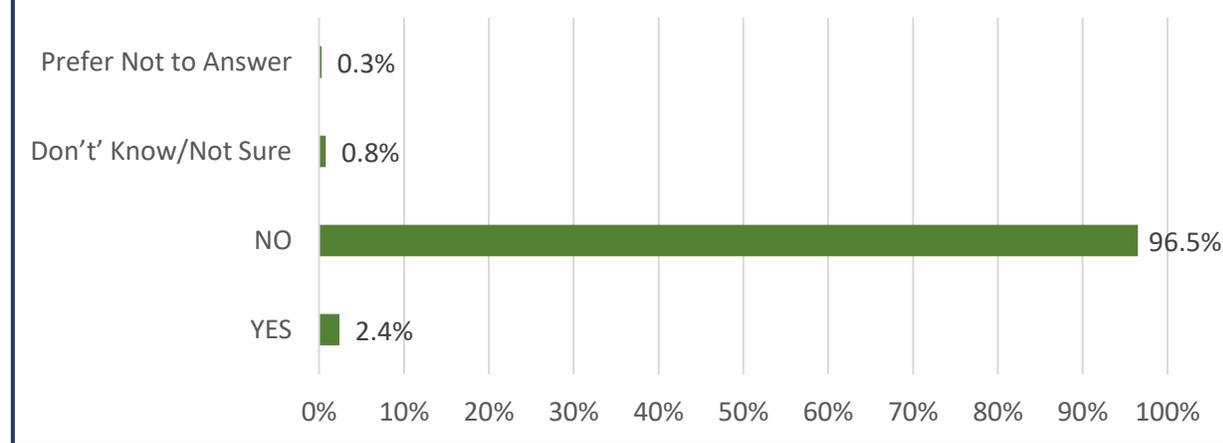
Q42 - Where would you go if you needed help for your mental health and wellness?



Q40 - Have you used any of the following illicit drugs in the past year?



Q41 Have you taken medication not prescribed to you or in a way other than prescribed in the past year?



Social Indicators – Education

| LEVEL OF EDUCATIONAL ATTAINMENT | Brunswick County, NC | State of North Carolina | United States |
|--|-----------------------------|--------------------------------|----------------------|
| No High School Diploma | 8.0% | 11.5% | 11.5% |
| High School Diploma Only | 29.1% | 25.5% | 26.7% |
| Some College | 21.9% | 21.1% | 20.3% |
| Associate's degree | 11.6% | 9.9% | 8.6% |
| Bachelor's degree | 18.9% | 20.4% | 20.2% |
| Graduate degree | 10.5% | 11.6% | 12.7% |

Source: U.S. Census Bureau, American Community Survey, 2016-2020

Social Indicators – Income

| INCOME LEVEL | Brunswick County, NC | State of North Carolina | United States |
|------------------------------------|----------------------|-------------------------|---------------|
| Per Capita Income | \$34,528 | \$31,993 | \$35,384 |
| Median Household Income | \$59,673 | \$56,642 | \$64,994 |
| Average Family Income | \$76,620 | \$79,620 | \$91,547 |
| Income Equality (GINI Coefficient) | 0.44 | 0.48 | 0.48 |

Source: U.S. Census Bureau, American Community Survey, 2016-2020

DEFINITIONS

- **Per Capita Income** is the reported income from wages and salaries as well as income from self-employment, interest or dividends, public assistance, retirement, and other sources. Per capita income is the average (mean) income for residents in the defined area.
- **Median Household Income** is the income of the household including that of all individuals 15 years old and over in the household, whether related to the head of household or not. Because many households consist of only one person, the average household income is usually less than the average family income.
- **GINI Coefficient** is a coefficient indicating income equality. A value of 1 indicates perfect inequality and zero is perfect equality, where all households have equal income.

Social Indicators – Environmental Risk – Primary Research

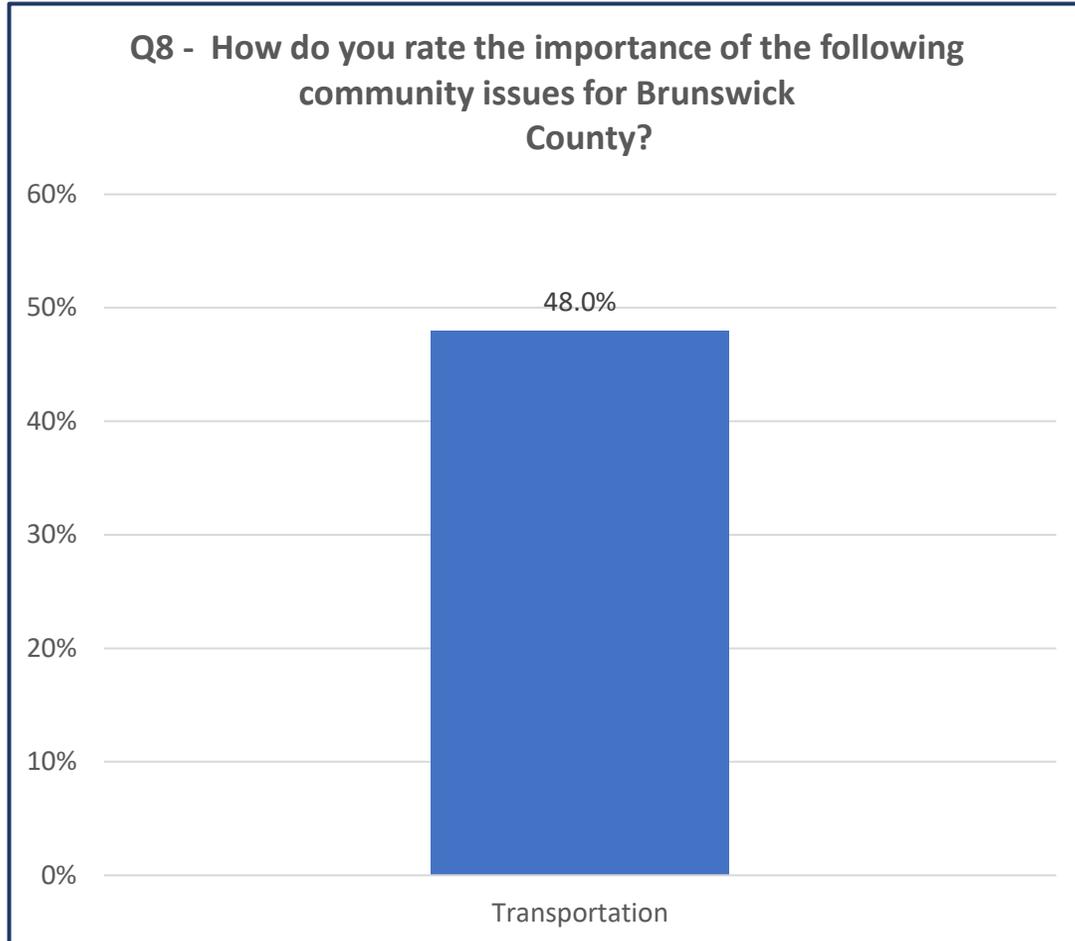
Q45 - Below is a list of Environmental Risks that may be found in Brunswick County. Please review each risk and select whether you feel that risk is Most Urgent, Most Challenging, or Most Resource-Intense to Correct.

| MOST URGENT | MOST CHALLENGING | MOST RESOURCE INTENSIVE TO CORRECT |
|--------------------------------|--|---|
| (1) Safe drinking water – 79% | (1) Accidents – 49% | (1) Trail, playgrounds, parks where you live –38% |
| (2) Water pollution - 68% | (2) Pesticides – 48% | (2) Indoor air pollution-37% |
| (3) Over-Development -58% | (3) Indoor air pollution-45% | (3) Coastal climate change- 25% |
| (4) Coastal climate change-45% | (4) Outdoor air pollution-43% | (4) Clean air – 25% |
| (5) Housing – 44% | (5) Waste disposal – 41% | (5) Waste disposal – 24% |
| (6) Violence -43% | (6) Personal safety-40% | (6) Outdoor air pollution -24% |
| (7) Clean air – 42% | (7) Violence – 37% | (7) Pesticides – 23% |
| (8) Personal safety – 41% | (8) Trails, playground, parks where you live – 36% | (8) Housing – 22% |
| (9) Clean air – 41% | (9) Housing – 34% | (9) Violence – 18% |
| (10) Waste disposal – 35% | (10) Clean air – 33% | (10) Personal safety – 17% |

Social Indicators – Transportation

| HOUSEHOLDS WITH NO MOTOR VEHICLE | BRUNSWICK COUNTY | NORTH CAROLINA | UNITED STATES |
|---|------------------|----------------|---------------|
| Total Households | 59,416 | 4,031,592 | 122,354,219 |
| Households with no motor vehicle | 1,821 | 223,909 | 10,344,521 |
| Percent of households with no motor vehicle | 3.06% | 5.55% | 8.45% |

Source: U.S. Census Bureau, American Community Survey, 2016-2020



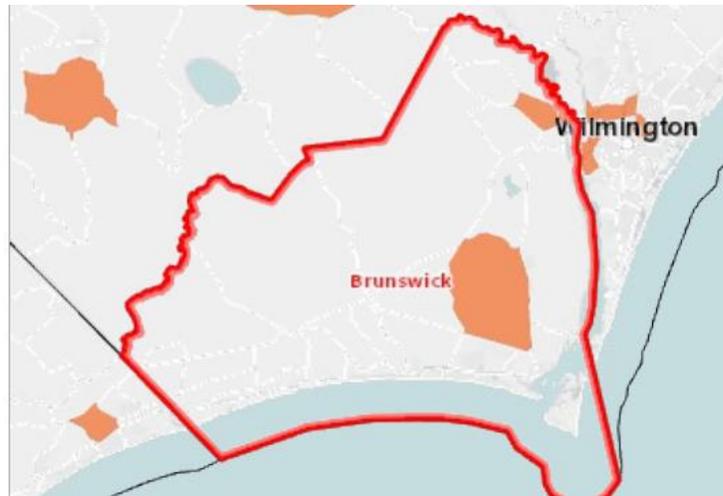
| FORM OF TRANSPORTATION | PERCENTAGE |
|-------------------------------------|------------|
| Personally owned/family vehicle | 96.30% |
| Family member/friend's vehicle | 2.20% |
| Uber/LYFT/Concierge driver services | 1.10% |
| Public transportation | 0.40% |

Social Indicators – Food Insecurity

| FOOD INSECURITY | BRUNSWICK COUNTY | | | NORTH CAROLINA | | | UNITED STATES | | |
|---|-------------------------|----------|----------|-----------------------|----------|----------|----------------------|----------|----------|
| Estimated Population that is Food Insecure, 2016 | 16,360 | | | 1,565,910 | | | 13.8 million | | |
| % Population that is Food Insecure, 2016 | 13.7% | | | 15.4% | | | 10.5% | | |
| DISPARITY | | | | | | | | | |
| | W | B | H | W | B | H | W | B | H |
| % of the Population that is Food Insecure by Racial/Ethnic Group | 5.6% | 20.1% | 16.2% | 7.8% | 22.1% | 15.0% | 7.9% | 19.1% | 15.6% |
| Food Desert Population | 10,696 | | | 1,593,822 | | | 39,074,974 | | |
| Source: US Department of Agriculture, Food Research Atlas, 2019 | 2 census tracts | | | 353 census tracts | | | 9,293 census tracts | | |
| Grocery Stores | 23 | | | 1,959 | | | 62,268 | | |
| Grocery Store establishments per 100,000 population Source: U.S. Census Bureau, County Business Patterns, 2020 | 16.83 | | | 18.77 | | | 18.79 | | |
| Fast Food Restaurants | 112 | | | 8,083 | | | 251,533 | | |
| Fast Food establishments per 100,000 population Source: U.S. Census Bureau, County Business Patterns, 2020 | 81.94 | | | 76.95 | | | 75.89 | | |
| SNAP Authorized Food Stores | 124 | | | 8,986 | | | 248,526 | | |
| SNAP Authorized Food Store establishments per 100,000 population Source: U.S. Department of Agriculture, Food and Nutrition Service, USDA_SSNAP Retail Locations, 2021 | 8.32 | | | 8.48 | | | 7.47 | | |

Social Indicators – Accessibility of Food

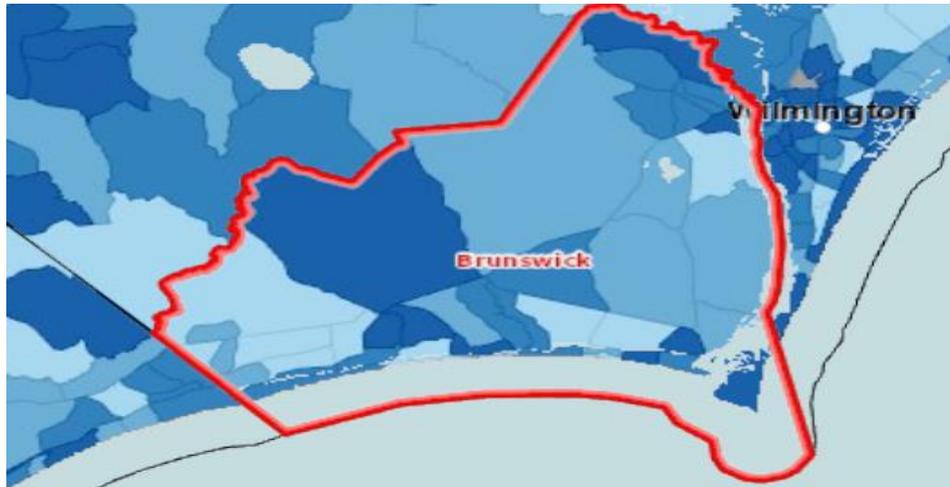
| FOOD INSECURITY | BRUNSWICK COUNTY | NORTH CAROLINA | UNITED STATES |
|---|------------------|-------------------|---------------------|
| Food Desert Population | 10,696 | 1,593,822 | 39,074,974 |
| <i>Source: US Department of Agriculture, Food Research Atlas, 2019</i> | 2 census tracts | 353 census tracts | 9,293 census tracts |
| Grocery Stores | 23 | 1,959 | 62,268 |
| Grocery Store establishments per 100,000 population | 16.83 | 18.77 | 18.79 |
| <i>Source: U.S. Census Bureau, County Business Patterns, 2020</i> | | | |
| Fast Food Restaurants | 112 | 8,083 | 251,533 |
| Fast Food establishments per 100,000 population | 81.94 | 76.95 | 75.89 |
| <i>Source: U.S. Census Bureau, County Business Patterns, 2020</i> | | | |
| SNAP Authorized Food Stores | 124 | 8,986 | 248,526 |
| SNAP Authorized Food Store establishments per 100,000 population | 8.32 | 8.48 | 7.47 |
| <i>Source: U.S. Department of Agriculture, Food and Nutrition Service, USDA SNAP Retail Locations, 2021</i> | | | |



Food Insecurity: Only 26 or 3% of respondents cited food insecurity in the CHOS survey despite 2 census tracts cited as ‘food deserts’ by the U.S. Department of Agriculture (USDA, 2019), and 10,096 residents living in food deserts (6% of the population).

Social Indicators – Housing

| HOUSING | BRUNSWICK COUNTY | NORTH CAROLINA | UNITED STATES |
|---|------------------|----------------|---------------|
| Households | 59,416 | 4,031,592 | 122,354,219 |
| <i>Source: US Census Bureau, American Community Survey, 2016-2020</i> | | | |
| Substandard Housing with 1 or more conditions | 16,150 | 1,124,108 | 38,476,032 |
| Percent of Substandard Housing | 27.2% | 27.9% | 31.5% |
| <i>Source: U US Census Bureau, American Community Survey, 2016-2020</i> | | | |
| Cost-Burdened Households (30%+ of annual income to housing expenses) | 16,092 | 1,099,976 | 37,128,748 |
| Percent of Cost-Burdened Households | 27.1% | 27.3% | 30.4% |
| <i>Source: US Census Bureau, American Community Survey, 2016-2020</i> | | | |
| Evictions (of Renter-Occupied Housing) | 2.2% | 4.6% | 2.3% |
| <i>Source: Eviction Lab, 2019</i> | | | |



Housing Instability: 63 or 8% of CHOS respondents worried about losing housing in the past year. From the secondary research, 59,016 total households are in Brunswick County, of which 16,092 or 27% are ‘cost-burdened’ according to the U.S. Housing and Urban Development (HUD) definition of 30% or more of annual income dedicated to housing costs. The breakdown of cost-burdened is 4,910 rental (31%), 9,034 owner-occupied with mortgage (56%) and 2,148 or 13% among owner-occupied housing without mortgage.

Social Indicators – Housing

| HOUSING | BRUNSWICK COUNTY | BLACK RESIDENTS |
|---|-------------------------|------------------------|
| Substandard Housing with 1 or more conditions | 27.2% | 31.3% |
| Cost-Burdened Households | 27.1% | 31.1% |
| Evictions | 2.2% | 4% |

Group Discussion and Prioritization Criteria

Possible Prioritization Criteria

Size: How many people are impacted by this issue?

Seriousness: Hospitalization, Disability, Deaths

Disparities: Is there a population disproportionately impacted?

Prioritization Criteria

| SIZE AND SERIOUSNESS OF ISSUE | RANKING | DISPARITIES |
|--|--|--|
| <p><i>Deaths: (Rate per 100,000 population in 2019)</i></p> <ul style="list-style-type: none"> • Cancer – 379 (265.4/100,000) • Heart Disease – 339 (237.4) • Cancer-Trachea/Bronchus – 102 (71.4) • Chronic Lower Resp. Disease – 93 (65.1) • Cerebrovascular Disease (Stroke) – 93 (65.1) • Unintentional Injury – 69 (48.3) • Alzheimer’ Disease – 60 (42.0) • Diabetes – 55 (38.5) • Poisoning – 47 (32.6) • Drug Overdose – 44 (24.3) <p><i>Hospitalizations:</i></p> <ol style="list-style-type: none"> 1. COVID-19 – 298 2. Sepsis, unspecified – 292 3. Hypertensive heart disease w heart failure – 102 4. Hypertensive heart and chronic kidney disease with heart failure – 100 5. Acute Kidney failure, unspecified - 85 <p><i>ER Visits:</i></p> <ol style="list-style-type: none"> 1. COVID-19 – 2,130 2. Other Chest Pain - 1,018 3. Acute Upper Respiratory Infection, unspecified - 695 4. Urinary tract infection, site not specified – 574 5. Nausea with vomiting, unspecified – 486 | <p>#26/100 Counties</p> <p>#11 – Clinical Care</p> <p>#11 – Physical Environment</p> <p>#20 – Quality of Care</p> <p>#21 – Health Behaviors</p> <p>#33 – Quality of Life</p> <p>#55 – Social Determinants</p> <p><u>Areas of Strength: Health Indicators</u></p> <ul style="list-style-type: none"> • Preventable Hospital Stays • Mammography • Screening • Flu vaccinations • <i>Social Determinants:</i> • H.S. completion • Income Inequality • <i>Environmental Health:</i> • Air pollution | <p><i>Health Conditions</i></p> <ul style="list-style-type: none"> • Coronary Heart Disease: Male/Black • Hypertension – Black and over 65 years of age • Diabetes – Male/ Black and Hispanic • Asthma – Age (below 65) • Infant Mortality: Black • Opiate Poisoning Deaths: White, 16-29 years <p><i>Health Indicators</i></p> <ul style="list-style-type: none"> • Premature Birth: • Black • Low Birth Weight Infants: Black • Teen Births: Hispanic <p><i>Health Behaviors</i></p> <ul style="list-style-type: none"> • Late Entry into Prenatal Care: Hispanic |

Prioritization Criteria

| SIZE AND SERIOUSNESS OF ISSUE | RANKING | DISPARITIES |
|---|---|---|
| <p>COMMUNITY HEALTH OPINION SURVEY</p> <p><i>Perceived Health Issues of Importance:</i></p> <ol style="list-style-type: none"> 1. Access to Healthcare – 87.4% 2. Health Insurance – 75.3% 3. Elder care options – 71.6% 4. Mental Health – 68.3% 5. Chronic Disease – 65.8% <p><i>Perceived Community Issues of Importance:</i></p> <ol style="list-style-type: none"> 1. Child maltreatment – 4.4% 2. Domestic/Sexual Violence – 70.0% 3. Violent Crime – 64.0% 4. Educational Opportunities – 62.4% 5. Services for Disabled – 61.2% <p><i>Perceived Environmental Issues of Importance:</i></p> <ol style="list-style-type: none"> 1. Safe drinking water – 79% 2. Water pollution – 68% 3. Over-development – 58% 4. Coastal climate change – 45% 5. Housing – 44% | <p><u>Areas to Explore:</u></p> <ul style="list-style-type: none"> • Life Expectancy/ Years of Potential Life Lost • Life Expectancy • Premature Death • Health Indicators • Sexually Transmitted Infections • Low Birth Weight Infants • Teen Births • Mental Health ER Visits • Health Behaviors • Adult Smoking • Excessive Drinking • Opiate Poisoning Deaths • Alcohol Impaired driving deaths • Injury deaths • Social Determinants: • Uninsured (Adults & Children) • Unemployment • Social Associations • Child Care • Disconnected Youth | <p><i>Social Determinants</i></p> <ul style="list-style-type: none"> • Adults/Children living below 100% and 200% of FPL – Black and Hispanic • Food Insecure – • Black & Hispanic • Disconnected Youth- 16-24, Black, Male |

Priority Matrix

| PRIORITY | SIZE | SERIOUSNESS | DISPARITIES |
|--|---------------------------|----------------------------|--|
| Score the following Priorities by each category from Very Unimportant (1) to Very Important (5). | Number of People Impacted | Severity of Health Impacts | Disproportionate Impact (Race/Ethnicity, Gender, Age, Poverty Level) |
| Priority 1 | | | |
| Priority 2 | | | |
| Priority 3 | | | |
| Priority 4 | | | |
| Priority 5 | | | |

Questions

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Appendix 3- Key Informant Interview Summary



BRUNSWICK COUNTY 2022 COMMUNITY HEALTH NEEDS ASSESSMENT KEY INFORMANT INTERVIEW SUMMARY



Submitted by: Kulik Strategic Advisers (KSA)

KSA conducted 48 Key Informant Interviews through the month of June and the early half of July 2022. During the interviews, Key Informants were asked to respond to the following questions:

1. What do you believe are the biggest 2-3 health issues facing your community today? How did this change during COVID-19? *1) worse 2) same 3) better 4) please elaborate if willing*
2. What social determinants of health are most negatively impacting your community? (Social determinants of health are **conditions in the environments in which people are born, live, learn, work, play, worship, and age** that affect a wide range of health and quality-of-life outcomes and risks.)
3. What barriers exist in the community that make it hard for members to stay healthy? How did this change during COVID-19? *1) worse 2) same 3) better 4) please tell us more if you can*
4. Do you have ideas that would reduce these barriers?
5. What emotional trauma or stressors related to COVID-19 have impacted your community?
6. Is there a population subgroup or town/municipality in the community that is underserved?
7. What are the strengths or bright spots in the community that make it easy to stay healthy? How did COVID-19 impact this? Specify:
8. If we could work together to fix one problem, what would you pick?
9. Tell me about some health focused efforts where many people worked to improve community health. What makes them successful and how can we improve collaboration?
10. What are your 5-10-year goals for the health of our community? In other words, *“What do you hope to be able to say is true about our community as it relates to health in 5-10 years from now”*?
11. Is there anyone else that you wish to refer to add as a Key Informant Interview?

Key Informant Themes

Top health priorities facing Brunswick County residents by themes:

1. Access to Healthcare/Insurance Affordability
 - a. Not enough providers for primary care or specialty care
 - b. Aging population of retirees coming into the community placing demand on health systems
 - c. Residents' ability to manage chronic health conditions (access to prescriptions and other medical equipment)
 - d. Insurance coverage, no Medicaid expansion, and Affordable Care Act remains too costly for individuals or employers to participate in.
 - e. Transportation challenges getting to care (25+ minutes travel time)
2. Mental Health (status and services)
 - a. Limited services and providers for mental health
 - b. Increased need for a mental health focus in the community
 - c. Depression and isolation (COVID-19 increase)
 - d. Suicide rates / Opioid (substance misuse)
 - e. Limited resources for children/adolescents
3. Knowledge and Access of Resources
 - a. Residents are unaware of all the supportive services
 - b. 2-1-1 database is only as good as the organizations reporting and adding their services
 - c. Outreach and engagement of rural areas
 - d. Take the services to the residents (place-based strategies)
4. Obesity
 - a. Concerns that much of the households on fixed incomes are unhealthy
 - b. The impacts of being overweight on other chronic health conditions
 - c. Marginalized populations not having access to fresh fruits and vegetables

Top social determinants of health (barriers) facing Brunswick County residents by themes:

1. Transportation
 - a. Limited access to current public transportation
 - b. Shortage of drivers for routes
 - c. No access to medical or basic needs transportation
 - d. Long wait times for transportation through current “Dial-A-Ride” system
2. Cost-burdened Households
 - a. No or lack of affordable housing stock
 - b. Quality of housing stock
 - c. Cost of living in Brunswick County
 - d. Affordability of rent and homeownership in Brunswick County
3. Access to affordable, nutritional foods
 - a. Many rural areas are food deserts
 - b. Residents across the county may have to travel 25+ miles to grocery stores
 - c. Food pantries are at the mercy of donations (not usually healthy options)
4. Income/Poverty
 - a. Pockets of poverty right on the outskirts of extreme wealth
 - b. Rural size of County makes knowledge of and accessing resources difficult
 - c. Most employment available are low paying service positions due to the tourism
5. Digital Inequalities
 - a. Limited access to internet for cost-burdened households
 - b. Unreliability of internet services throughout the County

When considering mental stressors or trauma related COVID-19 impacts on Brunswick County residents, the largest concern was mental health and substance misuse. The fear and uncertainty around the virus were elevated over the course of the past two years. The isolation, particularly among the senior and disabled populations caused a great deal of depression and anxiety. Thus, putting additional strain on the mental and behavioral healthcare systems.

Overall, the Key Informants indicated that Brunswick County residents were made up of two divergent populations, the new influx of wealthy retirees and families that were originally from Brunswick County that lived in poverty and on fixed incomes. Some specific areas and subgroups of the community mentioned were:

- Hispanic population (including migrant workers)
- Ash
- Navassa
- Leland
- Supply
- Southport (some regions)

When discussing the strengths of the community that can contribute to the overall health of the residents, the following 'bright spots' were mentioned:

- Community-based organizations that provide safety net services
- Strong churches in the community that provide food pantries
- The local free clinic and Federally Qualified Health Center (FQHC)
- Collaborative efforts of Brunswick County, Doshier Memorial Hospital and Novant Health Brunswick Medical Center
- Brunswick Resiliency Taskforce
- Brunswick Wellness Coalition
- Parks and Recreation
- Beaches

Overall, the Key Informants acknowledged how collaborative the different health systems are with various community partners. The entire county pulls together during times of struggle. Whether it be hurricanes or a pandemic the desire to help your neighbor exists here.

In the discussion to identify and fix just one community problem, the most common replies were:

- Access to affordable insurance coverage, expansion of Medicaid, creation of more sliding scale fee services
- Housing stock (for more marginalized populations)
- Increase the number of general practitioners as well as certain specialists (orthopedics, internists)
- Transportation and building the capacity of the existing system in more populous regions but researching more concierge style transportation options for the rural areas of the county

- Mental health and substance misuse. Providing more education and prevention, reducing the stigma, and increasing the number of providers

Finally, when envisioning the future of Brunswick County, five to ten years from now, respondents indicated overall that the future of Brunswick County should include:

- An inclusive community
- Equitable and affordable health and mental health care access
- A place where everyone has the opportunity to thrive
- More equitable distribution of resources and community assets

Two Key Informants who work with the Hispanic and Migrant populations added the following barriers that impact this population specifically:

- Inability to get documentation and identification
- Transient, go where the work is, children being moved frequently causes interruption in their education
- No translation services (children are often utilized as translators for their household)

Appendix 4- Focus Group Summaries

CHNA Focus Group June 22, 2022; 10:00 AM – 10:30 AM Coastal Horizons

- 15 Total Participants
- 6 Females (2 African American and 4 Caucasian)
- 9 Males (1 African American, 6 Caucasian and 2 Latino)

We reviewed and the group provided some input into the Community Health Status Opinion Survey tool.

The following areas were discussed in this focus group:

Transportation

Group participants reported traveling from different areas of the county to Coastal Horizons required meetings. It was expressed that transportation is a barrier for individuals when accessing services. 10 out of the 15 participants got a ride from a family member or friend who was waiting for them.

The group expressed that the current public transportation system is designed to provide services to the senior community and it's not available to anyone else.

Healthcare

The group expressed the need to access affordable primary care and affordable dental care.

Primary Care: A few individuals reported utilizing the emergency room as primary care. The group discussed the lack of available primary care physicians in the area and expressed the need for specialty care physicians.

The group discussed the need for mental health professionals.

Dental Care: A few participants expressed that affordable dental care is difficult to locate and access. .

Housing:

Housing is an area of concern for most individuals present. They discussed the poor housing conditions in which they live. They discussed the need for affordable quality housing. A few members talked about being on the "government waiting list for housing assistance" but expressed frustration with the process and the long wait.

The group expressed the need for a homeless shelter in the community.

Employment:

8 out of the 15 individuals are employed full-time. 3 are retired and 4 are in the process of seeking employment. They expressed having difficulty finding a job due to transportation and distances in the area.

CHNA Focus Group August 8, 2022; 7:00 PM – 7:30 PM Cedar Grove Improvement Association

- 12 Females (11 African American, 1 Caucasian)
- 9 Males (All African American)
- 21 Total in Attendance

Healthcare General consensus people do health checkups every 6 to 12 months

Access to the medical center; get the best care possible and not sit in the Emergency Department for long periods of time.

Agreed it was important for healthcare providers to look like us and be representative of our population and experiences. Someone who is relatable and understands our health challenges.

Housing

Affordable housing is an issue in the county for people with limited or no income.

The vouchers to support subsidized housing are very limited and hard to obtain. There is a long waitlist, when a slot opens, it is gone in minutes.

There is a difference between affordable housing and decent/safe housing that take the housing vouchers.

Homeless people sleep in their cars more often than we think and Brunswick County doesn't have shelter.

Homelessness, low/no income people need financial counseling and a safe place to stay and store their belongings while being sheltered or temporarily housed.

Some felt that homelessness in the Cedar Grove Community was not an issue, and that this community is a good working-class community that has stable housing.

Transportation

Affordable and reliable transportation is hard to come by. Most people get a ride from a friend or family member.

Brunswick Transit System (BTS) is hard to navigate, and some didn't fully understand whom they served and for what reason BTS could be used. All individuals present had their cars.

Other health issues or needs

Need more information on general public and health services that are available to us in Brunswick County.

Mental health resources are not abundant and accessible

Top 3 Health Concerns in Cedar Grove Community

Someone said accessibility awareness education. Marcos restated questions to get the group thinking about physical health issues...

1. Diabetes
2. Cancer (prostate and lung)
3. High Blood Pressure a. Heart issues

COVID IMPACTS

COVID-19 exacerbated substance use and mental health issues. Some individuals present believe substance/drug issues are not a big deal in Cedar Grove.

COVID-19 caused anxiety and stress to flourish in many people which in turn affects health outcomes and behaviors.

One man stated the health care system cost/billing was challenging to navigate and understand during COVID-19. For example, he needed to get tested for COVID-19 and his only option at the time was to go to the Emergency Department. It ended up costing him \$400 out of pocket just for a COVID-19 test out in the waiting room. This didn't make sense or seem justifiable when he could have gotten a free test done at the other testing sites.

Some expressed information needs and transparency on emerging health threats/disease: Monkeypox. New COVID-19 variants.

Appendix 5- Community Health Opinion Survey

Dear Community Member,

During the next few months Brunswick County Health Services, Doshier Memorial Hospital, and Novant Health Brunswick Medical Center will conduct a Community Health Needs Assessment to identify ways we can improve the health and wellness of individuals living in the County. Your answers to this survey will help us understand what is important and how we can better serve the County.

This survey should take about 15 minutes to complete. Your responses are confidential. If you need help with this survey, please call 1-877-257-8783.

PLEASE DO NOT COMPLETE THIS SURVEY IF YOU DO NOT LIVE IN BRUNSWICK COUNTY.

Part 1) ABOUT YOU AND YOUR HOUSEHOLD

1. Do you live in Brunswick County?

- Yes, Full Time
- Yes, Part Time
- No, I don't live in Brunswick County

2. What is your home zip code?

3. How many people live in your home (including yourself)? Including yourself, how many people in the following age groups live in your household? Please choose an answer for each age group.

| | Total People in Household |
|--------------------------|---------------------------|
| People in the Household: | <input type="text"/> |
| Less than 5 years old | <input type="text"/> |
| 5 to 12 years old | <input type="text"/> |
| 13 to 17 years old | <input type="text"/> |
| 18 to 54 years old | <input type="text"/> |
| 55 years and older | <input type="text"/> |

4. What is your age range?

- 18-24
- 25-34
- 35-44
- 45-54
- 55-64
- 65+

5. What is your gender?

- Male
- Female
- Prefer to self-identify
- Prefer not to answer

6. What is your sexual orientation?

- Straight
- Gay
- Lesbian
- Bisexual
- Transgender

7. What is your race and/or ethnicity?

- White or Caucasian
- Black or African American
- Hispanic or Latino
- More than one race
- Prefer not to answer
- Other (please specify)

Part 2) THE COMMUNITY AND HEALTH

8. How do you rate the importance of the following *COMMUNITY ISSUES* for Brunswick County? (Select below):

| | Very Important | Important | Not Important |
|--|-----------------------|-----------------------|-----------------------|
| Poverty | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Child maltreatment, neglect and abuse | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Domestic/sexual violence | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Discrimination/racism | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Violent crime | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| High paying jobs | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Transportation | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Homelessness | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Educational opportunities (schools, community colleges, on the job training) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Services for disabled | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Culturally appropriate (sensitive to people's cultural identity or heritage) health services | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Other (please specify)

9. How do you rate the importance of the following *HEALTH ISSUES* for Brunswick County?
 (Select below):

| | Very Important | Important | Not Important |
|--|-----------------------|-----------------------|-----------------------|
| Infant mortality | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Low birthweight babies | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Pregnancy and infant wellness | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Births to teens or adolescents/Teen pregnancy | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Child/Adult Immunizations | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Family planning | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Health insurance | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Access to healthcare | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Health resource information | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Child obesity/physical activity | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Asthma/Lung Disease | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Cancer | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Chronic Disease (heart disease, high blood pressure, diabetes, stroke) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Dental health | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Mental health - Counseling/ Support groups | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Elder care options | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Respite for caregivers | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Other (please specify)

10. What is your current living situation (check all that apply)?

- I own my home
- I rent my home/apartment
- I live with family or friends
- I live in temporary housing (shelter, motel, hotel, transitional housing)
- I am homeless
- Prefer not to answer
- Other (please specify)

11. What is the primary language spoken in your home?

- English
- Spanish
- Other (please specify)

12. In the past year, have you or your household been unable to get utilities (heat, electricity)?

- Yes
- No

13. Within the past year, have you worried about losing your housing?

- Yes
- No

14. What is your current employment status (check all that apply)?

- Full-time work
- Part-time work
- Self-employed
- Out of work and not currently looking for employment
- A homemaker
- Student
- Retired
- Unable to work
- Disabled
- Seasonal or migrant work
- Other (please specify)

15. What type of childcare do you use (select all that apply)?

- I don't use childcare
- Faith-based programs
- Private childcare center
- Cared for by family members or friends
- School-age child in afterschool program
- Does not apply
- Other (please specify)

16. Are you on active duty, a reservist, or a veteran of the U.S. Armed Forces?

- Yes
- No
- Not Applicable

17. What is the highest level of school, college or vocational training you completed by May 2022?

- Less than high school diploma
- High school diploma or GED
- Some college, no degree
- Associate degree
- Bachelor's degree
- Graduate degree (master's, doctorate)
- Other (please specify)

18. What form of transportation do you use most often?

- Personal/family vehicle
- Family member/friend vehicle
- Public transportation
- Uber/Lyft concierge driver services
- Other (please specify)

19. In the past year, has lack of transportation kept you from going to medical appointments, other appointments or work?

- Yes
- No

20. In the past year, has a lack of transportation kept you from getting things you need (e.g., food, medicine, basic necessities)?

- Yes
- No

21. Please rate the following statements

| | Never | Rarely | Sometimes | Usually | Always | N/A |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Occupational - I get personal satisfaction from my knowledge, skills, and talents used at work/school | <input type="radio"/> |
| Occupational - I am able to balance my work with my personal life | <input type="radio"/> |
| Social - I communicate well | | | | | | |

| | | | | | | |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| with others by sharing my views and respectfully listening to others' views | <input type="radio"/> |
| Emotional - I find it easy to cope or express my emotions in positive, constructive ways | <input type="radio"/> |
| Emotional - I am resilient and can bounce back after a disappointment or problem | <input type="radio"/> |
| Spiritual - My morals, values, and beliefs are true priorities which are reflected in my actions | <input type="radio"/> |
| Spiritual - My life has purpose and meaning | <input type="radio"/> |
| Intellectual - I am curious and interested in communities beyond where I live | <input type="radio"/> |
| Intellectual - I enjoy learning about things other than those I am required to use in education or work | <input type="radio"/> |
| Physical - I protect myself and others from sickness (e.g., wash my hands, cover my cough, etc.) | <input type="radio"/> |
| Physical - I limit drinking alcohol to less than two drinks per day | <input type="radio"/> |

Part 3) YOUR PHYSICAL HEALTH

22. Do you have a personal doctor or healthcare provider?

- Yes
- No

23. Is your medical care provided in a way that respects your culture?

- Yes
- No

24. Where do you go to get healthcare services when you are sick?

- Community Health Center/Free Clinic
- Doctor's office
- Emergency room
- Health Department
- Urgent Care
- VA Clinic
- I do not seek care when I am sick
- Other (please specify)

25. Which hospital do you primarily use for care?

- Doshier Memorial Hospital
- Novant Health Brunswick Medical Center
- Grand Strand Medical Center
- McLeod Seacoast Hospital
- Novant New Hanover Regional Medical Center
- Other (please specify)

26. In the past year, have you gone to the emergency room for non-urgent care?

- Yes
- No
- Unsure

27. Where do you go when you need dental care?

- Community Health Center/Free Clinic
- East Carolina University Dental Clinic
- Mobile Dental Clinic
- Private Dentists' Office
- I don't seek dental care
- I can't afford dental care
- Other (please specify)

28. Which of the following tests/screenings do you include in your health care (check all that apply)?

- A1c or fasting blood sugar
- Annual physical or well check
- Blood pressure check
- Cholesterol screening
- Colonoscopy
- Dental cleaning/X-rays
- Flu shot
- Mammogram
- Vision screening
- None
- Other (please specify)

29. What health insurance do you have (select all that apply)?

- Medicare or Medicare Supplement Plan
- Medicaid
- Veteran Administration benefits
- Private health insurance plan (provided by employer)
- Private health insurance plan (self-pay)
- Tricare, CHAMPUS
- Affordable Care Act (can also be called "Obamacare")
- I do not have health insurance
- Other (please specify)

30. In the past year, what challenges have you had in getting prescription medication (select all that apply)?

- Did not have challenges
- Insurance did not cover
- Did not have health insurance
- Pharmacy hours inconvenient
- Too expensive (total cost or co-pay)
- Other (please specify)

31. Do you currently use any cigarettes, tobacco, nicotine products (e-cigarettes, vape pens, JUUL), and chew tobacco?

- Yes
- No

Part 4) YOUR WELLNESS

32. How would you rate your overall health?

- Excellent
- Very good
- Good
- Fair
- Poor

33. If you could improve your health, what would you do? (Check all that apply)

- Eat more healthy food
- Exercise more
- Learn more about healthy living
- Manage my disease or condition
- Have preventative screenings
- Stop or reduce using tobacco/nicotine products (including vape)
- Stop or reduce using alcohol
- Stop or reduce using prescription
- Stop or reduce using illegal drugs
- Access substance use treatment
- Access mental health services
- I am not interested in improving my health
- Other (please specify)

34. What types of health services are most important to you? (Select the top 5 services most important to you)

- Alzheimer's/Dementia care
- Cancer care
- Colorectal care or screening
- Dental care
- Diabetes care
- Disease outbreak prevention
- Drug and alcohol misuse
- Emergency preparedness
- Heart disease care
- HIV/AIDS care and medication
- High blood pressure management
- Maternal/Infant services
- Mental health/Depression care
- Quitting use of tobacco products (including vape)
- Routine wellness checks (mammogram, cholesterol, immunizations, well-child)
- Sexually transmitted disease care
- Suicide prevention
- Telehealth
- Vision care
- Weight loss support
- Other (please specify)

35. Where do you get your health information? (Check all that apply)

- Doctor/health professional
- Friends or family
- Health department
- Hospital newsletter
- Internet
- Library
- Newspaper/Magazine
- Radio
- Social media
- Television
- Other (please specify)

36. Do you think Brunswick County has the resources to quickly respond to a challenge?

| | Yes | No | Prefer not to answer |
|----------------------|-----------------------|-----------------------|-----------------------|
| Opioids | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| COVID | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Disaster Preparation | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Hurricanes | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Other (please specify)

Part 5) YOUR BEHAVIORAL AND SOCIAL HEALTH

37. Thinking about your mental health, which includes stress, depression, anxiety and problems managing emotions, how many days during the past month was your mental health “NOT GOOD”?

- 0 - 5 days
- 6 - 10 days
- 11 - 15 days
- 16 - 20 days
- 21 days or more

38. Have you had a traumatic childhood event?

- Yes
- No

39. If you answered yes to question 38; has that negatively impacted your mental health?

- Yes
- No

40. Have you used any of the following illicit drugs in the past year?

- Cocaine or crack
- Ecstasy
- Heroin
- LSD
- Marijuana
- Methamphetamines (i.e. Meth)
- Unknown drug(s)
- Don't know
- None of the above
- Prefer not to answer
- Other (please specify)

41. Have you taken medication not prescribed to you or in a way other than prescribed in the past year? (Including but not limited to codeine, Vicodin, Percocet, morphine, oxycodone, Tramadol, Fentanyl, Hydrocodone, or OxyContin)

- Yes
- No
- Don't know/not sure
- Prefer not to answer

42. Where would you go if you needed help for your mental health and wellness?

- Primary care doctor
- Psychologist or another specialist
- Pastor/Minister/Clergy
- Private counselor or therapist
- Friend or family
- School counselor
- Hospital
- Work (Employee Assistance Program)
- Crisis Hotline
- Support groups (Alcoholics Anonymous or Narcotics Anonymous)
- Other (please specify)

43. In the past year, what prevented you from getting mental health care or substance use treatment? (Check all that apply)

- Guilt or shame about mental health
- Don't believe that treatment will help
- No health insurance (insurance will not cover)
- Provider does not accept insurance
- Cost was too high (private pay, co-pay or deductible)
- Don't know where to go
- No transportation
- Culture/personal beliefs
- Not enough providers
- Work interferes with appointment times
- No childcare
- Not ready to face the problem
- Did not seek mental health or substance use care or treatment
- Does not apply/ Did not need it
- Not ready to face the problem
- Other (please specify)

44. Please tell us whether you **"strongly agree"**, **"agree"**, **"disagree"** or **"strongly disagree"** with the next few statements about substance use services.

| | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree | Not aware/ No knowledge |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|----------------------------|
| In Brunswick County substance use services are affordable | <input type="radio"/> |
| In Brunswick County substance use services are accessible and easy to find | <input type="radio"/> |
| In Brunswick County substance use services are high quality | <input type="radio"/> |

45. Below is a list of Environmental Risks that may be found in Brunswick County. Please review each risk and select whether you feel that risk is Most Urgent, Most Challenging, or Most Resource-Intense to Correct.

| | Most Urgent | Most Challenging | Most Resource Intense to Correct |
|---|-----------------------|-----------------------|----------------------------------|
| Indoor air pollution | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Water pollution | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Waste disposal | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Clean air | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Safe drinking water | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Outdoor air pollution | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Accidents | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Pesticides | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Coastal climate change | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Violence | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Personal Safety | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Housing | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Trails, playgrounds, parks where you live | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Over-development | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

46. Share with us how often you?

| | Never | Rarely | Sometimes | Often | Always |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Talk on the phone with family, friends, or neighbors? | <input type="radio"/> |
| Get together with friends or relatives? | <input type="radio"/> |
| Go to church or religious services? | <input type="radio"/> |
| Join in social activities such as clubs, volunteer groups, athletic or school groups. | <input type="radio"/> |
| Internet/ Social media chatting | <input type="radio"/> |