

2021 COMMUNITY HEALTH NEEDS ASSESSMENT



Onslow County

Contact Information

For questions regarding the 2021 Community Health Needs Assessment (CHNA), contact Onslow County Health Department at 910-989-3966 or community_relations@onslowcountync.gov or Onslow Memorial Hospital 910-577-4736 or Sophia.Bodo@onslow.org.

Visit the Onslow County Health Department website at <https://www.onslowcountync.gov/215/Community-Health-Needs-Assessment> for more information on the CHNA.

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Executive Summary

Community Health Advisory Team (CHAT) Vision Statement

The Community Health Advisory Team (CHAT) serves as the leadership team that leads, supports, and executes the Community Health Needs Assessment (CHNA) and the Community Health Improvement Plans (CHIPs) that are identified and created from the results of the CHNA. The CHNA serves as a core roadmap for public health and creating community health programs and services. The CHNA is a collaborative process that includes multiple partners that provide unique data, guidance, and feedback on the CHNA and CHIPs. The CHNA is also used to help inform the agency's Strategic Planning.

Prior to 2021, the CHAT was referred to as the Community Health Assessment Team. The functions of this team were focused on the CHNA and how the Health Department and Hospital would execute the CHIPs. The team decided that true community change and health improvement would not occur if agencies continued working in silos. In August 2021, the team renamed CHAT as the Community Health Advisory Team (CHAT). The team then created a mission, vision, and goals to reflect true collaboration and community engagement.

CHAT Vision, Mission, and Core Values

Vision	Core Values
To live in a community in which all residents are empowered to live healthy, safe lives.	Community
	Commitment
	Health
	Partnership
	Equity
	Integrity
	Trust
	Compassion
Mission	
To collaborate with leaders across Onslow County to address the community's health needs and to develop innovative solutions that improve equity and access to resources.	

Leadership

OCHD, in collaboration with OMH and the CHAT, are the primary partners for the CHNA. As part of the Affordable Care Act, not-for-profit and government hospitals are required to conduct CHNA's every three years. Similarly, local health departments in North Carolina are required by the Division of Public Health (DPH) in the NC Department of Health and Human Services (DHHS) to conduct periodic community health assessments. Local health departments have been required to submit their CHNA's once every four years. With the permission of DHHS, OCHD changed from a four-year cycle to coincide with OMH's three-year cycle.

Partnerships/Collaborations

The CHAT is a team of public and private community stakeholders that meet to discuss public health issues and work collaboratively to improve the health of county residents. CHAT utilizes the community health needs assessment to collectively develop the community health improvement plans. There are currently 108 members on the CHAT list serv. Because the list reflects many individuals from the same organizations, on average, active meeting participation is about 35 members per meeting. These stakeholders come from all areas of interest to represent the non-profit sector, healthcare, government, faith leaders, and concerned residents. Below are the organizations reflected in CHAT membership.

- Caring Community Clinic
- City of Jacksonville Transit
- Coastal Carolina Community College
- Internal Medicine/Pediatrics
- Jacksonville City Government
- Jacksonville Onslow Collaboration
- Jacksonville Police Department
- Jacksonville VA Vet Center
- JCMC
- LCSWA Early Head Start
- LGBTQ+
- Marine Corps-Camp Lejeune
- NAF
- NC Oral Section
- OHLA
- One Place (formerly Onslow County Partnership for Children)
- Onslow Community Prevention
- Onslow County Sheriff's Office
- Onslow County Cooperative Extension Office
- Onslow County Department of Social Services
- Onslow County Government
- Onslow County Health Department
- Onslow County Museum
- Onslow County Out of the Darkness Walk
- Onslow County Parks and Recreation
- Onslow County Schools
- Onslow County Senior Services
- Onslow Literacy Council
- Onslow Memorial Hospital
- ONSMS COVID-19 Equity Project
- Peers Family Development
- Pine Valley United Methodist Church
- Region 8 Tobacco Lead with the Tobacco Branch
- RHA Health Services
- Sandy Run Church
- Sickie Cell Association
- Simply God Ministries
- Snead's Ferry's HOPE
- St. Julia AME Zion Church
- TASCO
- Trillium Health Resources
- University of North Carolina-Wilmington
- YMCA New River

Regional/Contracted Services

Health ENC, now a program of the Foundation for Health Leadership and Innovation (FHLI), coordinates a regional CHNA in 35 eastern North Carolina counties, including Onslow County. The Health ENC Program works to build coalitions and partnerships that address health issues identified through the regional CHNA process, which includes data specifically tailored to Onslow County.

OCHD and OMH have utilized the services of Health ENC and the access to the regional CHNA survey questions and measurements to provide the Onslow County community with access to data across the region.

Theoretical Framework/Model

Two types of data are analyzed for the Community Health Needs Assessment: secondary data and primary data. Secondary data is data that was collected from other sources, while primary data was collected directly from Onslow County citizens via online and paper surveys. Each type of data is analyzed using a unique methodology, and findings are organized by health topic areas. These findings are then synthesized for a comprehensive overview of the health needs in Onslow County.

The main source of the secondary data used for this assessment is primarily derived from county, state, and national public data sources that can be found in the Appendix B. For each indicator, comparisons assess how Onslow County compares to the other 34 counties in the Health ENC region as well as across the state over time. The 2021 CHNA was designed to align with Healthy NC 2030, with an emphasis on the social determinants of health and overarching themes that influence health indicators within the population. Health indicators can be divided into five broad categories: social and economic factors, physical environment, health behaviors, clinical care, and health outcomes.

Collaborative Process Summary

Health ENC led the planning and implementation for the regional assessment. Local Health Departments (LHDs) and Hospitals were included in stakeholder planning sessions that occurred regularly. In these planning sessions, LHDs and Hospitals were provided with various measurements, questions, and ideas for how Health ENC planned to create the survey materials. The feedback of LHDs and Hospitals were taken into consideration in the development of the survey. Once the LHDs and Hospitals were provided with the survey, it was their responsibility to promote and engage with diverse populations that reflect the makeup of the community to receive the most accurate CHNA results.

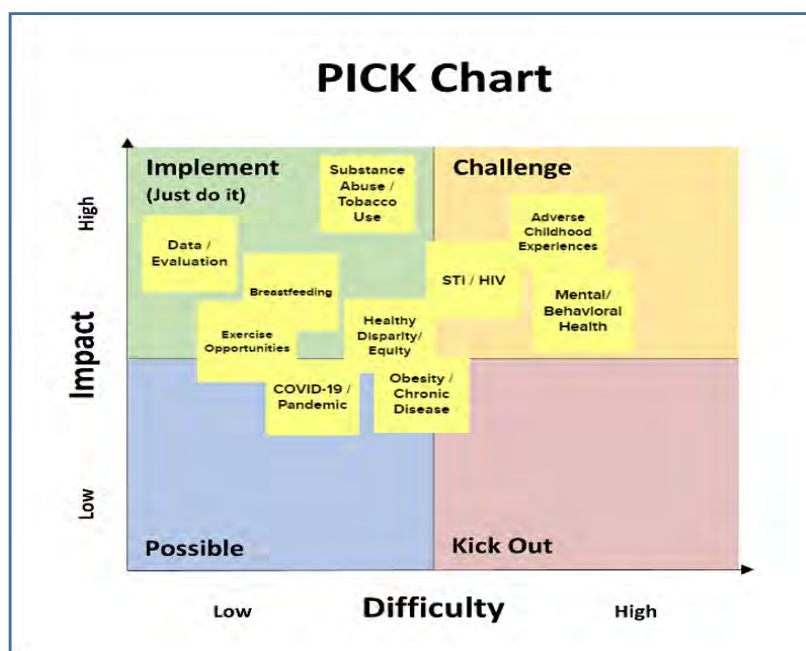
Key Findings

Key findings from responses to questions on the community survey are integrated into this report by theme or topic area, with an emphasis on the most significant needs as evidenced by both primary and secondary data. This approach is intended to offer a meaningful understanding of health needs and set the CHAT up to create and implement Community Health Improvement Plans (CHIPs) that address those needs.

While reviewing the survey and secondary data presented and referenced throughout the document, the data highlights the County's strengths and the positive effects the military presence has on the health and economic wellbeing of the County. This process also allowed the team to identify the need for improved data collection within programs to best measure performance and depict the true representation of Onslow County's needs and the importance of addressing Social Determinants of Health, while ensuring health equity.

Health Priorities

On December 9, 2021, the OCHD and OMH met with the CHAT to review the results of the 2021 CHNA report. The CHAT collaborated on priority areas and concerns as well as provided resources that directly targeted the mentioned health priority areas. In comparing the results of the survey with secondary data and available resources, CHAT identified data and evaluation, mental/behavioral health, health equity and health disparities, healthy living, and physical activities and exercise as the CHIPs.



Next Steps

This report describes the process and findings of the comprehensive community health needs assessment for the residents of Onslow County, North Carolina. Now that the CHAT has concluded the assessment, reviewed the results, identified the health priorities, the team will now need to develop evidence-based strategies to become CHIPs for the upcoming years.

Five teams were created to support each health priority initiative. These teams will act as subcommittees to execute the strategies that are developed. CHAT members have been assigned to specific teams depending on personal interest or agency need.

Health Priorities

1. Data and Evaluation
2. Mental/Behavioral Health
 - a. Substance Abuse and Tobacco Use
 - b. Adverse Childhood Experiences (ACEs)
3. Health Equity and Health Disparities
 - a. Chronic Diseases
 - b. Preventative Care
4. Healthy Living
 - a. Women's and Children's Health
 - b. Breastfeeding
5. Physical Activities and Exercise
 - a. Physical Activities/Exercise

CHIP teams will meet regularly in between the bi-monthly CHAT meetings to further discuss the corresponding health priorities. The frequency of these small group team meetings will depend on the health priority strategies that the CHAT will approve in September 2022.

Chapter 1 Introduction

Overview of Health ENC

Health ENC is a collaborative initiative serving 34 health departments and 31 hospitals in eastern North Carolina. Health ENC uses a shared approach for primary and secondary data collection to produce a comprehensive Regional Community Health Needs Assessment every three years that can be used to partially satisfy requirements for North Carolina Local Health Department Accreditation and the Internal Revenue Service requirement under the Patient Protection and Affordable Care Act for charitable hospitals.



Overview of Community Health Needs Assessment Process

The Community Health Needs Assessment Process gathers population health data that county health departments, hospitals, and community groups utilize to identify key health needs/issues in eastern North Carolina Communities. This data is also used to develop strategies and action plans based upon data that aim to improve the quality of life. Local health departments and hospitals also collaborate with other partners to maximize results by having a collective impact in the region.



Health Data Sources

Primary Data – Community Survey

Survey Methodology/Design

Health ENC Steering Committee structured the primary data collection for participating health departments and hospitals. The primary data used in the Community Health Needs Assessments included (1) a community survey that could be distributed online or by a paper submission and (2) focus group discussions in some counties. The Health

ENC Steering Committee did not encourage focus groups for the 2021 Community Health Needs Assessments because of the COVID-19 pandemic. However, some counties were able to hold focus group discussions safely despite significant challenges in collecting enough survey responses to accurately represent their communities' populations.

The Health ENC Steering Committee developed a primary survey to gather information from community members about their health concerns. A workgroup of Steering Committee members convened and examined survey questions utilized in the 2018 Community Health Needs Assessment. The workgroup also examined data readily available from secondary data sources. The focus was on developing survey questions to obtain data from community members that were not readily available in the secondary data or where secondary data was weak. In addition, questions were combined where appropriate and to be more inclusive in the wording of response choices. The Steering Committee reviewed the sample survey questions and made additional revisions to ensure the survey only contained questions where community input was needed to guide health priority selection and strategic action planning. The resulting survey was comprised of 25 questions related to the quality of life, health behaviors, health perceptions, preventative services, exercise, and access to care.

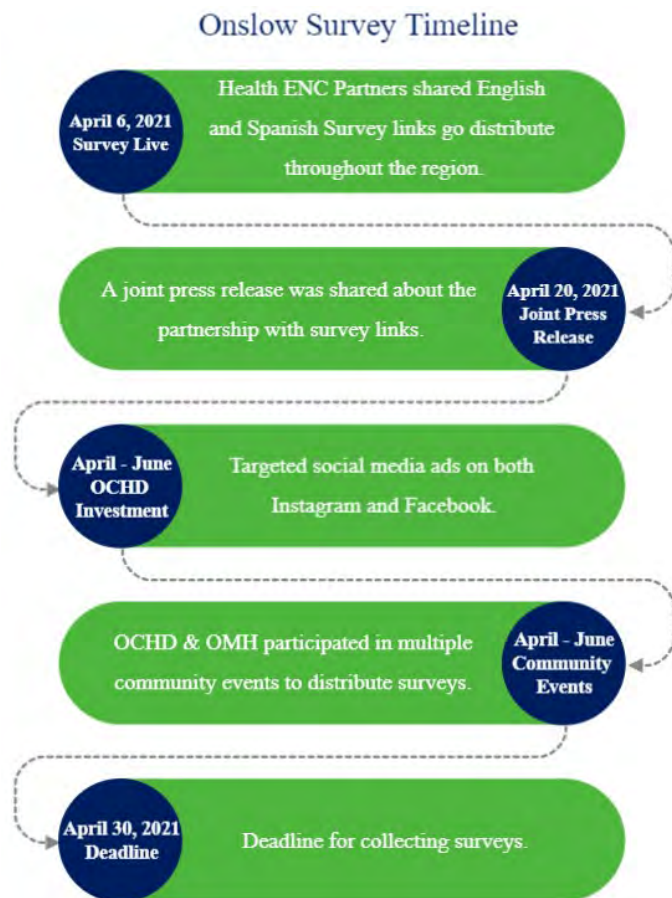
Once the survey questions were finalized, the Steering Committee decided on targets for each county. Because the survey was a convenience sample that was being conducted during a pandemic (COVID-19), each county was asked to complete a minimum of 300 surveys with representation from as many community groups as possible to assure sufficient sampling to represent the full community. The target of 300 surveys per county was identified through previous work with data analysis vendors who examined each county's population and confirmed this number should provide an accurate reflection of the total county's population if survey takers appropriately reflected the population demographics.



The surveys were made available to the public from April 6, 2021 – June 30, 2021. Surveys were distributed in paper format as well as electronically using the REDcap software. Health ENC partners received feedback throughout the survey period on the age, gender, race/ethnicity, and language of survey respondents to assist them in promoting the surveys to various community members within their counties. At the completion of the survey period, a total of 16,661 English surveys and 502 Spanish surveys were completed across Health ENC counties. Within Onslow County, 768 English surveys and 5 Spanish surveys were completed. Significant efforts were made to ensure that the distribution of survey takers reflected the diversity and makeup of the Onslow County population. Nonetheless, survey responses should be considered as only one component of information utilized to select health priorities. The most underserved populations' feedback is not adequately reflected in many counties. Health ENC partners were encouraged to include key stakeholders, who served these populations, in the health priority selection process to ensure that the health needs of these underrepresented populations were considered.

During the Onslow County survey period, electronic and paper surveys were distributed by the Onslow County Health Department (OCHD) and Onslow Memorial Hospital (OMH) to residents through a variety of methods. OCHD utilized their website as well as paid/ boosted social media posts to encourage survey responses and garner community engagement. Both agencies sent representatives equipped with iPads to local events such as the farmer's market as well as at Sanders Ford Inc, a local car dealership, to survey community members. OCHD was also able to encourage Spanish survey responses through outreach by a Spanish interpreter.

OMH primarily collected digital surveys through social media posts and posted the survey link on the OMH website. Due to the COVID-19 pandemic, OMH was unable to assist survey takers as previously conducted during past CHNA survey opportunities. For safety purposes, OMH did not provide and collect physical surveys. Instead, OMH distributed QR codes leading to digital survey links at local car dealerships, barbershops, school



pick up/drop off lines, doctor's offices, and clinics to reach the widest range of people possible.

During this survey period, events and outreach opportunities were limited and both agencies relied heavily on the use of social media and electronic surveys. Below is a more detailed list of efforts that both agencies took part in to engage with respondents.

Key Areas Examined:

- Quality of life, health behaviors, health perceptions.
- Preventative services, exercise, and access to care.

County Responses:

- 768 Total English (Total in ENC survey =16,661)
- 5 Total Spanish (Total in ENC survey =502)

Throughout the report, green boxes will be used to highlight key survey responses.



Secondary Data Sources

The secondary data sources referenced throughout the Community Health Needs Assessment and considered in the results of the document are Healthy North Carolina 2030 (HNC 2030), NC State Center for Health Statistics, and the Robert Wood Johnson County Health Rankings and Roadmaps.

Limitations:

As with any data, there are limitations that must be taken into account. The data presented in this report represents a snapshot of major economic, health, and wellness issues in eastern NC communities. It includes primary data gathered from community surveys as well as secondary data from health departments and other sources. This information can be used as a guide for helping communities identify leading health issues in the Health ENC County Region. Other health issues, data, and resources may be available that were not listed here that communities may wish to consider when establishing health priorities.

Chapter 2 County Profile

History

The first European and English settlers arrived in what was originally part of the colonial precincts of Carteret and New Hanover in 1713. By 1734, Onslow County was formed and named for the Honorable Arthur Onslow, speaker of the British House of Commons. Largely a collection of sparsely populated agrarian and maritime communities, Onslow County dramatically changed in the early 1940s with the establishment of Army's Camp Davis near Holly Ridge that is now closed, and the creation of Camp Lejeune in 1941.



Geography

Onslow County's flat terrain covers 767 square miles and is in the southeastern coastal plain of North Carolina, approximately 120 miles east of Raleigh, and 50 miles north of Wilmington. The southern border of the county is the coast of the Atlantic Ocean. The New River is a 40-mile-long river that empties into the Atlantic Ocean. The city of Jacksonville is the county seat, and the areas surrounding the city constitute the major population centers and growth areas. The county also includes the incorporated towns of Holly Ridge, Richlands, Swansboro, North Topsail Beach, part of Surf City and unincorporated Sneads Ferry. Onslow County is also an important agricultural force, with corn being one of the most produced crops in the County.

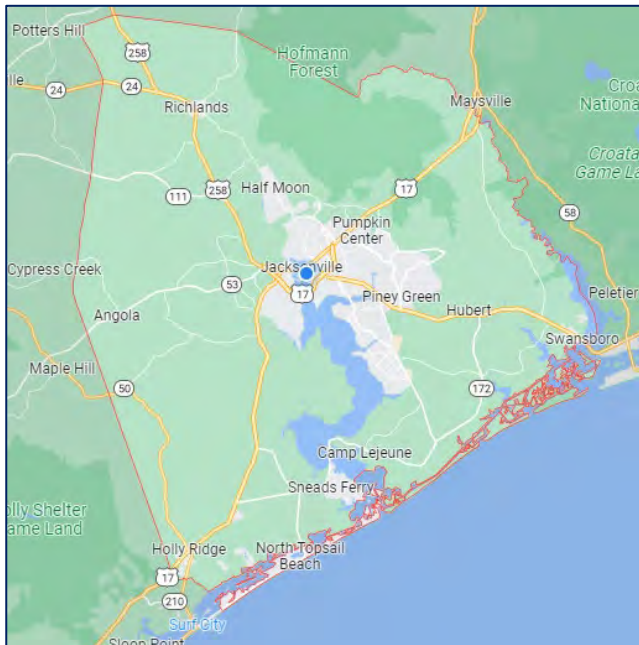
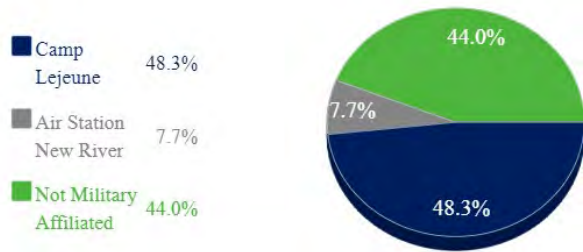


Figure 1. Onslow County Population



Total Population

Onslow County is home to an estimated population of 206,160, an increase of over 28,000 people since 2010. North Carolina contains 48,623 square miles, and 762.1 of those square miles belong to Onslow County. Those affiliated with the military account for more than half of the population.

Demographics

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

Table 1. 2021 Onslow County Race	
Native Hawaiian and Other Pacific Islander	0.3%
American Indian and Alaska Native	0.9%
Asian	2.2%
Two or More Races	4.6%
Black or African American	15.8%
White	76.2%

Minority Population

Health disparities are preventable differences in the burden of disease, injury, violence, or opportunities to achieve optimal health that are experienced by socially disadvantaged populations. Having accurate community representation, inclusion, and diversity are important to providing culturally appropriate services to minority and other vulnerable populations. The racial and ethnic composition of Onslow County can be found in Tables 1 and 2, as reported by the U.S Census Bureau.

Table 2. 2021 Onslow County Hispanic Origin Description	
Hispanic or Latino	12.9%
White, not Hispanic of Latino	65.7%

Military/Veteran Populations

Military Population

The Military Installations Camp Lejeune and Air Station New River are located entirely within the borders of the county. According to Military Installations for Camp Lejeune and Marine Corps Air Station New River, in total, both military bases employ 45,079 active-duty military members, 3,570 civilians, and accommodates 45,610 family members and 21,210 retirees. Over half of Onslow County is military-affiliated in some form. Many military families live in Onslow County for only a few years, creating an ever-changing and diverse community but presenting the challenge of newcomers being unfamiliar with the resources and services available to them.

Table 3. Military Population of Onslow County

	Camp Lejeune	Air Station New River	Total
Active Duty	38,778	6,301	45,079
Retirees	18,719	2,491	21,210
Family Member	38,769	6,841	45,610
Civilians	3,349	221	3,570
Total	99,615	15,854	115,469

Veteran Population

A veteran is defined as anyone who served in the active military, naval, or air service and did not separate via a dishonorable discharge as described by the U.S Department of Veterans Affairs. A retiree is any member or former member of the uniformed services who is qualified, by law, to retired pay, retirement, or retainer pay for being a member of the service, stated in the Veterans Benefit Administration Manual. In accordance with Tricare regulations, there are different plans for Tricare after retirement, however an individual must enroll within 90 days of retirement to avoid a lapse in coverage. According to U.S Census Bureau, between 2016 to 2020, North Carolina was home to about 654,000 veterans, with roughly 24,000 veterans residing in Onslow County from 2016 to 2020 (US Census Bureau).

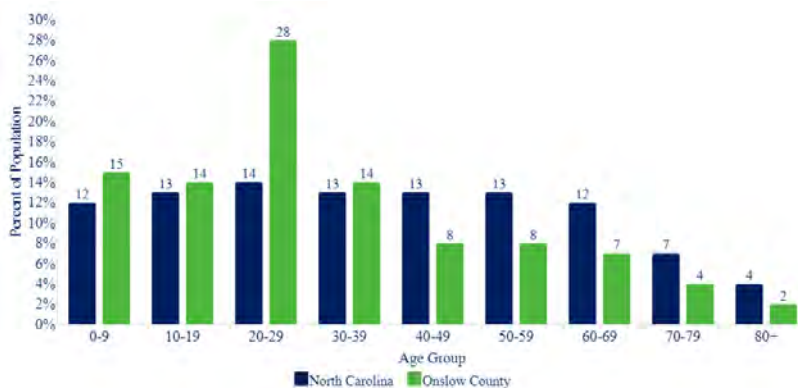
Population Growth

Rapid population growth makes it difficult for low-income and lower-middle-income households to afford the increase in public expenditures per capita and exacerbates efforts to reduce poverty, food insecurity, and barriers to accessing essential services such as health care and education.

Onslow County will continue to experience population growth. According to the North Carolina Office of State Budget and Management, it is projected that by the year 2040 the county will have a population of 250,566 and a population of 273,761 in 2050. One of the contributing factors to the birth and death rates in the area and the future population growth can also be attributed to the expansion of the military installations. In February 2020, it was announced that between 2020-2022 the Marine Corps Forces Special Operations Command was moving its entire special operations unit to North Carolina. The consolidation will see roughly 900 Marines, Sailors, and civilian employees located from Camp Pendelton, California to Camp Lejeune according to the Marine Times.

Table 4. Onslow County Predicted Population Growth			
	Current Population	Predicted 2040 Population	Predicted 2050 Population
Onslow County	206,160	250,566	273,761
North Carolina	10,551,162	12,669,133	13,824,955

Figure 2. Percent of Population by Age Group (2020)



Age Groups

Figure 2 illustrates the percent of the population in Onslow County and North Carolina by age for 2020. In 2020, the largest percentage of the Onslow County population fell between the ages of 20-29 with the median age being 26.5 while the median age in North Carolina was 38.9. The military population residing in Onslow County is a contributing

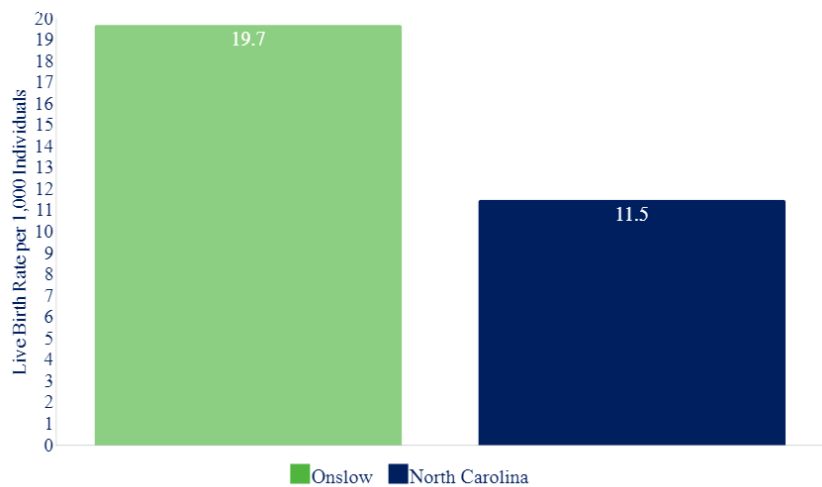
factor to skewing the average age, given the average age of Active Duty military members stationed at Camp Lejeune is between the ages of 20-21 (Statistical Atlas). Even though there is a large young population, there is a need for services that support the aging community. This is evident by the 41.7% of survey respondents that say Onslow County is a “good place to grow old.” Onslow County Board of Commissioners has approved American Rescue Plan Act funds to build an expansion of the Senior Services facility.

Birth Rates

Birth rates are important measures of population health and are measured as the number of births divided by the total population and then multiplied by 1,000. The birth rate is usually the dominant factor in determining the rate of population growth; however, population growth is also driven by the age structure of the population, immigration, and emigration. According to the NC State Center for Health

Statistics, between the years 2016-2020, North Carolina's live birth rate was 11.5 per 1,000 individuals. Onslow County's live birth rate between those years was significantly higher at 19.7 per 1,000 individuals. This trend indicates a need for services related to healthy pregnancies, WIC, the benefits of breastfeeding, nutrition education for new and expectant mothers, education on infant safe sleep practices, developmental milestones, childhood immunizations, etc. In the development of CHIPs, CHAT designated healthy living (which encompasses women's and children's health as well as breastfeeding) as a top priority area for the County due to the need for community services related to women's and children's health.

Figure 3. Live Birth Rates per 1,000 Individuals, 2016-2020



Chapter 3 Social Determinants of Health

Social Determinants of Health (SDOH) are the conditions in the environments where people are born, live, work play, worship, and age that affect a wide range of health, function, and quality-of-life outcomes. SDOH can be grouped into 5 domains: Economic Stability, Education Access and Quality, Neighborhood and Built Environment, Social and Community Context, and Health Care Access and Quality.

Economic Stability

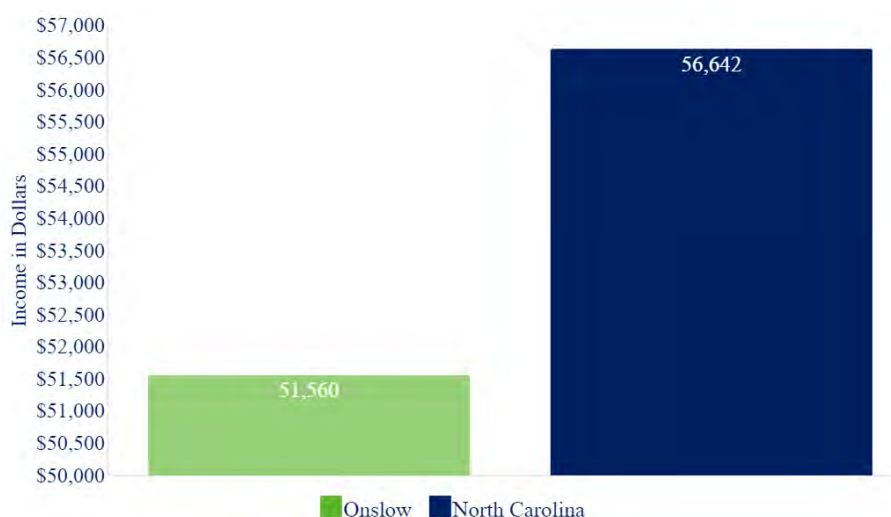
Economic Stability is categorized as one of the five Social Determinants of Health. It is the connection between the financial resources people have such as income, cost of living, and socioeconomic status. Those with a low socioeconomic status are more likely to suffer from chronic conditions such as diabetes, obesity, and cancer. The CDC identifies low-income and lower-middle-income individuals as having less access to resources such as healthcare or medication to other services. Community health improvement efforts must determine which subpopulations are most in need to effectively focus services and interventions.

Of the survey respondents, 35.7% believe employers in Onslow County need higher-paying employment.

Income

Median household income reflects the relative affluence and prosperity of an area. In 2020, the median household income in Onslow County was \$51,560, which is lower than the median household income in North Carolina of \$56,642. Areas with higher median household incomes typically have a greater share of educated residents and lower unemployment rates.

Figure 4 . Median Household Income (2020)

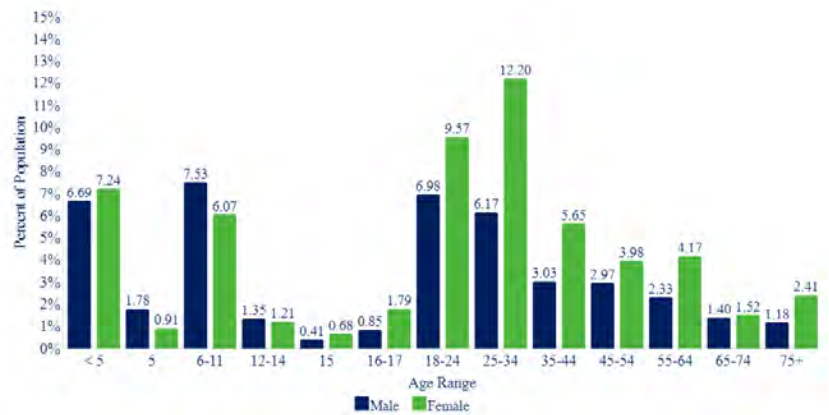


Poverty

The Census Bureau uses a set of money income thresholds that vary by family size and composition to determine who classifies as impoverished. If a family's total income is less than the family's threshold, then that family and every individual within it are living in poverty. Individuals living below the Federal Poverty Level have limitations in regards to access to health services, healthy food, and other necessities playing a role in poorer health statuses.

Federal Poverty Levels, or FPL, help determine an individual's eligibility for various subsidies, programs and benefits. For example, FPL is used to determine their eligibility for Medicaid. A high poverty rate is both a cause and a consequence of poor economic conditions. The community recognizes this, as CHNA survey respondents named "low income/poverty" as the top issue with the highest impact on quality of life in Onslow County.

Figure 5. Percent of Population in Poverty by Age and Sex in Onslow County (2019)

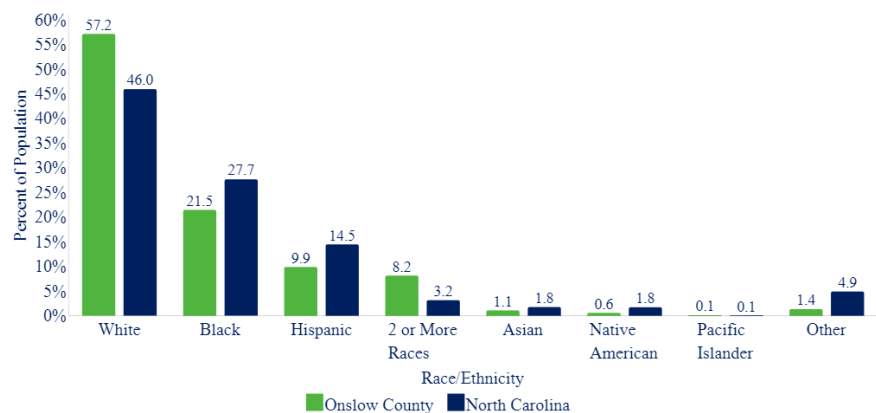


According to Data USA, the largest demographic living in poverty in Onslow County are females ages 25-34. In 2019, the average salary for females in North Carolina was \$48,401, in comparison to \$64,373 for men. This data indicates that gender income inequality is an ongoing issue that the County and North Carolina must continue to be aware of and address.

Poverty by Race and Ethnicity

Poverty is directly linked to negative health outcomes. Income is central to accessing resources needed to be healthy such as safe housing, nutritious food, education, transportation, and healthcare. According to the North Carolina Institute of Medicine, Healthy North Carolina

Figure 6. Percent of Population in Poverty by Race/Ethnicity



2030, people of color are disproportionately more likely to live in poverty. The Census Bureau uses

a set of money income thresholds that vary by family size and composition to determine who classifies as impoverished. Figure 6. shows the most common racial or ethnic group living below the poverty line in North Carolina and Onslow County is White, followed by Black and then Hispanic (Data USA).

Children in Poverty

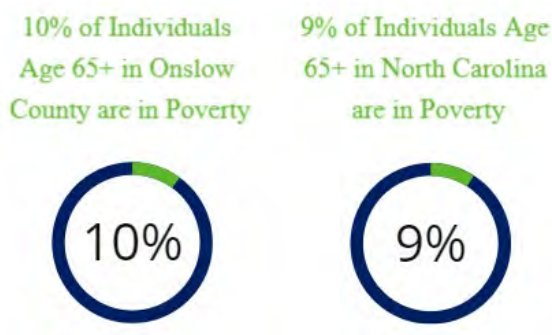
Nationally, children were the most likely of any age group to live in poverty, with 35.8% of people under the age of 18 in the United States living under 200% of the FPL in 2020 (US Census Bureau).

In Onslow County, 8,114 out of 50,715 children (16%) are living in poverty according to the US Census Bureau and Census Reporter in 2020. According to the North Carolina Institute of Medicine, Healthy North Carolina 2030, children born to low-income mothers have a greater risk of low birth weight and higher rates of heart conditions, hearing problems, and intestinal disorders. Children in poverty are also more likely to experience inadequate health outcomes such as having a low birth weight, obesity, poor mental health, asthma, and even infant mortality.

Figure 7. Roughly 1/10 Children in Onslow County are in Poverty



Figure 8. Percent of Adults Age 65+ in Poverty



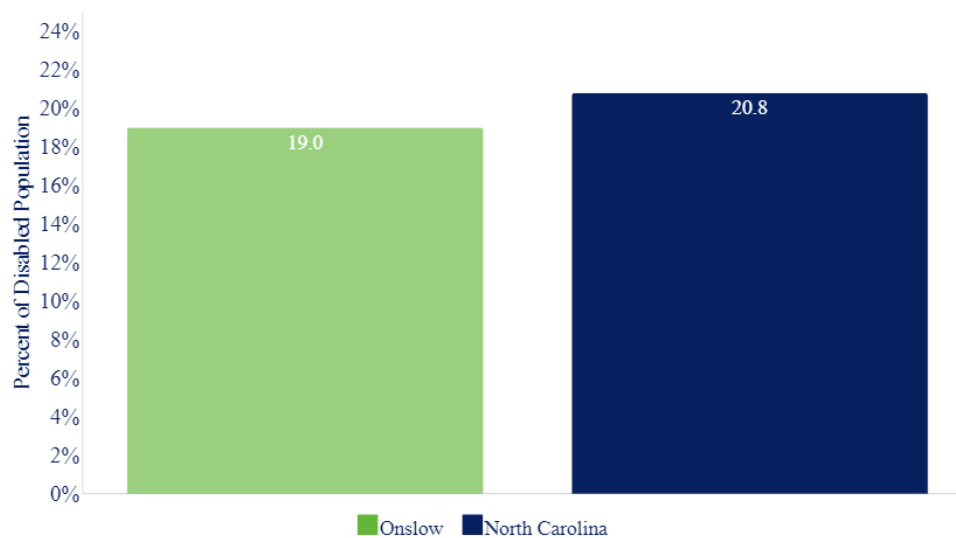
Older Adults in Poverty

Income is essential to accessing resources needed to be healthy such as safe housing, nutritious food, education, transportation, and healthcare. According to the National Council on Aging, over 15 million Americans age 65+ are economically insecure. Those experiencing low incomes may have limited options when selecting where to live, what services to use, and may also require more special needs. In a report by the Kaiser Family Foundation, the poverty rate increases as health status worsens. The rate of adults age 65+ years living in poverty is 1% higher in Onslow County (10%) when compared to North Carolina (9%) according to Census Reporter.

Disabled Individuals Living Below Poverty

Persons with disabilities are more likely to live in poverty in comparison with the general population. Without adequate income, individuals with disabilities may not be able to afford necessary expenses such as rent, mortgage, utility bills, medical and dental care, or food. Figure 9 shows the percent of disabled people living below poverty level in Onslow County (19%) is lower than NC (20.8%).

Figure 9. Percent of Disabled Population Living Below Poverty Level



Education Access and Quality

The connection between education to health outcomes is well-established—people with higher levels of education are more likely to live healthier and longer. It therefore makes sense that Education Access and Quality is one of the five SDOH. This domain includes key issues such as graduating from high school, enrollment in higher education, educational attainment, language and literacy, and early childhood education and development.

High School Dropouts

Graduating from high school is an important personal achievement and is essential for an individual's social and economic advancement. Graduation rates can also be an important indicator of the performance of an educational system.

Health factors have the potential to negatively influence an individual's educational attainment and increase the likelihood of dropping out. Risk factors include:

- The size of the school

- School structure and curriculum
- Low grades
- Educational expectations
- Grade retention
- Language barriers
- Socioeconomic status
- Race/Ethnicity

The high school dropout rate in Onslow County has decreased when compared to previous years. According to the North Carolina Department of Public Instruction, Onslow County's high school dropout rate was 1.56 per 100 students during the 2020-2021 school year, which is lower than the average rate of the previous 4 years.

Table 5. High School Dropout Counts/Rates Per School Year										
	2016-2017		2017-2018		2018-2019		2019-2020		2020-2021	
	Count	Rate	Count	Rate	Count	Rate	Count	Rate	Count	Rate
North Carolina Public Schools	11,097	2.31	10,523	2.18	9,512	2.01	7,194	1.53	9,147	1.94
Onslow County	165	2.20	148	1.97	119	1.63	55	0.76	116	1.56

The rate of high school suspensions in Onslow County have also been declining over time (Table 6). The rate fluctuates yearly, but at the County has seen a recent decline to 8.7 suspensions per 100 students in the 2019-2020 school year, the lowest it has been since 2014.

Table 6. Rate of High School Suspensions in Onslow County Schools per School Year										
Data Type	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
Number	2,368	2,339	2,339	2,027	2,299	2,594	2,473	2,867	2,611	2,303
Rate	10.1	9.6	9.5	8.1	9.1	10.1	9.5	10.9	9.9	8.7

Educational Attainment

Educational attainment is the highest level of education that an individual has completed. This includes a doctoral degree, Master's degree, Bachelor's degree, or high school diploma. When an individual obtains a degree or some form of post-secondary education, it introduces career

opportunities in a variety of fields and is often a prerequisite for higher-paying jobs—making the individual more likely to achieve better health outcomes.

Educational attainment rates in Onslow tend to be lower overall when compared to North Carolina. Onslow County has only 4 colleges within county limits: Cheveux School-Hair Design, Coastal Carolina Community College, Campbell University Camp Lejeune Campus, and Miller-Motte Community College-Jacksonville.

The percent of educational attainment for Onslow County and North Carolina in 2020 are as follows:

Table 7. Percent of Population (Ages 25 and Up) Educational Attainment for Onslow County and North Carolina (2020)		
Education	Onslow County	North Carolina
Partial College, No Degree	28.5%	21.1%
Associate degree	10.9%	9.9%
Bachelor's Degree	16.4%	20.4%
Graduate/ Professional Degree	7.2%	11.6%

Neighborhood and Built Environment

Neighborhood and Built Environment is another SDOH, and it encompasses the connection between where a person lives (including their housing, neighborhood, and environment) and their health and wellbeing. This includes topics like quality of housing, access to transportation, air and water quality, and neighborhood crime and violence.

Survey respondents were asked to identify the top 3 issues which have the highest impact on the quality of life in this county. 39.9% of respondents chose lack of affordable housing.

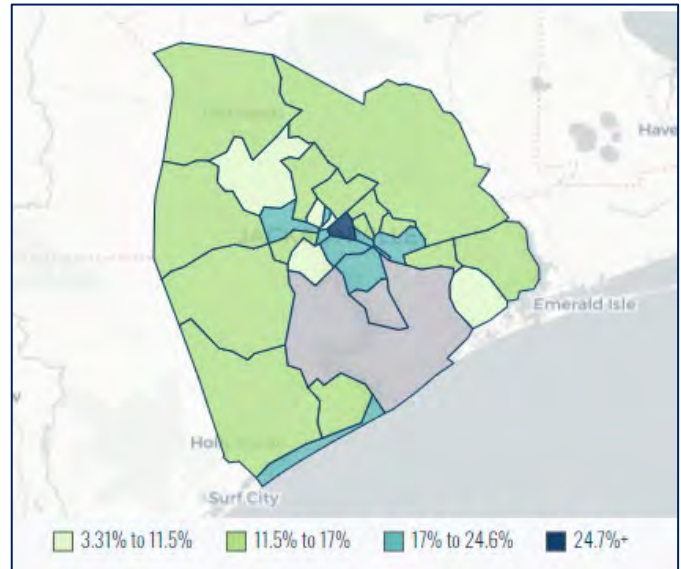
Housing Severe Housing Problems

Safe and affordable housing is an essential component of healthy communities. Housing problems include overcrowding, high housing costs, lack of kitchen, or lack of plumbing facilities. A lack of safe and affordable housing can provoke negative health outcomes such as low-quality childhood development, chronic diseases, and/or even injury. Severe housing problems correlate with high rates of poverty and historic segregation that have confined people of color to under-resourced

residential areas, according to the North Carolina Institute of Medicine, Healthy North Carolina 2030. Therefore, disparities primarily occur along geographic, racial, educational, and income lines.

The map provided by Cape Fear Collective, shows the percentage of people with severe housing problems in Onslow County. These housing problems are contributing to the absorption rate. A local realty group in the county, RE/Max Elite Realty Group, shared that the housing absorption rate, which is how long a house will typically stay on the market on average, has dropped significantly since 2016. In 2016 the average housing absorption rate was 2.75 months vs. 2020 at 1.75 months. Aside from the current state of the economy and housing market, Onslow County has faced housing shortages for years. These shortages were greatly impacted by Hurricane Florence which exacerbated the housing market, and its impact has continued to plague the housing market in Onslow County (JD News).

Figure 10. Rate of Population with Severe Housing Problems in 2019



Median Monthly Housing Costs

High costs of homeownership with a mortgage can strain both homeowners and the local housing market.

The median property value in Onslow County raised from \$153,900 in 2018 to \$156,900 in 2019, states Data USA. The median property value has not increased nearly as much in the same time frame as the median listing price in Onslow County. According to the Federal Reserve Economic Data source, the median listing price in Onslow

Figure 11. Median Listing Price in Onslow County, 2018-2021



County ranged from \$191,950 in January 2018 to \$214,400 in December 2019. While the property value stays within a close range as the listing prices in Onslow County soar, this displays the seller's capability to list the home much more than its worth due to the high demand for homes in the community.

Data from Zillow, one of the most visited real estate websites, shows an average of 19.71% increase in typical home values in houses in the Onslow County area since January 2019. The North Topsail Beach area has seen the largest increase at 27.1% since the previous year. CHNA survey respondents also listed “lack of affordable housing” as a top issue in Onslow County that needs improvement.

Onslow County Household Size

The average household size in Onslow County is 2.73 people per household (owners) and 2.64 people per household (renters), which is slightly higher than the North Carolina value of 2.57 people per household (owners) and 2.39 people per household (renters). This trend reflects the growing population of Onslow County and further demonstrates the need to address access to affordable housing in the County.

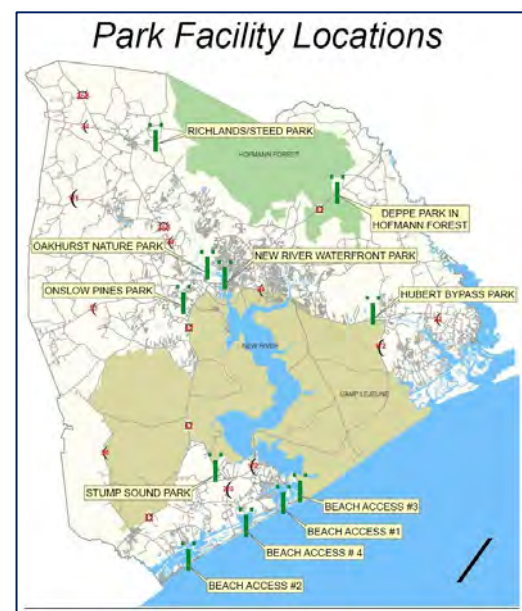
Table 8. Owners’ and Renters’ Average Household Size in Onslow County and North Carolina		
Average household size	Onslow County	North Carolina
Owners’	2.73	2.57
Renters’	2.64	2.39

Parks and Recreation

The CDC recommends at minimum 150 minutes of moderate level physical activity per week. Physical activity reduces the risks of chronic diseases such as heart disease, type 2 diabetes, cancer, depression, anxiety, and dementia. Not only does adequate physical activity reduce rates of disease, but it also promotes overall well-being. For example, improved sleep, increased physical ability in individual’s everyday activities, improved cognitive ability, and improved bone and musculoskeletal health are all benefits of regular physical activity.

Lifestyle choices undoubtedly affect obesity rates. It is also important to recognize the role of larger socioeconomic factors that can influence behavior, including access to affordable healthy food options and a built environment conducive to physical activity. Having ample access to safe, clean parks and other

Figure 12. Onslow County Park Facility and Beach Access Locations



recreational facilities, for example, influence good health and physical activity. These areas and facilities are vital to an individual's quality of life and provide residents with affordable exercise options. Within the borders of Onslow County, there are 9 parks, 2 paddling trails, 2 bicycle routes, and 4 beach access points. In 2021, Onslow County park attendance exceeded 1.1 million visitors. In 2021, there was also two new additions to Onslow County Parks and Recreation (Big Branch Bike Park and Hines Farm Park & Stables).

One of the survey questions asked participants the reason they “do not exercise at least a half-hour a few days each week” See responses below:

- 1.5%, I would need transportation and I don't have it
- 2.3%, I don't know how to safely
- 3.3%, Exercise is not important to me
- 6.7%, I don't know how to find exercise partners
- 6.7%, Other
- 8.7%, It costs too much to exercise
- 9.4% I would need childcare and I don't have it
- 10.4, Facilities closed due to Covid-19
- 10.8%, There is no safe place to exercise
- 11.9%, My job is physical or hard labor
- 12.9% I'm physically disabled
- 15.8% I don't have access to a facility that has the things I need like a pool, golf course, or track
- 20.2%, Low self-image
- 36.4%, I don't have enough time to exercise
- 54.3%, I'm too tired to exercise

Transportation

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

In 2019, Onslow County had an estimated 0.35% of residents commute to work by public transportation, compared to the state value of 1.1% (Data USA). Approximately 8.23% of residents walk to work, which was higher than the state value of 1.8% (Data USA).

Onslow County has two modes of public transportation available and accessible to the public. Onslow County Transit System (OUTS) Inc. serves pre-qualified residents of Onslow County needing transportation to medical appointments, work, daycare, shopping, and social and recreational activities. This is a curb-to-curb service that requires prescheduling of rides and preauthorization. Jacksonville Transit is another mode of public transportation serving the City of Jacksonville. Jacksonville Transit has a set bus route (Figure 13). The system offers a reduced fare rate for individuals 6-18 years old, 65 and older, and those with disabilities who have an approved photo ID.

Other agencies have seen the need to reduce the gaps in transit services within the county. Onslow County Senior Services offers additional transportation services to the 60 and older population for medical appointments and other basic needs.

Figure 13. Jacksonville Transit Bus Route



Survey respondents were asked to choose the top 3 services that need improvement, 25.1% of survey respondents chose transportation.

Food Insecurity Households with SNAP Benefits

Limited access to healthy foods has been linked to obesity, cardiovascular conditions, nutritional deficiencies, diabetes, and chronic kidney disease. The Supplemental Nutrition Assistance Program (SNAP) is a federal

assistance program that provides low-income families with electronic benefit transfers (EBTs) that can be used to purchase food. The goal of the program is to increase food security and reduce hunger by increasing access to nutritious foods. Per the Onslow County Department of Social Services, total SNAP benefits issued out to Onslow County residents in fiscal year 2020/2021 was \$55,078,855 which was an 86.5% increase from 2019/2020 which was \$29,530,008.

The Food Bank of Central and Eastern North Carolina found that in 2018-2019, 14.6% of the Onslow County population was identified as food insecure, and 20.3% children under the age of 18 experienced food insecurity during that time. Share the Table, Inc. estimates that currently 15.2% of the Onslow County population is considered food insecure, while 20.4% of children under the age of 18 have been identified as food insecure.

Food insecurity has risen in Onslow County over the past few years. Many nonprofits, faith communities, and government programs have seen a need to reduce food insecurity in the community. These resources include but are not limited to:

- Churches that offer food drives
- Food Banks
- Food Pantries
- Farmers' Markets (not free but accept WIC/SNAP benefits and support local farmers)
- Homeless shelters
- Salvation Army
- Soup kitchens

In the past 12 months were you ever worried about whether your family's food would run out before you got money to buy more?

- 78.8% of survey respondents answered **No**
- 20.3% of survey respondents answered **Yes**
- 0.9% of survey respondents answered **Don't Know or Not Sure**

Figure 14. Map of Food Resources in Onslow County



Crime and Safety

Both violent crime and property crime are used as indicators of a community's crime and safety. Violence negatively impacts communities by increasing the risk of physical injuries, and mental health conditions. Additionally, high crime rates in a community limit business growth and put a strain on education, justice, and medical systems. Violent crime includes four offenses: murder and non-negligent manslaughter, rape, robbery, and aggravated assault. Property crime includes the offenses of burglary, larceny-theft, motor vehicle theft, and arson.

More than half (53.1%) of survey respondents agree this county is a safe place to live.

According to Crime Grade, the rate of crime in general in Onslow County is 48.87 per 1,000 residents each year. The leading form of crime in the county is property crime. Throughout the county the rate of property crime is 31.23 per 1,000 residents, with theft being the leading offense at 14.83 per 1,000 residents. Burglary is close in comparison when it comes to property crime at 13.98 per 1,000 residents.

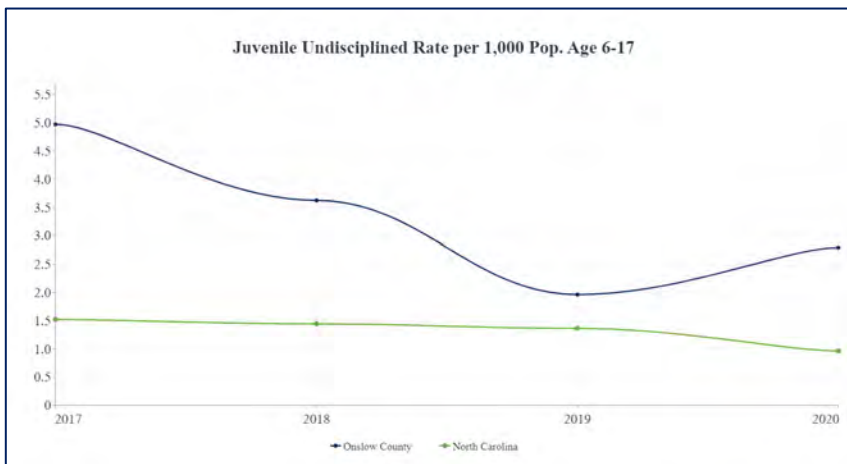
Juvenile Crime

Youth who commit crimes may not gain the educational credentials necessary to secure employment. Negative peer influences, a history of abuse/neglect, mental health issues, and significant family problems increase the risk of juvenile arrest.

The undisciplined rate describes juveniles who are unlawfully absent from

school; regularly disobedient and beyond disciplinary control of the parent/guardian; are regularly found where it is unlawful for juveniles to be or have run away from home for more than 24 hours. According to the North Carolina Department of Public Safety, Figure 15 shows that in 2020, the juvenile undisciplined rate in Onslow County (2.8) was higher than the rate in North Carolina (0.97).

Figure 15. Juvenile Undisciplined Rate per 1,000 Population 6-17



Onslow County Sheriff's Office assigns School Resource Officers (SROs) to schools around the county to protect students and make a safer educational environment. There are 27 schools throughout the County, and currently 19 SROs. In 2021-2022, alone there were 777 reports taken, 149 leading to arrests which in turn resulted in a teen court referral or juvenile petition. Of the 777 reports taken 85 turned into teen court referrals, 142 juvenile petitions, and 184 warning notices. Onslow County Sheriff's Office has seen an alarming increase in reports from the 2020-2021 school year to 2021-2022 school year. In 2020-2021, there were 298 reports taken, 17 of those resulted in

arrests, 31 teen court referrals, and 38 juvenile petitions. Due to the alarming increase in reports from the 2021-2022 school year three additional SRO positions will be proposed for the 2022-2023 school year.

Juvenile delinquency is the committing of criminal acts or offenses by a person younger than 18 years of age that would be a crime if committed by an adult. According to the North Carolina Department of Public Safety, in 2020, the juvenile delinquent rate for Onslow County was higher (21.74) than in NC (18.1). While the juvenile crime rate decreased from 2017 to 2018, the rate increased from 13.7 in 2018 to 21.74 in 2020. Juvenile crimes include DUI arrest, minor in possessions, robbery, rape, murder, and any other crime that can be committed by an adult.

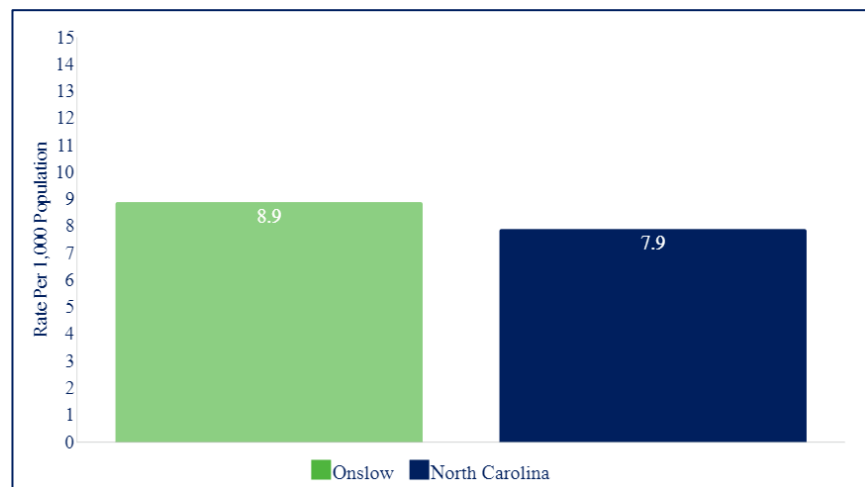
Child Abuse

Child abuse includes physical, sexual, and emotional abuse. All types of child abuse and neglect can have long-lasting effects throughout life, damaging a child's sense of self, ability to have healthy relationships, and ability to function at home, at work, and at school. Adverse childhood experiences (ACEs) can arise from traumatic events such as Abuse, Neglect, or Family

Adversity such as domestic violence, substance use/abuse, mental health illness, incarceration of a parent, bullying, witnessing violence, racism/sexism/discrimination, homeless/inconsistent living conditions or natural disaster/war.

The 2020 child abuse rate in Onslow County was higher (8.9 per 1,000 pop.) than in NC (7.9 per 1,000 pop.). In 2020, 57.4 children per 1,000 population in Onslow County were assessed for abuse and neglect compared to 43.4 per 1,000 population in North Carolina. Onslow County has multiple resources to aid in the prevention of child abuse and neglect. One Place Child Advocacy Center located in Onslow County plays an essential role in connecting families with vital resources and programs such as Early Head Start, Pre-K, Childcare Resources and Referrals, and Early Educator Support, and serve as programs serve as protective factors while providing comprehensive services targeting the impacts of abuse and neglect. In Spring 2018, TASCO (Turning Adversity Into Success for Children in Onslow) was formed by the city of Jacksonville, Onslow County Government, Camp Lejeune and other area community resources. In Onslow County, PEERS Family Development Center services include prevention of child abuse and neglect while promoting effective parenting

Figure 16. Child Abuse Rate per 1,000 Population



practices. Measures have been taken to implement programs such as the Parent Enhancement Program, Adolescent Parenting Program with Parents as Teacher home visiting curriculum, and Childcare. A common program offered by PEERS Family Development Center to aid against child abuse and neglect is the Triple P Program (Positive Parenting Program). The Triple P program offers evidence-based parenting and family support strategies to parents of children 0-16 years of age while normalizing the concept of seeking parenting support.

Social and Community Context

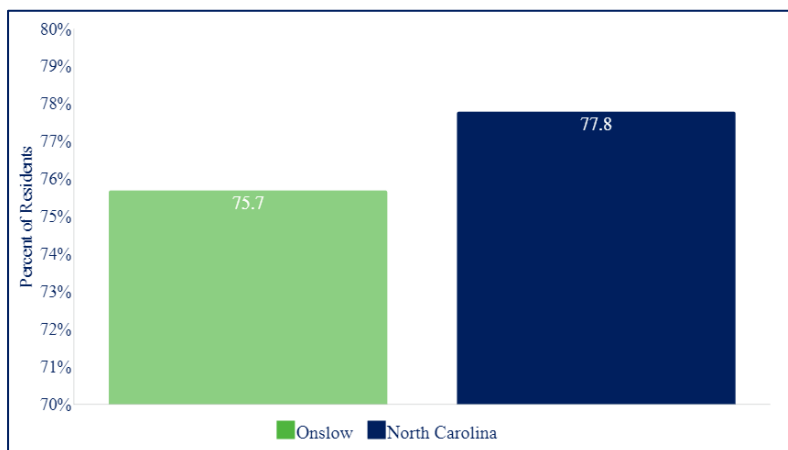
Social and Community Context refers to the settings in which people live, learn, work and play, and their health and wellbeing, and it includes relationships. This includes topics like cohesion within a community, civic participation, discrimination, conditions in the workplace, and incarceration.

Civic/Political Engagement

Exercising the right to vote allows a community to choose elected officials and hold them accountable. Voting ensures that all citizens can voice their opinions on issues such as the use of tax dollars, civil rights, and foreign policy. By voting, individuals shape their communities and influence the next generation of society. Onslow County has a lower percentage of residents of voting age (75.7%) than North Carolina (77.8%). According to the Onslow County Board of Elections

approximately 111,000 Onslow County citizens are registered to vote, leaving about 89,000 citizens unregistered or are registered in their home of record. Onslow County Health Department's Women, Infants, and Children (WIC) Program helps clients register to vote if needed to help increase voter engagement. To educate about the Uniformed and Overseas Absentee Voting Act (UOAVA), the State Board of Elections sends representatives to military units and squadrons to inform and assist them in absentee voting.

Figure 17. Percent of Population of Voting Age, 2015-2019



Incarceration

According to the US Bureau of Justice Statistics, approximately one out of 100 adults in the US are in jail or prison. Conditions in jails and prisons can lead to an increased risk of infectious diseases such as tuberculosis, hepatitis C, and COVID-19, as well as assault from other inmates. After incarceration, individuals are likely to face a variety of social issues such as employment discrimination, disruption of family relationships and recidivism.

The incarceration rate for North Carolina is 341 per 100,000 population (HNC 2030). The Onslow County Detention Center provided incarceration data from January 2020 through December 2021. The report identified 1,380 female incarcerations in Onslow County, with an average of 3.78 bookings per day. Compared to 3,748 incarcerations for males throughout the county, with an average of 10.27 bookings per day. This totals 5,128 incidences of incarcerations for 2021. The total number of incarcerations for Onslow County is up by 435 bookings from 2020 to 2021.

Figure 18. One out of 100 Adults in the US Jail or Prison



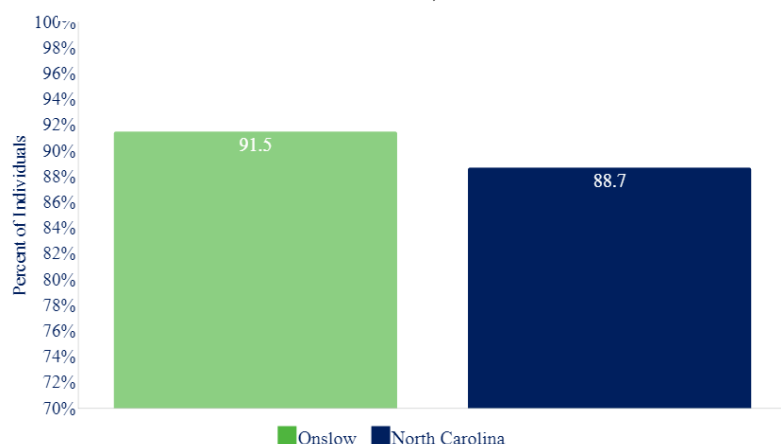
Healthcare Access and Quality

Healthcare Access and Quality is another Social Determinant of Health. It is the connection between people's access to and understanding of health services and their own health. This domain includes key issues such as access to healthcare, access to primary care, health insurance coverage, and health literacy.

Health Insurance Coverage

Figure 19 illustrates the percentage of individuals age 0-64 with Health Insurance, 2015-2019. About 1 in 10 people in the United States do not have health insurance. Health insurance is a contract that requires a health insurer (insurance company) to pay some or all of an individual's healthcare cost in exchange for a premium. Not everyone has the financial ability to pay a monthly premium to obtain health insurance, let alone

Figure 19. Percent of Individuals Age 0-64 with Health Insurance, 2015-2019



vision or dental insurance. High medical costs in the United States make it extremely difficult for the average person to afford medical bills from routine or catastrophic healthcare out-of-pocket. Laws such as the Affordable Care Act, which address health insurance coverage, health care costs, and preventative care, have extended coverage to millions of uninsured Americans. Most health plans cover a set of preventive services such as shots and screening tests where there is no out of pocket cost to the participant (Healthcare.gov). People without health insurance may not be able to afford medical treatment or prescription drugs. They are also less likely to get routine checkups and screenings, so if they do become ill, they delay seeking treatment until the condition is more advanced, and therefore more difficult and costly to treat. Throughout the county, there are a few, low-cost resources for individuals who do not have health insurance. Some of those resources available in Onslow County include Caring Community Clinic, Goshen Medical Center, and Onslow County Health Department, who all offer a sliding fee scale for individuals who are low-income or uninsured.

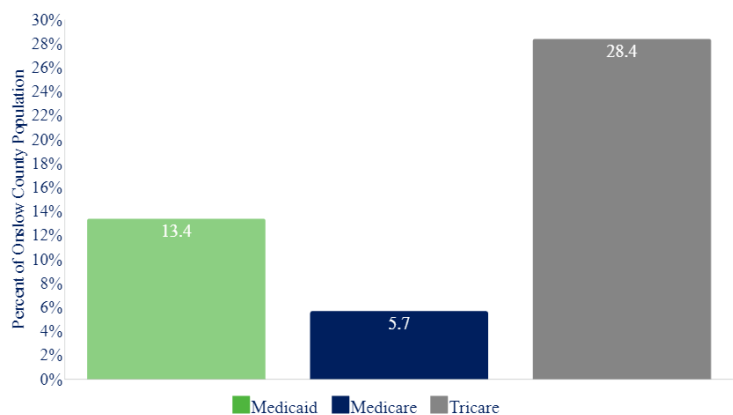
Data USA found that 91.5% of individuals have health insurance in Onslow County as compared to 88.7% across NC. This high coverage rate is largely due to the high military presence and federal employment opportunities in the community.

Government Health Insurance Only Coverage – Medicaid, Medicare, Tricare

Medicaid, Medicare, and Tricare are government health care programs. Each program serves a specific population (older persons, persons with disabilities, low-income individuals, veterans, and active-duty personnel and their dependents).

Between 2018-2019, Data USA reported in Onslow County, 13.4% of the population receives health insurance coverage through Medicaid, 5.7% through Medicare, and 28.4% through Tricare.

Figure 20. Percent of Onslow County with Government Insurance, 2018-2019



Primary Care Practitioners

Access to primary care is necessary to improve the health outcomes of communities. With the COVID-19 Pandemic, primary care is critical as an entry point to further care. Many rural areas of North Carolina lack adequate access to primary care providers. The disparities in access between rural and metropolitan areas have continued to grow despite an overall increase of physicians in NC. In the CHNA survey, 30.8% of respondents stated that they had a problem getting health care you needed for themselves or a family member in the past 12 months. The majority (53.6%) of those who had problems were seeking primary care. The top two reported reasons why they experienced difficulties in seeking care were due to inability to get an appointment or COVID-19.

In the map above (Figure 21), Onslow County is shaded in green, a color that indicates the county is meeting the NC Institute of Medicine's (NCIOM) target ratio of 1 primary care provider to every 1,500 people. The NCIOM definition of primary care clinician includes physicians, nurse practitioners (NPs), physician assistants (PAs), and certified nurse-midwives (CNMs). As shown in

Figure 21. Population per Primary Care Practitioner, North Carolina, 2017

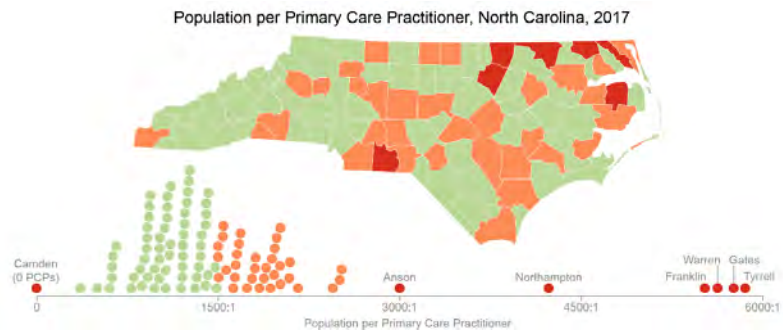


Figure 22. Physicians per 10,000 Population by County, North Carolina, 2019

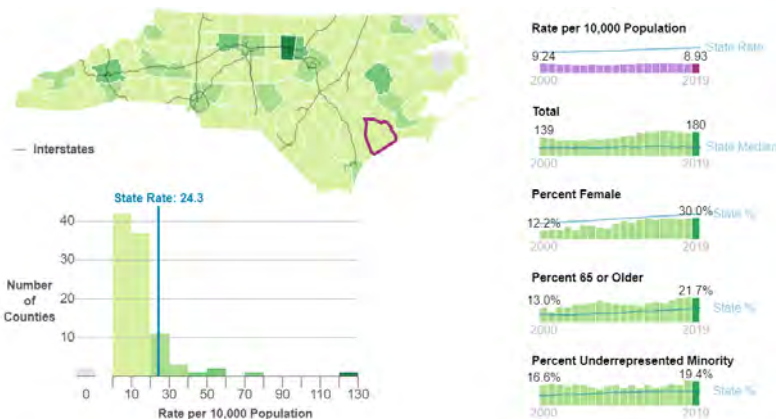


Figure 22, however, the number of physicians per 10,000 population in Onslow County has decreased from 9.24 physicians in 2000 to 8.93 in 2019, which is below the state rate of 24.3 per 10,000 population.

Teen Birth Rates

Where teens are born, live, learn, play, work, and worship have an impact on their health outcomes. Drivers of health inequities identified by the CDC that contribute to high teen birth rates include low education or low-income levels of a teen's family, few opportunities in a teen's community for positive youth involvement, neighborhood racial segregation, neighborhood physical disorder, and

neighborhood-level income inequality. Access to quality health education and services, including contraception and Sexually Transmitted Infection information, is limited and can become a barrier to many teens in need of these services.

In Onslow County, the teen birth rate is two times higher than North Carolina’s average teen birth rate for females ages 15-19. Children of teenage mothers are more at risk of developing health problems, having lower school achievement, dropping out of high school, becoming incarcerated during adolescence, giving birth as a teenager, and experience unemployment as a young adult. The rates in Onslow County can be skewed by the expectant military population who are stationed here and married in their young adult years (ages 18-19). The NC State Center for Health Statistics reports that between 2016 and 2020, 1,260 of the 42,238 pregnancies for women age 15-19 statewide were in Onslow County. Expecting teens and women of Onslow County may find it difficult to access prenatal services due to the limited number of obstetricians providing prenatal care within the county. Prevention efforts to curb the prevalence of teen births is key, according to the CDC.

Table 9. Pregnancy Rates per 1,000 population for Females 15-19 in Onslow County and North Carolina, (2016-2022)		
Per 1,000 population	# of Pregnancies	Rate
Onslow County	1260	50.1
North Carolina	42,238	25.1

Social Determinants of Health Analysis

Creating conditions where families can thrive is extremely important. The pandemic revealed many health inequities in the community and highlighted the need to focus on social determinants of health to improve health outcomes. Promoting economic security, advocating for accessible healthcare services, improving community conditions, and increasing social connectedness has never been more important. The Onslow County Health Department, Onslow Memorial Hospital, and members of CHAT understand that the pandemic hit families and communities hard, and are working collectively to find ways to improve the community’s health, including:

- Increasing community resiliency by promoting partnerships with local resources for free or low-cost childcare such as PEERS Family Development Center and One Place.
- Highlighting the increase in abuse and neglect cases within the county through TASCO (Turning Adversity Into Success for Children of Onslow County).
- Increasing education and awareness on Adverse Childhood Experiences (ACES). Improving community conditions by collaborating with traditional and nontraditional partners to increase awareness and knowledge of the food insecure communities throughout the county.

Work will include highlighting services such as Onslow County Senior Services that provides meals to seniors, as well as food pantries such as St. Julia that hosts a weekly food drive.

- Advancing health equity through engaging community stakeholders and residents from diverse backgrounds to raise awareness and develop strategies to reduce health disparities in Onslow County.
- Facilitating a Health Department-led monthly stakeholder meeting and Health Equity Leadership team to address COVID-19 related health disparities and advance health equity by expanding local health department capacity and services.
- Leading a Health Department-driven internal health equity team and training to build staff capacity to understand and address equity, identify policies that may have a greater impact on Historically Marginalized Populations, and improve hiring practices.

Chapter 4 Life Expectancy and Chronic and Communicable Disease Profile

Life Expectancy

Life Expectancy refers to the expected average number of years of life remaining at a given age. There are many significant factors that can affect life expectancy including access to healthcare, lifestyle, crime rates, etc. In 2020, life expectancy at birth was 77 years for the total U.S. population – a decrease of 1.8 years from 78.8 years in 2019. Life Expectancy in Onslow County for 2018-2020 is 76.1 compared to North Carolina's Life Expectancy of 77.6 years for 2019 (CDC).

Leading Causes of Death

Cause of death is based on medical information that may include injury, diagnoses, and external cause of injury entered onto death certificates.

Knowledge about the leading causes of death in a population is critical to understanding how to target interventions to maximize population health. The top five leading causes of death in 2019 reported by the North Carolina State Center for Health Statistics in Onslow County were Cancer, Heart Disease, Chronic Lower Respiratory Disease, Cerebrovascular Disease, and Other Unintentional Injuries. In 2019, the top five leading causes of death

Onslow County				North Carolina			
Rank	Cause	Deaths	Rate	Rank	Cause	Deaths	Rate
1	Cancer	275	138.93	1	Cancer	19,963	190.34
2	Heart Disease	260	131.35	2	Heart Disease	19,661	187.46
3	Chronic Lower Respiratory Diseases	98	49.51	3	Chronic Lower Respiratory Diseases	5,411	51.59
4	Cerebrovascular Disease	65	32.84	4	Cerebrovascular Disease	5,203	49.61
5	Other Unintentional Injuries	62	31.32	5	Other Unintentional Injuries	4,683	44.65
6	Diabetes Mellitus	51	25.77	6	Alzheimer's Disease	4,508	42.98
7	Nephritis Nephrotic Syndrome and Nephrosis	38	19.2	7	Diabetes Mellitus	3,127	29.81
8	Suicide	36	18.19	8	Nephritis Nephrotic Syndrome and Nephrosis	2,121	20.22
9	Septicemia	32	16.17	9	Pneumonia and Influenza	1,730	16.49
10	Chronic Liver Disease and Cirrhosis	27	13.64	10	Motor Vehicle Injuries	1,608	15.33

for North Carolina were the same as Onslow County. After the top five, the leading causes of death differ, with one of most noticeable causes in Onslow County being suicide ranking in the top 10.

Leading Causes of Injury Death, Hospitalizations, ED Visits

Data from NC Department of Health and Human Services report from 2016 to 2019 in Onslow County identified the leading cause of injury deaths was unintentional poisoning, also known as overdose. The leading cause of injury hospitalizations and the leading cause of injury emergency department visits were unintentional falls.

Table 11. Leading Causes of Injury Death 2016-2019 Onslow County

Rank	Cause	#
1	Poisoning – Unintentional	159
2	MVT – Unintentional	92
3	Firearm – Self-Inflicted	84
4	Fall – Unintentional	49
5	Suffocation – Self-Inflicted	39
Total		557

Table 12. Leading Causes of Injury Hospitalization 2016-2019 Onslow County

Rank	Cause	#
1	Fall – Unintentional	1,152
2	MVT – Unintentional	354
3	Poisoning – Unintentional	268
4	Poisoning – Self-Inflicted	210
5	Fire/Burn – Unintentional	138
Total		2,615

Table 13. Leading Causes of ED Visits 2016-2019 Onslow County

Rank	Cause	#
1	Fall – Unintentional	13,062
2	Unspecified – Unintentional	7,283
3	MVT – Unintentional	6,563
4	Struck By/Against – Unintentional	4,828
5	Natural/Environmental – Unintentional	2,950
Total		52,530

Overall Violent Deaths

Two of the most common forms of overall violent deaths are homicide and suicide. From 2015-2019 there were 10,937 overall violent deaths in North Carolina with 64.6% of those death by suicide. During that same timeframe in Onslow County, there were 247 deaths categorized as overall violent, 73.4% were death by suicide, suggesting that suicide is a pervasive issue in Onslow County. CHNA survey respondents listed mental/behavioral health as being one of the top services that need the most improvement in the County. COVID-19 has only heightened this awareness, as the top three areas respondents stated as being impacted by COVID-19 were stress/anxiety, social isolation, and mental/behavioral health. This strong response shows Onslow County residents believe mental health and suicide to be important public health issues in the community.

Survey respondents were asked to identify the top 3 areas they were impacted most significantly/severely:

- 64.1% answered stress and anxiety
- 43.1% answered social isolation
- 35.1% answered mental/behavioral health

Onslow County has various services and resources to assist residents in crisis. Aside from national resources such as the National Suicide Prevention Lifeline and the Military Crisis Lifeline, there are also local resources. Agencies such as Trillium Health Resources, Integrated Family Services, and RHA Behavioral Health Services are mental health services that support victims and their families. Another resource in the county is the Jacksonville Survivors of Suicide Loss, which meets the second Tuesday of every month.

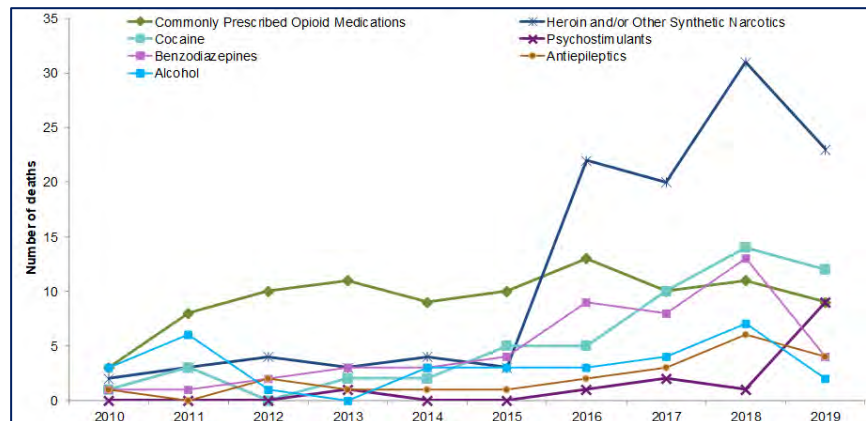
Substance Abuse

Substance abuse is a term utilized to describe the pattern of misusing drugs often occurring in individuals with mental illness to help cope with symptoms.

Unfortunately, the use of substances can lead to many chronic and acute health problems. Some chronic conditions are addiction, overdose, mental illness/disorders, heart disease, stroke, cancer, HIV/AIDS,

hepatitis B and C, and lung disease. Much like the rest of the nation, Onslow County continues to be affected by the serious opioid epidemic. In (Figure 23) there was a spike in heroin overdose deaths in Onslow County from 2015 to 2016, and another increase in overdose deaths between 2017 and

Figure 23. Substances Contributing to Overdose Deaths in Onslow County, 2010-2019



2018. OCHD is helping to lead the charge regarding substance abuse in the community by leading two substance abuse strategic teams.

Onslow County has formed two strategic teams to aid in the prevention and awareness of substance abuse within the community. One of the teams is SOAR (Strategic Opioid Advanced Response), which is a multidisciplinary task force that works to further the prevention of substance abuse in Onslow County. This task force is dedicated to improving the opioid response in the community through a collaborative effort among local government, community stakeholders, and concerned citizens. The other team is OFR (Overdose Fatality Review), where the team goal is to effectively identify system gaps and innovative community-specific overdose prevention and intervention strategies.

47.6% of survey respondents believe we need more info about mental/behavioral health, while 23.3% believe we need more info on substance misuse prevention.

According to the NCDHHS, in 2020, 78% of drug overdose deaths in Onslow County involved illicit opioids (heroin and synthetic fentanyl), compared to North Carolina at 76%. During 2020, Onslow County had 29.8 drug overdose deaths per 100,000 residents compared to North Carolina's 31.5 drug overdose deaths per 100,000 residents. Also, in 2021 Onslow County had 111.1 drug overdose emergency department visits per 100,000 residents compared to North Carolina's 149.9 drug overdose emergency department visits per 100,000 residents.

Table 14. Onslow County and North Carolina Rate of Drug Overdose Deaths and Emergency Department Visits per 100,000 population, (2020, NCDHHS)

Per 100,000 Residents	Drug Overdose Deaths	Drug Overdose ED Visits
Onslow County	29.8	111.1
North Carolina	31.5	149.9

Tobacco Use

All tobacco products are harmful to the body and can lead to nicotine addiction including smoking, chewing tobacco, and e-cigarettes. The impact of smoking is devastating on nearly every organ of the body, leading to disease and disability. Smoking causes cancer, heart disease, stroke, lung diseases, type 2 diabetes, and other chronic health conditions. Chewing tobacco also increases the risk of cancer, heart disease, and stroke, as well as causing gum decay, tooth decay, and tooth loss. E-cigarette use is on the rise across the United States impacting all ages. Just as smoking or chewing tobacco has harmful effects on the body so does the use of e-cigarettes. There are many harmful substances linked to e-cigarette use including cancer-causing chemicals; ultrafine particles that can be inhaled into the lungs; diacetyl which is linked to lung disease; volatile organic compounds; and heavy metals such as nickel, tin, and lead.

According to Healthy Communities NC, in 2018, Onslow County was ranked 79th out of the 100 North Carolina counties, with a percentage of 19.4% of adults who were current smokers. The rank was based on 1st being the highest amount of smokers and 100th being the lowest amount of smokers per county. Not only is using tobacco products harmful to individuals, but it is also harmful to unborn babies. OCHD's Care Management for High-Risk Pregnancy (CMHRP) and the Women's Health Clinic uses the 5 A's (Ask, Advise, Assess, Assist, and Arrange) to help lead patients to quit or reduce smoking during pregnancy and to stay quit. Along with the 5A's, both teams also make referrals to the 24/7 free QuitlineNC.

Chronic Diseases

Chronic diseases are conditions that last one year or more and can require ongoing medical attention and limit daily living. In Onslow County, the top 5 chronic diseases are cancer, heart disease, chronic lower respiratory disease, cerebrovascular disease, and diabetes. As you can see in Table 15, Onslow County and North Carolina share similarity in the top five chronic diseases.

Table 15. Top 5 Chronic Diseases in Onslow County and North Carolina							
Onslow County				North Carolina			
Rank	Chronic Disease	Deaths	Rate	Rank	Chronic Disease	Deaths	Rate
1	Cancer	275	138.93	1	Cancer	19,963	190.34
2	Heart Disease	260	131.35	2	Heart Disease	19,661	187.46
3	Chronic Lower Respiratory Diseases	98	49.51	3	Chronic Lower Respiratory Diseases	5,411	51.59
4	Cerebrovascular Disease	65	32.84	4	Cerebrovascular Disease	5,203	49.61
5	Diabetes Mellitus	51	25.77	5	Alzheimer's	4,508	42.98

Cancer

According to the Center for Disease Control and Prevention, Cancer Data and Statistics, for every 100,000 people, 436 new cancer cases were reported, and 149 people died from cancer. In Onslow County, from 2015 to 2019, there were a total of 4,079 cancer cases and a total of 1,461 cancer deaths. Table 16 includes NC State Center for Health Statistics data for cancer incidence rates for 2013-2020. In Onslow County, the two highest incidence rates documented were Breast Cancer and Lung Cancer. Although rates for Breast Cancer remain high, mortality rates in comparison are low.

However, lung cancer mortality rates are among the highest. Lung cancer screenings are not as routine as breast cancer screenings, the U.S Preventative Services Task Force recommends yearly lung cancer screenings for populations who smoke 20 packs of cigarettes or more a year, smoke now or have been quit less than 15 years, or are between 50 and 80 years old. Interventions such as early detection screening are extremely important to discovering cancer early. In 2020, a projected 11,315 women in North Carolina were estimated to be diagnosed with breast cancer, 138 in Onslow County. The Onslow County Health Department participates in the North Carolina Breast and Cervical Cancer Control Program which provides free or low-cost breast and cervical cancer screening and follow-up to eligible women. OCHD partners with OMH to ensure BCCCP clients receive preventative mammograms. In October for breast cancer awareness month OMH offers an annual free clinical breast exam for women 18 and older, without requiring insurance.

Survey respondents were asked to select all of the preventative services they have had in the past 12 months:

- 61.5%, selected Blood Pressure Check
- 57.0%, selected Dental Cleanings/X-Ray's
- 53.7%, selected Flu Shot
- 53.7%, selected Physical Exam
- 46.5%, selected Cholesterol
- 44.9%, selected Blood Sugar Check
- 43.5%, selected Vision Screening
- 34.7%, selected Mammogram
- 25.8%, selected Pap Smear
- 12.9%, selected Skin Cancer Screening
- 11.0%, selected Cardiovascular Screening
- 10.6%, selected Colon/Rectal Exam
- 7.0%, selected None of the above
- 5.9%, selected Bone Density Test
- 5.7%, selected Hearing Screening
- 3.4%, selected Prostate Cancer Screening

Table 16. Cancer Incidence Rates- Age-Adjusted

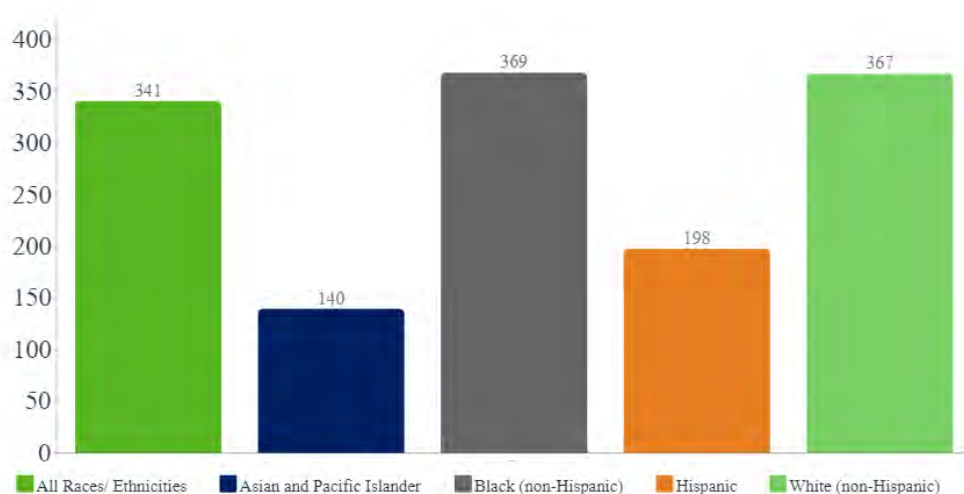
	Lung		Breast		Prostate		Colon		All Cancers	
	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate
2016-2020	439	61	95	24.2	60	22.2	123	16.8	1461	203.6
2015-2019	445	63.9	100	26.7	58	22.4	110	15.5	1414	203.6
2014-2018	430	63.9	95	26.6	49	20.3	103	15.1	1378	205.6
2013-2017	418	63.9	90	25.6	40	17.5	84	13	1305	200

Table 17. Cancer Mortality Rates- Age-Adjusted										
	Lung		Breast		Prostate		Colon		All Cancers	
	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate
2016-2020	439	61	95	24.4	60	22.2	123	16.8	1461	203.6
2015-2019	445	63.9	100	26.7	58	22.4	110	15.5	1414	203.4
2014-2018	430	63.9	95	26.6	49	20.3	103	15.1	1378	205.6
2013-2017	418	63.9	90	25.6	40	17.5	84	13	1305	200

Heart Diseases

Heart Disease refers to several types of heart conditions, one of the most common is coronary artery disease. Some of the most common risk factors for heart disease include high blood pressure, high blood cholesterol, alcohol, and smoking. According to the CDC, about 659,000 people in the United States die from heart disease each year. In

Figure 24. Heart Disease Death Rate per 100,000 in Onslow County, All Races/Ethnicities, Both Genders, Ages, 2017-2019



Onslow County, the average estimated death rate for heart disease for all races, genders, and 35 years and older for 2017-2019 is 341.1. This rate is above the state average (301.1) and the national average (317.4). This can be attributed to several things, such as health behaviors that include excessive drinking and tobacco use that trend higher than the state. Another noteworthy point is that the rates of people of color (non-Hispanic) deaths of health diseases slightly exceeded the rate of white individuals (non-Hispanic) in Onslow County. This is especially interesting since people of color represent only 13.3% of the population in Onslow while white individuals represent 66.1%. Heart disease is another chronic illness that could benefit from early detection and prevention measures. In Onslow County, the age-adjusted heart disease death rates have decreased over the years, but rates are still higher in Onslow than in the State of North Carolina. The Health Department and partners host regular outreach events focused on knowing your numbers and being aware of high blood pressure, high cholesterol, and diabetes. During these events, individuals receive free cholesterol, glucose, and blood pressure testing, and are given their BMI scores.

Chronic Lower Respiratory Diseases

Chronic Lower Respiratory Disease (CLRD) is a group of 4 major diseases that affect the lungs: chronic obstructive pulmonary disease, emphysema, chronic bronchitis, and asthma. Smoking is the most common cause; however, environmental air pollutants, genetic factors, and respiratory infections contribute to the development of CLRD. In North Carolina, the rate of deaths per 100,000 population is 51.59 and Onslow County's rate is 49.51 per 100,000 population, making CLRD the third leading cause of death (Table 15). As of 2019, CLRD ranked fourth in the leading causes of death in the United States accounting for 46.3 deaths per 100,000 population (152,657 deaths), reports the CDC. In the community input sessions that were held across North Carolina as part of the development of the Healthy NC 2030 Plan, representatives from different regions of the state were given worksheets with 4 health-related topics and factors (indicators). Those representing Jacksonville/Onslow County identified air pollution as of high importance related to physical environment. Air pollution and poor air quality can attribute to the high rates of death.

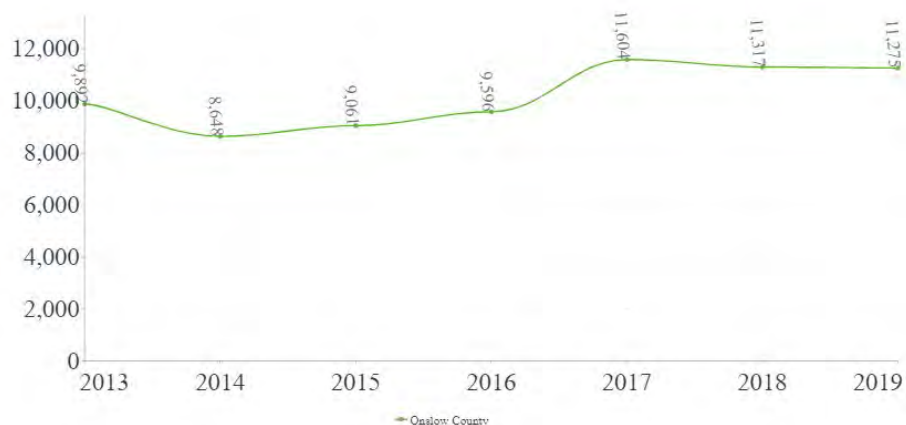
Cerebrovascular Diseases

Cerebrovascular Disease is a group of conditions that affect the brain's blood flow and blood vessels. Multiple diseases can arise from this condition including aneurysms, arteriovenous malformations, cerebral cavernous malformations, arteriovenous fistula, carotid-cavernous fistula, carotid stenosis, and transient ischemic attack or stroke. Nationally, the CDC reports that cerebrovascular disease has accounted for 160,264 deaths in 2020, which translates to a rate of 48.6 deaths per 100,000 population. North Carolina had 5,203 deaths in 2020 with a rate of 49.61 per 100,000 population (Table 15). Onslow County's rate was lower than North Carolina at 32.84 per 100,000 population, accounting for 65 deaths in 2020.

Diabetes

Diabetes is a condition that affects how the body turns food into energy. There are three types of diabetes (Type 1, Type 2, and Gestational Diabetes). Diabetes can be prevented and/or managed with good diet, physical activity, maintaining a healthy weight and managing stress. According to the

Figure 25. Diagnosed Diabetes- Total, Adults Aged 20+ Years, Number – Onslow County



CDC there are 37.3 million adults in the United States that have diabetes and 1 in 5 individuals do not know they have diabetes. In 2019, there were 11,275 total adults age 20 years and older diagnosed with diabetes in Onslow County. Type 2 diabetes is preventable; however, it took 51 lives in 2019 while causing complications in many individuals. In 2019, 9.9% of men were diagnosed with diabetes compared to 9.4% of women. Although diabetes rates in men are higher than for women, in 2019 both obesity (Male 32.5% vs Female 34%) and physical inactivity rates (male 22.3% vs female 25.5%) came up higher for women. According to the CDC men are more likely to get type 2 diabetes at a lower weight than women.

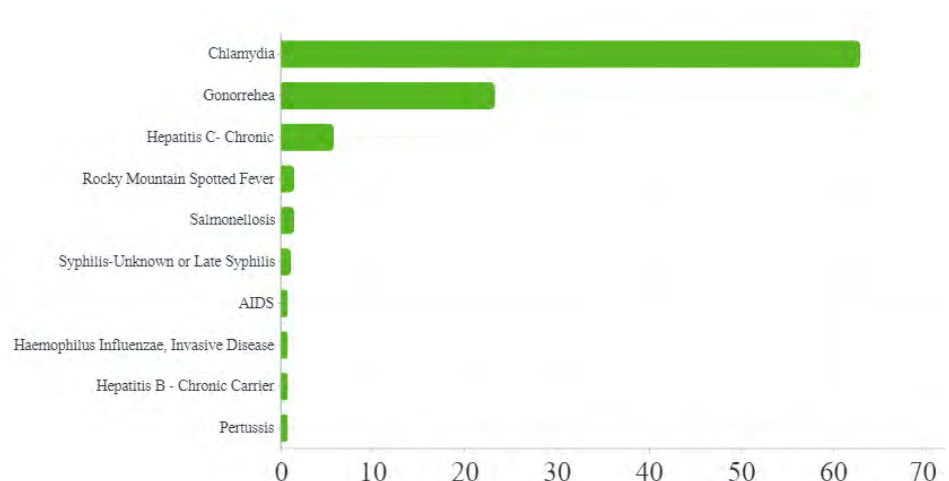
The Onslow County Health Department provides a Diabetes Prevention Program (DPP) and a Diabetes Self-Management Education Program to help individuals at risk for developing type 2 diabetes or with diabetes improve their lives and have better health outcomes. The majority of participants that have participated in OCHD-led DPP courses have been women. Harvard Health Publishing reports men are less likely than women to get routine physical exams that would detect risk factors for diseases such as diabetes. This would account for the high participation among women in DPP classes.

Top Ten Reportable Communicable Diseases

A communicable disease is one that spreads from one person to another through a variety of ways that include: contact with blood and bodily fluids; breathing in an airborne virus; or being bitten by an insect. Preventing and controlling the spread of communicable diseases are of concern for Onslow County. The 2020 top Communicable Diseases as reported by NC DHHS are listed below, with Chlamydia being the highest reported in the County. It is important to note that, while COVID-19 data was not included in this list, COVID-19 infection rates played a large part in shaping the communicable disease response in the County.

Onslow County ranks 30th in the state for Newly Diagnosed HIV Rates Among Adults and Adolescents in 2020, which is 9 rankings lower than the previous year showing improvement from 2019 to 2020. The rate of diagnosis in Onslow County for 2019 was higher at 16.4 per 100,000 population compared to 2020's rate of 13.9 per population. However, the average

Figure 26. Top 10 Communicable Diseases in 2020, Onslow County Rate Per 1,000



rate from 2017-2019 (11.8 per population) has increased by 0.4 from 2018-2020 (12.2 per population). The Onslow County Health Department offers sexually transmitted diseases and communicable disease screenings through physical examination and laboratory testing for the community. Prevention measures for STD's/STI's include vaccination, screenings, abstinence education, use of condoms, and safer sex education. Many of these services are free and confidential at local health departments including treatment and counseling, if applicable, to teens and young adults who tend to be the populations at-risk for these diseases.

Chapter 5 Healthy North Carolina 2030 Indicators

Healthy people and communities are the basis of a thriving state, and improving the health, safety, and well-being of residents in North Carolina is imperative to the work of the state government. The national Healthy People initiative run by the United States Department of Health and Human Services (NC DHHS) aligns with the Healthy North Carolina goals that the North Carolina Department of Health and Human Services releases every 10 years. HNC is comprised of health indicators with 10-year target goals to steer the state in the improvement of health and well-being. NC DHHS, Division of Public Health (DPH), local health departments, and other collaborative partners throughout the state use the key indicators identified in the HNC to work towards common goals. HNC 2030 focuses on health equity and the social determinants of health that influence the health outcomes of North Carolina's population.

The HNC 2030 is one of the sources heavily referenced throughout this report. Many of the HNC 2030 health indicators are also identified in the Community Health Needs Assessment as areas of improvement. Onslow County Health Department, Onslow Memorial Hospital, and partners are creating and strategizing on Community Health Improvement Plans (CHIPs) that align with some of the HNC indicators. The health indicators that are shared between Onslow and North Carolina are adverse childhood experiences, access to exercise opportunities, drug overdose deaths, tobacco use, excessive drinking, suicide rates, teen birth rates, and early prenatal care. All indicators are a goal to work towards with our community partners; however, the ones listed above were identified through our 2021 Community Health Needs Assessment.

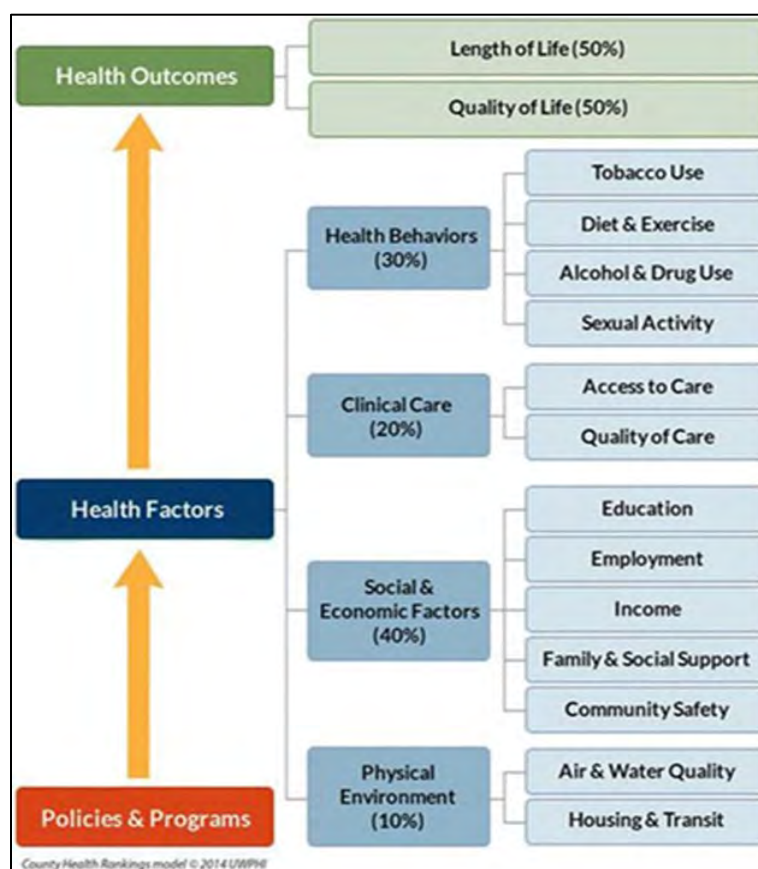
HEALTH INDICATOR	DESIRED RESULT	TOTAL POPULATION	
		CURRENT (YEAR)	2030 TARGET
INDIVIDUALS BELOW 200% FPL	Decrease the number of people living in poverty	36.8% (2013-17)	27.0%
UNEMPLOYMENT	Increase economic security	7.2% (2013-17)	Reduce unemployment disparity ratio between white and other populations to 1.7 or lower
SHORT-TERM SUSPENSIONS (PER 10 STUDENTS)	Dismantle structural racism	1.39 (2017-18)	0.80
INCARCERATION RATE (PER 100,000 POPULATION)		341 (2017)	150
ADVERSE CHILDHOOD EXPERIENCES	Improve child well-being	23.6% (2016-17)	18.0%
THIRD GRADE READING PROFICIENCY	Improve third grade reading proficiency	56.8% (2018-19)	80.0%
ACCESS TO EXERCISE OPPORTUNITIES	Increase physical activity	73% (2010/18)	92%
LIMITED ACCESS TO HEALTHY FOOD	Improve access to healthy food	7% (2015)	5%
SEVERE HOUSING PROBLEMS	Improve housing quality	16.1% (2011-15)	14.0%
DRUG OVERDOSE DEATHS (PER 100,000 POPULATION)	Decrease drug overdose deaths	20.4 (2018)	18.0
TOBACCO USE	Decrease tobacco use	YOUTH 19.8% (2017) ADULT 23.8% (2018)	9.0% 15.0%
EXCESSIVE DRINKING	Decrease excessive drinking	16.0% (2018)	12.0%
SUGAR-SWEETENED BEVERAGE CONSUMPTION	Reduce overweight and obesity	YOUTH 33.6% (2017) ADULT 34.2% (2017)	17.0% 20.0%
HIV DIAGNOSIS (PER 100,000 POPULATION)	Improve sexual health	13.9 (2018)	6.0
TEEN BIRTH RATE (PER 1,000 POPULATION)		18.7 (2018)	10.0
UNINSURED	Decrease the uninsured population	13% (2017)	8%
PRIMARY CARE CLINICIANS (COUNTIES AT OR BELOW 1:1,500 PROVIDERS TO POPULATION)	Increase the primary care workforce	62 (2017)	25% decrease for counties above 1:1,500 providers to population
EARLY PRENATAL CARE	Improve birth outcomes	68.0% (2018)	80.0%
SUICIDE RATE (PER 100,000 POPULATION)	Improve access and treatment for mental health needs	13.8 (2018)	11.1
INFANT MORTALITY (PER 1,000 BIRTHS)	Decrease infant mortality	6.8 (2018)	6.0
LIFE EXPECTANCY (YEARS)	Increase life expectancy	77.6 (2018)	82.0

Chapter 6 County Health Ranking Indicators

The County Health Rankings & Roadmaps are a program of the University of Wisconsin Population Health Institute. County Health Rankings are based on a model of community health that emphasizes the many factors that influence how long and how well we live. The Rankings use more than 30 measures that help communities understand how healthy their residents are today (health outcomes) and what will impact their health in the future (health factors). Figure 27 depicts these measures and shows how they fit together to provide a profile of community health.

There are many factors that influence how well and how long people live. The *County Health Rankings* model, Figure 27, is a population health model that uses data from different sources to help identify areas of concern and strengths to help communities achieve health and wellness. The Rankings provide county-level data on health behavior, clinical care, social and economic and physical environment factors.

Figure 27. County Health Rankings & Roadmaps



Source: County Health Rankings
<https://www.countyhealthrankings.org>

Figure 28. Onslow County and North Carolina Health Indicators (2020)

Health Indicators / Measures	Onslow	NC
Health Outcomes		
Premature Death (Years of Potential Life Lost)	8,200	7,600
Low Birthweight (% of live births < 2,500 grams)	7%	9%
Health Factors		
Health Behaviors		
Adult Smoking (% of adults, age-adjusted, current smokers)	20%	18%
Adult Obesity (% of adults, 20 and older) BMI greater 30 kg/m ²)	29%	32%
Alcohol impaired driving deaths (% driving deaths involving alcohol)	35%	28%
Sexual Transmitted infections (Chlamydia cases per 100,000 pop)	1078.40	647.80
Teen Births (Number births per 1,000 females 15-19 years old)	48%	22%
Clinical Care		
Uninsured (% of population under 65 without health insurance)	10%	13%
Primary Care Physicians (Ratio of pop to primary care doctors)	3,040 to 1	1,400 to 1
Dentists (Ratio of pop to dentists)	970 to 1	1720 to 1
Flu Vaccinations (% of fee-for-service Medicare enrollees that had flu shot)	44%	52%
Social & Economic Factors		
High School Completion (% 25 and older with HSD or equivalent)	92%	88%
Unemployment (% 16 and older unemployed but seeking work)	4.60%	3.90%
Income inequality (Ratio household income at 80 th percentile to income 20 th percentile)	3.7%	4.70%
Social Associations (Number of membership associations per 10,000 population)	6.7	11.5
Injury deaths (Deaths due to injury per 100,000 population)	71	77
Physical Environment		
Air Pollution (particulate matter – avg. daily density of fine PM 2.5 mg per cubic meter)	7.1	8.5
Areas to Explore Needs Attention	Areas of Strength Doing Good	

Source: County Health Rankings
<https://www.countyhealthrankings.org/>

Please note a word of caution when interpreting these results. The County Health Rankings uses its own definitions and a combination of national-level data sources (and years) to develop its own indicators/measures. Therefore, the results may differ from data collected at state and/or county levels. For example, the Primary Care Physician Ratio to population data above used the Area Health Resource File/American Medical Association data and defined primary care physicians as MDs and DO's to estimate this ratio. This number differs from Figure 21 (Population per Primary Care Physician by the Sheps Center) that defines primary care practitioners as a more inclusive definition (includes nurse practitioners, PAs, certified nurse midwives). For more information, visit their website at https://nchealthworkforce.unc.edu/blog/primary_care_nc/.

There are many factors, such as poverty and low education, which have been shown to contribute to health and wellness. This figure is just a snapshot—not all indicators/measures are included here.

However, this figure may serve as a starting point for discussion among community stakeholders when helping identify which priorities to consider.

County health rankings are released yearly to identify the health outcomes and factors of each County in the state. Counties are ranked on a scale of 1-100 in North Carolina: 1 being the best while 100 is considered the worst. In 2021, Onslow County was ranked 27/100 in health factors and 24/100 in health outcomes while in 2022, Onslow County was ranked 26/100 in health factors and 23/100 in health outcomes. The results of the current 2022 health rankings provide entities like CHAT with specific areas of improvement which in turn, helps provide the framework for CHIPs.

Figure 29. 2021 Onslow County Health Ranking

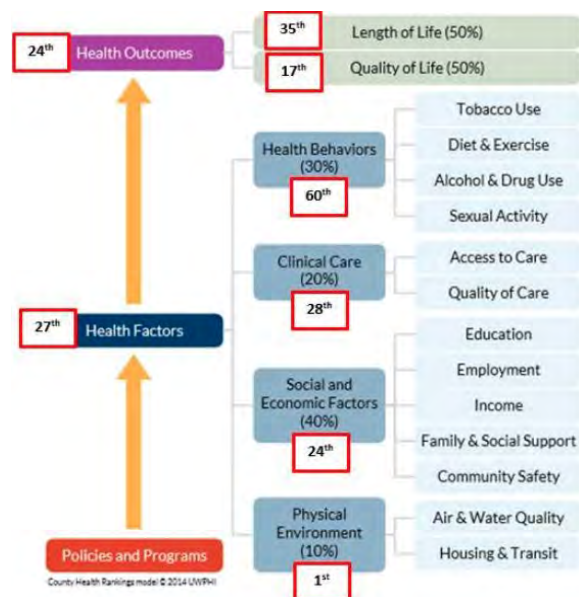
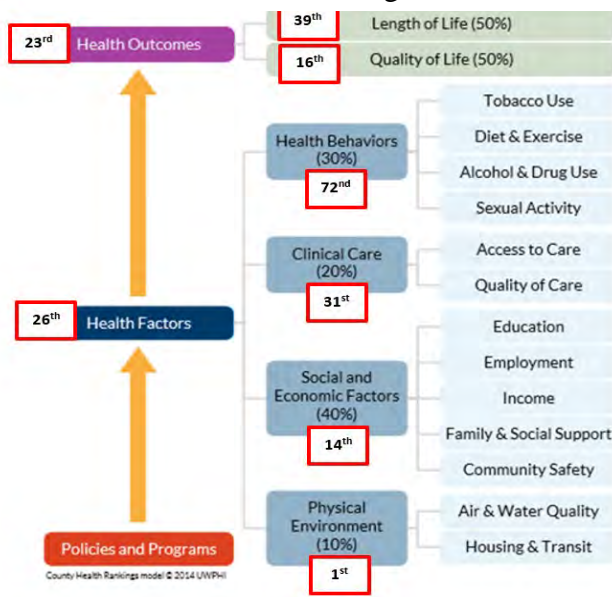


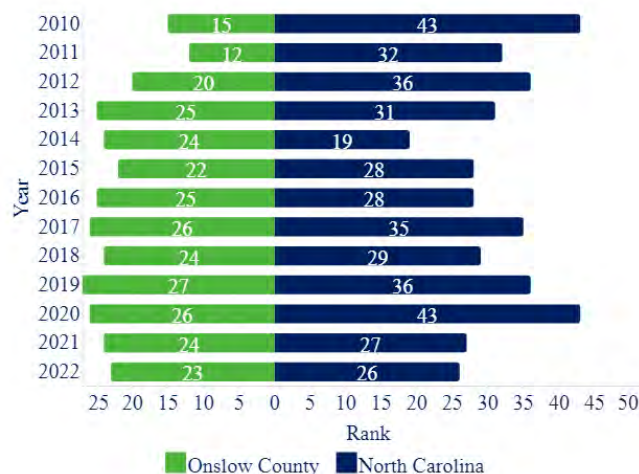
Figure 30. 2022 Onslow County Health Ranking



When comparing the health rankings of Onslow County in 2021 and 2022, data shows that health behaviors were the most affected over the last year, resulting with a decrease in rank by 12. Specific areas of improvement in Health Factors include adult obesity, physical inactivity, sexually transmitted diseases, and alcohol-impaired driving deaths.

Initiatives addressing these health factors are taking place through collaborative efforts by CHAT, PEERS, One Place, TASCO, Onslow County Senior Services, and other county organizations like St. Julia to improve health outcomes in Onslow County.

Figure 31. Onslow County Health Rankings Trend 2010 - 2022

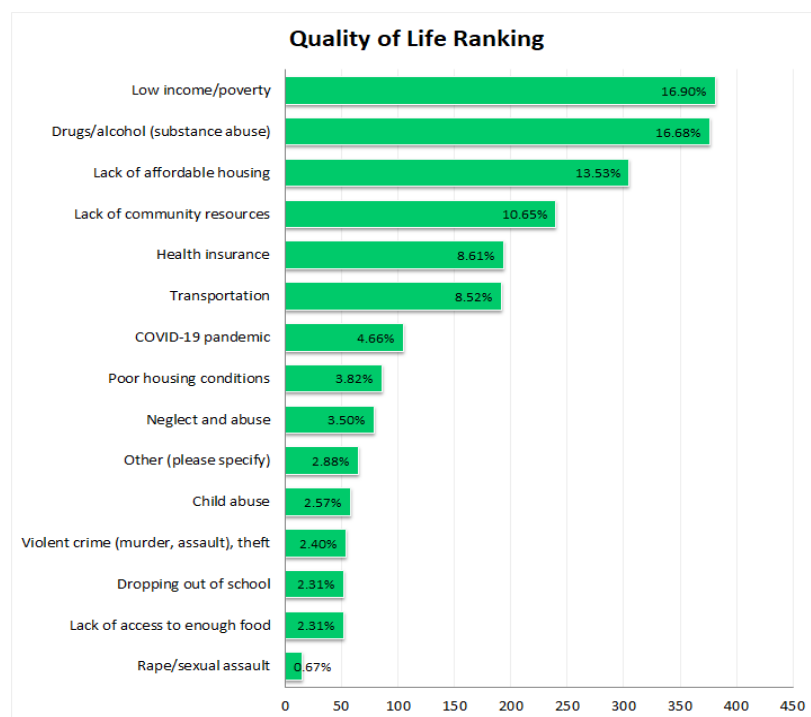


Chapter 7 Survey Findings

The 2021 Community Health Needs Assessment survey consisted of 25 questions that were developed by Health ENC for Onslow County residents to ask a series of questions related to quality of life, health behaviors, health perceptions, preventative services, exercise, and access to care. The survey was offered in both electronic and paper formats, and great effort was made to ensure that survey respondents reflected the demographic makeup of the Onslow County population. A total of 768 English surveys and 5 Spanish responses were collected during the survey period from April 1, 2021, through June 30, 2021.

The figure below shows the top three quality of life issues as identified by the community survey were (1) low income and poverty, (2) drugs and alcohol (substance abuse), and (3) lack of affordable housing. This response reflects the areas that Onslow County residents consider to be the most critical to their wellbeing.

Figure 32. Quality of Life Ranking



Additionally, the community survey included questions that asked residents to agree or disagree to statements related to community resources and quality of life. Statements that respondents agreed the most with include Onslow County being (1) a good place to raise children, (2) a good place to grow old, and (3) a safe place to live. Statements that respondents disagreed with the most include Onslow County having (1) plenty of economic opportunity, (2) affordable housing that meets the needs, and (3) plenty of help for people during times of need. The community survey results are a useful tool to determine the areas of

most importance to Onslow County residents. It is important to then consider these priorities when developing policies and interventions that impact the community. For all survey responses, see Appendix A.

Chapter 8 Inventory of Resources

According to the latest Census report, Onslow County's population reflected an estimated 13.75 percent increase since 2010, bringing the total county population to 206,160. Although the community has experienced population and economic growth, this growth has not come without struggles greatly attributed to the COVID-19 pandemic. Like many communities, the COVID-19 pandemic affected Onslow County residents and the local economy. According to the US Bureau of Labor Statistics, in April 2020, the

Figure 33. Unemployment Rate in Onslow County, NC



unemployment rate in Onslow County reached a record high of 12.9%, but by December 2021, the unemployment rate decreased to 3.3%. Aside from the high unemployment rate, the community also experienced closures of restaurants like local favorites, such as Chuys and Osprey Grill. Pauses and reductions of services for local non-profits and small businesses was also a theme during COVID-19 for organizations and agencies that could not sustain profits and clients during mandates and limitations required by the State.

As the effects of the pandemic begin to improve, the Onslow County community will begin to see more economic, population, and resource growth in the coming years. Onslow County residents will see an influx of military presence due in large part to the recently awarded \$152 million dollar contract allotted to three major headquarters buildings on the Marine Base: Camp Lejeune. This comes in the aftermath of Hurricane Florence, which caused significant damage to Camp Lejeune facilities, as well as neighboring military installations (JDNews). The significant allocation of federal funding for the demolition, renovation, and reconstruction of three significant military structures was precipitated by a 2017 infrastructure evaluation assessing the constructional integrity of these buildings. The completion of this major undertaking is set to occur in phases and are set to be completed by 2024 and 2025 (JDNews). The 2020 announcement that between 2020-2022 the Marine Corps Forces Special Operations Command was moving its entire special operations unit to North Carolina will also relocate 900 Marines, Sailors, and civilian employees from Camp Pendelton, California, to Camp Lejeune (Marine Times).

In terms of resources related to the health priorities chosen by the Onslow County Health Department, Onslow Memorial Hospital, and partners, CHAT continues to advocate for better data

and evaluation to support community resource needs, gaps in services, and provide evidence to grantors and other funding streams. Better education and data would also contribute to the increase in resources to support the priority areas such as Health Equity and Health Disparities, and Healthy Living.

To see a list of all resources in the community, visit the Onslow County Health Department Community Resources page at <https://www.onslowcountync.gov/1760/Community-Resources>.

Chapter 9 Community Prioritization Process

The objective of the Community Health Needs Assessment is to assess the health of the community to determine areas of strength as well as areas of opportunity, such as the need to address health disparities related to underserved communities and Historically Marginalized Populations (HMPs). This aligns with the goals of the Onslow County Health Department (OCHD) and Onslow Memorial Hospital (OMH) to link people to needed personal health services and to assure the provision of health care when otherwise unavailable. The COVID-19 pandemic has intensified the need to focus on a variety of population health issues and access to community resources. Its impact can be seen across many areas of public health, including substance abuse, mental health, chronic disease, and preventative care.

In examining the survey results, OCHD and Onslow Memorial Hospital (OMH) met with CHAT on December 9, 2021, to further discuss the CHNA report and the health needs of Onslow County residents. CHAT collaborated on priority areas and concerns as well as provided resources that directly target those unmet healthcare needs of target at-risk groups, underserved, and/or vulnerable populations. During this meeting, OMH and OCHD provided a brief overview of the CHNA report and the significant health needs in Onslow County. Over 25 CHAT members attended this meeting from a variety of agencies and community organizations. After the team presented the summary information as well as the significant health needs for Onslow County, the team discussed how to narrow their focus to three to five priority areas, considering their span of control as well as past efforts in these areas. Next, the group used a PICK chart as a prioritization tool to analyze each possible focus area based on the impact and difficulty of implementing interventions. This tool helped to facilitate the discussion around what areas the various agencies and groups would use to be able to make the biggest impact.

Through the discussion of the Community Health Advisory Team, the five health priority areas selected for Onslow County are:

1. Data and Evaluation
2. Mental/Behavioral Health
 - a. Substance Abuse and Tobacco Use
 - b. Adverse Childhood Experiences (ACEs)
3. Health Equity and Health Disparities
 - a. Chronic Diseases
 - b. Preventative Care
4. Healthy Living
 - a. Women's and Children's Health
 - b. Breastfeeding
5. Physical Activities and Exercise
 - a. Physical Activities/Exercise

OCHD, OMH, and CHAT acknowledge that there are many other serious and concerning health problems throughout the community beyond the selected priority areas and will continue to strive to meet the needs of Onslow County. The team also recognizes the importance of targeting these five issues due to their prevalence and potential impact on residents. Many of these priorities also reflect issues of highest concern for County residents, as revealed by the CHNA survey results. OCHD, OMH, and community partners have provided various services and programs that target the selected priority areas, which reflects the interest across the community in addressing these critical issues.

Appendices to the 2021 Community Health Needs Assessment

Appendix A: Community Health Needs Assessment Survey (Health ENC 2021)

7/27/2021

Community Health Needs Assessment 2021 | REDCap

Community Health Needs Assessment 2021

PID: 1535

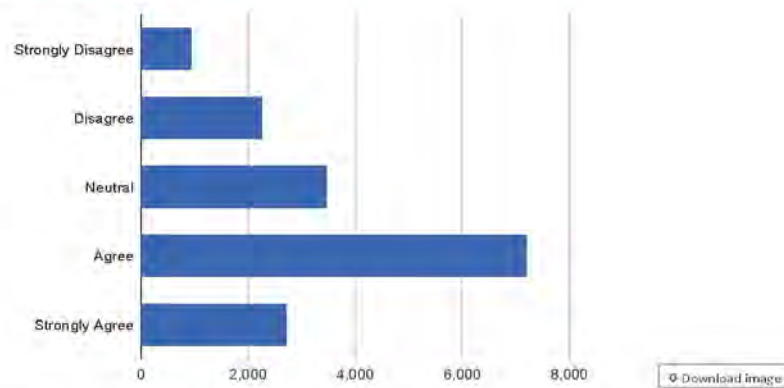
Data Exports, Reports, and Stats

Onslow County

There is good healthcare in my county. *(healthcare)*

Total Count (N)	Missing*	Unique
768	0 (0.0%)	5

Counts/frequency: Strongly Disagree (65, 8.5%), Disagree (160, 20.8%), Neutral (211, 27.5%), Agree (265, 34.5%), Strongly Agree (67, 8.7%)



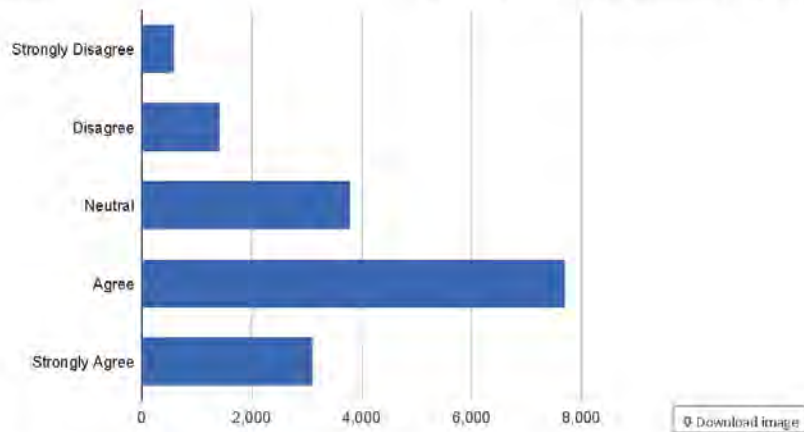
This county is a good place to raise children. *(raise children)*

Total Count (N)	Missing*	Unique
767	1 (0.1%)	5

Counts/frequency: Strongly Disagree (17, 2.2%), Disagree (81, 10.6%), Neutral (196, 25.6%), Agree (354, 46.2%), Strongly Agree (119, 15.5%)

7/27/2021

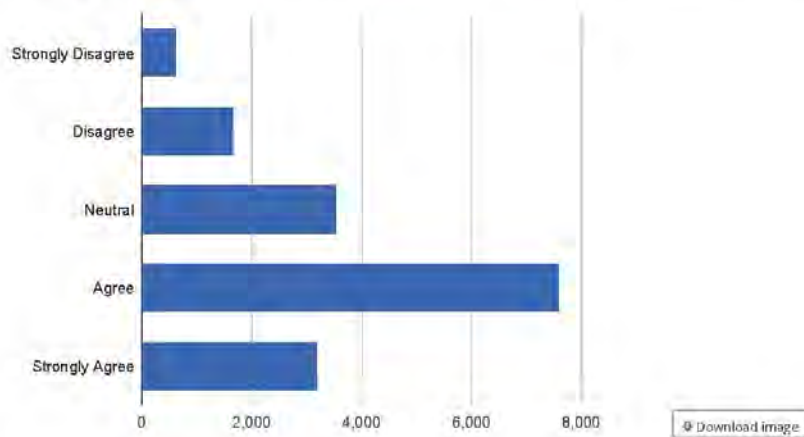
Community Health Needs Assessment 2021 | REDCap



This county is a good place to grow old. (*grow old*)

Total Count (N)	Missing*	Unique
767	1 (0.1%)	5

Counts/frequency: Strongly Disagree (32, 4.2%), Disagree (112, 14.6%), Neutral (193, 25.2%), Agree (320, 41.7%), Strongly Agree (110, 14.3%)



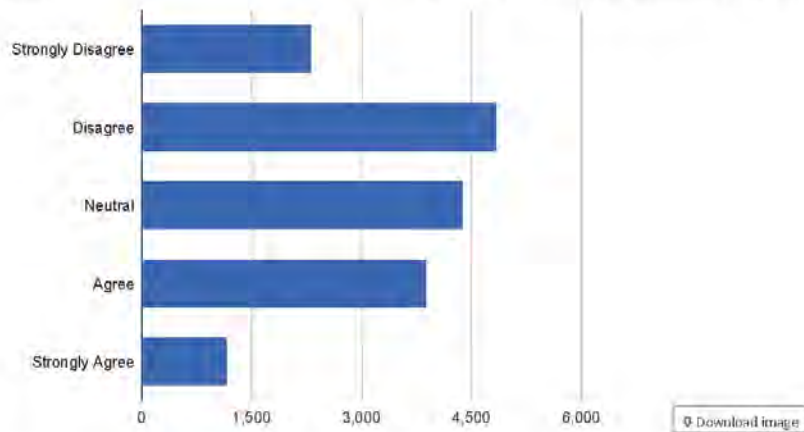
There is plenty of economic opportunity in this county. (*econ opp*)

Total Count (N)	Missing*	Unique
766	2 (0.3%)	5

Counts/frequency: Strongly Disagree (120, 15.7%), Disagree (237, 30.9%), Neutral (207, 27.0%), Agree (167, 21.8%), Strongly Agree (35, 4.6%)

7/27/2021

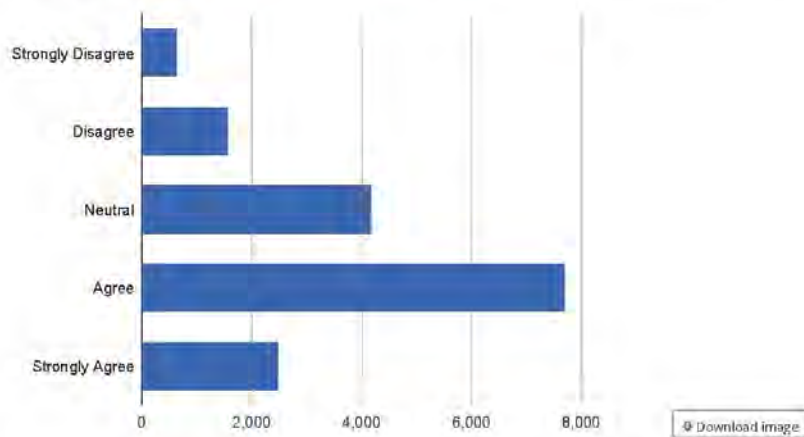
Community Health Needs Assessment 2021 | REDCap



This county is a safe place to live *(safe)*

Total Count (N)	Missing*	Unique
764	4 (0.5%)	5

Counts/frequency: Strongly Disagree (19, 2.5%), Disagree (67, 8.8%), Neutral (188, 24.6%), Agree (406, 53.1%), Strongly Agree (84, 11.0%)



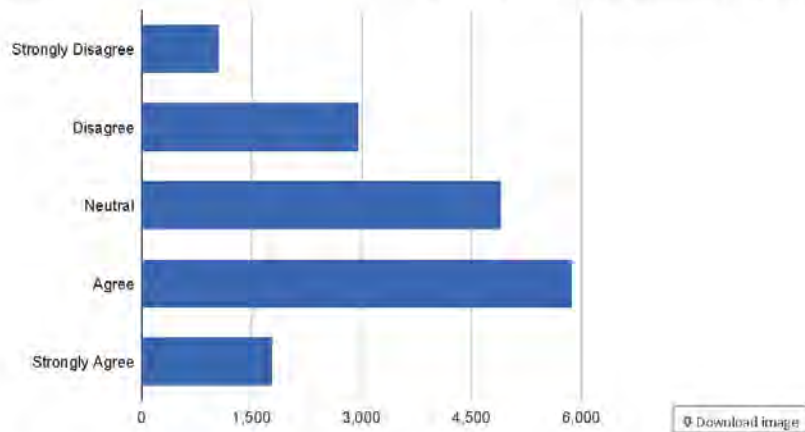
There is plenty of help for people during times of need in this county. *(help)*

Total Count (N)	Missing*	Unique
767	1 (0.1%)	5

Counts/frequency: Strongly Disagree (70, 9.1%), Disagree (177, 23.1%), Neutral (217, 28.3%), Agree (254, 33.1%), Strongly Agree (49, 6.4%)

7/27/2021

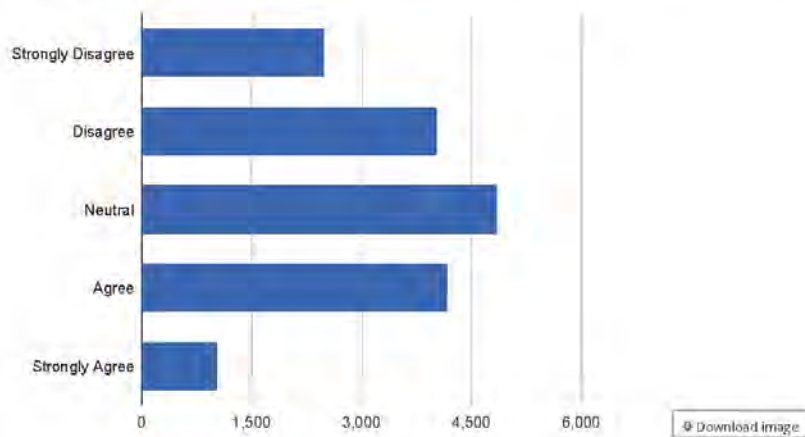
Community Health Needs Assessment 2021 | REDCap



There is affordable housing that meets the needs in this county *(affordable)*

Total Count (N)	Missing*	Unique
768	0 (0.0%)	5

Counts/frequency: Strongly Disagree (131, 17.1%), Disagree (228, 29.7%), Neutral (215, 28.0%), Agree (159, 20.7%), Strongly Agree (35, 4.6%)



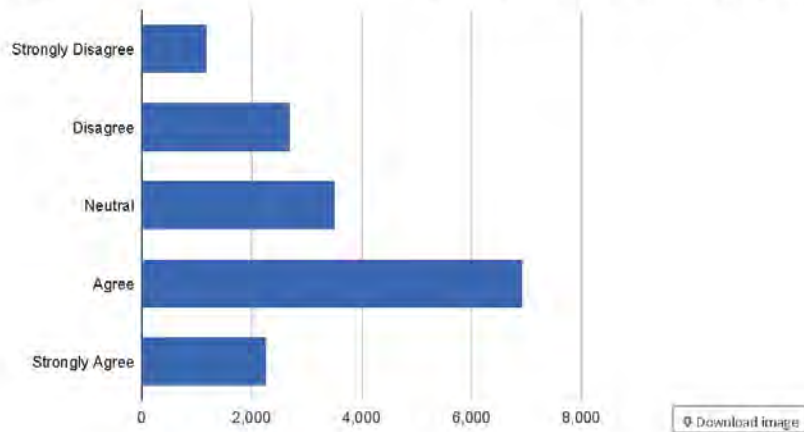
There are good parks and recreation facilities in this county. *(parks)*

Total Count (N)	Missing*	Unique
761	2 (0.3%)	5

Counts/frequency: Strongly Disagree (37, 4.9%), Disagree (115, 15.1%), Neutral (139, 18.3%), Agree (361, 47.4%), Strongly Agree (109, 14.3%)

7/27/2021

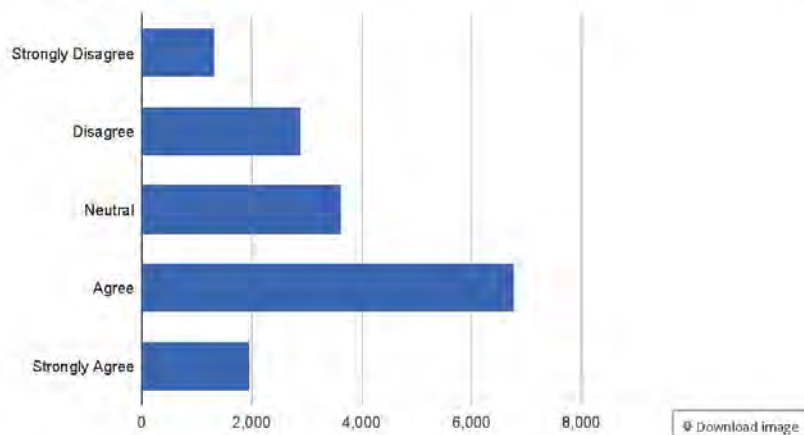
Community Health Needs Assessment 2021 | REDCap



It is easy to buy healthy foods in this county. *(healthyfood)*

Total Count (N)	Missing*	Unique
768	0 (0.0%)	5

Counts/frequency: Strongly Disagree (75, 9.8%), Disagree (153, 19.9%), Neutral (174, 22.7%), Agree (295, 38.4%), Strongly Agree (71, 9.2%)



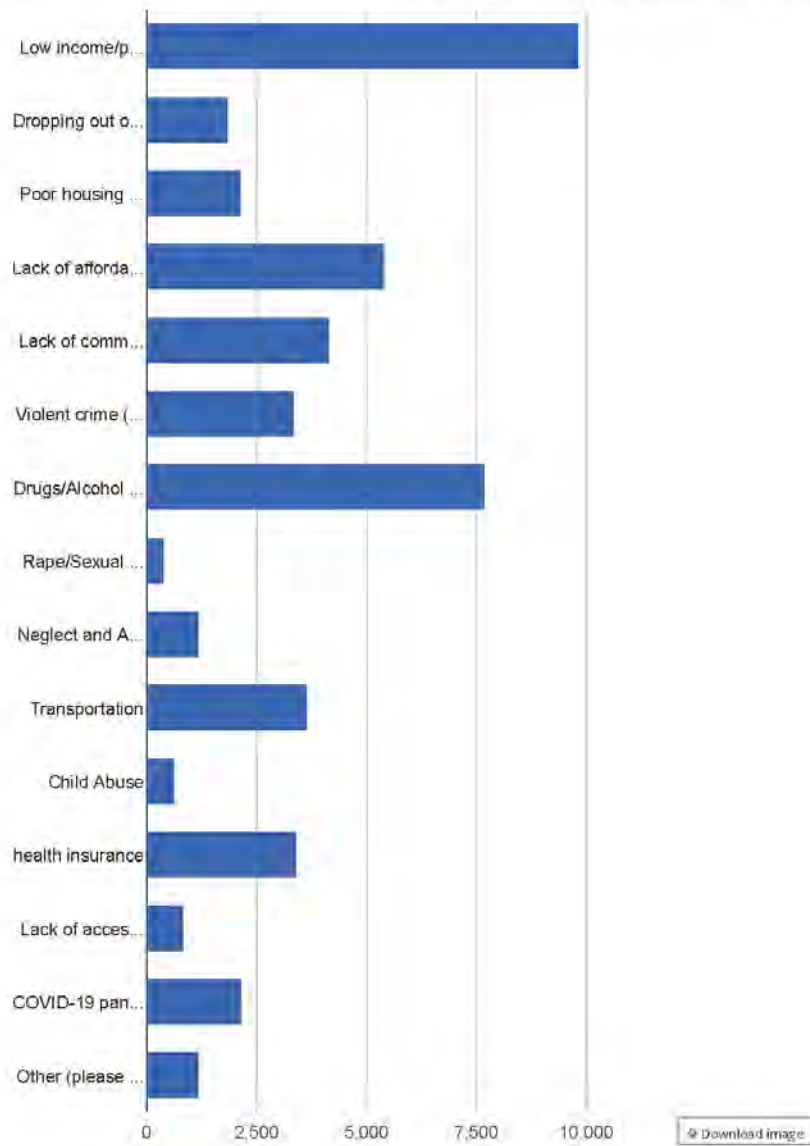
Please select the top 3 issues which have the highest impact on quality of life in this county. *(topissues)*

Total Count (N)	Missing*	Unique
765	3 (0.4%)	15

Counts/frequency: Low income/poverty (381, 49.8%), Dropping out of school (52, 6.8%), Poor housing conditions (86, 11.2%), Lack of affordable housing (305, 39.9%), Lack of community resources (239, 31.2%), Violent crime (murder, assault) Theft (54, 7.1%), Drugs/Alcohol (Substance Use) (375, 49.0%), Rape/Sexual Assault (15, 2.0%), Neglect and Abuse (79, 10.3%), Transportation (192, 25.1%), Child Abuse (58, 7.6%), health insurance (194, 25.4%), Lack of access to enough food (51, 6.7%), COVID-19 pandemic (105, 13.7%), Other (please specify) (65, 8.5%)

7/27/2021

Community Health Needs Assessment 2021 | REDCap



Other (topthreeother1)

Total Count (N)	Missing*
65	703 (91.5%)

Please select what you feel are the top 3 services that need the most improvement in your community. (improvements)

Total Count (N)	Missing*	Unique

https://redcap.ecu.edu/redcap_v10.6.24/DataExport/index.php?pid=1535&report_id=4039&stats_charts=1

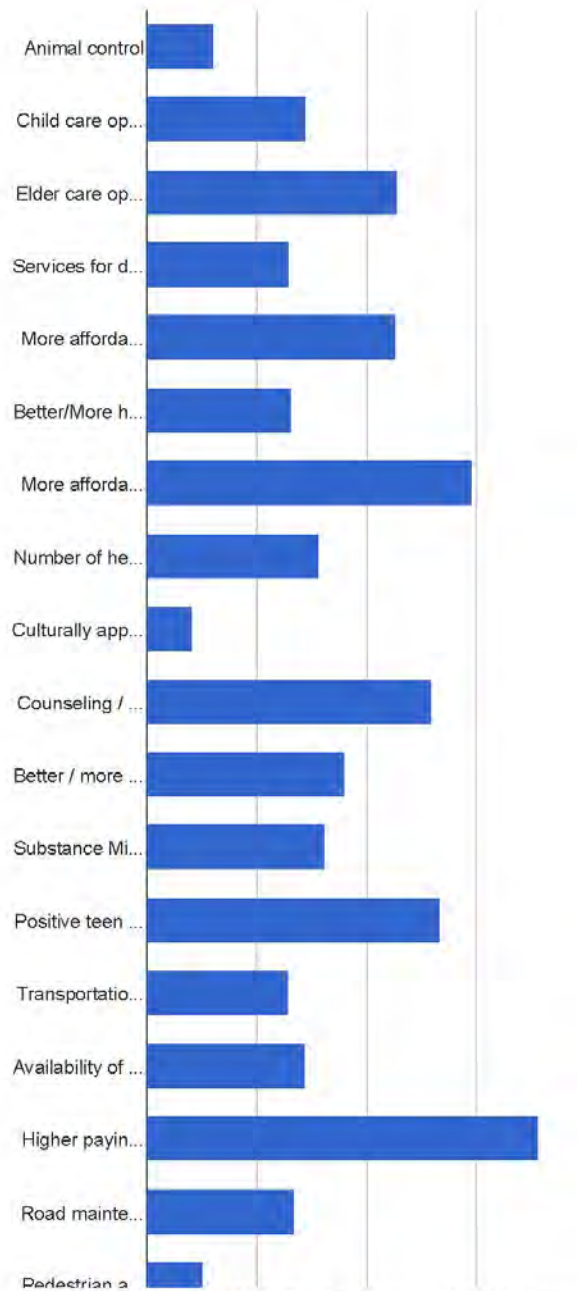
8/45

7/27/2021

Community Health Needs Assessment 2021 | REDCap

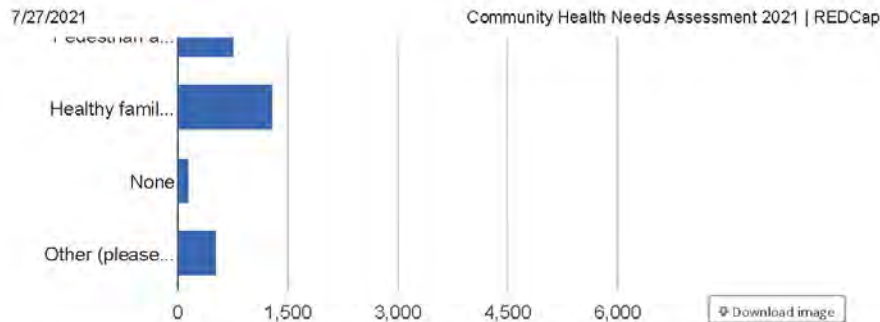
765	3 (0.4%)	21
-----	----------	----

Counts/frequency: Animal control (53, 6.9%), Child care options (110, 14.4%), Elder care options (152, 19.9%), Services for disabled people (84, 11.0%), More affordable health services (197, 25.8%), Better/More healthy food choices (82, 10.7%), More affordable / better housing (223, 29.2%), Number of healthcare providers (105, 13.7%), Culturally appropriate health services (29, 3.8%), Counseling / mental and behavioral health / support groups (212, 27.7%), Better / more recreational facilities (parks, trails, community centers) (108, 14.1%), Substance Misuse Services/ Recovery Support (115, 15.0%), Positive teen activities (174, 22.7%), Transportation options (85, 11.1%), Availability of employment (57, 7.5%), Higher paying employment (273, 35.7%), Road maintenance (88, 11.5%), Pedestrian and cyclist road safety (37, 4.8%), Healthy family activities (68, 8.9%), None (2, 0.3%), Other (please specify) (24, 3.1%)



https://redcap.ecu.edu/redcap_v10.6.24/DataExport/index.php?pid=1535&report_id=4039&stats_charts=1

7/45



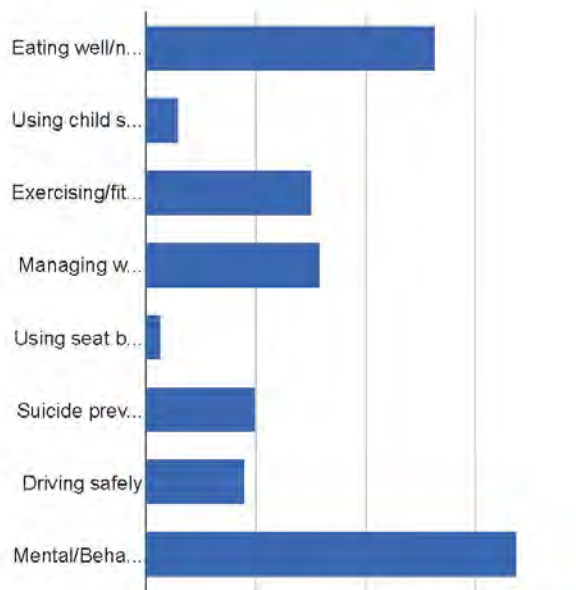
Other (*improvement_other*)

Total Count (N)	Missing*
24	744 (96.9%)

Please select the top 3 health behaviors that you feel people in your community need more information about. (*health_behavin*)

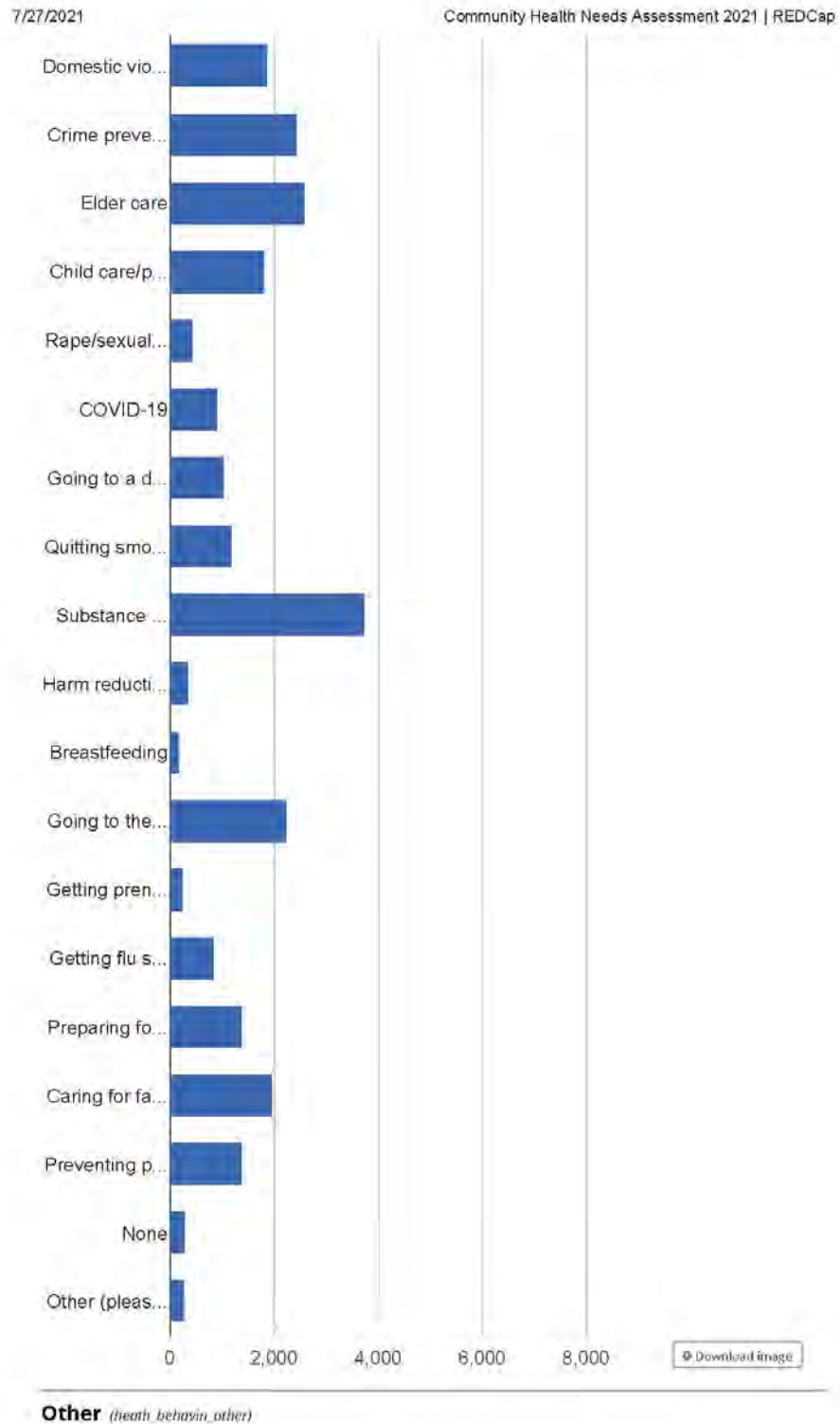
Total Count (N)	Missing*	Unique
765	3 (0.4%)	27

Counts/frequency: Eating well/nutrition (182, 23.8%), Using child safety car seats (33, 4.3%), Exercising/fitness (94, 12.3%), Managing weight (122, 15.9%), Using seat belts (5, 0.7%), Suicide prevention (177, 23.1%), Driving safely (110, 14.4%), Mental/Behavioral Health (364, 47.6%), Domestic violence prevention (111, 14.5%), Crime prevention (50, 6.5%), Elder care (140, 18.3%), Child care/parenting (97, 12.7%), Rape/sexual abuse prevention (14, 1.8%), COVID-19 (37, 4.8%), Going to a dentist for check-ups/preventive care (42, 5.5%), Quitting smoking/tobacco use prevention (55, 7.2%), Substance misuse prevention (178, 23.3%), Harm reduction (18, 2.4%), Breastfeeding (17, 2.2%), Going to the doctor for yearly check-ups and screenings (78, 10.2%), Getting prenatal care during pregnancy (8, 1.0%), Getting flu shots and other vaccines (54, 7.1%), Preparing for an emergency/disaster (93, 12.2%), Caring for family members with special needs / disabilities (108, 14.1%), Preventing pregnancy and sexually transmitted diseases (safe sex) (55, 7.2%), None (7, 0.9%), Other (please specify) (11, 1.4%)



https://redcap.ecu.edu/redcap_v10.6.24/DataExport/index.php?pid=1535&report_id=4039&stats_charts=1

8/45



Total Count (N)	Missing*
11	757 (98.6%)

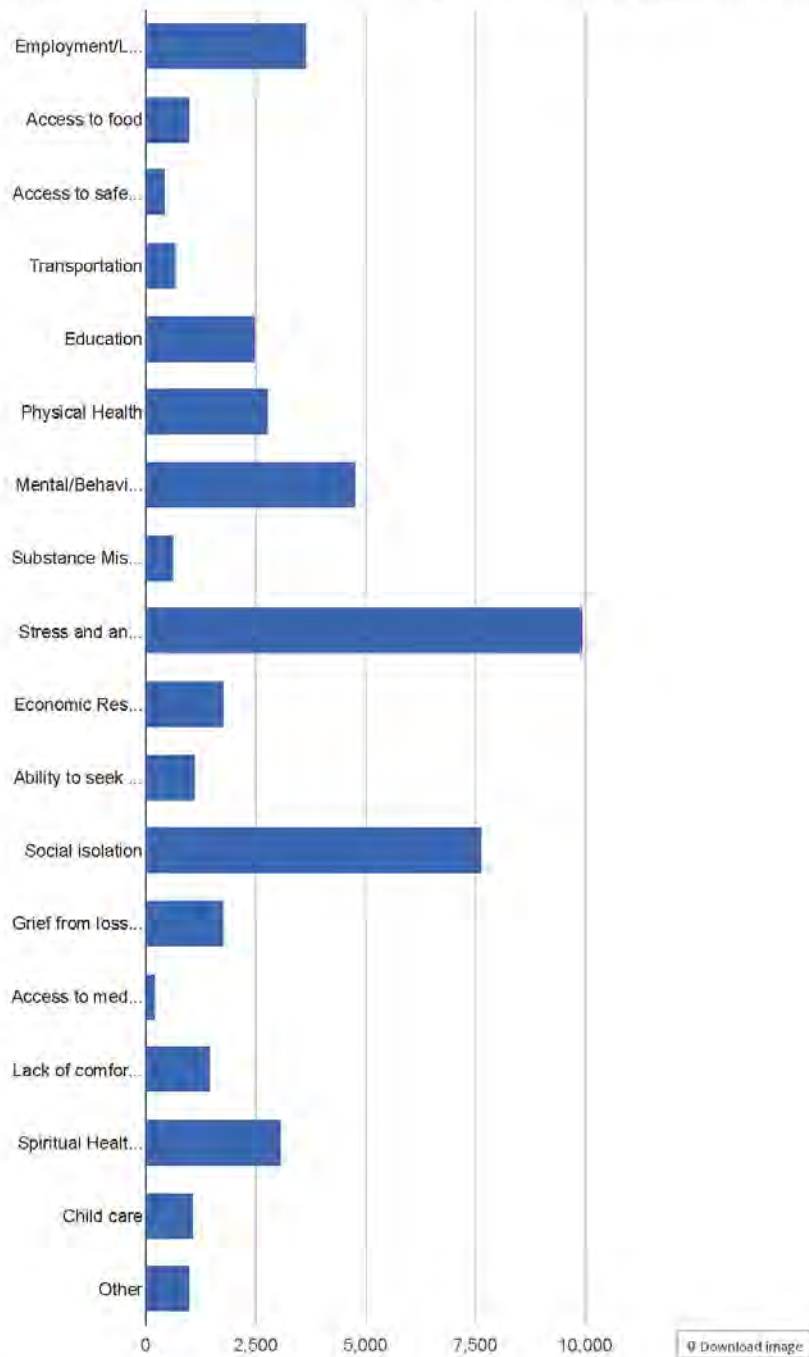
Please select the top 3 areas where COVID-19 have impacted you most severely/significantly? *(covid)*

Total Count (N)	Missing*	Unique
764	4 (0.5%)	18

Counts/frequency: Employment/Loss of job (132, 17.3%), Access to food (67, 8.8%), Access to safe housing (13, 1.7%), Transportation (23, 3.0%), Education (96, 12.6%), Physical Health (131, 17.1%), Mental/Behavioral Health (268, 35.1%), Substance Misuse (28, 3.7%), Stress and anxiety (490, 64.1%), Economic Resources (101, 13.2%), Ability to seek medical care (82, 10.7%), Social Isolation (329, 43.1%), Grief from loss of loved one (54, 7.1%), Access to medication (11, 1.4%), Lack of comfort in seeking medical care (100, 13.1%), Spiritual Health/Well-being (148, 19.4%), Child care (60, 7.9%), Other (31, 4.1%)

7/27/2021

Community Health Needs Assessment 2021 | REDCap



Other *(other_covid)*

Total Count (N)	Missing*
28	240 (96.4%)

https://redcap.ecu.edu/redcap_v10.6.24/DataExport/index.php?pid=1535&report_id=4039&stats_charts=1

11/45

Where do you get most of your health-related information? (Please check all that apply)

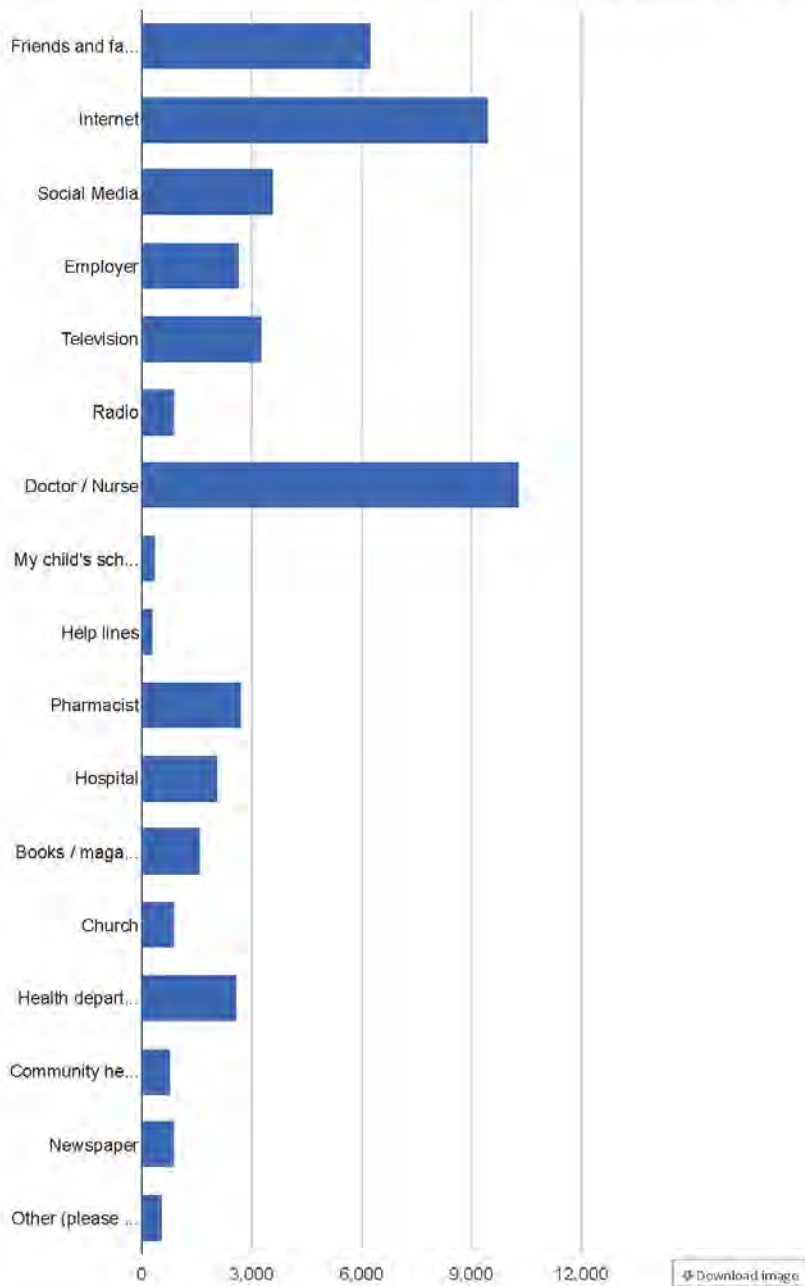
(health_info)

Total Count (N)	Missing*	Unique
766	2 (0.3%)	17

Counts/frequency: Friends and family (275, 35.9%), Internet (475, 62.0%), Social Media (177, 23.1%), Employer (126, 16.4%), Television (120, 15.7%), Radio (25, 3.3%), Doctor / Nurse (482, 62.9%), My child's school (15, 2.0%), Help lines (19, 2.5%), Pharmacist (111, 14.5%), Hospital (93, 12.1%), Books / magazines (95, 12.4%), Church (21, 2.7%), Health department (102, 13.3%), Community health worker (24, 3.1%), Newspaper (29, 3.8%), Other (please specify) (38, 5.0%)

7/27/2021

Community Health Needs Assessment 2021 | REDCap



Other (health_info_other)

Total Count (N)	Missing*
35	733 (95.4%)

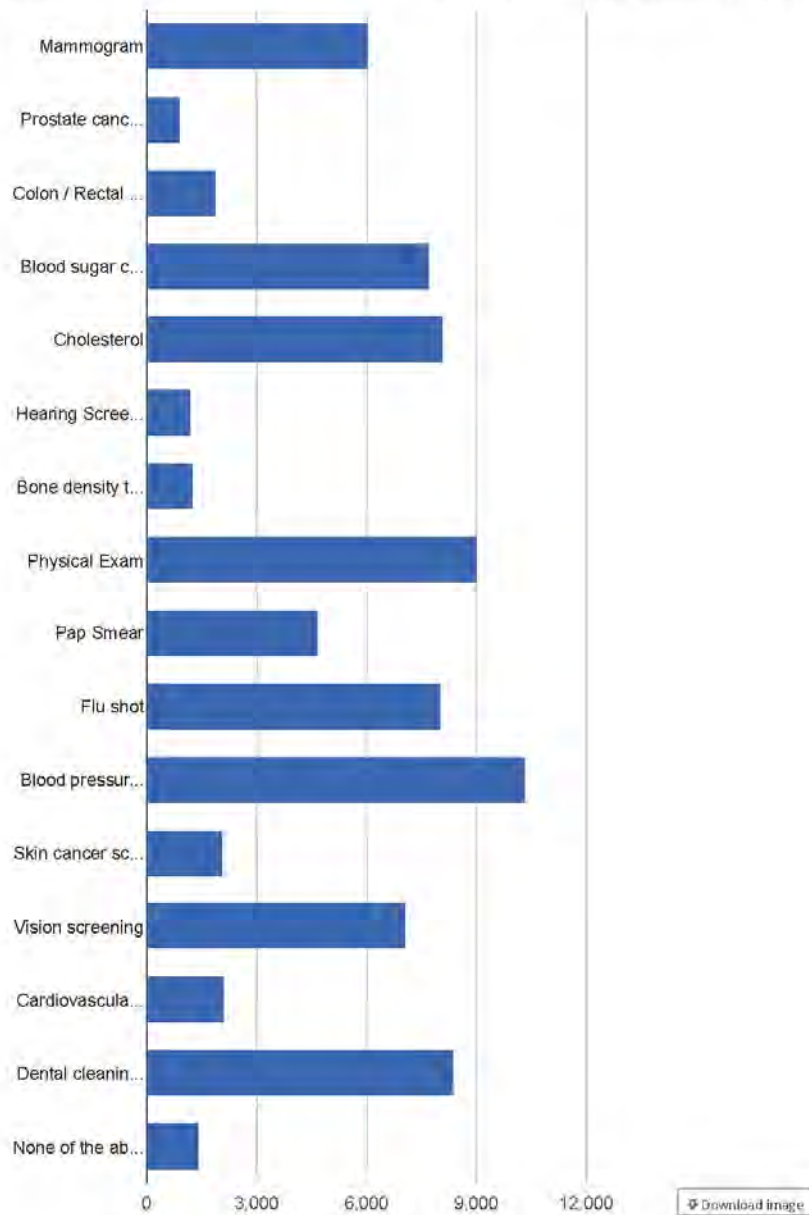
Which of the following preventative services have you had in the past 12 months? (Check all that apply) *(prevent_services)*

Total Count (N)	Missing*	Unique
766	2 (0.3%)	16

Counts/frequency: Mammogram (266, 34.7%), Prostate cancer screening (26, 3.4%), Colon / Rectal exam (81, 10.6%), Blood sugar check (344, 44.9%), Cholesterol (356, 46.5%), Hearing Screening (44, 5.7%), Bone density test (45, 5.9%), Physical Exam (411, 53.7%), Pap Smear (198, 25.8%), Flu shot (411, 53.7%), Blood pressure check (471, 61.5%), Skin cancer screening (99, 12.9%), Vision screening (333, 43.5%), Cardiovascular screening (84, 11.0%), Dental cleaning / X-rays (437, 57.0%), None of the above (54, 7.0%)

7/27/2021

Community Health Needs Assessment 2021 | REDCap



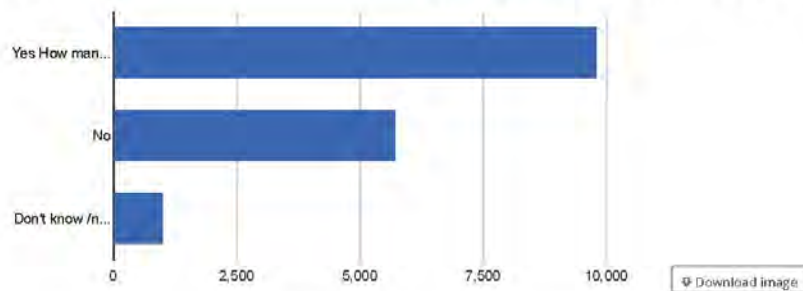
During a normal week, other than in your regular job, do you engage in any physical activity or exercise that lasts at least a half an hour? (Please select only one) *(physical activity)*

Total Count (N)	Missing*	Unique
767	1 (0.1%)	3

Counts/frequency: Yes 1 how many times per week? (446, 58.4%), No (286, 37.3%), Don't know/not sure (33, 4.3%)

7/27/2021

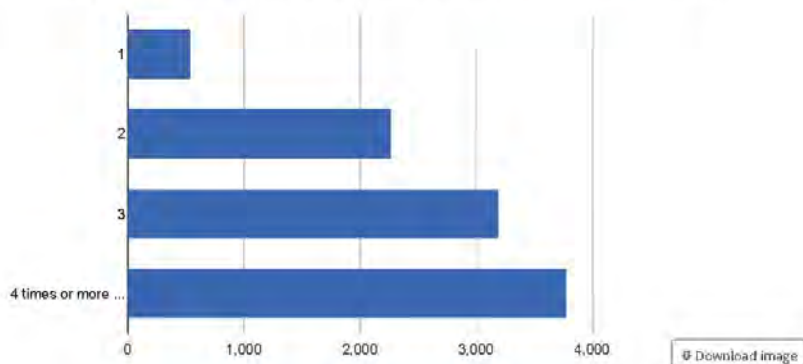
Community Health Needs Assessment 2021 | REDCap



How many times per week? (*exercisetimesweek*)

Total Count (N)	Missing*	Unique
447	321 (41.8%)	4

Counts/frequency: 1 (18, 4.0%), 2 (100, 22.4%), 3 (156, 34.9%), 4 times or more per week (173, 38.7%)



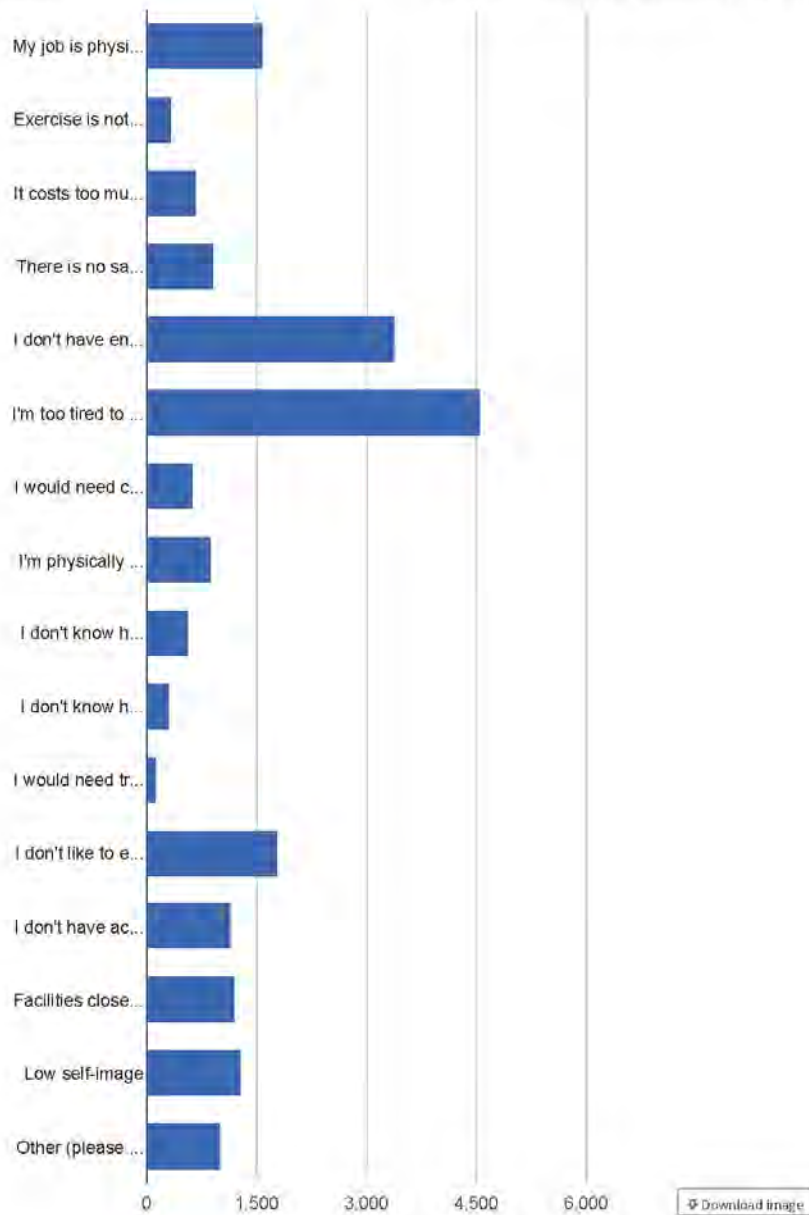
If you do not exercise at least a half hour a few days each week, please select the reasons why you do not exercise? (Please select all that apply) (*notexercise*)

Total Count (N)	Missing*	Unique
481	287 (37.4%)	16

Counts/frequency: My job is physical or hard labor. (57, 11.9%), Exercise is not important to me. (16, 3.3%), It costs too much to exercise. (42, 8.7%), There is no safe place to exercise. (52, 10.8%), I don't have enough time to exercise. (175, 36.4%), I'm too tired to exercise. (261, 54.3%), I would need child care and I don't have it. (45, 9.4%), I'm physically disabled. (62, 12.9%), I don't know how to find exercise partners. (32, 6.7%), I don't know how to safely (11, 2.3%), I would need transportation and I don't have it. (7, 1.5%), I don't like to exercise. (90, 18.7%), I don't have access to a facility that has the things I need, like a pool, golf course, or a track. (76, 15.8%), Facilities closed due to COVID 19 (50, 10.4%), Low self-image (97, 20.2%), Other (please specify) (32, 6.7%)

7/27/2021

Community Health Needs Assessment 2021 | REDCap



Other (*exercise_other*)

Total Count (N)	Missing*
32	736 (95.8%)

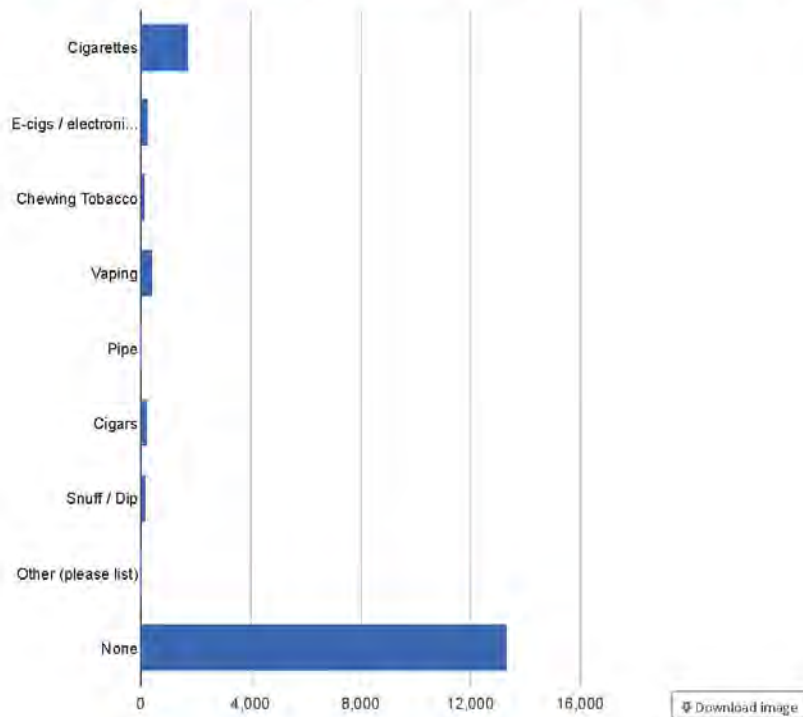
Please select any tobacco product you currently use, (*please_select_any_tobacco*)

7/27/2021

Community Health Needs Assessment 2021 | REDCap

Total Count (N)	Missing*	Unique
755	13 (1.7%)	8

Counts/frequency: Cigarettes (80, 10.6%), E-cigs / electronic cigarettes (14, 1.9%), Chewing Tobacco (5, 0.7%), Vaping (21, 2.8%), Pipe (1, 0.1%), Cigars (5, 0.7%), Snuff / Dip (7, 0.9%), Other (please list) (0, 0.0%), None (648, 85.8%)



Other (please list) *(other_please_list)*

Total Count (N)	Missing*
0	768 (100.0%)

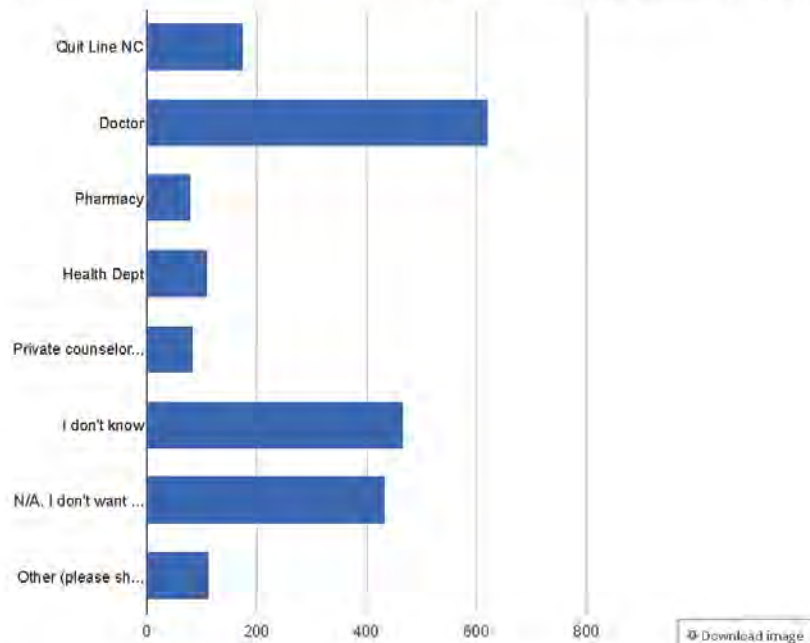
Where would you go for help if you wanted to quit? *(quit)*

Total Count (N)	Missing*	Unique
53	715 (93.1%)	7

Counts/frequency: Quit Line NC (3, 5.7%), Doctor (20, 37.7%), Pharmacy (0, 0.0%), Health Dept (2, 3.8%), Private counselor / therapist (2, 3.8%), I don't know (8, 15.1%), N/A, I don't want to quit (15, 28.3%), Other (please share more) (3, 5.7%)

7/27/2021

Community Health Needs Assessment 2021 | REDCap



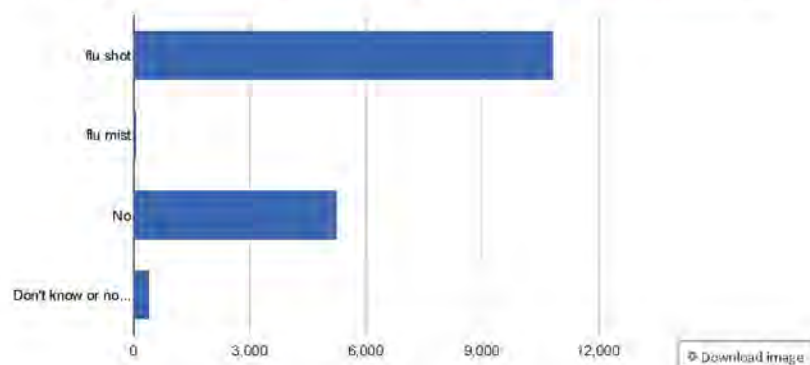
Other: (quit_other)

Total Count (N)	Missing*
3	765 (99.6%)

An influenza / flu vaccine can be a "flu shot" injected into your arm or a spray like "Flu Mist" which is sprayed into your nose. During the past 12 months, have you received a seasonal flu vaccine? (Choose only one) (flu)

Total Count (N)	Missing*	Unique
767	1 (0.1%)	4

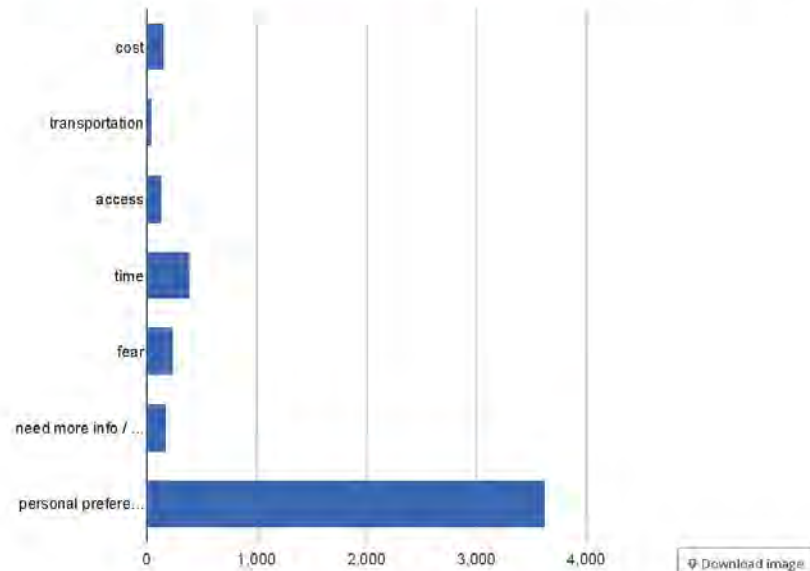
Counts/frequency: flu shot (530, 69.1%), flu mist (2, 0.3%), No (229, 29.9%), Don't know or not sure (6, 0.8%)



If you did not get your flu vaccine, why not? Please check any barriers. *{flu_barriers}*

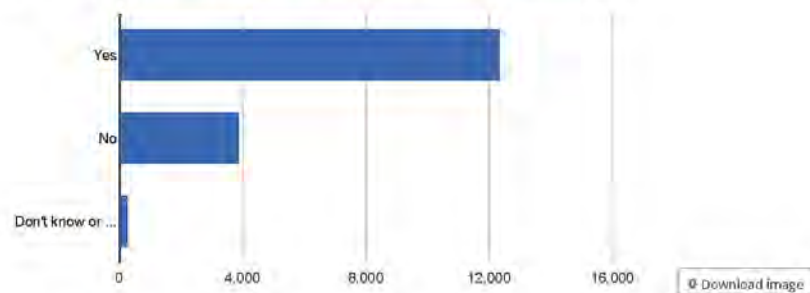
Total Count (N)	Missing*	Unique
218	550 (71.6%)	7

Counts/frequency: cost (11, 5.0%), transportation (2, 0.9%), access (8, 3.7%), time (14, 6.4%), fear (6, 2.8%), need more info / have questions (6, 2.8%), personal preference (171, 78.4%)

**Have you had a COVID-19 vaccine?** *{covidshot}*

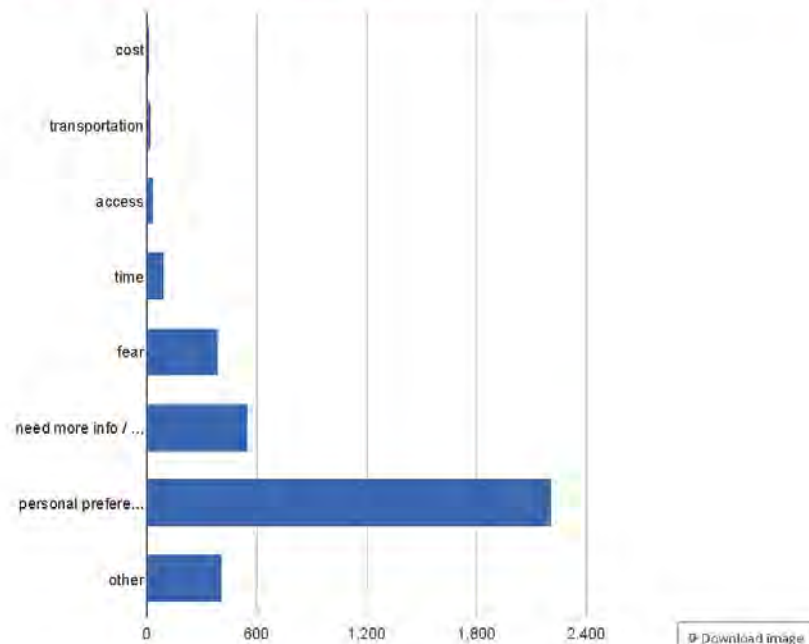
Total Count (N)	Missing*	Unique
768	0 (0.0%)	3

Counts/frequency: Yes (535, 69.7%), No (228, 29.7%), Don't know or unsure (5, 0.7%)

**If you did not get your COVID-19 vaccine, why not? Please check any barriers.** *{covidvesskip}*

Total Count (N)	Missing*	Unique
224	544 (70.8%)	7

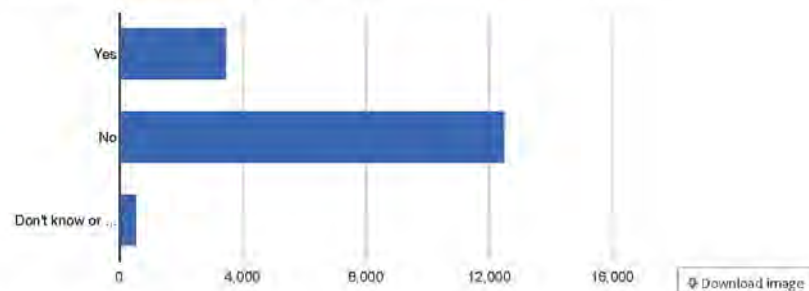
Counts/frequency: cost (2, 0.9%), transportation (0, 0.0%), access (4, 1.8%), time (8, 3.6%), fear (11, 4.9%), need more info / have questions (40, 17.9%), personal preference (131, 58.5%), other (28, 12.5%)



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

Total Count (N)	Missing*	Unique
767	1 (0.1%)	3

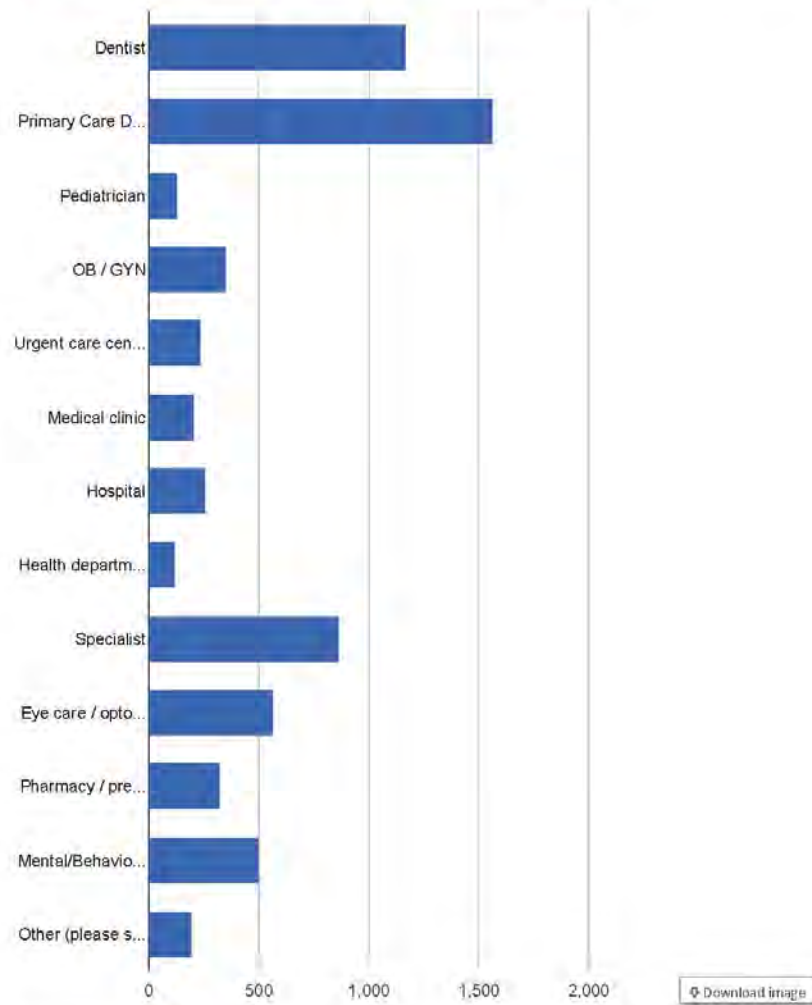
Counts/frequency: Yes (236, 30.8%), No (514, 67.0%), Don't know or refuse (17, 2.2%)



If yes, what type of provider or facility did you have trouble getting healthcare from? (Please choose all that apply) *(healthcareproviderhelp)*

Total Count (N)	Missing*	Unique
233	535 (69.7%)	13

Counts/frequency: Dentist (77, 33.0%), Primary Care Doctor (125, 53.6%), Pediatrician (18, 7.7%), OB / GYN (29, 12.4%), Urgent care center (30, 12.9%), Medical clinic (16, 6.9%), Hospital (17, 7.3%), Health department (5, 2.1%), Specialist (65, 27.9%), Eye care / optometrist / ophthalmologist (47, 20.2%), Pharmacy / prescriptions (28, 12.0%), Mental/Behavioral Health Providers (60, 25.8%), Other (please share more) (9, 3.9%)



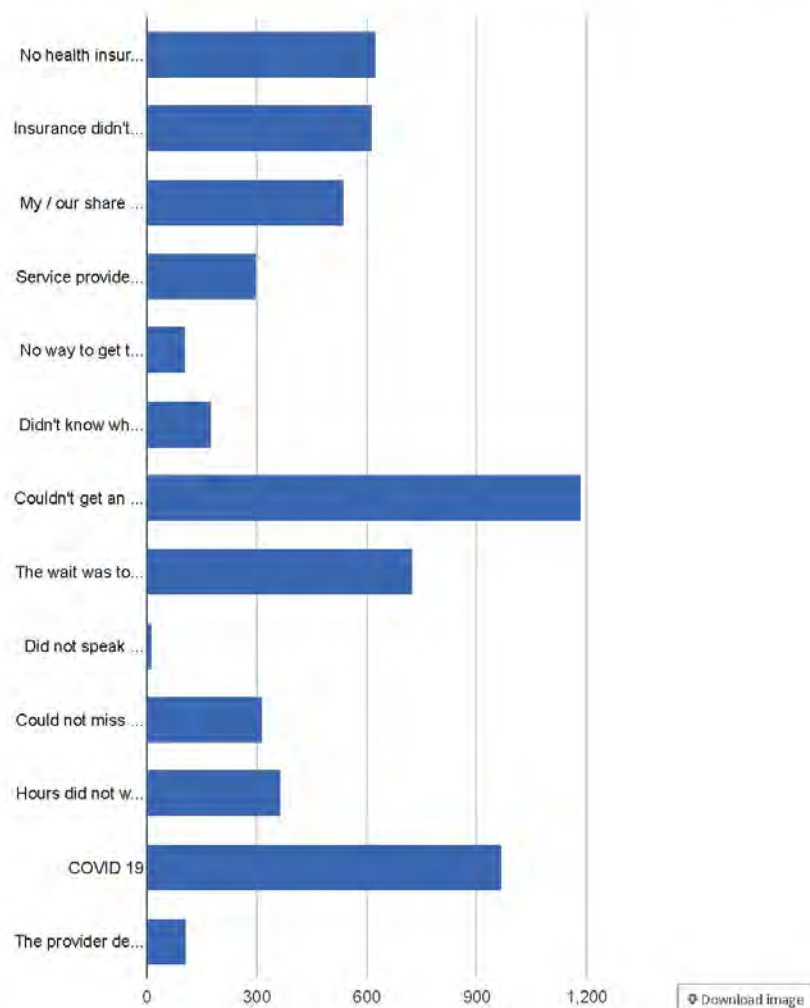
Other (healthcareprovider_other)

Total Count (N)	Missing*
8	760 (99.0%)

Which of these problems prevented you from getting the necessary health care? (Please choose all that apply) (healthcarewhichproblems)

Total Count (N)	Missing*	Unique
227	541 (70.4%)	12

Counts/frequency: No health insurance (39, 17.2%), Insurance didn't cover what I / we needed. (42, 18.5%), My / our share of the cost (deductible / co-pay) was too high. (38, 16.7%), Service provider would not take my / our insurance or Medicaid. (18, 7.9%), No way to get there. (8, 3.5%), Didn't know where to go (5, 2.2%), Couldn't get an appointment (72, 31.7%), The wait was too long (52, 22.9%), Did not speak my language (0, 0.0%), Could not miss work to go (20, 8.8%), Hours did not work with my availability (23, 10.1%), COVID 19 (79, 34.8%), The provider denied me care or treated me in a discriminatory manner because of a protected status (age, race, sexual preference, disease, etc.) (8, 3.5%)



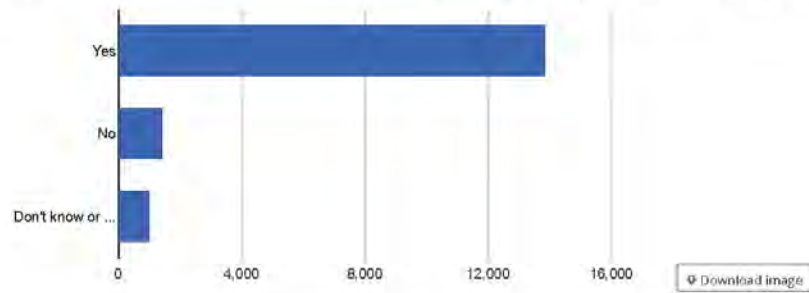
In a natural disaster (hurricane, flooding, tornado, etc.), do you feel like you know how to access or find the information you need to stay safe? *(naturaldisasteraccess)*

Total Count (N)	Missing*	Unique
763	5 (0.7%)	3

Counts/frequency: Yes (660, 86.5%), No (73, 9.6%), Don't know or not sure (30, 3.9%)

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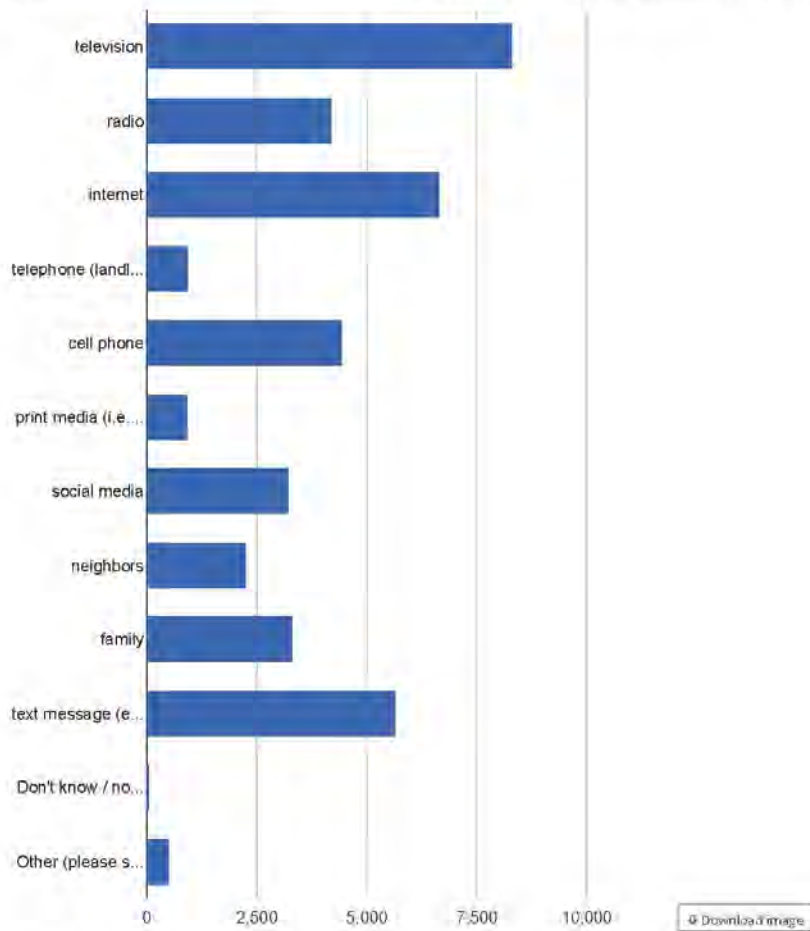
If so, where do you get your information to stay safe? *(naturaldisasterinfo)*

Total Count (N)	Missing*	Unique
657	111 (14.5%)	12

Counts/frequency: television (317, 48.2%), radio (136, 20.7%), internet (280, 42.6%), telephone (landline) (19, 2.9%), cell phone (146, 22.2%), print media (i.e., newspaper) (25, 3.8%), social media (139, 21.2%), neighbors (78, 11.9%), family (96, 14.6%), text message (emergency alert system) (256, 39.0%), Don't know / not sure (1, 0.2%), Other (please specify) (34, 5.2%)

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Other (natural_disaster_other)

Total Count (N)	Missing*
34	734 (95.6%)

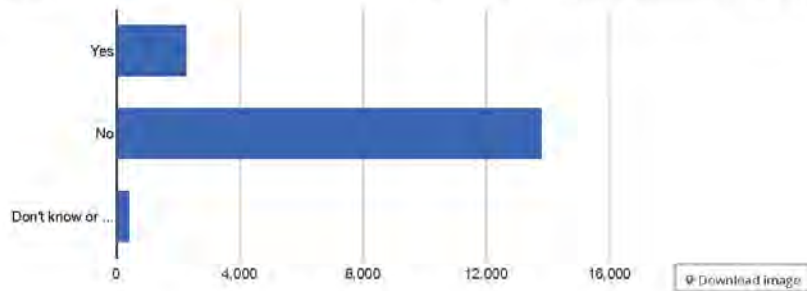
In the past 12 months, were you ever worried about whether your family's food would run out before you got money to buy more? (Please choose only one) (foodworried)

Total Count (N)	Missing*	Unique
768	0 (0.0%)	3

Counts/frequency: Yes (156, 20.3%), No (605, 78.8%), Don't know or no sure (7, 0.9%)

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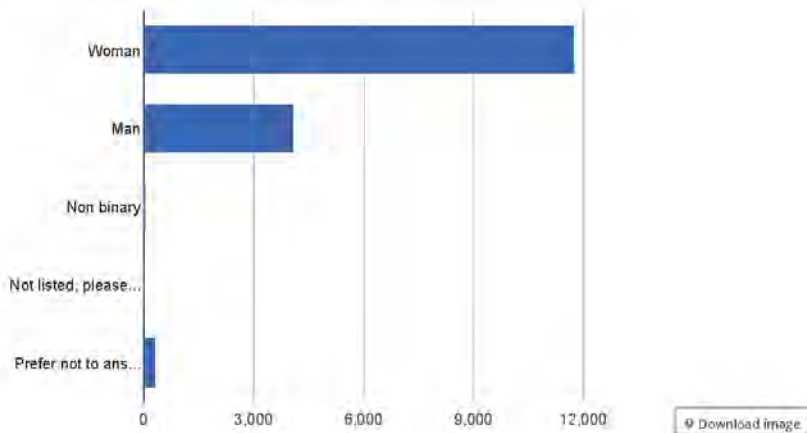
Is there anything else you would like for us to know about your community? *(anythingelse)*

Total Count (N)	Missing*
162	606 (78.9%)

How would you describe yourself? *(gender)*

Total Count (N)	Missing*	Unique
764	4 (0.5%)	4

Counts/frequency: Woman (629, 82.3%), Man (118, 15.4%), Non binary (1, 0.1%), Not listed, please share more: (0, 0.0%), Prefer not to answer (16, 2.1%)



Please share more. *(gender_other)*

Total Count (N)	Missing*
0	768 (100.0%)

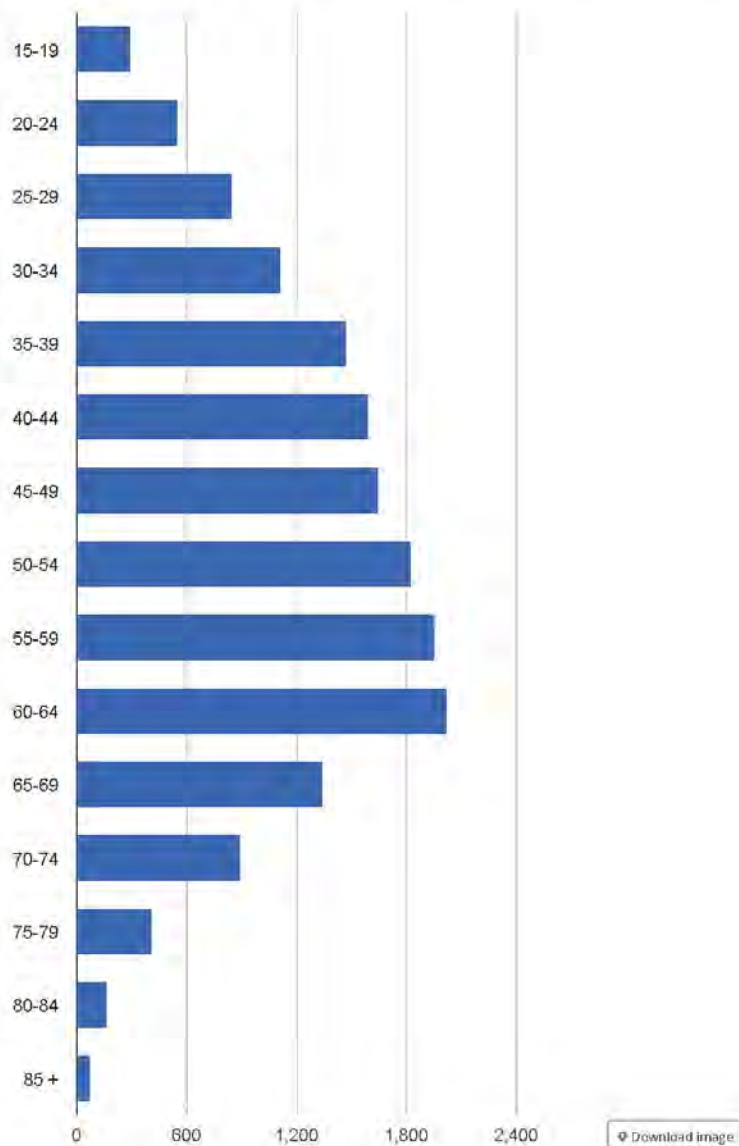
How old are you? *(age)*

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Total Count (N)	Missing*	Unique
763	5 (0.7%)	14

Counts/frequency: 15-19 (7, 0.9%), 20-24 (21, 2.8%), 25-29 (41, 5.4%), 30-34 (67, 8.8%), 35-39 (89, 11.7%), 40-44 (84, 11.0%), 45-49 (78, 10.2%), 50-54 (90, 11.8%), 55-59 (91, 11.9%), 60-64 (91, 11.9%), 65-69 (61, 8.0%), 70-74 (30, 3.9%), 75-79 (8, 1.0%), 80-84 (5, 0.7%), 85+ (0, 0.0%)



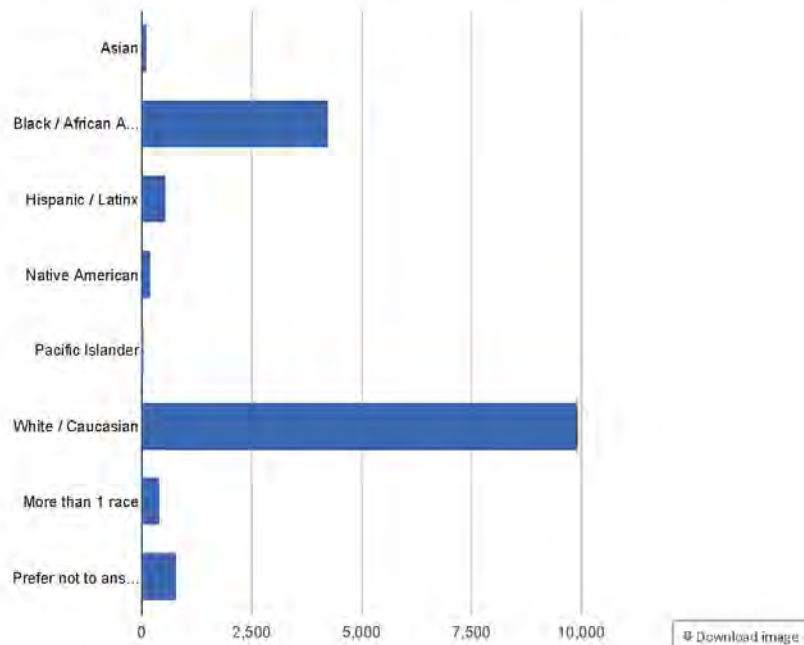
How do you describe your race/ethnicity? (raceethnicity)

Total Count (N)	Missing*	Unique
764	4 (0.5%)	8

https://redcap.ecu.edu/redcap_v10.6.24/DataExport/index.php?pid=1535&report_id=4039&stats_charts=1

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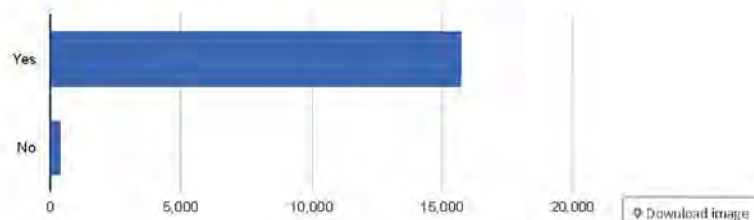
Counts/frequency: Asian (6, 0.8%), Black / African American (72, 9.4%), Hispanic / Latinx (33, 4.3%), Native American (4, 0.5%), Pacific Islander (2, 0.3%), White / Caucasian (561, 73.4%), More than 1 race (33, 4.3%), Prefer not to answer (53, 6.9%)



Is English the primary language spoken in your home? (language)

Total Count (N)	Missing*	Unique
764	4 (0.5%)	2

Counts/frequency: Yes (754, 98.7%), No (10, 1.3%)



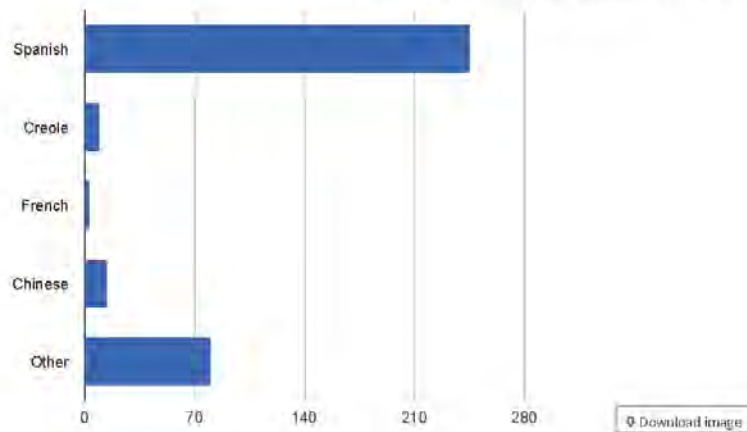
If no, please share which primary language (language)

Total Count (N)	Missing*	Unique
10	758 (98.7%)	3

Counts/frequency: Spanish (3, 30.0%), Creole (1, 10.0%), French (0, 0.0%), Chinese (0, 0.0%), Other (6, 60.0%)

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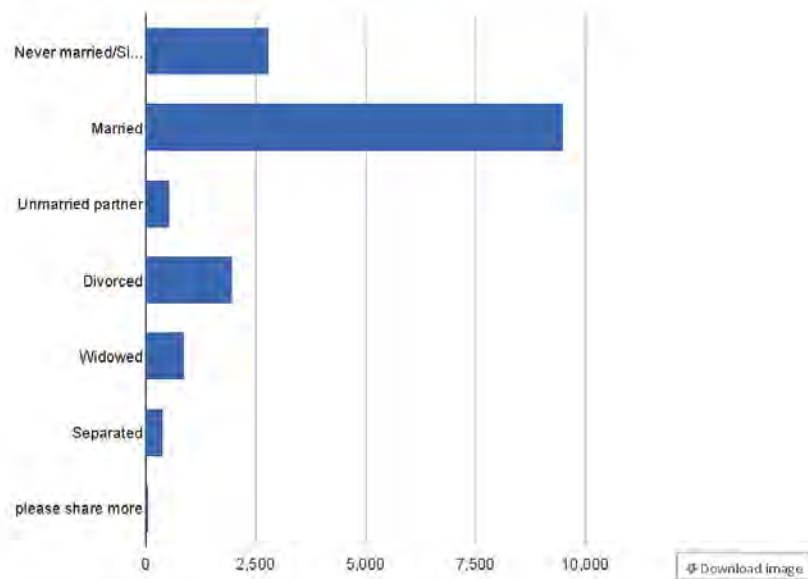
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What is your marital status? (*marriagestatus*)

Total Count (N)	Missing*	Unique
762	6 (0.8%)	7

Counts/frequency: Never married/Single (70, 9.2%), Married (499, 65.5%), Unmarried partner (19, 2.5%), Divorced (125, 16.4%), Widowed (34, 4.5%), Separated (12, 1.6%), please share more (3, 0.4%)



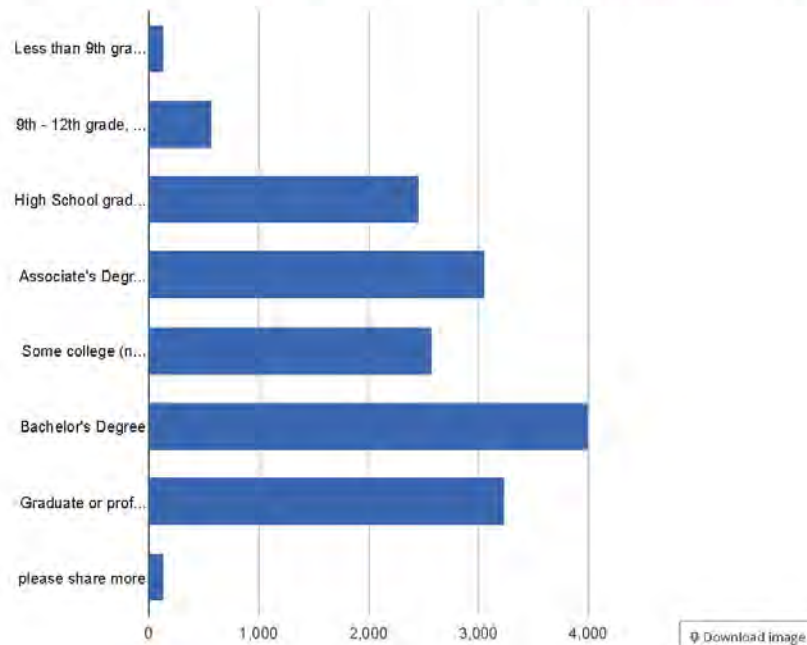
please share more. (*marital_other*)

Total Count (N)	Missing*
3	765 (99.6%)

What is the highest level of education you have completed? *(education)*

Total Count (N)	Missing*	Unique
767	1 (0.1%)	8

Counts/frequency: Less than 9th grade (4, 0.5%), 9th - 12th grade, no diploma (7, 0.9%), High School graduate (or GED/equivalent) (84, 11.0%), Associate's Degree or Vocational Training (168, 21.9%), Some college (no degree) (130, 16.9%), Bachelor's Degree (200, 26.1%), Graduate or professional degree (169, 22.0%), please share more (5, 0.7%)

**Please share more** *(please_share_more)*

Total Count (N)	Missing*
5	763 (99.3%)

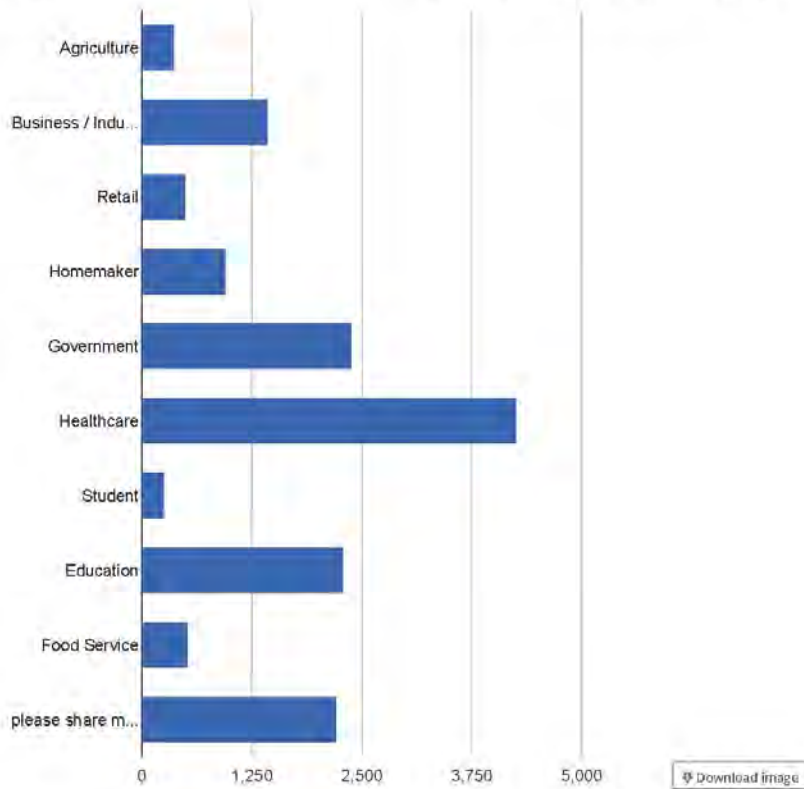
How is your current job best described? *(job)*

Total Count (N)	Missing*	Unique
745	23 (3.0%)	10

Counts/frequency: Agriculture (8, 1.1%), Business / Industry (32, 4.3%), Retail (24, 3.2%), Homemaker (79, 10.6%), Government (154, 20.7%), Healthcare (263, 35.3%), Student (8, 1.1%), Education (59, 7.9%), Food Service (12, 1.6%), please share more (106, 14.2%)

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Please share more (job_other)

Total Count (N)	Missing*
96	672 (87.5%)

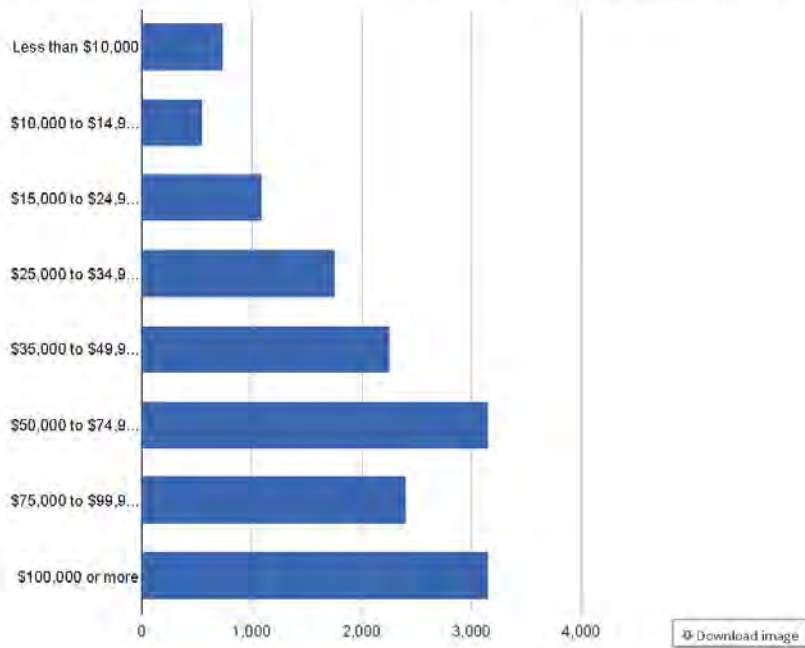
What is your total household income? (income)

Total Count (N)	Missing*	Unique
730	38 (4.9%)	8

Counts/frequency: Less than \$10,000 (17, 2.3%), \$10,000 to \$14,999 (16, 2.2%), \$15,000 to \$24,999 (48, 6.6%), \$25,000 to \$34,999 (90, 12.3%), \$35,000 to \$49,999 (109, 14.9%), \$50,000 to \$74,999 (162, 22.2%), \$75,000 to \$99,999 (138, 18.9%), \$100,000 or more (150, 20.5%)

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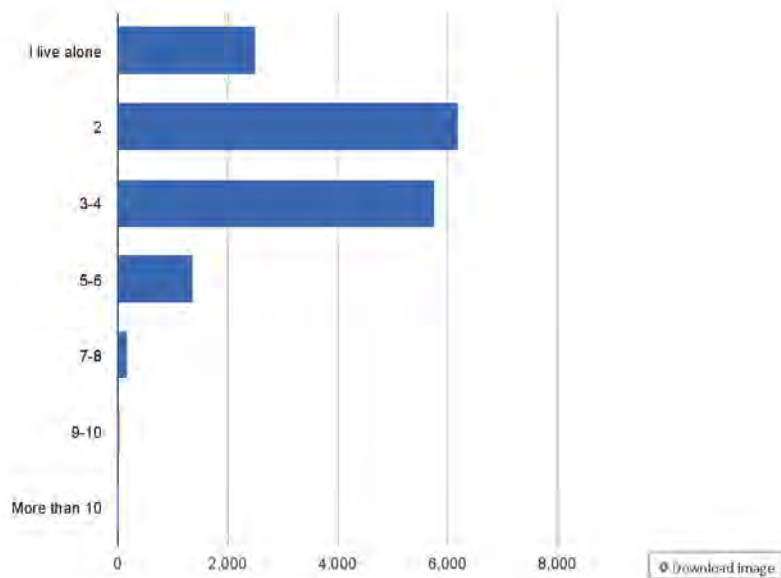
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How many people live in your household? *(householdnumber)*

Total Count (N)	Missing*	Unique
762	6 (0.8%)	7

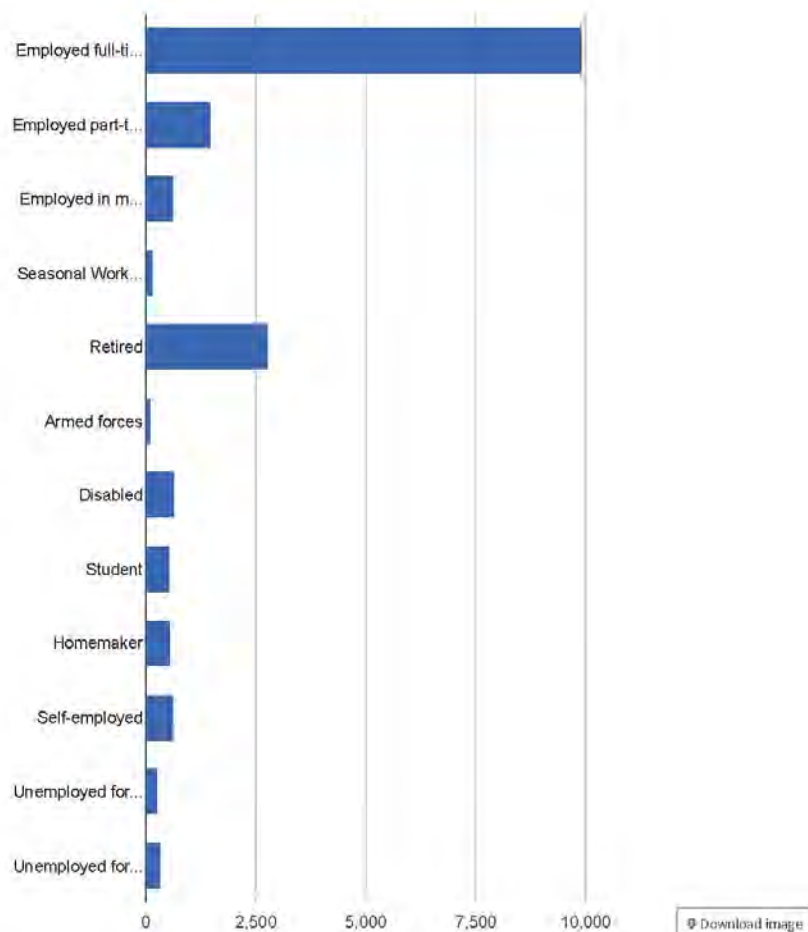
Counts/frequency: 1 live alone (100, 13.1%), 2 (280, 36.7%), 3-4 (289, 37.9%), 5-6 (77, 10.1%), 7-8 (11, 1.4%), 9-10 (4, 0.5%), More than 10 (1, 0.1%)



What is your employment status? Please check all that apply. *(employment)*

Total Count (N)	Missing*	Unique
761	2 (0.9%)	12

Counts/frequency: Employed full-time (469, 61.6%), Employed part-time (69, 9.1%), Employed in multiple jobs (24, 3.2%), Seasonal Worker/Temporary (6, 0.8%), Retired (112, 14.7%), Armed forces (7, 0.9%), Disabled (43, 5.7%), Student (24, 3.2%), Homemaker (65, 8.5%), Self-employed (28, 3.7%), Unemployed for 1 year or less (14, 1.8%), Unemployed for more than 1 year (16, 2.1%)

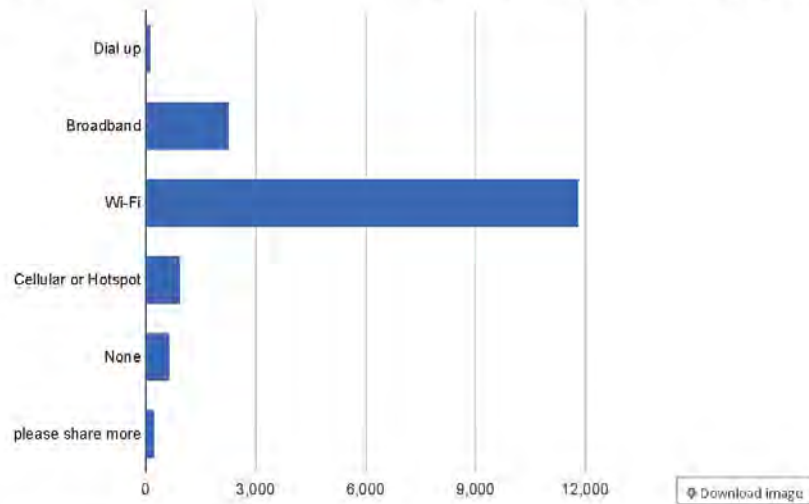
**What type of internet access do you have at your home?** *(internet_or_wifi)*

Total Count (N)	Missing*	Unique
763	5 (0.7%)	6

Counts/frequency: Dial up (7, 0.9%), Broadband (130, 17.0%), Wi-Fi (593, 77.7%), Cellular or Hotspot (18, 2.4%), None (9, 1.2%), please share more (6, 0.8%)

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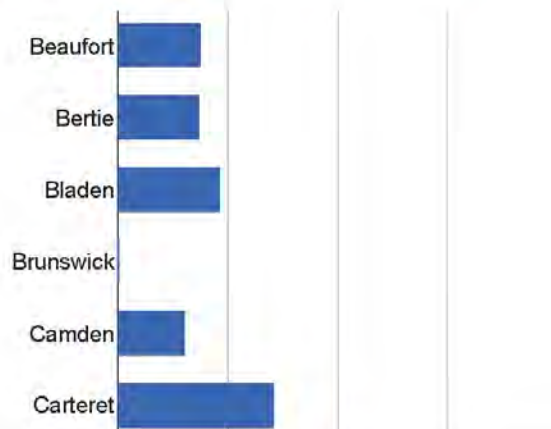
Other (internet or wifi other)

Total Count (N)	Missing*
5	763 (99.3%)

Which county do you live in? (county)

Total Count (N)	Missing*	Unique
768	0 (0.0%)	1

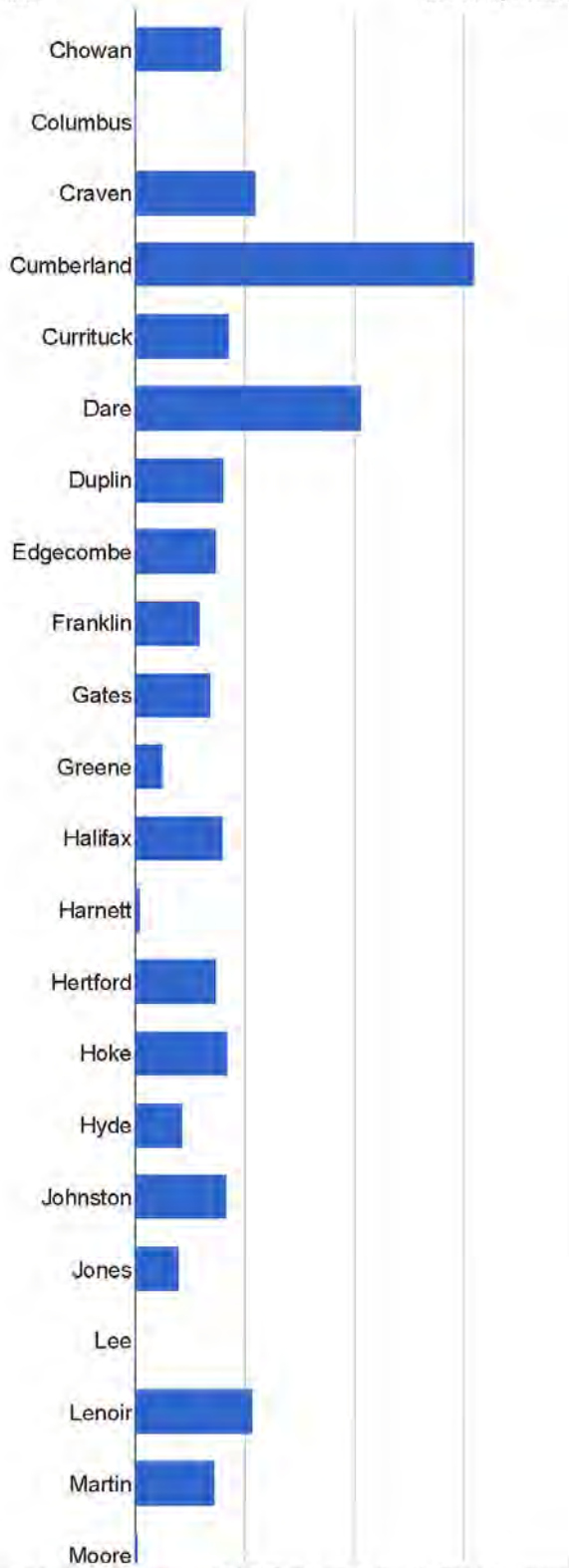
Counts/frequency: Beaufort (0, 0.0%), Bertie (0, 0.0%), Bladen (0, 0.0%), Brunswick (0, 0.0%), Camden (0, 0.0%), Carteret (0, 0.0%), Chowan (0, 0.0%), Columbus (0, 0.0%), Craven (0, 0.0%), Cumberland (0, 0.0%), Currituck (0, 0.0%), Dare (0, 0.0%), Duplin (0, 0.0%), Edgecombe (0, 0.0%), Franklin (0, 0.0%), Gates (0, 0.0%), Greene (0, 0.0%), Halifax (0, 0.0%), Harnett (0, 0.0%), Hertford (0, 0.0%), Hoke (0, 0.0%), Hyde (0, 0.0%), Johnston (0, 0.0%), Jones (0, 0.0%), Lee (0, 0.0%), Lenoir (0, 0.0%), Martin (0, 0.0%), Moore (0, 0.0%), Nash (0, 0.0%), Northampton (0, 0.0%), Onslow (768, 100.0%), Pamlico (0, 0.0%), Pasquotank (0, 0.0%), Pender (0, 0.0%), Perquimans (0, 0.0%), Pender (0, 0.0%), Pitt (0, 0.0%), Robeson (0, 0.0%), Sampson (0, 0.0%), Tyrrell (0, 0.0%), Washington (0, 0.0%), Wake (0, 0.0%), Wayne (0, 0.0%), Wilson (0, 0.0%), Other (0, 0.0%)


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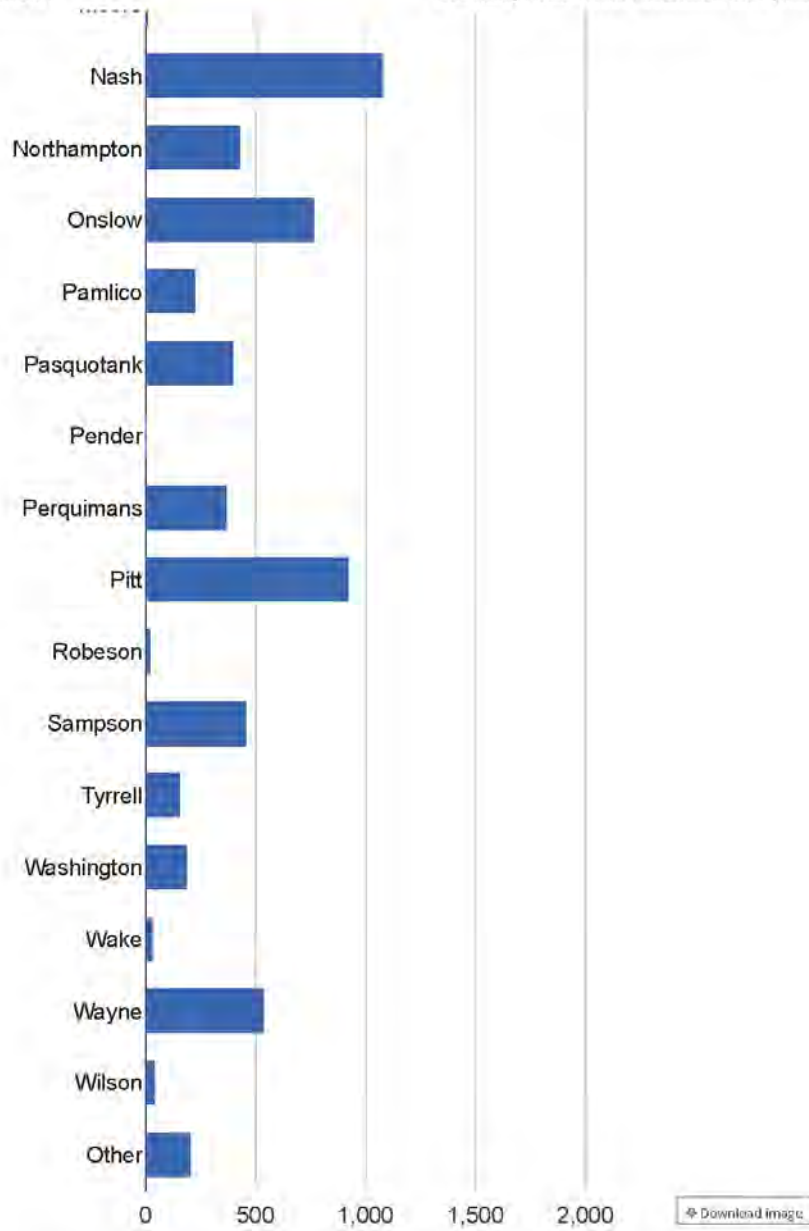


https://redcap.ecu.edu/redcap_v10.6.24/DataExport/index.php?pid=1535&report_id=4039&stats_charts=1

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Other (*county_other*)

Total Count (N)	Missing*
0	768 (100.0%)

What is your 5 digit zip code? (*zip_code*)

Total Count (N)	Missing*
708	60 (7.8%)

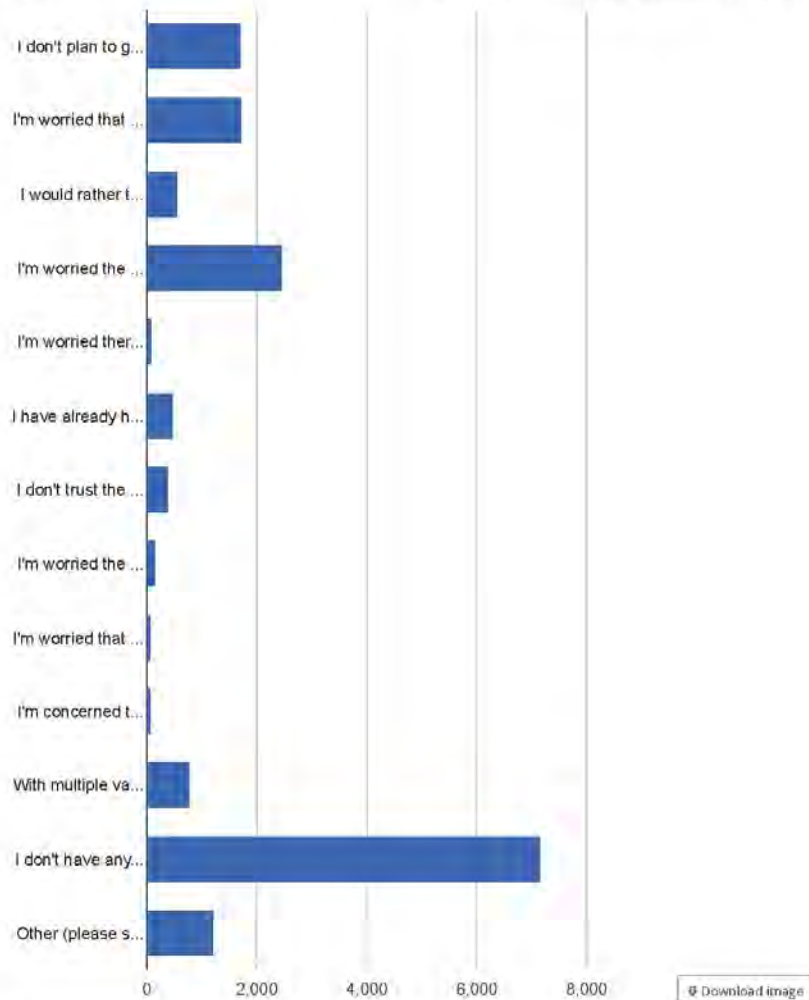
Which of the following concerns do you have, if any, about receiving a COVID-19 vaccine?
(Please select all that apply) *(covidconcerns)*

Total Count (N)	Missing*	Unique
672	96 (12.5%)	13

Counts/frequency: I don't plan to get a vaccine. (118, 17.6%), I'm worried that the COVID-19 vaccine isn't safe. (103, 15.3%), I would rather take the risk of getting sick with COVID-19. (47, 7.0%), I'm worried the COVID-19 vaccine may be harmful or have side effects. (151, 22.5%), I'm worried there may be a cost associated with receiving the COVID-19 vaccine. (7, 1.0%), I have already had COVID-19 so I don't believe a vaccine is necessary. (32, 4.8%), I don't trust the distribution process of the COVID-19 vaccine. (25, 3.7%), I'm worried the COVID-19 vaccine has not been distributed fairly. (6, 0.9%), I'm worried that the location of the COVID-19 vaccine will be difficult to travel to. (4, 0.6%), I'm concerned that I won't have time to get the COVID-19 vaccine. (3, 0.4%), With multiple vaccines becoming available, I'm concerned about knowing which one is best for me. (50, 7.4%), I don't have any concerns about getting the COVID-19 vaccine. (345, 51.3%), Other (please specify) (84, 12.5%)

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Other (covid_concerns_other)

Total Count (N)	Missing*
81	687 (89.5%)

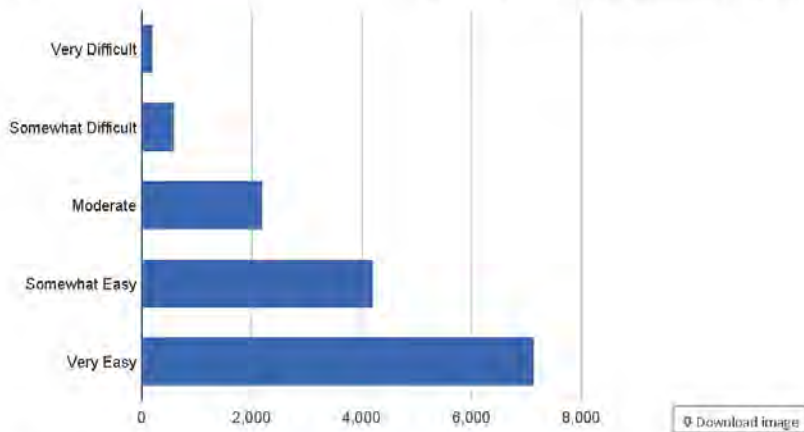
Find the information you need related to COVID-19? (covidinfo)

Total Count (N)	Missing*	Unique
743	25 (3.3%)	5

Counts/frequency: Very Difficult (13, 1.7%), Somewhat Difficult (38, 5.1%), Moderate (153, 20.6%), Somewhat Easy (204, 27.5%), Very Easy (335, 45.1%)

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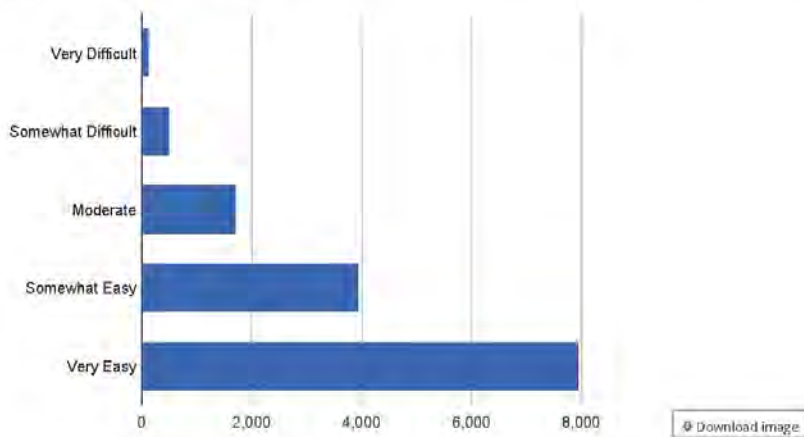
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Find out where to get a COVID-19 vaccine? *(covidwhere)*

Total Count (N)	Missing*	Unique
740	28 (3.6%)	5

Counts/frequency: Very Difficult (10, 1.4%), Somewhat Difficult (27, 3.6%), Moderate (107, 14.5%), Somewhat Easy (198, 26.8%), Very Easy (398, 53.8%)



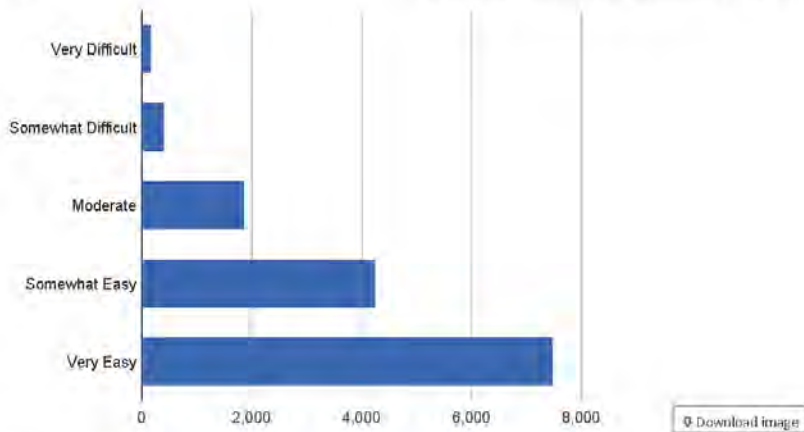
Understand information about what to do if you think you have COVID-19? *(covidunderstand)*

Total Count (N)	Missing*	Unique
739	29 (3.8%)	5

Counts/frequency: Very Difficult (15, 2.0%), Somewhat Difficult (27, 3.7%), Moderate (120, 16.2%), Somewhat Easy (216, 29.2%), Very Easy (361, 48.8%)

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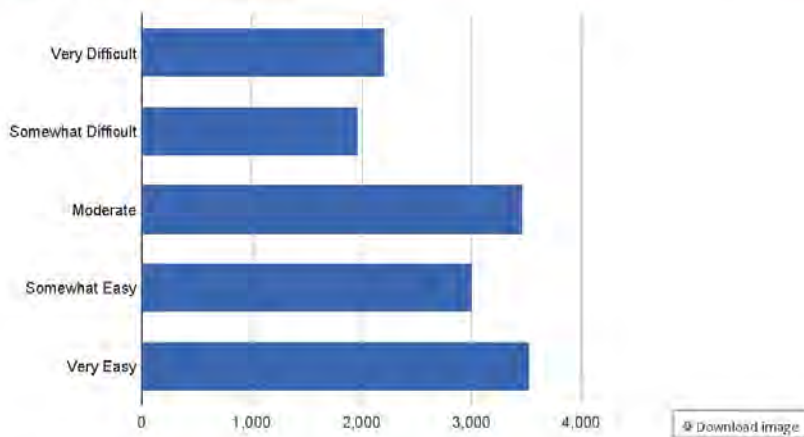
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Trust if the information about COVID-19 in the media is reliable? (covidtrust)

Total Count (N)	Missing*	Unique
737	31 (4.0%)	5

Counts/frequency: Very Difficult (160, 21.7%), Somewhat Difficult (138, 18.7%), Moderate (175, 23.7%), Somewhat Easy (115, 15.6%), Very Easy (149, 20.2%)



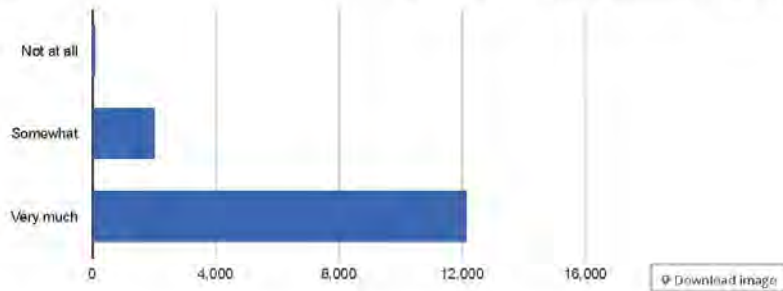
I know how to protect myself from coronavirus. (covidprotect)

Total Count (N)	Missing*	Unique
744	24 (3.1%)	3

Counts/frequency: Not at all (2, 0.3%), Somewhat (86, 11.8%), Very much (654, 87.9%)

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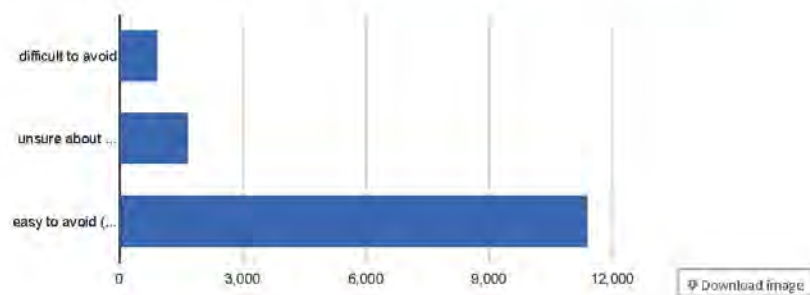
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For me avoiding an infection with COVID-19 in the current situation is... *(covidavoid)*

Total Count (N)	Missing*	Unique
741	27 (3.5%)	3

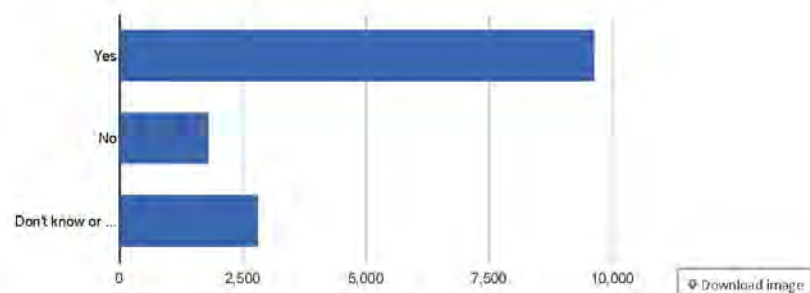
Counts/frequency: difficult to avoid (80, 10.8%), unsure about how to avoid (64, 8.6%), easy to avoid (I have no problem) (597, 80.6%)



Do you think that global warming is happening? *(warmingyesno)*

Total Count (N)	Missing*	Unique
747	21 (2.7%)	3

Counts/frequency: Yes (511, 68.4%), No (105, 14.1%), Don't know or unsure (131, 17.5%)



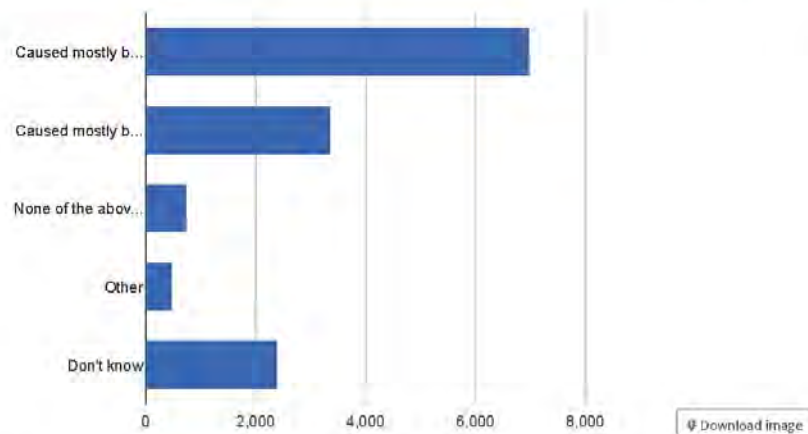
Assuming global warming is happening, do you think it is... ? *(warmingdoyouthink)*

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Total Count (N)	Missing*	Unique
735	33 (4.3%)	5

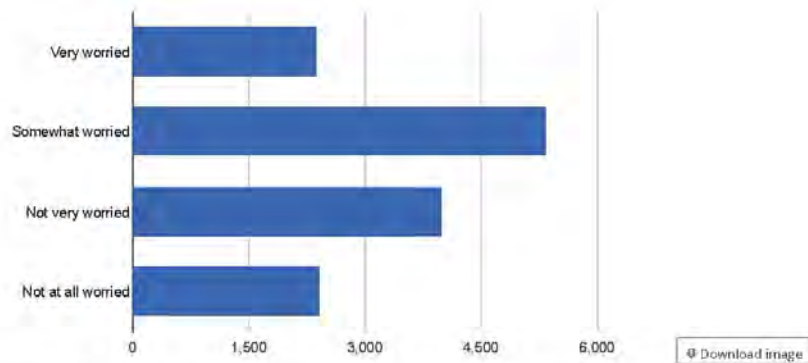
Counts/frequency: Caused mostly by human activities (393, 53.5%), Caused mostly by natural changes in the environment (175, 23.8%), None of the above because global warming isn't happening (38, 5.2%), Other (34, 4.6%), Don't know (95, 12.9%)



How worried are you about global warming? (*warmingworried*)

Total Count (N)	Missing*	Unique
736	32 (4.2%)	4

Counts/frequency: Very worried (130, 17.7%), Somewhat worried (278, 37.8%), Not very worried (186, 25.3%), Not at all worried (142, 19.3%)



How much do you think global warming will harm you personally? (*warmingharm*)

Total Count (N)	Missing*	Unique
737	31 (4.0%)	5

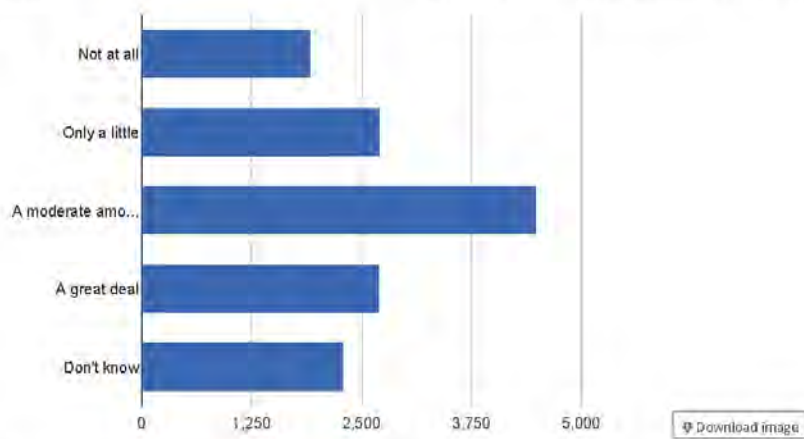
Counts/frequency: Not at all (121, 16.4%), Only a little (141, 19.1%), A moderate amount (228, 30.9%), A great deal (136, 18.5%), Don't know (111, 15.1%)

https://redcap.ecu.edu/redcap_v10.6.24/DataExport/index.php?pid=1535&report_id=4039&stats_charts=1

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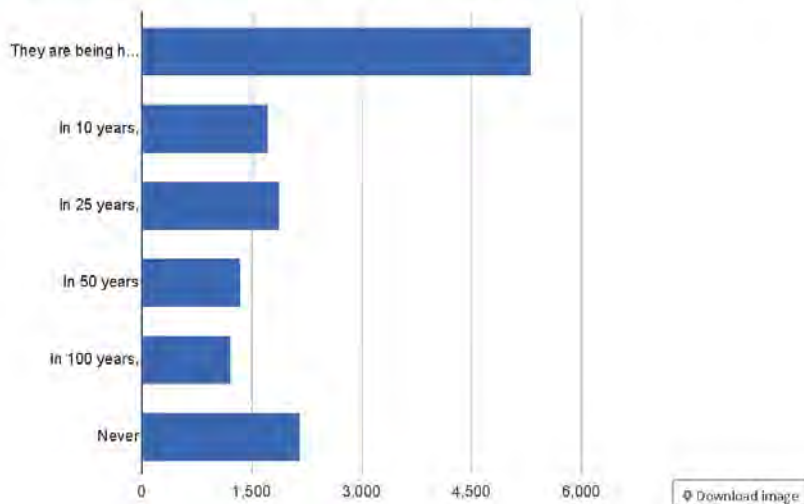


When do you think global warming will start to harm people in the United States?

(warmingwhenharm)

Total Count (N)	Missing*	Unique
722	46 (6.0%)	6

Counts/frequency: They are being harmed right now, (287, 39.8%), In 10 years, (80, 11.1%), In 25 years, (96, 13.3%), In 50 years, (61, 8.4%), In 100 years, (75, 10.4%), Never (123, 17.0%)



Do you think the government and politicians in your county should be doing more or less to address global warming?

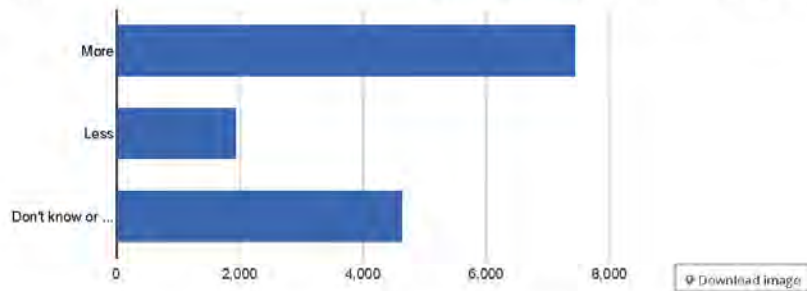
(warminggovt)

Total Count (N)	Missing*	Unique
739	29 (3.8%)	3

Counts/frequency: More (382, 51.7%), Less (111, 15.0%), Don't know or not sure (246, 33.3%)

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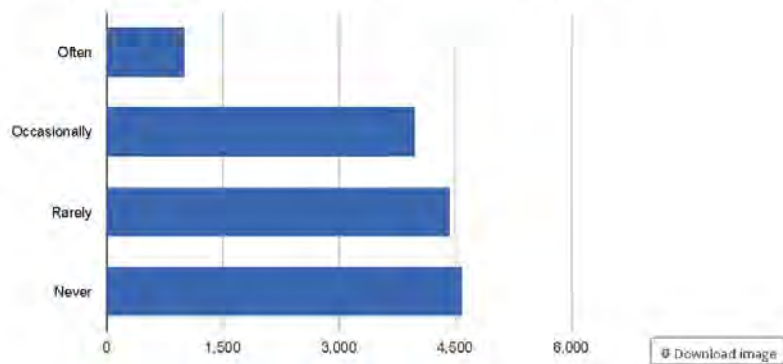
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How often do you discuss global warming with your friends and family? (*warmingfriends*)

Total Count (N)	Missing*	Unique
738	30 (3.9%)	4

Counts/frequency: Often (61, 8.3%), Occasionally (211, 28.6%), Rarely (235, 31.8%), Never (231, 31.3%)



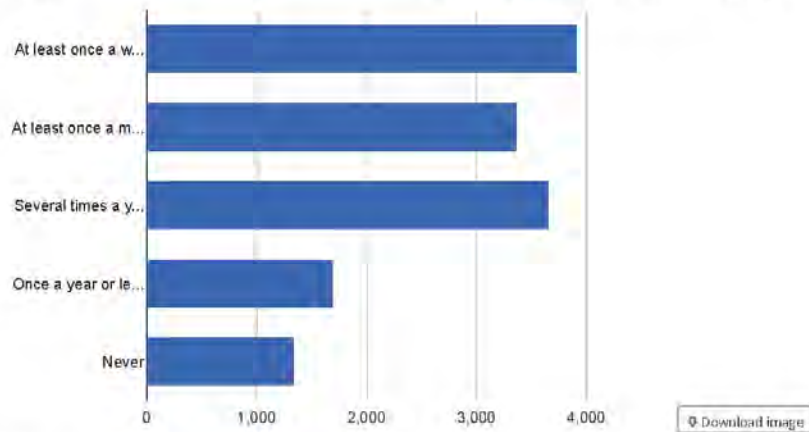
How often do you hear about global warming in the media? (*warmingmedia*)

Total Count (N)	Missing*	Unique
730	38 (4.9%)	5

Counts/frequency: At least once a week (216, 29.6%), At least once a month (167, 22.9%), Several times a year (176, 24.1%), Once a year or less often (103, 14.1%), Never (68, 9.3%)

7/27/2021

Community Health Needs Assessment 2021 | REDCap



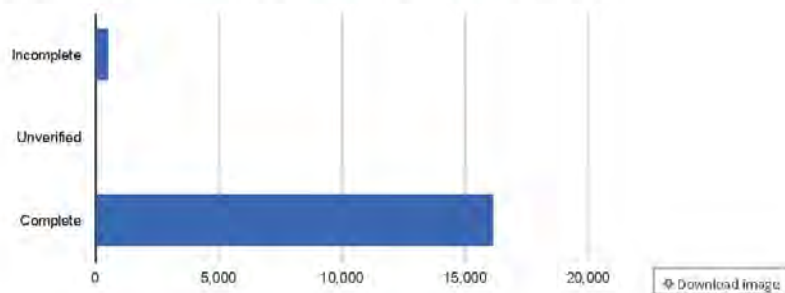
Thank you for your participation! Please feel free to include any additional comments in the box below. *(thankyou)*

Total Count (N)	Missing*
64	704 (91.7%)

Complete? *(form_1_complete)*

Total Count (N)	Missing*	Unique
768	0 (0.0%)	2

Counts/frequency: Incomplete (17, 2.2%), Unverified (0, 0.0%), Complete (751, 97.8%)



* Note: Values listed as 'Missing' may include records with a Missing Data Code (if Missing Data Codes are defined).

Appendix B. HNC 2030 State and County Data (December 2021)

Appendix B
HNC 2030 County/State Data

Social and Economic Factors					
Health Indicator	Desired Result	Definition	Onslow County	North Carolina	HNC 2030 Target
Poverty*	All people in North Carolina are financially stable and have lifetime economic prosperity.	Percent of individuals with incomes at or below 200% of the Federal Poverty Level	37.7% (2019)	31% (2020)	27.0%
Unemployment*	All people of working age in North Carolina have equitable pathway to fulfilling employment.	Percent of population aged 16 and older who are unemployed but seeking work	2.9% (2019)	6.4% (2020)	Reduce unemployment disparity ratio between white and other populations to 1.7 or lower
Short-term Suspensions	All people in North Carolina are supported by a K-12 educational system that values diversity, equity, and inclusion for its students, faculty, staff, and communities.	Number of out-of-school short-term suspensions in educational facilities for all grades per 10 students	DPI unable to provide update to SCHS	1.5 (2018-2019)	0.80
Incarceration**	North Carolina embraces a fair and equitable justice system, free from racism and bias, where safety is foundational to all aspects of a free society, and all communities are free from harm and violence.	Incarceration in North Carolina prisons per 100,000 population	224 (2020)	288 (2020)	150
Adverse Childhood Experiences	All children in North Carolina thrive in safe, stable, and nurturing environments.	Percent of children who have experienced two or more Adverse Childhood Experiences at or below 200% FPL	ACEs do not have county level data	20.9% (2019/2010)	18.0%
Third Grade Reading Proficiency	All children in North Carolina can discover the joy of reading at an early age and are supported in the home, school, and community to be lifelong readers.	Percent of children reading at a proficient level or above based on third grade End of Grade exams: Proficiency defined as Level 3 or higher	DPI unable to provide update to SCHS	56.8% (2018-2019)	80.0%

Notes for social and economic factor data:

Sugar-Sweetened Beverage Consumption*	All people in North Carolina live in communities that support healthy food and beverage choices.	Percent of youth reporting consumption of one or more sugar-sweetened beverages per day	DPI unable to provide update to SCHS	30.1 % (2019)	17.0%
		Percent of adults reporting consumption of one or more sugar-sweetened beverages per day	36.1% (2019)	35.4% (2019)	20.0%
HIV Diagnosis	All people in North Carolina experience sexual health with equitable access to quality and culturally competent prevention, treatment, and management of sexually transmitted infections.	Number of new HIV diagnoses per 100,000 population	13.9 (2020)	12.0 (2020)	6.0
Teen Births	All people in North Carolina live in communities support healthy choices for family planning and have equitable access to high quality, affordable reproductive health services.	Number of births to girls aged 15-19 per 1,000 population	37.1 (2019)	18.2 (2019)	10.0

Notes for Health Behaviors data:

*Adult Tobacco Use, Adult Sugar-Sweetened Beverage Consumption, and Excessive Drinking data are only available as regional data from the Behavioral Risk Factor Surveillance System.

*BRFSS Data for Adult Smoking, Adult Sugar Sweetened Beverage Consumption, and Excessive Drinking are reported for the LHD Region, and is not county level data.

Note: HIV Diagnosis *2020 data should be treated with caution due to reduced availability of testing caused by the COVID-19 pandemic.

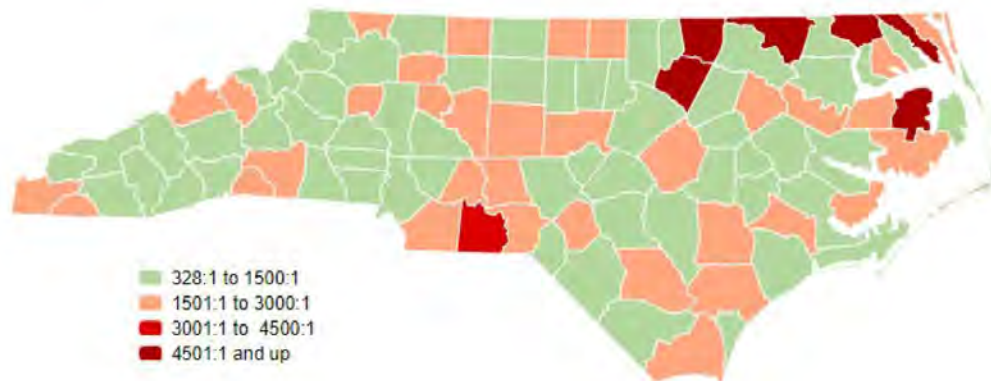
Health Outcomes					
Health Indicator	Desired Result	Definition	Onslow County	North Carolina	HNC 2030 Target
Infant Mortality	All babies in North Carolina are born healthy, thrive in caring and healthy homes, and see their first birthday.	Rate of infant deaths per 1,000 live births	5.1 (2020)	6.9 (2020)	6.0
		Disparity ratio between white non-Hispanic and African American, non-Hispanic infant deaths	2.56 (2016-2020)	2.59 (2016-2020)	Black/White disparity ratio = 1.5
Life Expectancy (years)	All people in North Carolina have long and healthy lives.	Average number of years of life remaining for persons who have attained a given age	76.1 (2020)	76.4 (2020)	82.0

Notes on Health Outcomes:

*Disparity ratio – Rates based on less than 10 deaths are unreliable and should be interpreted with caution. Source: NC Department of Health & Human Services State Center for Health Statistics, 29NOV2021. See table on website for more information.

<https://schs.dph.ncdhhs.gov/data/vital/ims/2020/2020-IMR-TABLE3b.html>

Clinical Care					
Health Indicator	Desired Result	Definition	Onslow County	North Carolina	HNC 2030 Target
Uninsured	All people in North Carolina live in communities with access to comprehensive, high quality, affordable health insurance.	Population under age 65 without insurance	11.1% (2019)	12.9% (2020)	8.0%
Early Prenatal Care	All birthing people have healthy pregnancies and maternal birth outcomes.	Percentage of women who receive pregnancy-related health care services during the first trimester of pregnancy	72.6% (2020)	73.1% (2020)	80.0%
Suicide	All people in North Carolina live in communities that foster and support positive mental health.	Age-adjusted number of deaths attributable to self-harm per 100,000 population	24.6 (2020)	13.3 (2020)	11.1
Primary Care Clinicians (Counties at or below 1:1500 provider to population)	All people in North Carolina live in communities with access to comprehensive, high quality, affordable health care.	Primary care workforce as a ration of the number of full- time equivalent primary care clinicians to county population (primary care provider to population ratio)	See map below		25% decrease for counties above 1:1500 provider to population



References

1. BMJ Journals. Injury Prevention. Epidemiology of Violent Deaths in the World. <https://injuryprevention.bmj.com/content/7/2/104>
2. Carolina Demography. NC in Focus: 2020 Veteran's Snapshot. <https://www.ncdemography.org/2020/11/12/nc-in-focus-2020-veterans-snapshot/#:~:text=In%202019%2C%20nearly%20642%2C000%20veterans,under%2018%20million%20in%202018>
3. Census Reporter. North Carolina. <https://censusreporter.org/profiles/04000US37-north-carolina/>
4. Census Reporter. Onslow County, North Carolina. <https://censusreporter.org/profiles/05000US37133-onslow-county-nc/>
5. Centers for Disease Control and Prevention. About Underlying Cause of Death, 1999-2020. <https://wonder.cdc.gov/controller/datarequest/D76;jsessionid=9891C97D63E3E8F3CA253F014DB3>
6. Centers for Disease Control and Prevention. Benefits of Physical Activity. <https://www.cdc.gov/physicalactivity/basics/pa-health/index.htm>
7. Centers for Disease Control and Prevention. Chronic Obstructive Pulmonary Disease (COPD). Basics About COPD. <https://www.cdc.gov/copd/basics-about.html>
8. Centers for Disease Control and Prevention. Diabetes. Diabetes and Men. <https://www.cdc.gov/diabetes/library/features/diabetes-and-men.html>
9. Centers for Disease Control and Prevention. Diagnosed Diabetes - Total, Adults Aged 18+ Years, Age-Adjusted Percentage, National. <https://gis.cdc.gov/grasp/diabetes/diabetesatlas-surveillance.html>
10. Centers for Disease Control and Prevention. How Much Physical Activity Do Adults Need? <https://www.cdc.gov/physicalactivity/basics/adults/index.htm#:~:text=Physical%20activity%20is%20anything%20that,Physical%20Activity%20Guidelines%20for%20Americans%20>
11. Centers for Disease Control and Prevention. Lung Cancer. Who Should Be Screened for Lung Cancer? https://www.cdc.gov/cancer/lung/basic_info/screening.htm#:~:text=may%20work%20better,-,The%20only%20recommended%20screening%20test%20for%20lung%20cancer%20is%201ow,minutes%20and%20is%20not%20painful
12. Centers for Disease Control and Prevention. National Center for Health Statistics. North Carolina. <https://www.cdc.gov/nchs/pressroom/states/northcarolina/nc.htm>
13. Centers for Disease Control and Prevention. Physical Activity Prevents Chronic Disease. <https://www.cdc.gov/chronicdisease/resources/infographic/physical-activity.htm#:~:text=Regular%20physical%20activity%20helps%20improve,depression%20and%20anxiety%2C%20and%20dementia>
14. Centers for Disease Control and Prevention. Reproductive Health: Teen Pregnancy. About Teen Pregnancy. <https://www.cdc.gov/teenpregnancy/about/index.htm#:~:text=The%20children%20of%20teenage%20mothers,unemployment%20as%20a%20young%20adult>

15. Centers for Disease Control and Prevention. Smoking & Tobacco Use. About Electronic Cigarettes (E-Cigarettes). https://www.cdc.gov/tobacco/basic_information/e-cigarettes/about-e-cigarettes.html
16. Centers for Disease Control and Prevention. Smoking & Tobacco Use. Health Effects. https://www.cdc.gov/tobacco/basic_information/health_effects/index.htm#:~:text=Smoking%20leads%20to%20disease%20and,a%20serious%20smoking%2Drelated%20illness
17. Centers for Disease Control and Prevention. Smoking & Tobacco Use. Smokeless Tobacco: Health Effects. https://www.cdc.gov/tobacco/data_statistics/fact_sheets/smokeless/health_effects/index.htm
18. Centers for Disease Control and Prevention. The National Institute for Occupational Safety and Health (NIOSH). Aircrew Safety & Health – Communicable Diseases. <https://www.cdc.gov/niosh/topics/aircrew/communicablediseases.html>
19. Centers for Disease Control and Prevention. Violence Prevention. Risk and Protective Factors. <https://www.cdc.gov/violenceprevention/aces/riskprotectivefactors.html>
20. City of Jacksonville, North Carolina. Jacksonville Transit Route Map. <https://jacksonvillenc.gov/225/Route-Maps-Schedules>
21. County Health Rankings. Rankings Data and Documentation. <https://www.countyhealthrankings.org/explore-health-rankings/rankings-data-documentation>
22. County Health Rankings. Severe Housing Problems. <https://www.countyhealthrankings.org/explore-health-rankings/measures-data-sources/county-health-rankings-model/health-factors/physical-environment/housing-transit/severe-housing-problems>
23. County Office. Colleges in Onslow County, North Carolina. <https://www.countyoffice.org/nc-onslow-county-colleges/>
24. Crime Grade. Crime per Capita in Onslow County. <https://crimegrade.org/safest-places-in-onslow-county-nc/>
25. Data Center. Child Abuse and Neglect Reports Investigated and Substantiated in North Carolina. <https://datacenter.kidscount.org/data/tables/2246-child-abuse-and-neglect-reports-investigated-and-substantiated?loc=35&loct=5#detailed/5/4910-5009/false/574,1729,37,871,870,573,869,36,868,867/6122,6121/4696,19358>
26. Data Center. Child Abuse and Neglect Reports Investigated and Substantiated in North Carolina. <https://datacenter.kidscount.org/data/tables/2246-child-abuse-and-neglect-reports-investigated-and-substantiated?loc=35&loct=2#detailed/2/any/false/574,1729,37,871,870,573,869,36,868,867/6122,6121/4696,19358>
27. Data Center. Suspensions from School in North Carolina. <https://datacenter.kidscount.org/data/tables/7633-suspensions-from-school#detailed/10/5010-5124/false/1769,1696,1648,1603,1539,1381,1246,1124,1021,909/any/14778,14779>
28. Data USA. North Carolina. <https://datausa.io/profile/geo/north-carolina>
29. Data USA. Onslow County, North Carolina. <https://datausa.io/profile/geo/onslow-county-nc>

30. Federal Bureau of Investigation. Crime in the United States. Property Crime.
<https://ucr.fbi.gov/crime-in-the-u.s/2010/crime-in-the-u.s.-2010/property-crime#:~:text=Definition,of%20force%20against%20the%20victims>
31. Federal Reserve Economic Data. Housing Inventory: Median Listing Price in Onslow County, NC. <https://fred.stlouisfed.org/series/MEDLISPRI37133>
32. Food Bank ENC. 2018-2019 Onslow County Profile. http://foodbankcenc.org/wp-content/uploads/2019/11/2019-2020-County-Profiles_Onslow.pdf
33. Harvard Health Publishing. Men's Health. Routine Screening Tests for Men.
<https://www.health.harvard.edu/mens-health/routine-screening-tests-for-men>
34. Health Care. Federal Poverty Level (FPL). <https://www.healthcare.gov/glossary/federal-poverty-level-fpl/>
35. Health Care. Health Insurance. <https://www.healthcare.gov/glossary/health-insurance/>
36. Health System Tracker. Health and Wellbeing. How does U.S. life expectancy compare to other countries? <https://www.healthsystemtracker.org/chart-collection/u-s-life-expectancy-compare-countries/>
37. Healthy Communities. Onslow County, North Carolina.
<https://healthycommunitiesnc.org/profile/geo/onslow-county>
38. Healthy Paso Del Norte.
<https://www.healthypasodelnorte.org/indicators/index/view?indicatorId=1923&localeTypeId=2>
39. Healthy People 2030. Health Care Access and Quality.
<https://health.gov/healthypeople/objectives-and-data/browse-objectives/health-care-access-and-quality>
40. Healthy People 2030. Incarceration. <https://health.gov/healthypeople/priority-areas/social-determinants-health/literature-summaries/incarceration>
41. JD News. <https://www.jdnews.com/story/news/2021/10/25/onslow-county-looking-new-senior-services-building-amid-growing-problems/6117785001/>
42. JD News. <https://cm.jdnews.com/offers-reg/?return=https%3A%2F%2Fwww.jdnews.com%2Fstory%2Fbusiness%2Freal-estate%2F2019%2F02%2F19%2Farea-buyers-faced-with-housing-race-after-florence%2F5900897007%2F>
43. Kaiser Family Foundation. How Many Seniors Live in Poverty? <https://www.kff.org/report-section/how-many-seniors-live-in-poverty-issue-brief/>
44. Kaiser Family Foundation. Preventive Services Covered by Private Health Plans Under the Affordable Care Act. <https://www.kff.org/health-reform/fact-sheet/preventive-services-covered-by-private-health-plans/>
45. K12 Academics. The Risk Factor of High School Dropouts.
<https://www.k12academics.com/High%20School%20Dropouts/risk-factor-high-school-dropouts>
46. Marine Corps Times. <https://www.marinecorpstimes.com/news/your-marine-corps/2020/02/12/its-official-marine-raiders-leaving-california-for-a-new-home-in-north-carolina/>

47. Military Installations. Camp Lejeune In-depth Overview.
<https://installations.militaryonesource.mil/in-depth-overview/camp-lejeune>
48. Military Installations. MCAS New River In-depth Overview.
<https://installations.militaryonesource.mil/in-depth-overview/mcas-new-river>
49. National Alliance on Mental Illness. Substance Use Disorders. <https://www.nami.org/about-mental-illness/common-with-mental-illness/substance-use-disorders>
50. National Center for Biotechnology Information. Gender Influence on Health and Risk Behavior in Primary Prevention: a Systematic Review.
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7088168/>
51. National Center for Biotechnology Information. The Impact of Poverty on the Current and Future Health Status of Children.
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2528796/#:~:text=Children%20living%20in%20low%2Dincome%20families%20or%20neighbourhoods%20have%20worse,lack%20of%20readiness%20to%20learn>
52. National Council on Aging. Get the Facts on Economic Security for Seniors.
<https://www.ncoa.org/article/get-the-facts-on-economic-security-for-seniors>
53. National Institute of Justice. Violent Crime. <https://nij.ojp.gov/topics/crimes/violent-crime>
54. National Institute on Drug Abuse. What are the Other Health Consequences of Drug Addiction? <https://nida.nih.gov/publications/drugs-brains-behavior-science-addiction/addiction-health>
55. North Carolina Department of Health and Human Services. Food and Nutrition Services (Food Stamps). [https://www.ncdhhs.gov/divisions/child-and-family-well-being/food-and-nutrition-services-food-stamps#:~:text=Food%20and%20Nutrition%20Services%20is,Transfer%20cards%20\(EBT%20cards\)](https://www.ncdhhs.gov/divisions/child-and-family-well-being/food-and-nutrition-services-food-stamps#:~:text=Food%20and%20Nutrition%20Services%20is,Transfer%20cards%20(EBT%20cards))
56. North Carolina Department of Health and Human Services. IVP Branch: Overdose Data.
<https://injuryfreenc.dph.ncdhhs.gov/DataSurveillance/Poisoning.htm>
57. North Carolina Department of Health and Human Services. North Carolina Injury and Violence Prevention Branch. NC Violent Death Reporting System.
https://dashboards.ncdhhs.gov/t/DPH/views/NCVDRSDashboard/NC-VDRSDashboard?%3AshowAppBanner=false&%3Adisplay_count=n&%3AshowVizHome=n&%3Aorigin=viz_share_link&%3AisGuestRedirectFromVizportal=y&%3Aembed=y
58. North Carolina Department of Health and Human Services. 2019 North Carolina HIV Surveillance Report. https://epi.dph.ncdhhs.gov/cd/stds/figures/hiv19rpt_11302020.pdf
59. North Carolina Department of Health and Human Services. 2020 North Carolina HIV Surveillance Report. <https://epi.dph.ncdhhs.gov/cd/stds/figures/2020-HIV-AnnualReport-Final.pdf>
60. North Carolina Department of Health and Human Services. 2020 North Carolina STD Surveillance Report. <https://epi.dph.ncdhhs.gov/cd/stds/figures/2020-STD-AnnualReport-Final-v2.pdf>

61. North Carolina Department of Health and Human Services. Opioid and Substance Use Action Plan Data Dashboard. <https://www.ncdhhs.gov/opioid-and-substance-use-action-plan-data-dashboard>
62. North Carolina Department of Health and Human Services. What Are Opioids? <https://www.ncdhhs.gov/about/department-initiatives/opioid-epidemic/what-are-opioids>
63. North Carolina Department of Public Instruction. Discipline, ALP and Dropout Annual Reports. Table D6 - Dropout High School Counts Rates 5 years (2020-21). <https://www.dpi.nc.gov/data-reports/dropout-and-discipline-data/discipline-alp-and-dropout-annual-reports>
64. North Carolina Department of Public Safety. 2020 County Databook. <https://www.ncdps.gov/documents/2020-county-databook>
65. North Carolina Health Workforce. North Carolina Health Professional Supply Data. <https://nchealthworkforce.unc.edu/interactive/supply/>
66. North Carolina Health Workforce. Primary Care Access in North Carolina is Not Equally Distributed. https://nchealthworkforce.unc.edu/blog/primary_care_nc/
67. North Carolina Institute of Medicine. Healthy North Carolina 2030. <https://nciom.org/wp-content/uploads/2020/01/HNC-REPORT-FINAL-Spread2.pdf>
68. North Carolina Institute of Medicine. Healthy North Carolina 2030. Health Indicator 4: Incarceration Rate. <https://nciom.org/wp-content/uploads/2020/01/Incarceration-Rate.pdf>
69. North Carolina State Center for Health Statistics. Leading Causes of Death in North Carolina 2019. <https://schs.dph.ncdhhs.gov/interactive/query/lcd/lcd.cfm>
70. North Carolina State Center for Health Statistics. North Carolina Resident Live Birth Rates per 1,000 Population, 2016-2020. <https://schs.dph.ncdhhs.gov/data/databook/CD3-LiveBirthRates-2016-2020.html>
71. North Carolina State Center for Health Statistics. Statistics and Reports. <https://schs.dph.ncdhhs.gov/data/county.cfm>
72. North Carolina State Center for Health Statistics. Top 5 Leading Causes of Injury Death, Hospitalization, and Emergency Department Visits by County* All Ages, 2016-2019. https://injuryfreenc.dph.ncdhhs.gov/DataSurveillance/Top5TablesByCounty2016_2019Final.pdf
73. North Carolina State Center for Health Statistics. 2016-2020 Pregnancy Rates per 1,000 Population, by Race/Ethnicity for Females 15-19. <https://schs.dph.ncdhhs.gov/data/databook/>
74. North Carolina State Center for Health Statistics. 2020 State of North Carolina and 2018-2020 County Life Expectancy at Birth. <https://schs.dph.ncdhhs.gov/data/databook/CD8A-2020-StateAnd-2018-2020-CountyLifeExpectanciesAtBirth-REV.html>
75. Office of State Budget and Management. North Carolina Population by Age, 2040-2050. <https://www.osbm.nc.gov/media/2256/download?attachment>
76. Office of State Budget and Management. Projected Population Change in North Carolina Counties: 2040-2050. <https://www.osbm.nc.gov/media/2249/download?attachment>
77. One Place. <https://www.oneplaceonslow.org/>

78. Onslow County Food Resources.
<https://www.onslowcountync.gov/DocumentCenter/View/7334/Food-Resources-Document-2018>
79. Onslow County Nutrition and Transportation.
<https://www.onslowcountync.gov/545/Nutrition-Transportation>
80. Onslow County Nutrition Sites. <https://www.onslowcountync.gov/547/Nutrition>
81. Onslow County WIC. <https://www.onslowcountync.gov/216/WIC>
82. Onslow United Transit System. <http://onslowunitedtransit.org/welcome.html>
83. Parent Education Empathy Rapport and Support Family Development Center.<https://www.peersfamilydevelopmentcenter.com/>
84. Prison Policy Initiative. <https://www.prisonpolicy.org/blog/2020/01/16/percent-incarcerated/>
85. Share the Table NC. <https://sharethetablenc.com/>
86. Statistical Atlas. Overview of Camp Lejeune, Onslow County, North Carolina.
<https://statisticalatlas.com/county-subdivision/North-Carolina/Onslow-County/Camp-Lejeune/Overview>
87. Trail Maps. North Carolina.
<http://trailmaps.pbworks.com/w/page/22412515/North%20Carolina%20-%20Onslow%20County%20-%20Michelle%20Smith>
88. Turning Adversity Into Success for Children of Onslow. <https://tasco-onslow.hub.arcgis.com/>
89. University of Michigan Health. Conditions and Treatments. Neurosciences. Cerebrovascular Disease. <https://www.uofmhealth.org/conditions-treatments/brain-neurological-conditions/cerebrovascular#:~:text=Cerebrovascular%20disease%20refers%20to%20a,blood%20vessel%20rupture%20>
90. U.S. Census Bureau. B25010 Average Household Size of Occupied Housing Units by Tenure. Onslow County and North Carolina.
https://data.census.gov/cedsci/table?q=household%20size%20by%20tenure&g=0400000US37_0500000US37133&tid=ACSDT5Y2020.B25010
91. U.S. Census Bureau. DP05 ACS Demographic and Housing Estimates. Onslow County and North Carolina.
https://data.census.gov/cedsci/table?q=voting%20age&g=0400000US37_0500000US37133
92. U.S. Census Bureau. North Carolina. <https://www.census.gov/quickfacts/NC>
93. U.S. Census Bureau. Onslow County, North Carolina.
<https://www.census.gov/quickfacts/onslowcountynorthcarolina>
94. U.S. Census Bureau. POV-01. Age and Sex of All People, Family Members and Unrelated Individuals. Below 200 Percent of Poverty. All Races.
<https://www.census.gov/data/tables/time-series/demo/income-poverty/cps-pov/pov-01.html>
95. U.S. Census Bureau. S1501 Educational Attainment. North Carolina.
<https://data.census.gov/cedsci/table?q=North%20Carolina%20Educational%20Attainment>
96. U.S. Census Bureau. S1501 Educational Attainment. Onslow County, North Carolina.
<https://data.census.gov/cedsci/table?q=%20Onslow%20County%20Educational%20Attainment&tid=ACSST5Y2020.S1501>

97. U.S. Census Bureau. S1703 Selected Characteristics of People at Specified Levels of Poverty in the Past 12 Months. Onslow County and North Carolina.
https://data.census.gov/cedsci/table?t=Poverty&g=04000000US37_05000000US37133&tid=A CSST5Y2020.S1703
98. Veteran Resources. Veterans, Retirees, Reservists and Guard.
<https://veteranresources.taonline.com/veterans/>
99. WITN. Housing Absorption Causing Economic Concerns in Onslow County. RE/Max Elite Realty Group. <https://www.witn.com/2021/07/23/housing-absorption-causing-economic-concerns-onslow-county/>
100. Zillow. Jacksonville Home Values. <https://www.zillow.com/jacksonville-nc/home-values/>