2018

Madison County Community Health Assessment

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ACKNOWLEDGEMENTS

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Our community health assessment process and products were supported collaboratively by **WNC Healthy Impact**, a partnership between hospitals and health departments to improve community health in western North Carolina. This innovative regional effort is coordinated, housed and financially supported by **WNC Health Network**, the alliance of western NC hospitals working together to improve health and healthcare. Learn more at www.WNCHN.org.

WNCHEALTHYIMPACT

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MADISON COUNTY 2018 COMMUNITY HEALTH ASSESSMENT EXECUTIVE SUMMARY

Community Results Statement

Madison County residents are healthy, active, and substance free.

Leadership for the Community Health Assessment Process

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Regional/Contracted Services

Our county received support from **WNC Healthy Impact**, a partnership and coordinated process between hospitals, public health agencies, and key regional partners in western North Carolina working towards a vision of improved community health. We work together locally and regionally to assess health needs, develop collaborative plans, take action, and evaluate progress and impact. This innovative regional effort is coordinated and supported by **WNC Health Network**. WNC Health Network is the alliance of hospitals working together to improve health and healthcare in western North Carolina. Learn more at www.WNCHN.org.

Theoretical Framework/Model

WNC Health Network provides local hospitals and public health agencies with tools and support to collect, visualize, and respond to complex community health data through Results-Based Accountability™ (RBA). RBA is a disciplined, common-sense approach to thinking and acting with a focus on how people, agencies, and communities are better off for our efforts.

Through WNC Healthy Impact, all hospitals and their public health partners can access tailored Results-Based Accountability training and coaching; scorecard licenses and development (including the electronic Hospital Implementation Strategy); and scorecard training and technical assistance.

Collaborative Process Summary

Madison's collaborative process is supported by WNC Healthy Impact, which works at the regional level.

Locally, our process is guided by the CHA team, which is divided into primary and secondary data teams. These teams review the data and develop a short list of health issues of concern. These health issues are then brought forth to the community, where health priorities are selected.

Phase 1 of the collaborative process began in January, 2018 with the collection of community health data. For more details on this process see Chapter 1 – Community Health Assessment Process.

Key Findings

The primary data team reviewed data from the key informant surveys regarding issues of high concern, including level of resources. The secondary data team reviewed data from the WNC Healthy Impact Data Workbook, which included local, regional, and state data. It was noted

there was crossover of primary data and secondary data teams in the areas of obesity, mental health, substance use, and diabetes. The following 8 health issues were presented to members of the health consortium to prioritize:

- Alzheimer/Dementia
- COPD/Asthma
- Diabetes
- Heart Disease
- Infant/Child Health
- Mental Health
- Overweight/Physical Activity/Nutrition
- Substance Use

Community members ranked and voted on the eight health issues listed above, leading to the selection of the following two health priorities:

Health Priorities

Health Priority 1 Physical Activity and Nutrition
Health Priority 2 Substance Use and Mental Health

Next Steps

CHA leadership, along with the Healthy Eating Active Living and Madison Substance Awareness teams, will work with community members to better understand the story and root causes behind our priority health issues. New and existing partners will be engaged to help to do better on these issues. We will identify what works to do better through research on evidence-based strategies, observing what is working in other communities, and engaging priority populations. Strategies will be selected, as well as performance measures to ensure that residents are better off because of them. The Community Health Improvement plan will be developed as an electronic scorecard and published so that teams and the community at large can monitor progress.

CHAPTER 1 – COMMUNITY HEALTH ASSESSMENT PROCESS

Purpose

Community health assessment (CHA) is an important part of improving and promoting the health of county residents. A CHA – which is a process that results in a public report – describes the current health indicators and status of the community, what has changed, and what still needs to change to reach a community's desired health-related results.

What are the key phases of the Community Health Improvement Process?

In the **first phase** of the cycle, process leaders for the CHA collect and analyze community data – deciding what data they need and making sense of it. They then decide what is most important to act on by clarifying the desired conditions of wellbeing for their population and by then determining local health priorities.

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The **second phase** of the cycle is community health strategic planning. In this phase, process leaders work with partners to understand the root causes of the identified health priorities, both what's helping and what's hurting the issues. Together, they make a plan about what works to do better, form workgroups around each strategic area, clarify customers, and determine how they will know people are better-off because of their efforts.

In the **third phase** of the cycle, process leaders for the CHA take action and evaluate health improvement efforts. They do this by planning how to achieve customer results and putting the plan into action. Workgroups continue to meet, and monitor customer results and make changes to the plan as needed. This phase is vital to helping work groups understand the contribution their efforts are making toward their desired community results.

Definition of Community

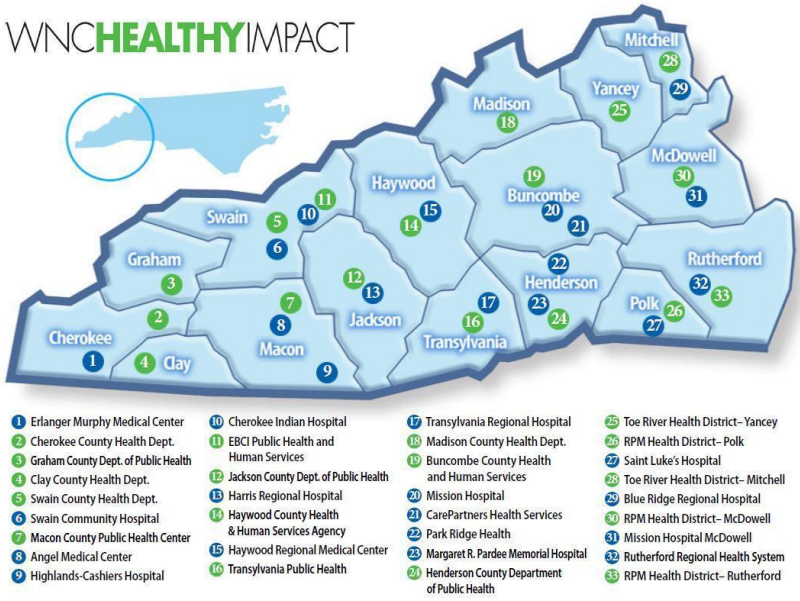
Community is defined as "county" for the purposes of the North Carolina Community Health Assessment Process. Madison County is included in Mission Hospital community for the purposes of community health improvement, and as such they were a key partner in this local level assessment.

WNC Healthy Impact

WNC Healthy Impact is a partnership and coordinated process between hospitals, public health agencies, and key regional partners in western North Carolina working towards a vision of improved community health. We work together locally and regionally to assess health needs, develop collaborative plans, take action, and evaluate progress and impact.

This regional initiative is designed to support and enhance local efforts by:

- Standardizing and conducting data collection,
- Creating communication and report templates and tools,
- Encouraging collaboration,
- Providing training and technical assistance,
- Addressing regional priorities, and
- Sharing evidence-based and promising practices.



This innovative regional effort is supported by financial and in-kind contributions from hospitals, public health agencies, and partners, and is coordinated by **WNC Health Network**. WNC Health Network, Inc. is an alliance of hospitals working together, and with partners, to improve health and healthcare. Learn more at www.WNCHN.org.

Data Collection

The set of data reviewed for our community health assessment process is comprehensive, though not all of it is presented in this document. Within this community health assessment we share a general overview of health and influencing factors, then focus more on priority health issues identified through a collaborative process. Our assessment also highlights some of our community strengths and resources available to help address our most pressing issues.

Core Dataset Collection

The data reviewed as part of our community's health assessment came from the WNC Healthy Impact regional core set of data and additional local data compiled and reviewed by our local CHA team. WNC Healthy Impact's core regional dataset includes secondary (existing) and primary (newly collected) data compiled to reflect a comprehensive look at health. The following data set elements and collection are supported by WNC Healthy Impact data consulting team, a survey vendor, and partner data needs and input:

- A comprehensive set of publicly available secondary data metrics with our county compared to the sixteen county WNC region
- Set of maps accessed from Community Commons and NC Center for Health Statistics
- WNC Healthy Impact Community Health Survey (cell phone, landline and internet-based survey) of a random sample of adults in the county
- Online key informant survey

See **Appendix A** for details on the regional data collection methodology.

Additional Community-Level Data

In addition, the Madison Substance Awareness Coalition (MSAC) conducted a community survey 2015, 2016, and 2018 as well as Madison County Schools collected PRIDE substance use survey data from middle and high school students in 2016 and 2018. The Healthy Eating Active Living (HEAL) collected BMI data on all K-8 students.

Health Resources Inventory

We conducted an inventory of available resources of our community by reviewing a subset of existing resources currently listed in the 2-1-1 database for our county as well as working with partners to include additional information. Where gaps were identified, we partnered with 2-1-1 to fill in or update this information when applicable. See **Chapter 7** for more details related to this process.

Community Input & Engagement

Including input from the community is a critical element of the community health assessment process. Our county included community input and engagement in a number of ways, including reviewing data and helping to select priorities.

Two data teams were established to review primary and secondary data during the Fall of 2018. The primary data team reviewed findings from the WNC Healthy Impact community survey regarding high concerns and resource issues from the key informant surveys. The secondary data team reviewed data from the WNC Healthy Impact Data Workbook, which included information from local, regional, and state data. It was noted there was crossover of primary data and secondary data in the areas of obesity, mental health, substance use, and diabetes.

The following eight health issues were presented to members of the Health Consortium to prioritize:

- Alzheimer/Dementia
- COPD/Asthma
- Diabetes
- Heart Disease
- Infant/Child Health
- Mental Health
- Overweight/Physical Activity/Nutrition
- Substance Use

An overview of the CHA process was presented to Health Consortium members in November, 2018. Handouts of the relative data points for each of the eight health issues were given to members and discussed. A prioritization tool was used to rank each health issue on a scale of 1-4 based on relevance, impact, and feasibility. Members ranked each health issue and then voted by placing colored dots on the health issues that were their top priorities based on the ranking criteria.

The following health issues were selected by the membership:

- Physical Activity and Nutrition
- Substance Use and Mental Health

In addition, community engagement is an ongoing focus for our community and partners as we move forward to the collaborative planning phase of the community health improvement process. Partners and stakeholders with current efforts or interest related to priority health issues will continue to be engaged. We also plan to work together with our partners to help ensure that programs and strategies in our community are developed and implemented with community members and partners.

At-Risk & Vulnerable Populations

Throughout our community health assessment process, our team was focused on understanding general health status and related factors for the entire population of our county, as well as the groups particularly at-risk for health disparities or adverse health outcomes. For the purposes of the overall community health assessment, we aimed to understand differences in health outcomes, correlated variables, and access, particularly among medically underserved, low-income, and/or minority populations, and others experiencing health disparities.

The at-risk and vulnerable populations of focus for our process and product include older adults, as well as Madison County residents experiencing:

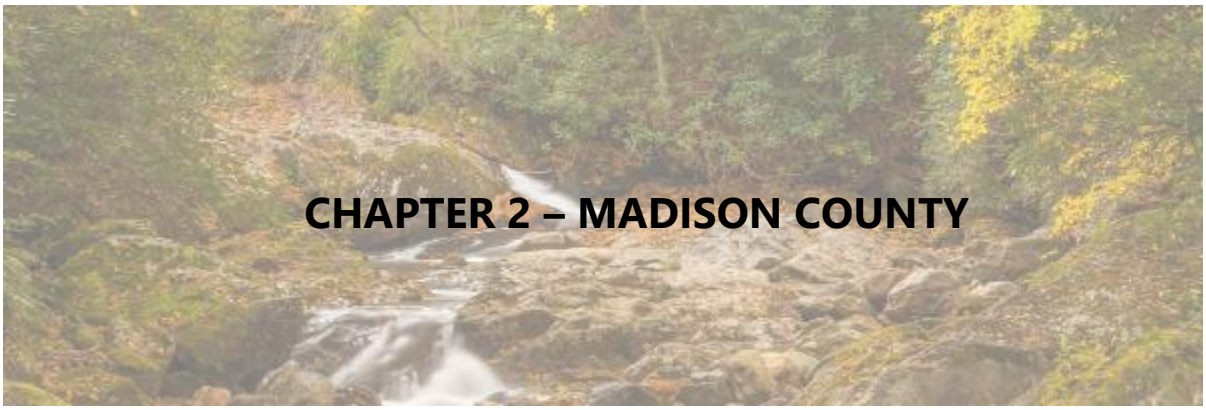
- Low income
- Literacy barriers
- Transportation issues
- Challenges accessing health care

Though there are not universally accepted definitions of the three groups, here are some basic definitions from the Health Department Accreditation Self-Assessment Instrument (in some cases definitions have been slightly altered to better represent our region):

Underserved populations relate to those who do not access health care either because there is a lack of services or providers available or because of limitations such as income, literacy/language barriers or understanding on how to access services, cultural competency of clinicians, trust, transportation, etc.

At-risk populations are the members of a particular group who are likely to, or have the potential to, get a specified health condition. This could be from engaging in behavior (such as pregnant women who smoke) that could cause a specified health condition, having an indicator or precursor (high blood pressure) that could lead to a specified health condition or having a high ACE score (traumatic experiences), which is correlated with increased risk of specified health conditions.

A vulnerable population is one that may be more susceptible than the general population to risk factors that lead to poor health outcomes. Vulnerable populations, a type of at-risk population, can be classified by such factors as race/ethnicity, socio-economic status, cultural factors and age groups.



CHAPTER 2 – MADISON COUNTY

Location, Geography, and History of Madison County

Madison County offers 288,800 scenic acres (452 square miles) of beautiful mountains and fertile valleys. With whitewater rafting, snow skiing, snow tubing, the Appalachian Trail, scenic byways and a hot natural mineral spring, Madison County is rich in outdoor recreational opportunities. Nearly 73% of the county is forest land and nearly 25% of the county acreage is managed by the U.S. Forest Service. Madison, ranking 53 in size among North Carolina's 100 counties, is located 15 miles north of Asheville on the North Carolina/Tennessee border of the Smoky Mountains of Appalachia. The terrain is steep to gently rolling, with elevations ranging from 1,280 feet to 5,516 feet, the lowest running along the French Broad River into Tennessee. The diverse topography of Madison County, with several peaks over 5,000 feet in elevation and the low French Broad River Valley, provides for spectacular scenic visits. More than 15,000 acres of the county are located in the Pisgah National Forest.

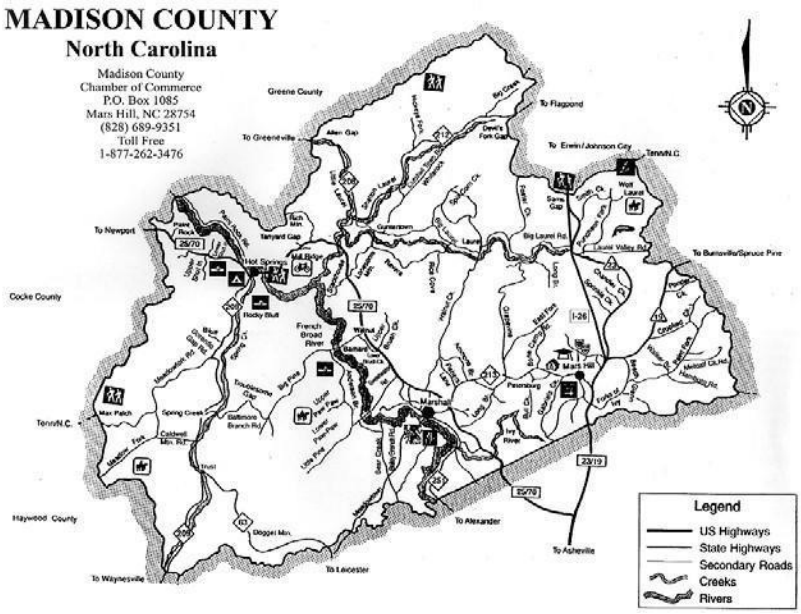
The Appalachian Trail runs along much of the northern border of the county. In addition to the natural beauty, Madison County is defined by its rural nature. There are a little more than 20,000 residents. Approximately 79% of the roads throughout the county are paved at this time. Nine miles of Interstate 26 follows the eastern side of the county into Tennessee. This was the first stretch of interstate in North Carolina to be designated a scenic byway.

There are three municipalities located in the county: Mars Hill, Marshall, the county seat, and Hot Springs.

Mars Hill is home to Mars Hill University which is one of the few universities in the nation to have a competitive clogging team that offers scholarships. Due to the presence of the college, residents of the town and county enjoy a variety of cultural, intellectual and entertainment offerings than would usually be found in a town of its size.

The county seat of Marshall is experiencing a revitalization effort that has led to extensive renovations of old buildings and a greater appreciation for the uniqueness of its architecture. The Madison County Arts Council sponsors many programs and events throughout the year. Buildings that housed Marshall Elementary and Marshall High School, public schools that were erected on an island in the French Broad River, have been renovated for artists, their studios and galleries.

Hot Springs is the smallest town in the county. It is located in the Pisgah National Forest where the Appalachian Trail intersects with the French Broad River. Outdoor recreation is abundant in the area with activities such as rafting, kayaking, and backpacking. In addition, Hot Springs boasts the Hot Springs Resort and Spa which is known for its natural, mineral-rich springs and offers private tubs for soaking.



Madison County has a single public school system that is comprised of three elementary schools, one middle school, high school, and early college. There are approximately 2600 students in the school system. Mars Hill University, a private Liberal Arts University, was founded in 1856. The university has reorganized into three schools: Education and Leadership; Business and Community Service; and Arts and Science. In 2015 the RN to BSN program was added with the traditional BSN program beginning in Fall 2016. The Madison Campus of Asheville-Buncombe Technical Community College, located in Marshall, offers training in tailored trade and technical classes, and industrial training.

Madison County Health Department, 2015. Madison County Community Health Assessment, Page13.

History

Buncombe was carved off partly from these counties in 1792 and covered what is now eleven counties. These counties were sliced off from Buncombe a few at a time. Between 1792 and 1851, Madison was a part of Buncombe County.

Madison County was formed in 1851 and was named for President James Madison. The county seat of Marshall (originally called Lapland). The large area of land that is now Madison County was a part of Rutherford and Burke counties and was named for U.S. Chief Justice John Marshall. Mars Hill University was founded in 1856 and sits on its original site. The university's name (which became the town's name) comes from "Mars' hill" mentioned in the Bible, in Acts 17:22.

When the railroad lost ground to automobile transportation, Madison County settled back into isolation from the forces developing the rest of the United States. The state found it too expensive to build roads in the mountains until the early 1960s, when road building in Appalachia received greater priority. Recently, major road improvements were made along

several routes, including improvements on Highway 25-70 and the upgrading of U.S. Highway 23 to Interstate I-26.

As Madison County changes, it is important to take into consideration the mountain traditions, culture, and environment in relationship to healthcare delivery and access. One healthcare challenge is the lack of a hospital in the county, although there is a private non-profit medical practice with four offices located throughout the county, which is a benefit. Madison County has a single public school system that is comprised of three elementary schools, one middle school, a high school, and an early college. There are approximately 2,400 students in the school system. Mars Hill University (MHU), a private Liberal Arts University, was founded in 1856. The university has reorganized into three schools: Education and Leadership; Business and Community Service; and Arts and Science. In 2015 the RN to BSN program was added with the traditional BSN program beginning in Fall 2016 and the first graduating class was Spring 2018. MHU and the Madison County Health Department have a strong relationship, with faculty and students working together on various public health projects. The Madison Campus of Asheville-Buncombe Technical Community College, located in Marshall, offers training in tailored trade and technical classes, and industrial training.
Madison County Health Department, 2015. Madison County Community Health Assessment, Page14.

Population

Understanding the growth patterns and age, gender, and racial/ethnic distribution of the population in Madison County are key to planning the allocation of health care resources for the county in both the near- and long- term.

General Population Characteristics

County	Total Population (2010)	% Males	% Females	Median Age*	% Under 5 Years Old	% 5-19 Years Old	% 20 - 64 Years Old	% 65 Years and Older
Madison	20,764	49.5	50.5	43.3	4.5	18.7	59.1	17.7
WNC (Regional) Total	759,727	48.5	51.5	44.7	n/a	n/a	n/a	n/a
State Total	9,535,483	48.7	51.3	37.4	6.6	20.2	60.2	12.9

U.S. Census Bureau. (2018). ACS Demographic and Housing Estimates: 2016 ACS 5-Year Estimates. [Data tables]. Available from http://factfinder2.census.gov.

The Madison County population has a slightly higher proportion of females than males.

The median age (43.3 years) is 1.4 years "younger" than the WNC regional average, but 5.9 years "older" than the NC average. Madison County has lower proportions of "younger persons" and higher proportions of the "older persons" than NC as a whole.

POPULATION DISTRIBUTION BY RACE/ETHNICITY

County	Total Population (2010)	White	Black or African American	American Indian, Alaskan Native	Asian	Native Hawaiian, Other Pacific Islander	Some Other Race	Two or More Races	Hispanic or Latino (of any race)
		%	%	%	%	%	%	%	%
Madison	20,764	96.5	1.2	0.2	0.3	0.0	0.5	1.3	2.0
WNC (Regional) Total	759,727	89.3	4.2	1.5	0.7	0.1	2.5	1.8	5.4
State Total	9,535,483	68.5	21.5	1.3	2.2	0.1	4.3	2.2	8.4

U.S. Census Bureau. (2018). ACS Demographic and Housing Estimates: 2016 ACS 5-Year Estimates. [Data tables]. Available from http://factfinder2.census.gov.

Madison County has significantly lower proportions of all minority racial and ethnic groups than the WNC region and NC as a whole.

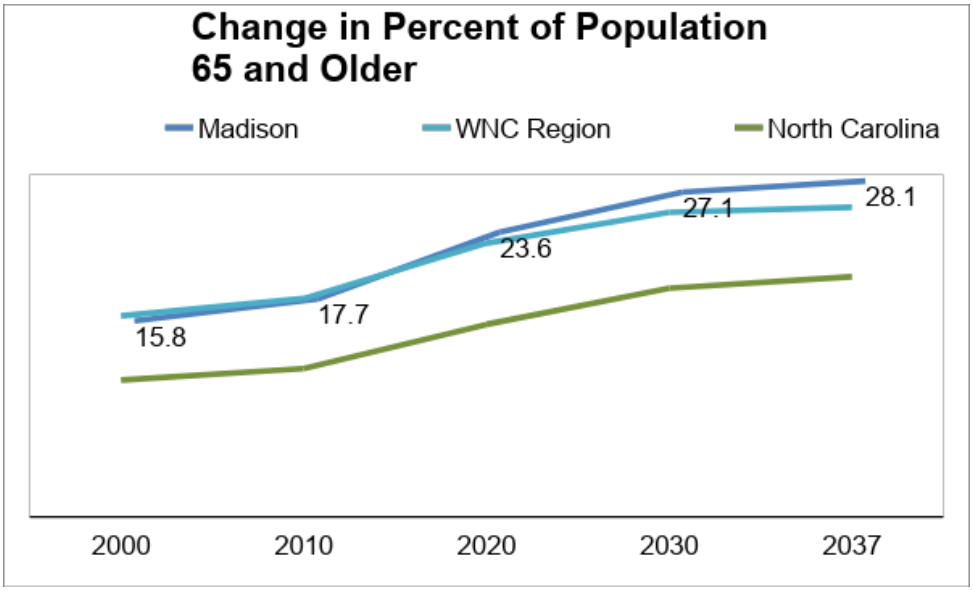
PERCENT POPULATION GROWTH			
DECADE	**MADISON COUNTY**	**WNC REGION**	**STATE OF NC**
2000-2010	**5.4**	**13.0**	**15.6**
2010-2020	**5.3**	**6.7**	**10.7**
2020-2030	**3.2**	**6.1**	**9.5**

U.S. Census Bureau. (2018). ACS Demographic and Housing Estimates: 2016 ACS 5-Year Estimates. [Data tables]. Available from http://factfinder2.census.gov.

The modest rate of growth in Madison County is expected to slow over the next two decades, to a rate lowest among comparators by 2030.

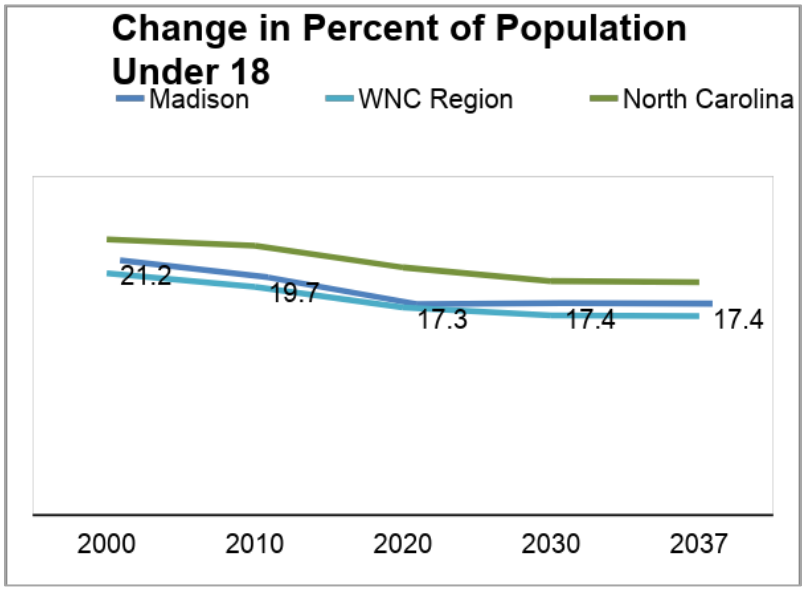
There are 8,400 total households in Madison County with 5,736 family households. 20.5% of households have children 18 years of age or younger, while 13.4% of households contain residents 65 and older.

U.S. Census Bureau. (2018). Selected Social Characteristics in the United States: 2016 ACS 5-Year Estimates. [Data tables]. Available from http://factfinder2.census.gov.



North Carolina Office of State Budget and Management. (2018). County/State Population Projections: Sex and Single Years of Age (2000-2037). [Data tables]. Available from https://www.osbm.nc.gov/demog/county-projections

The population in each major age group age 65 and older continues to trend higher in Madison and WNC than the state projections.



North Carolina Office of State Budget and Management. (2018). County/State Population Projections: Sex and Single Years of Age (2000-2037). [Data tables]. Available from https://www.osbm.nc.gov/demog/county-projections.

While the 65 and older population continues to increase, the population under 18 is decreasing. There are many retired individuals moving to the area and working families with children seem to be moving out of the county for employment opportunities.

The data reflects 4.6% of residents moved within Madison County during 2012-2016, while 5.5% moved from a different county within the state. 1.8% moved from a different state and 0.1% moved to Madison from abroad.

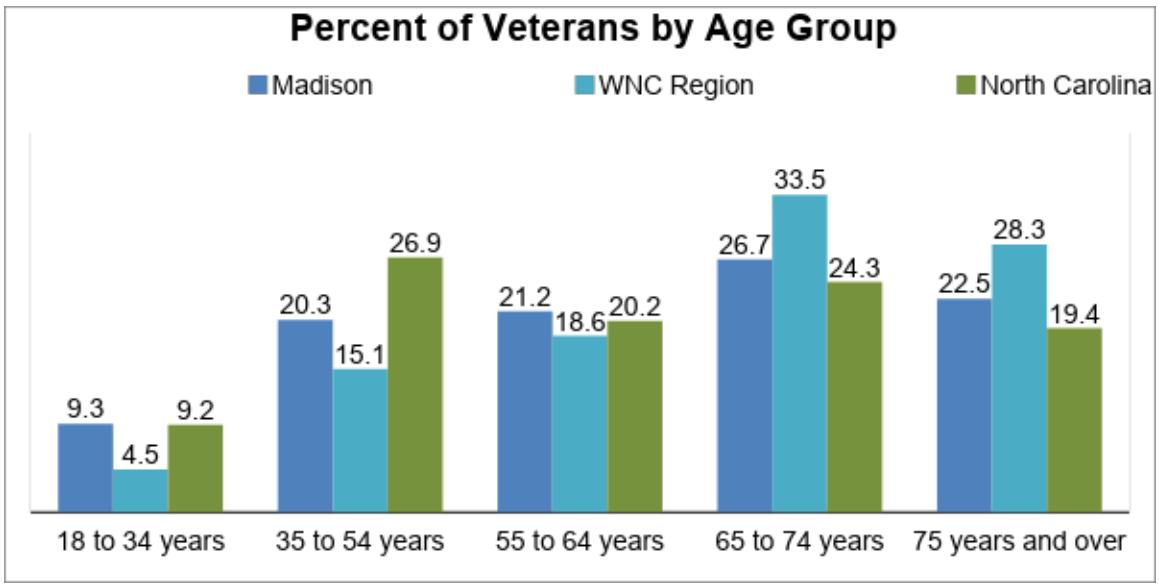
U.S. Census Bureau. (2018). Geographic Mobility by Selected Characteristics: 2016 ACS 5-Year Estimates. [Data tables]. Available from http://factfinder2.census.gov.

There are 8,400 total households in Madison County with 5,736 family households. 20.5% of households have children 18 years of age or younger, while 13.4% of households contain residents 65 and older.

U.S. Census Bureau. (2018). Selected Social Characteristics in the United States: 2016 ACS 5-Year Estimates. [Data tables]. Available from http://factfinder2.census.gov.

The percentage of grandparents responsible for basic needs of grandchildren (under 18) is significantly higher (75.8%) compared to the state (46%) and the WNC regional total (52.1%). Responsibility of basic needs includes providing food, shelter, clothing, day care, etc., for any or all grandchildren living in the household.

U.S. Census Bureau. (2018). Grandparents: 2016 ACS 5-Year Estimates. [Data tables]. Available from http://factfinder2.census.gov.



U.S. Census Bureau. (2018). Veteran Status: 2016 ACS 5-Year Estimates. [Data tables]. Available from http://factfinder2.census.gov.

The percentage of veterans' age 55-64 years is slightly higher than the WNC Region and the state.

CHAPTER 3 – A HEALTHY MADISON COUNTY

Elements of a Healthy Community

In the online survey, key informants were asked to list characteristics of a healthy community. They were also asked to select the health issues or behaviors that they feel are the most critical to address collaboratively in their own community over the next three years or more. Follow-up questions asked them to describe which contributors to progress and impediments to progress exist for these issues, as well as the likelihood that collaborative effort could make a positive change for these issues.

When key informants were asked to describe what elements they felt contributed to health community in our county, they reported:

- Access to Care and Services
- Recreational/Outdoor Activities
- Affordable Care and Services
- Access to Healthy Foods

According to responses from the 2018 community survey, the top county issues perceived as in most need of improvement were:

- Availability of Employment
- Internet Availability

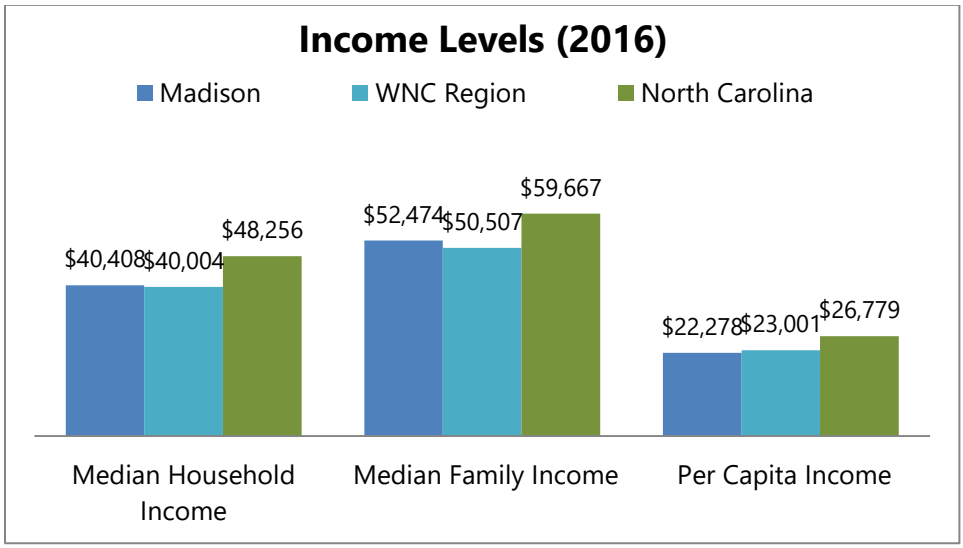
During our collaborative planning efforts and next steps, we will further explore these concepts and the results our community has in mind.

CHAPTER 4 – SOCIAL & ECONOMIC FACTORS

As described by Healthy People 2020, economic stability, education, health and healthcare, neighborhood and built environment, and social community and context are five important domains of social determinants of health. These factors are strongly correlated with individual health. People with higher incomes, more years of education, and a healthy and safe environment to live in have better health outcomes and generally have longer life expectancies. Although these factors affect health independently, they also have interactive effects on each other and thus on health. For example, people in poverty are more likely to engage in risky health behaviors, and they are also less likely to have affordable housing. In turn, families with difficulties in paying rent and utilities are more likely to report barriers to accessing health care, higher use of the emergency department, and more hospitalizations.

Income & Poverty

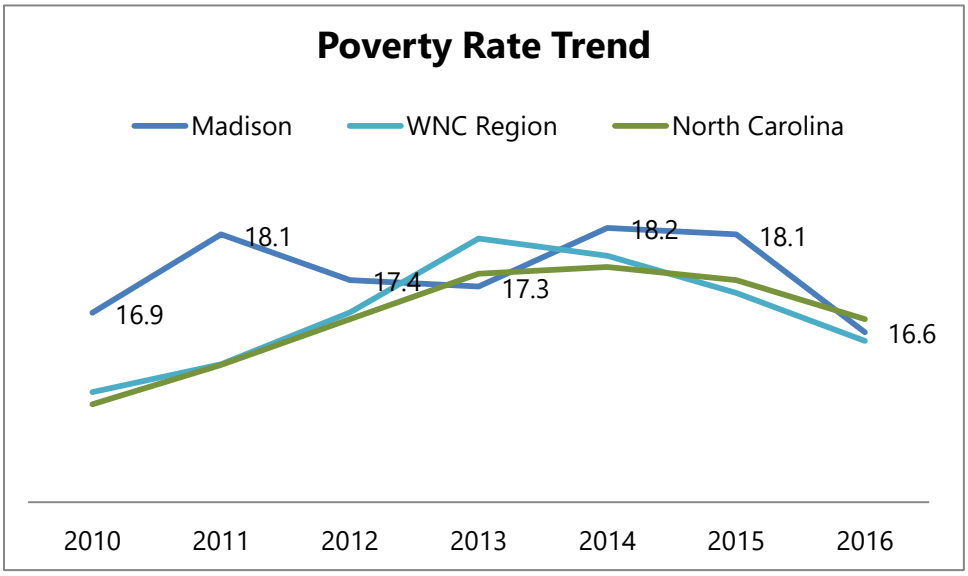
"Income provides economic resources that shape choices about housing, education, child care, food, medical care, and more. Wealth, the accumulation of savings and assets, helps cushion and protect us in times of economic distress. As income and wealth increase or decrease, so does health" (County Health Rankings, 2018).



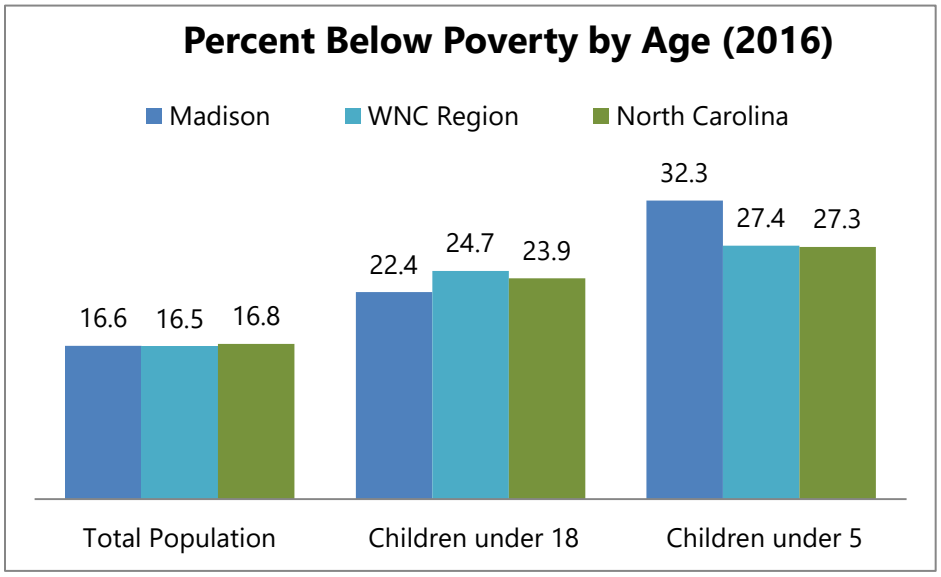
U.S. Census Bureau. (2018). Selected Economic Characteristics: ACS 5-Year Estimates. [Data tables]. Available from http://factfinder2.census.gov.

Median household and family income in Madison County has increased from 2015 and is slightly higher than the WNC Region but lower than the state average. The number of households with food stamps/SNAP benefits has slightly decreased from 2015. However, the number of individuals 65 and older that participate in food and nutrition services has increased from 2014-2018.

UNC-CH Jordan Institute for Families. (2018). Food and Nutrition Services: Point in Time Data. [Data tables]. Available from http://ssw.unc.edu/ma/.

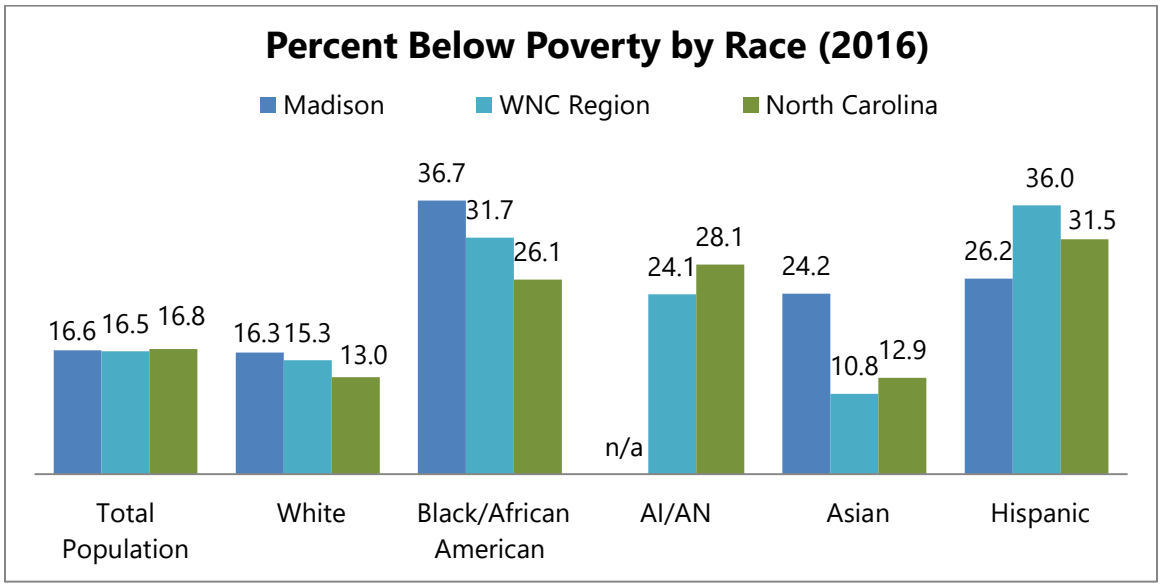


U.S. Census Bureau. (2018). Poverty Status in the Past 12 Months: ACS 5-Year Estimates. [Data tables]. Available from http://factfinder2.census.gov.



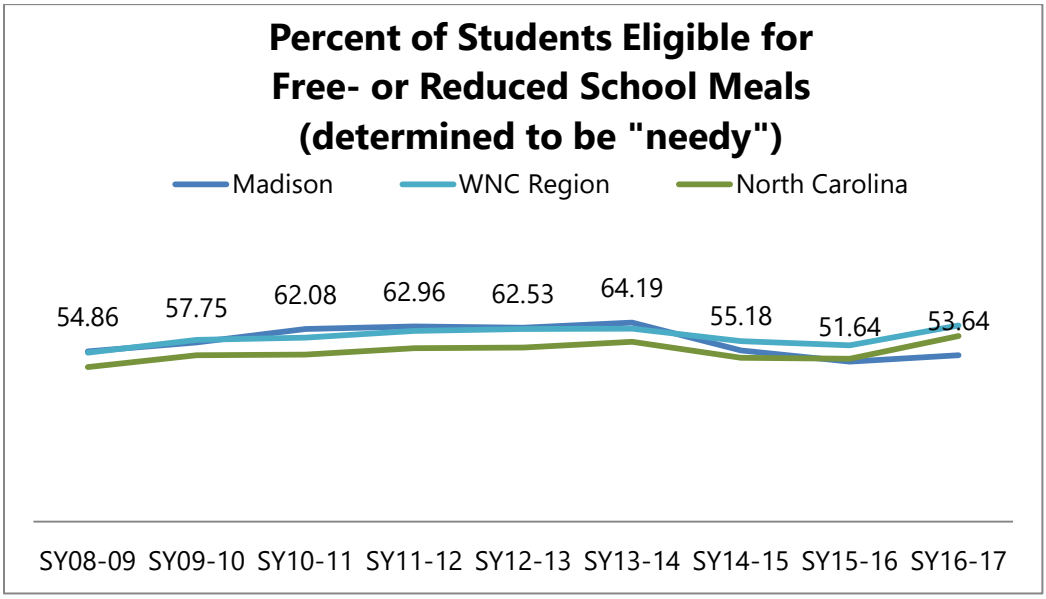
Citation: U.S. Census Bureau. (2018). Poverty Status in the Past 12 Months: ACS 5-Year Estimates. [Data tables]. Available from http://factfinder2.census.gov.

The overall poverty rate is trending down; however the percentage of poverty for children under the age of 5 is higher than the WNC Region and the state.



U.S. Census Bureau. (2018). Poverty Status in the Past 12 Months: 2012-2016 ACS 5-Year Estimates. [Data tables]. Available from http://factfinder2.census.gov.

Black/African American individuals experience a higher percentage of poverty in Madison County compared to all other races.



NC Department of Public Instruction. (2018). Financial and Business Services: Free and Reduced Student Data by Site. [Data tables]. Available from http://www.ncpublicschools.org/fbs/resources/data/.

Surprisingly, Madison County Schools have a lower percentage of students eligible for free or reduced school meals than the WNC Region and the state.

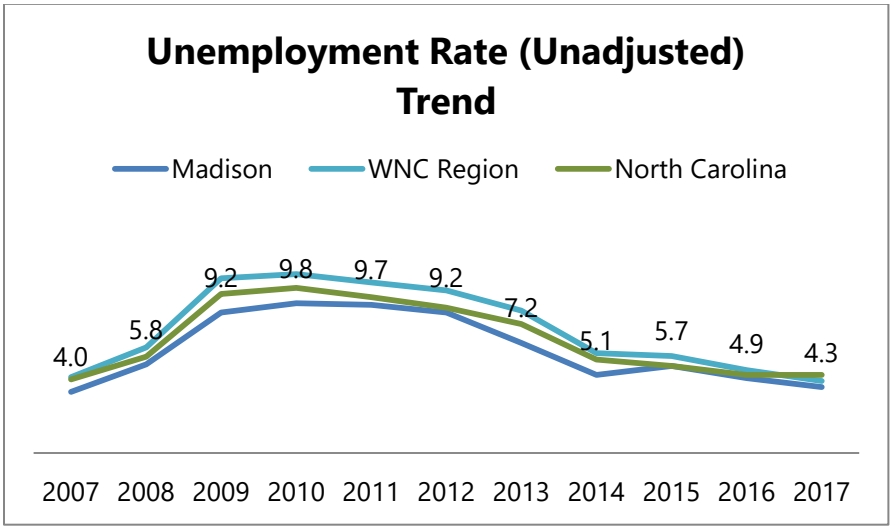
Employment

"Employment provides income and, often, benefits that can support healthy lifestyle choices. Unemployment and under employment limit these choices, and negatively affect both quality of life and health overall. The economic condition of a community and an individual's level of educational attainment both play important roles in shaping employment opportunities" (County Health Rankings, 2018).

As of 2017, the three employment sectors in Madison County with the largest proportions of workers (and average weekly wages) were:

- Educational Services: 22.05% of workforce ($669)
- Health Care and Social Assistance: 15.16% of workforce ($623)
- Public Administration: 12.53% of workforce ($639)

NC Employment Security Commission. (2018). Access NC: Quarterly Census Employment and Wages. [Data tables]. Available from https://accessnc.opendatasoft.com/pages/home/.



North Carolina Department of Commerce, Labor, and Economic Analysis Division. (2018). Access NC: Labor Force (Laus). [Data tables]. Available from https://accessnc.opendatasoft.com/pages/dashboard_laborforce_laus/.

The unemployment rate continues to trend downward and Madison County remains lower than the WNC Region and that state.

Education

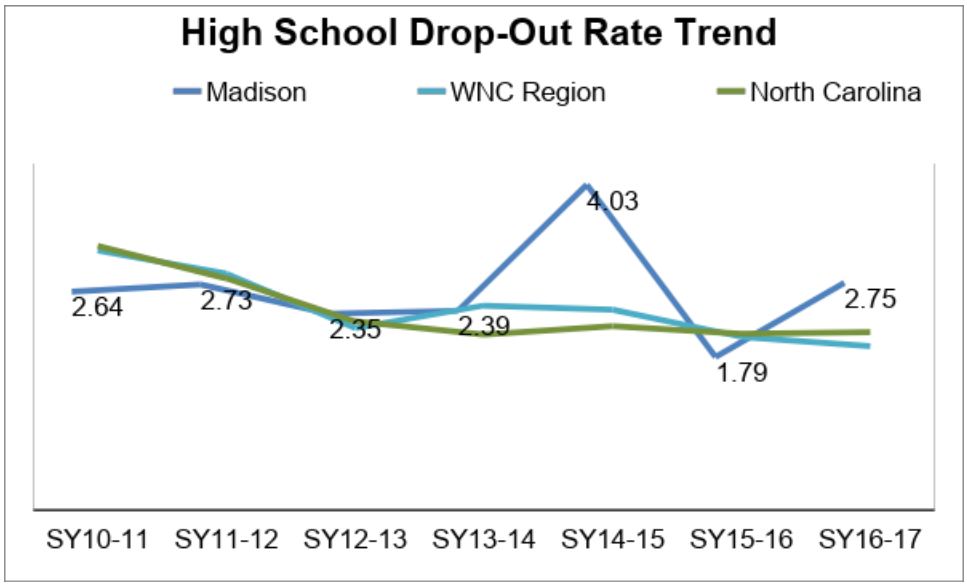
"Better educated individuals' live longer, healthier lives than those with less education, and their children are more likely to thrive. This is true even when factors like income are taken into account" (County Health Rankings, 2018). More schooling is linked to higher incomes, better employment options, and increased social supports that, together, support opportunities for healthier choices. Higher levels of education can lead to a greater sense of control over one's life, which is linked to better health, healthier lifestyle decisions, and fewer chronic conditions. Education is also connected to lifespan: on average, college graduates live nine more years than high school dropouts.

Parental education is linked to children's health and educational attainment. Stress and poor health early in life, which is common among those whose parents have lower levels of education, is linked to decreased cognitive development, increased tobacco and drug use, and a higher risk of cardiovascular disease, diabetes, depression, and other conditions. (2018 County Health Rankings)

As of 2017 Madison County Schools student enrollment for grades K-13th was 2,398, which has decreased by over 200 students from the 2010/2011 school year.
NC Department of Public Instruction. (2018). NC Statistical Profile Online: Final Pupils by Year and Grade. [Data tables]. Available from http://www.ncpublicschools.org/fbs/resources/data/#statistical-profile.

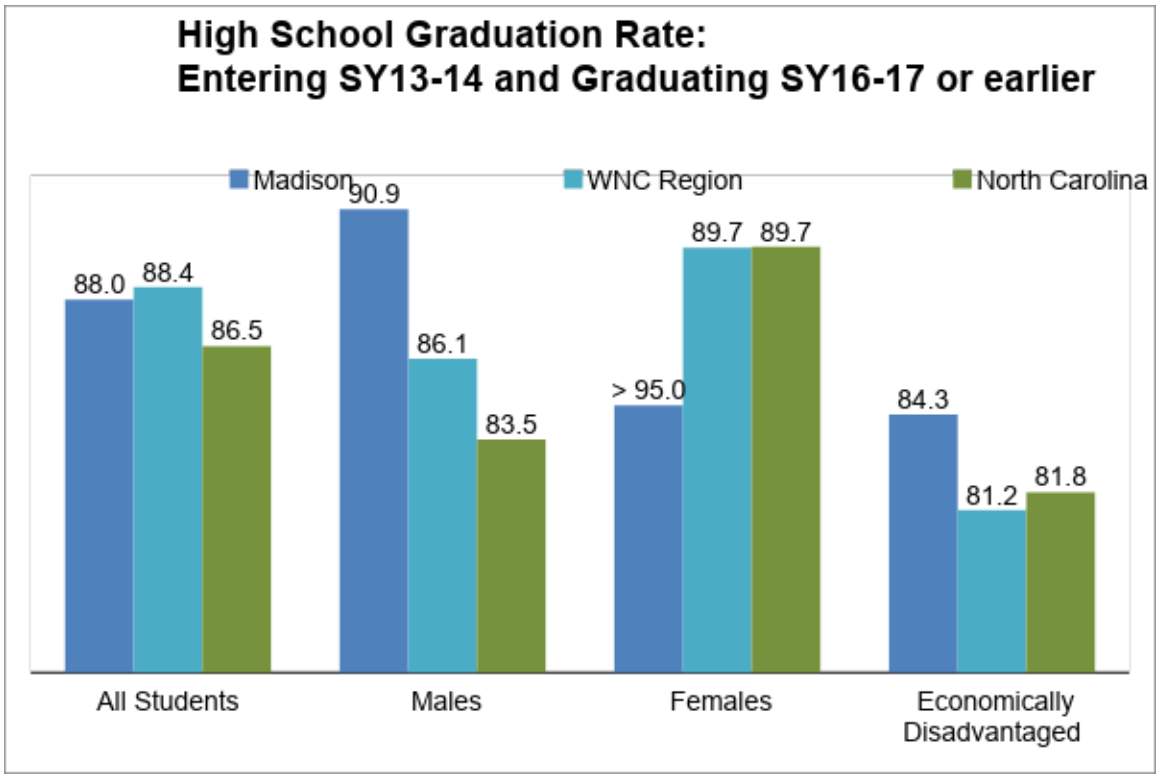
Madison County has a total of 12 licensed child care facilities as of April 2018. 7 of these have a 5 star ranking. A one star rating means the program meets NC's minimum licensing standards, which includes a 75% compliance history. Programs may voluntarily apply for additional stars, which are based on staff education [experience, training or credentialing of staff] and program standards [evaluates sufficient space, variety of play materials, staff to child ratio, interactions between adults and children]. A four- or five- starred program has earned more points than a two- or three- starred program.
NC DHHS. (2018). Division of Child Development and Early Education: Child Care Facility Search Site. [Data tables]. Available from https://ncchildcaresearch.dhhs.state.nc.us/search.asp.

Early Childhood education was one of the top three issues of most importance identified by the Key Informant survey 2018 as critical to address. (WNCHN-WNC Healthy Impact Community Health Survey 2018)



NC Department of Public Instruction. (2018). Consolidated Data Reports: High School Dropout Counts and Rates. [Data tables]. Available from http://www.ncpublicschools.org/research/dropout/reports/.

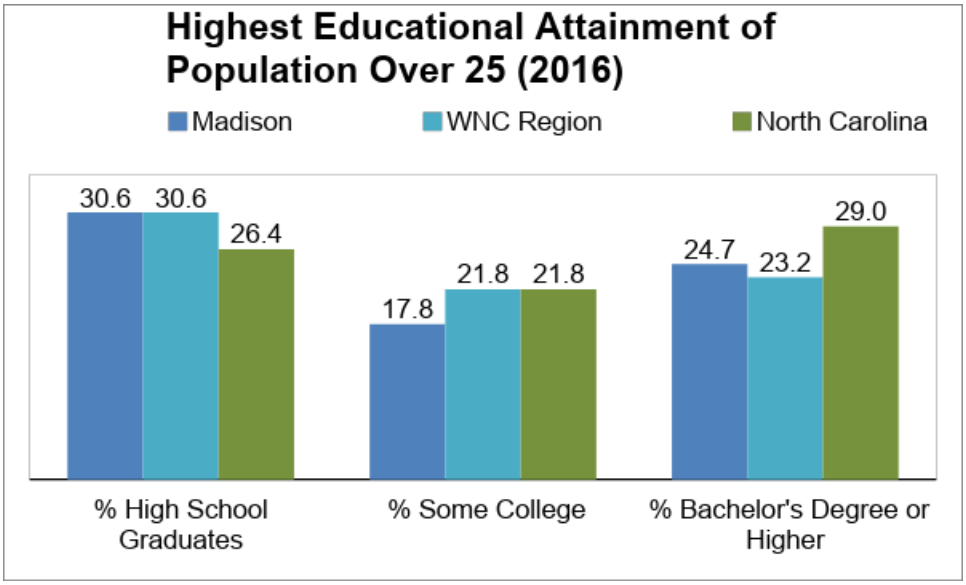
The high school drop-out rate has fluctuated for several years and appears to be trending somewhat higher for the SY16/17 with a rate of 2.75 which is 23 students.



Public Schools of North Carolina. (2018). 4-Year Cohort Graduation Rate Report. [Data tables]. Available from http://www.ncpublicschools.org/accountability/reporting/cohortgradrate.

The Madison County high school graduation rate is slightly below the WNC region for 2016/2017, but above the state rate.
Early Childhood education was one of the top three issues of most importance identified by the Key Informant survey 2018 as critical to address (WNCHN-WNC Healthy Impact Community Health Survey, 2018).

The percentage of students' proficient on EOG tests 2016/2017 is slightly higher than the WNC Region and state. In addition, the average SAT score has increased from 2013/2014 (1015) to (1065) for the 2016/2017 academic year.
NC Department of Public Instruction. (2018). NC School Report Cards: District Profile. [Data tables]. Available from http://www.ncpublicschools.org/src/.



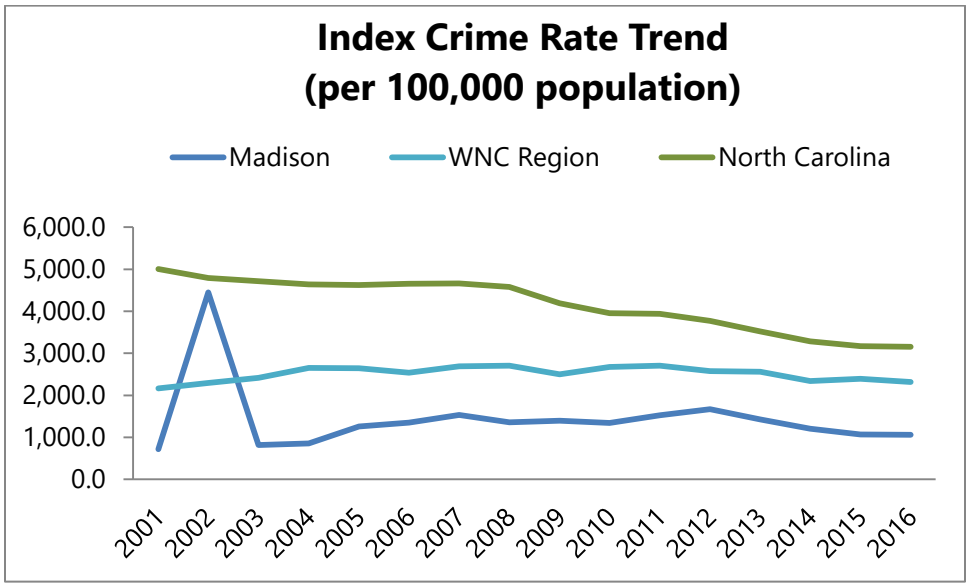
U.S. Census Bureau. (2018). Educational Attainment: ACS 5-Year Estimates. [Data tables]. Available from http://factfinder2.census.gov.

In Madison County the percentage of high school graduates is equal to the WNC region and higher than the state. However, the percentage of individuals over 25 with some college is lower than the WNC Region and state, while the percentage of residents with a bachelor's degree or higher is slightly higher than the WNC Region yet lower than the state percentage.

Community Safety

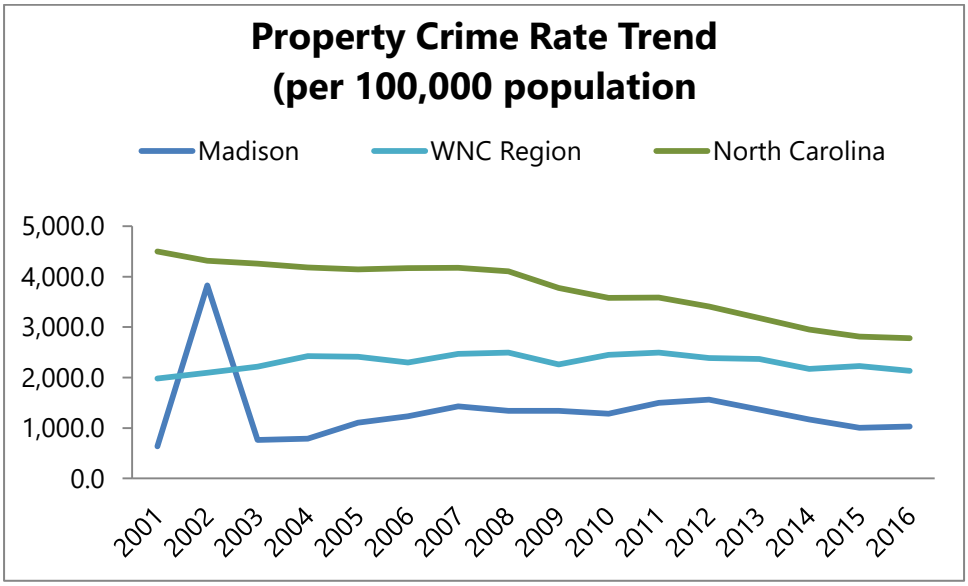
"Injuries through accidents or violence are the third leading cause of death in the United States and the leading cause for those between the ages of 1 and 44. Accidents and violence affect health and quality of life in the short and long-term, for those both directly and indirectly affected, and living in unsafe neighborhoods can impact health in a multitude of ways" (County Health Rankings, 2018).

Index crime is defined as the sum of all violent and property crime. The index crime rate in Madison County was lowest among comparators throughout the period cited except for 2002.



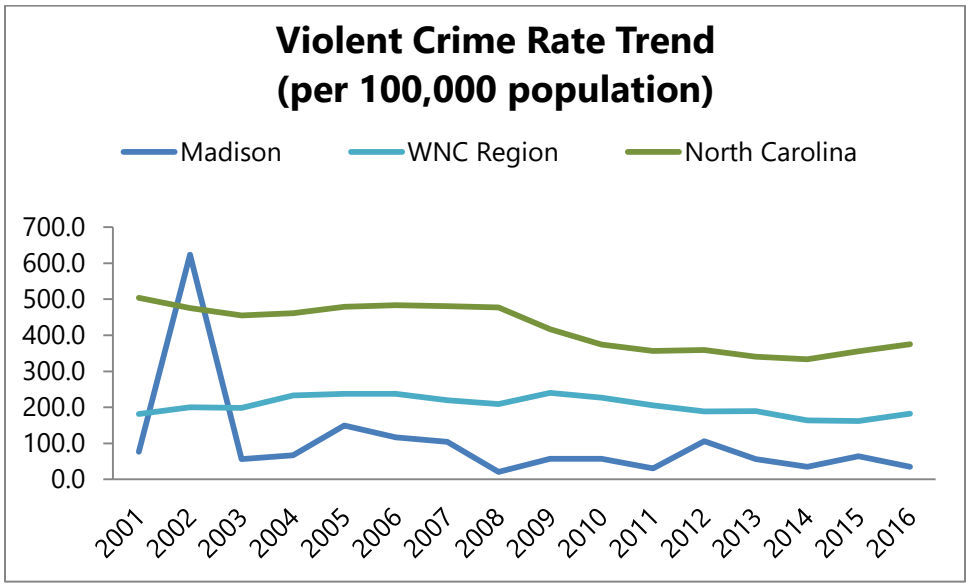
North Carolina Department of Justice. (2018). State Bureau of Investigation: Crime Trends - Offenses and Rates per 100,000. [Data tables]. Available from http://crimereporting.ncsbi.gov/.

Property crime includes burglary, arson, and motor vehicle theft. The property crime rate in Madison County through 2016 was lowest among comparators throughout the period cited except for 2002.



North Carolina Department of Justice. (2018). State Bureau of Investigation: Crime Trends - Offenses and Rates per 100,000. [Data tables]. Available from http://crimereporting.ncsbi.gov/.

Violent crime includes murder, forcible rape, robbery, and aggravated assault. The violent crime rate in Madison County was lowest among comparators throughout the period cited except for 2002, when the local rate was the highest.



North Carolina Department of Justice. (2018). State Bureau of Investigation: Crime Trends - Offenses and Rates per 100,000. [Data tables]. Available from http://crimereporting.ncsbi.gov/.

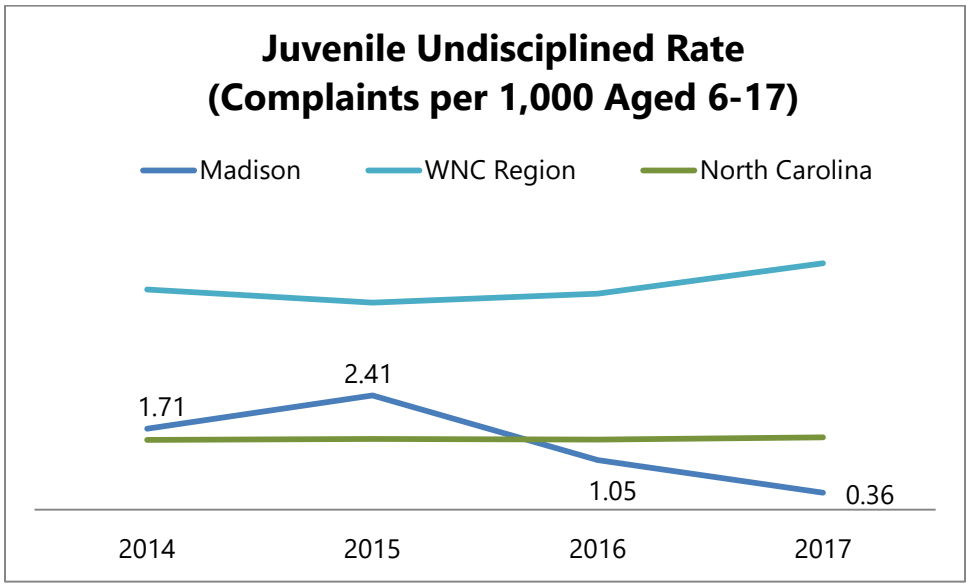
In FY2016-2017, 137 persons in Madison County were identified as victims of sexual assault, which has decreased from 2014. The single most frequently reported specific type of sexual assault by individuals in Madison County during this period was rape (45) followed by adult survivor of child sexual assault (22).

Regionally, the most frequently reported type of sexual assault was also rape followed by adult survivor of child sexual assault; statewide the most frequently reported type was rape followed by child sexual assault.

State-wide and region-wide the most commonly reported offender was a relative. In Madison County the most common offender was a boy/girlfriend followed by a relative. This is a change from the 2015 CHA data where the most common offender was a relative.

North Carolina Department of Administration. (2018). County Statistics - Sexual Assault: Statewide Statistics by Year. [Data tables]. Available from https://ncadmin.nc.gov/about-doa/divisions/council-for-women.

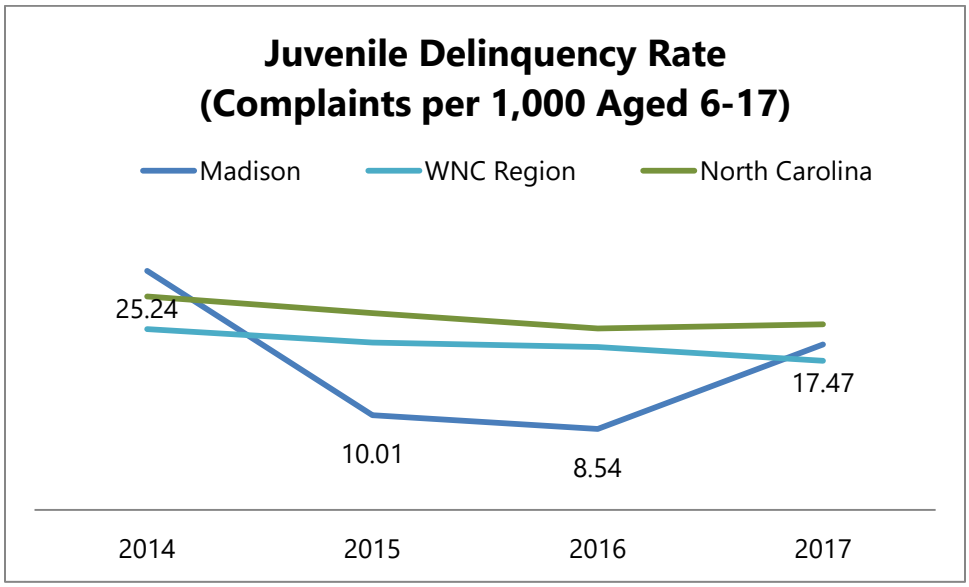
Undisciplined rate reflects offenses that would not be crimes if committed by adults (truancy, running away from home, ungovernable (regularly disobedient and beyond disciplinary control of parent/guardian, or is regularly found where it is unlawful for juveniles to be).



NC Department of Public Safety. (2018). County Databook: Juvenile Justice. [Data tables]. Available from https://www.ncdps.gov/Juvenile-Justice/Community-Programs/Juvenile-Crime-Prevention-Councils/JCPC-Planning-Process/County-Databooks.

Madison County Schools has had and an established truancy board that meets regularly and this may have impacted the downward trend from 2015.

Delinquency rate reflects any juvenile between 6 and not yet 16 who commits an offense that would be a crime under state or local law if committed by an adult.



NC Department of Public Safety. (2018). County Databook: Juvenile Justice. [Data tables]. Available from https://www.ncdps.gov/Juvenile-Justice/Community-Programs/Juvenile-Crime-Prevention-Councils/JCPC-Planning-Process/County-Databooks.

The juvenile delinquency rate has doubled from 2016-2017.

Substantiated reports of child abuse in Madison County have decreased since 2012.

County	Reports Substantiated (#)				
	FY12-13	FY13-14	FY14-15	FY15-16	FY16-17
Madison	28	51	35	18	15
State Total	4,219	4,444	4,348	3,779	3,555

UNC-CH Jordan Institute for Families Management Assistance for Child Welfare, Work First and Food & Nutrition Services in North Carolina. (2018). Abuse and Neglect: Longitudinal Data: Number of Children with Investigated Reports of Abuse and Neglect over Time. [Data tables]. Available from http://ssw.unc.edu/ma/.

Madison County Schools had 23 total reportable violent acts committed during the 2016-2017 school year; possession of a controlled substance (10), possession of a weapon (8), followed by possession of an alcoholic beverage. In addition, Madison was one of only 2 counties in the WNC Region to report an incident involving possession of a firearm.

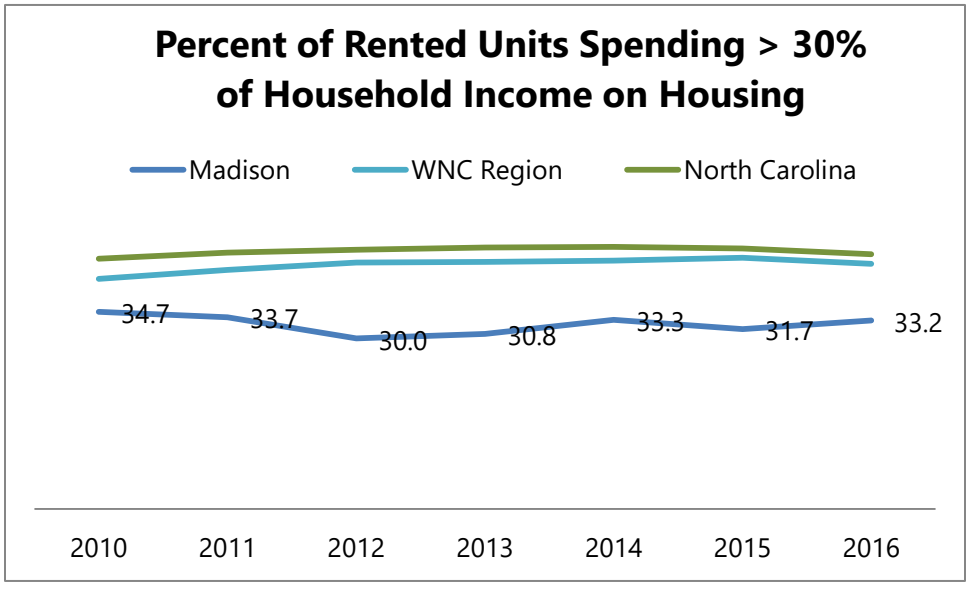
NC Department of Public Instruction. (2018). Consolidated Data Reports: Total Number of Acts for Individual Schools. [Data tables]. Available from http://www.ncpublicschools.org/research/discipline/reports/#consolidated.

Housing

"The housing options and transit systems that shape our communities' built environments affect where we live and how we get from place to place. The choices we make about housing and transportation, and the opportunities underlying these choices, also affect our health" (County Health Rankings, 2018).

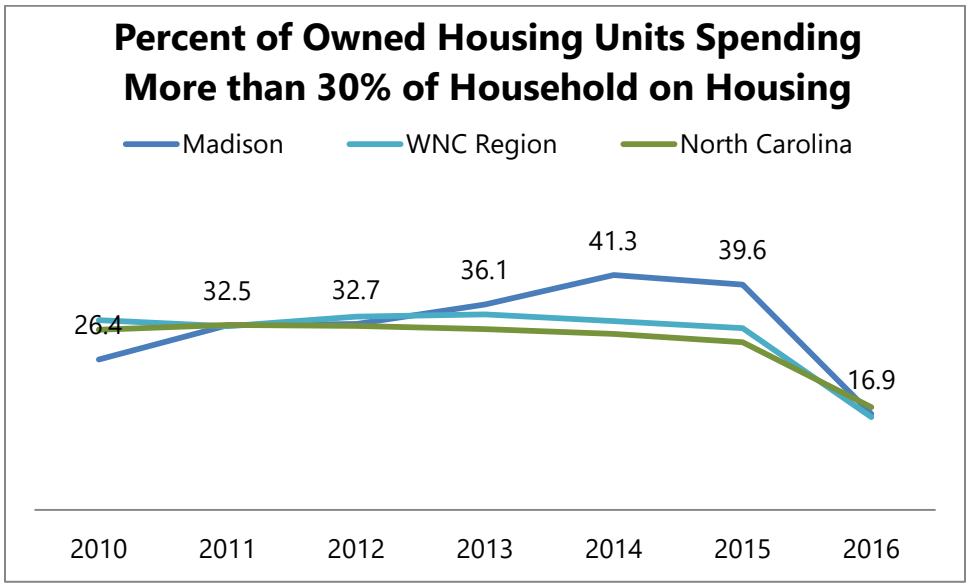
Between 2012-2016, data reflects there were 8,400 total occupied housing units with 26% being mobile homes or other type of housing.

U.S. Census Bureau. (2018). Physical Housing Characteristics for Occupied Units: 2012-2016 ACS 5-Year Estimates. [Data tables]. Available from http://factfinder2.census.gov.



In Madison County in 2010-2016, a smaller proportion of renters but a higher proportion of mortgage holders from 2013-2016 spent >30% of household income on housing than the

WNC or NC average. 2016 reflects a decrease for Madison County that is more in line with the region and the state.



U.S. Census Bureau. (2018). Mortgage Status by Selected Monthly Owner Costs as a Percentage of Household Income in the Past 12 Months: ACS 5-Year Estimates. [Data tables]. Available from http://factfinder2.census.gov.

Family & Social Support

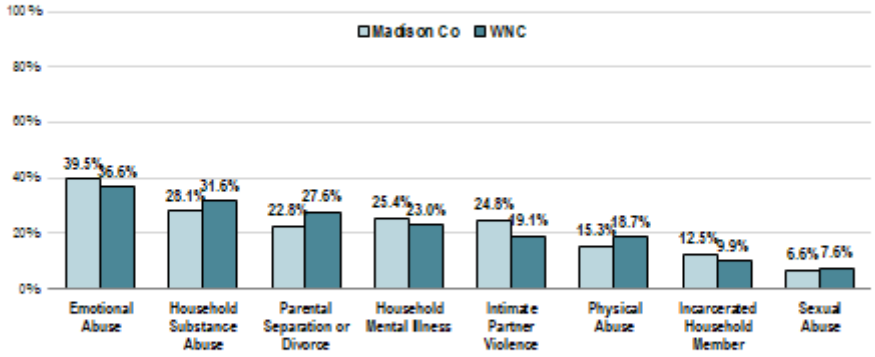
"People with greater social support, less isolation, and greater interpersonal trust live longer and healthier lives than those who are socially isolated. Neighborhoods richer in social capital provide residents with greater access to support and resources than those with less social capital" (County Health Rankings, 2018).

Key informants in the online survey were given a list of conditions relating to related to social determinants of health in which people are born, grow, live, work, and age, as well as known factors that contribute to a person's health. They were then asked to select up to three health issues or behaviors that are the most critical to address collaboratively in their community over the next three years or more .The following chart outlines the rank order of social determinants of health identified by key informants as critical to address (WNCHN – Online Key Informant Survey, 2018).

Rank	Health Issue	Identified as Critical to Address
1	ACEs	12
2	Early Childhood Education	11
3	Employment Opportunities	11
4	Food Insecurity	9

Experienced Adverse Childhood Experiences (ACEs) Prior to Age 18

(2018)



Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 351-358]
Notes: • Asked of all respondents (Adults 18+).
• ACEs are stressful or traumatic events, including abuse and neglect. They are a significant risk factor for substance abuse disorders and can impact prevention efforts.

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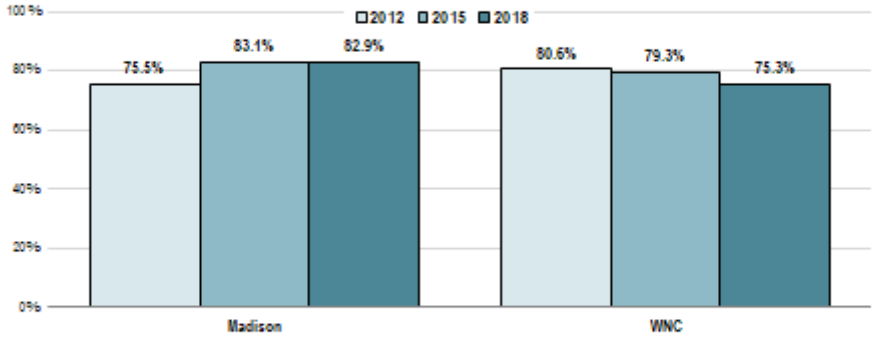
"Always" or "Usually" Get Needed Social/Emotional Support



Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 336]
Notes: • Includes "always" and "usually" responses.

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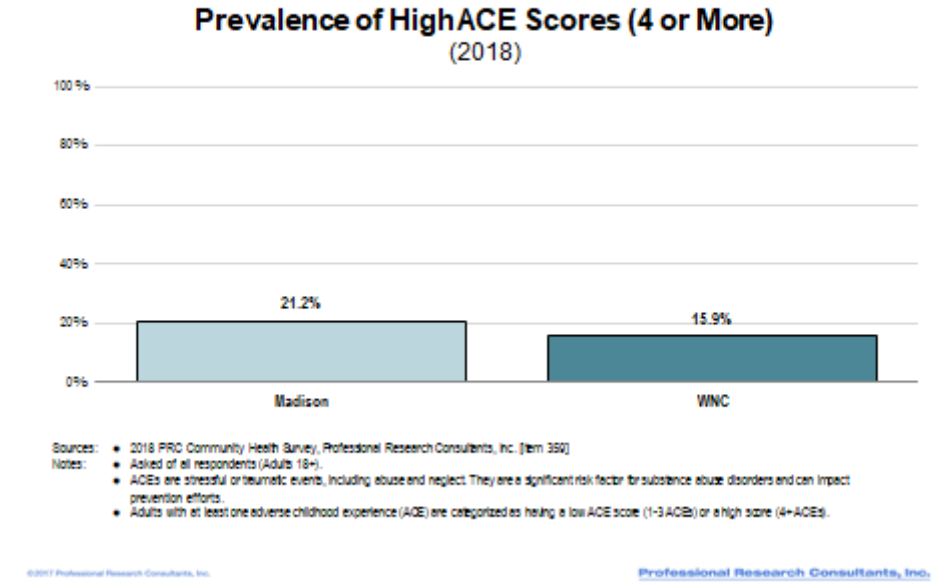
(WNCHN – WNC Healthy Impact Community Health Survey, 2018)



(WNCHN – WNC Healthy Impact Community Health Survey, 2018)

Although there are a higher percentage of individuals with a ACEs score of 4 or more, there is an increase in 2018 in the percentage of people always or usually getting social/emotional support. Madison County Schools, Health Department and the Children's Collaborative received a grant to provide resiliency training school personnel, health department, social services and other community organizations; to date there have been two trainings with additional trainings scheduled Spring 2019.

CHAPTER 5 – HEALTH DATA FINDINGS SUMMARY

Mortality

Fifteen Leading Causes of Death Single 5-Year Aggregate, 2012-2016
Age-Adjusted Death Rates per 100,000 Population

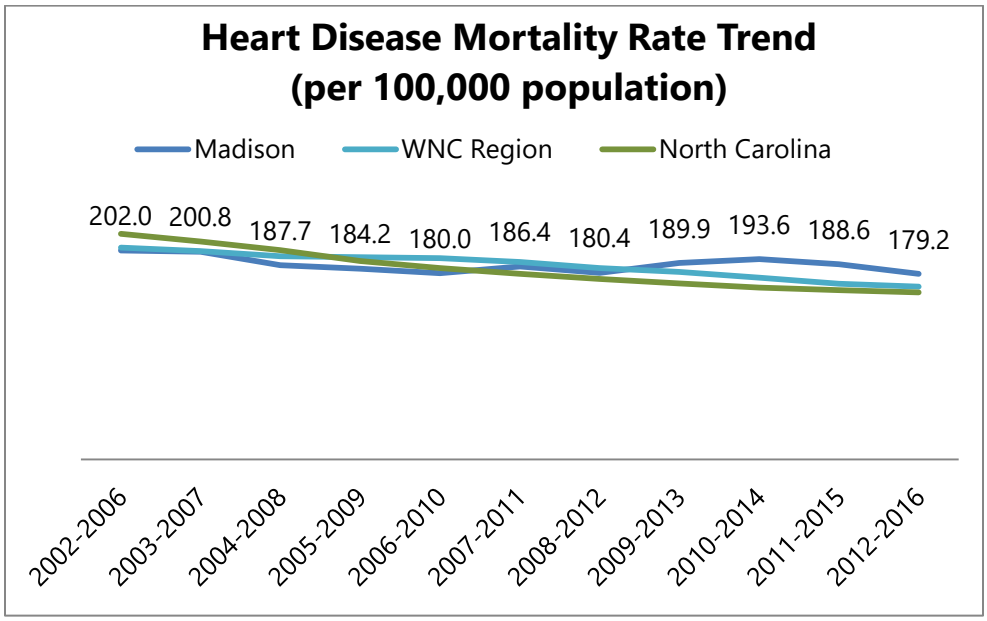
Rank	Cause of Death	Madison	
		# Deaths	Death Rate
1	Diseases of Heart	266	179.2
2	Cancer	244	159.8
3	Chronic Lower Respiratory Diseases	94	61.9
4	Cerebrovascular Disease	76	50.5
5	All Other Unintentional Injuries	51	39.3
6	Alzheimer's disease	38	26.0
7	Pneumonia and Influenza	30	20.6
8	Diabetes Mellitus	24	17.5
9	Suicide	**19**	**16.1**
10	Nephritis, Nephrotic Syndrome, and Nephrosis	22	15.9
11	Unintentional Motor Vehicle Injuries	**14**	**15.0**
12	Septicemia	**17**	**11.7**
13	Chronic Liver Disease and Cirrhosis	**16**	**10.4**
14	Homicide	**6**	**5.2**
15	Acquired Immune Deficiency Syndrome	**0**	**0.0**

North Carolina State Center for Health Statistics (NC SCHS). (2018). Causes of Death. [Data tables]. Available from https://schs.dph.ncdhhs.gov/data/.

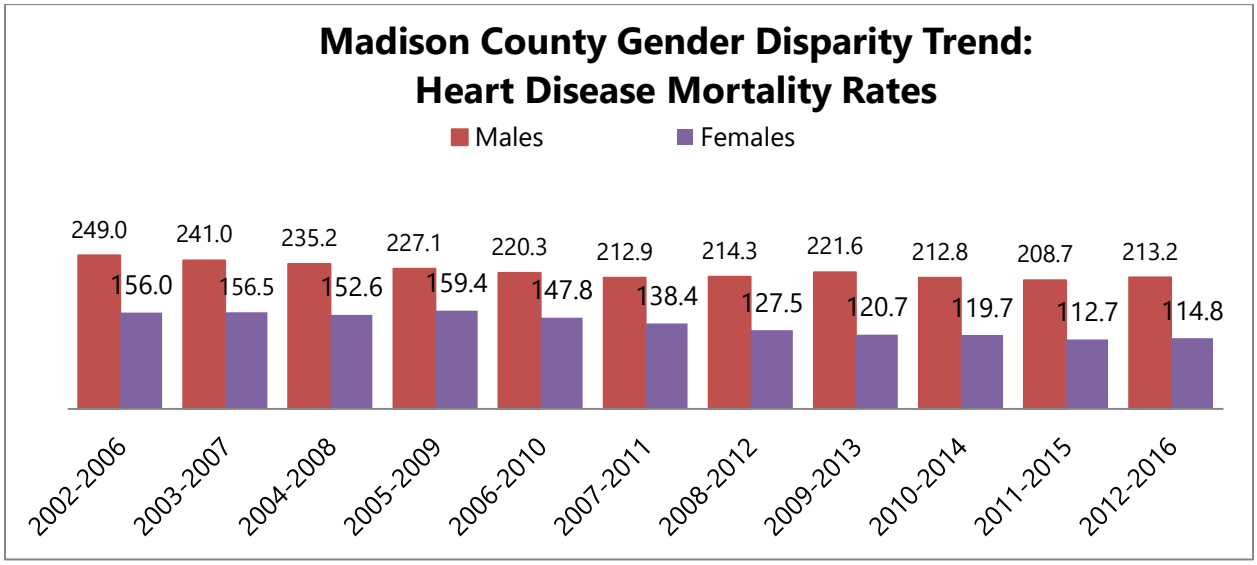
Heart Disease continues to be the leading cause of death in Madison County with the death rate higher than the state while all other unintentional injuries is now included in the top 5 causes of death.

The diabetes mortality trend has increased by 2.2% as of 2016, however the rate remains below the WNC Region and the state.

North Carolina State Center for Health Statistics (NC SCHS). (2018). Causes of Death. [Data tables]. Available from https://schs.dph.ncdhhs.gov/data/.

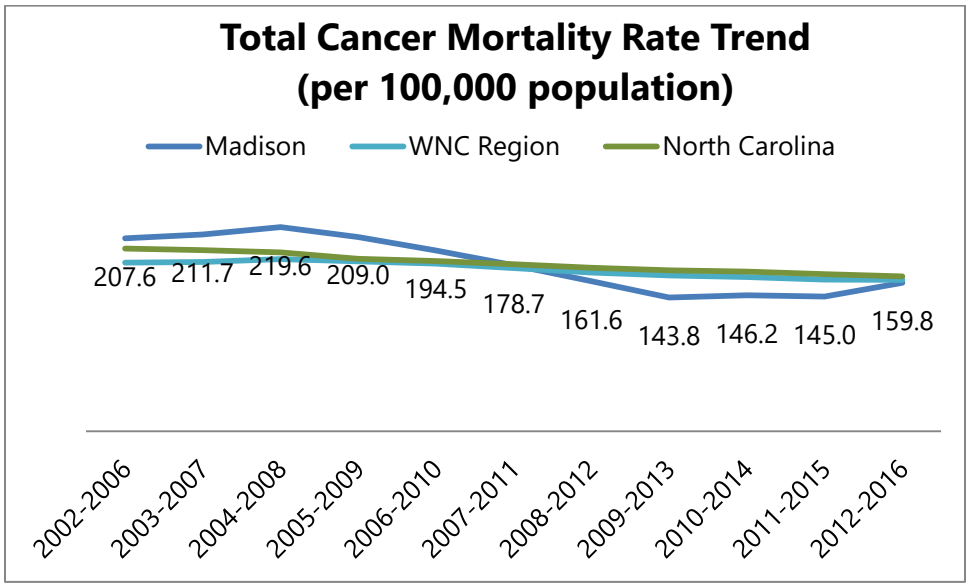


North Carolina State Center for Health Statistics (NC SCHS). (2018). Race-Specific and Sex-Specific Age-Adjusted Death Rates by County: County Health Data Book. [Data tables]. Available from https://schs.dph.ncdhhs.gov/data/.



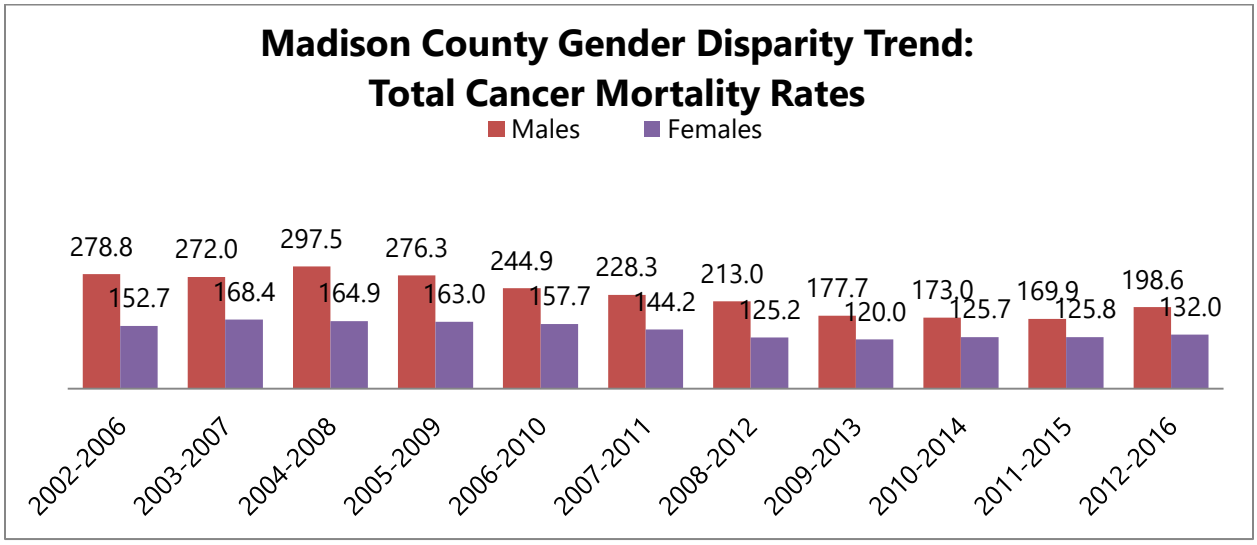
North Carolina State Center for Health Statistics (NC SCHS). (2018). Race-Specific and Sex-Specific Age-Adjusted Death Rates by County: County Health Data Book. [Data tables]. Available from https://schs.dph.ncdhhs.gov/data/.

Heart disease mortality rates in Madison County consistently reflect males being affected over females with this disease since 2002.



Citation: North Carolina State Center for Health Statistics (NC SCHS). (2018). Race-Specific and Sex-Specific Age-Adjusted Death Rates by County: County Health Data Book. [Data tables]. Available from https://schs.dph.ncdhhs.gov/data/.

Since 2004 there has been a downward trend in cancer mortality rates; however Madison County currently is comparable with the WNC Region and state.

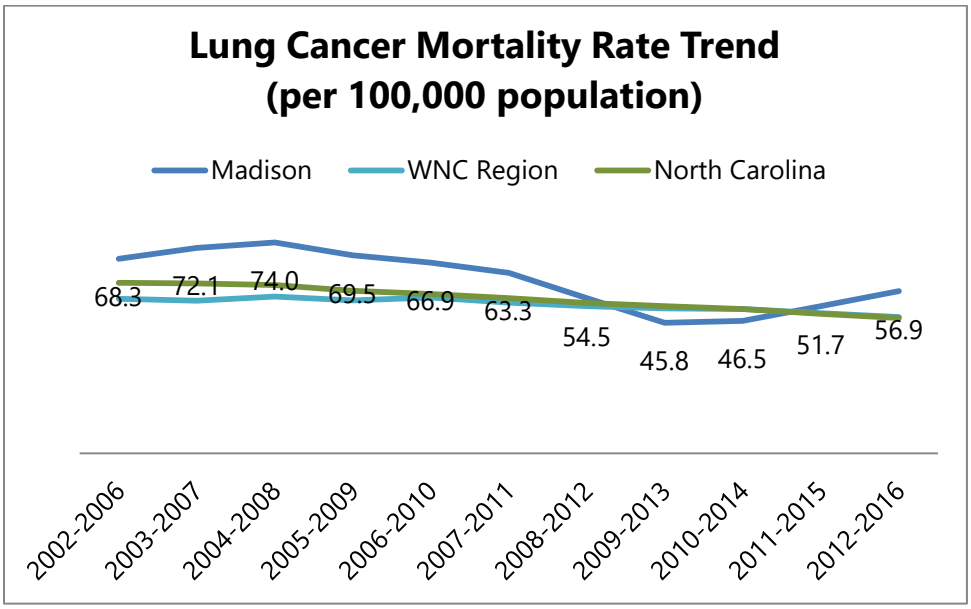


North Carolina State Center for Health Statistics (NC SCHS). (2018). Race-Specific and Sex-Specific Age-Adjusted Death Rates by County: County Health Data Book. [Data tables]. Available from https://schs.dph.ncdhhs.gov/data/.

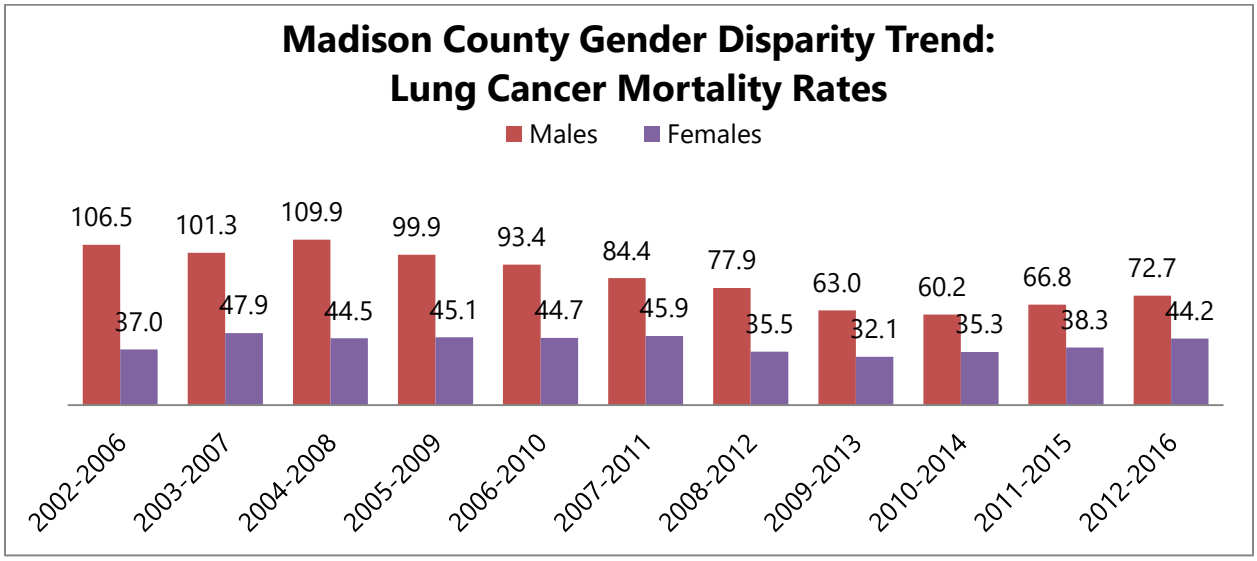
As with heart disease, historically in Madison County males have a higher cancer mortality rate than females.

Lung cancer is the leading site specific cancer followed by breast cancer in women.

North Carolina State Center for Health Statistics (NC SCHS). (2018). 2012-2016 Cancer Mortality Rates per 100,000 Population Age-Adjusted to the 2000 US Census: Central Cancer Registry. [Data tables]. http://www.schs.state.nc.us/data/cancer/mortality_rates.htm.

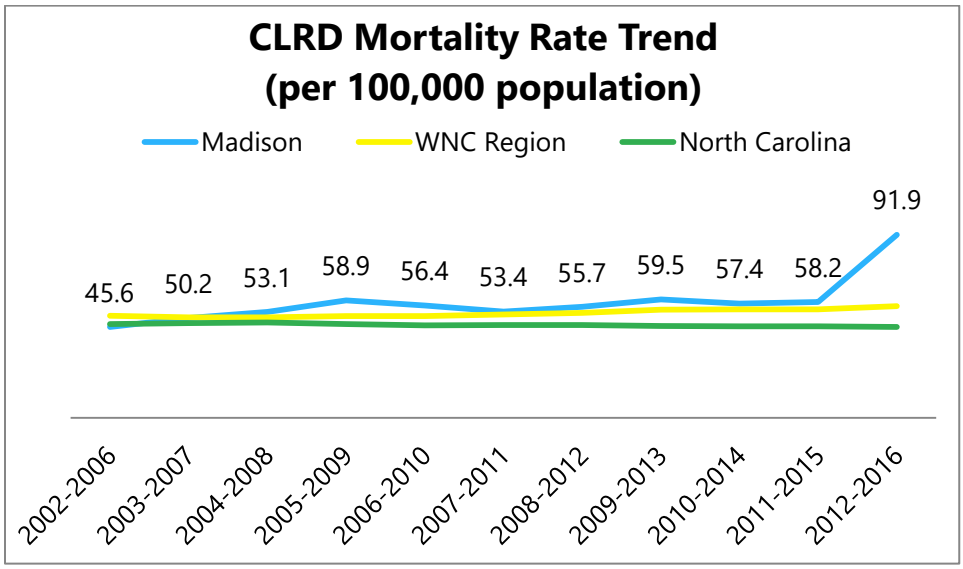


North Carolina State Center for Health Statistics (NC SCHS). (2018). Race-Specific and Sex-Specific Age-Adjusted Death Rates by County: County Health Data Book. [Data tables]. Available from https://schs.dph.ncdhhs.gov/data/.



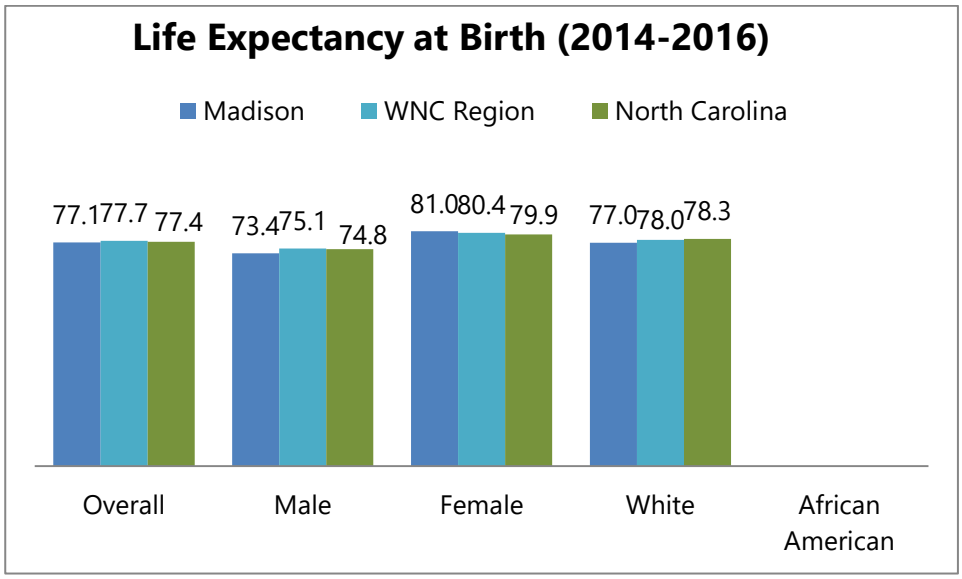
North Carolina State Center for Health Statistics (NC SCHS). (2018). Race-Specific and Sex-Specific Age-Adjusted Death Rates by County: County Health Data Book. [Data tables]. Available from https://schs.dph.ncdhhs.gov/data/.

It is notable that lung cancer mortality rates are much higher in males versus females.



North Carolina State Center for Health Statistics (NC SCHS). (2018). Race-Specific and Sex-Specific Age-Adjusted Death Rates by County: County Health Data Book. [Data tables]. Available from https://schs.dph.ncdhhs.gov/data/.

Of note is the dramatic increase in Chronic Lower Respiratory Disease Mortality rate for the 2012-2016 period. The number of residents represented is 94. This is the highest number recorded to date.



North Carolina State Center for Health Statistics (NC SCHS). (2018). County Life Expectancy at Birth: County Health Data Book. [Data tables]. Available from https://schs.dph.ncdhhs.gov/data/.

Health Status & Behaviors

Each state's counties are ranked according to health outcomes and the multiple health factors that determine a county's health. Each county receives a summary rank for its health outcomes and health factors, and also for four different specific types of health factors: health behaviors, clinical care, social and economic factors, and the physical environment.

Below is a list of the parameters considered in each of the health outcome and health factor categories:

Health Outcomes – Mortality	**Social and Economic Factors**
Premature death	High school graduation
Morbidity	Some college
Poor or fair health	Unemployment
Poor physical health days	Children in poverty
Poor mental health days	Inadequate social support
Low birth weight	Children in single-parent households
Health Factors	Violent crime rate
Health Behaviors	**Physical Environment**
Adult smoking	Air pollution – particulate matter days
Adult obesity	Air pollution – ozone days
Physical inactivity	Access to recreational facilities
Excessive drinking	Limited access to healthy foods
Motor vehicle death rate	Fast food restaurants
Sexually transmitted infections	
Teen birth rate	
Clinical Care	
Uninsured	
Primary care physicians	
Preventable hospital stays	
Diabetic screening	
Mammography screening	

Madison County Health Department, 2015. Madison County Community Health Assessment, Page 29.

According to *County Health Rankings* (2016) for NC, Madison County was ranked 29th overall among the 100 NC counties.

Madison County ***health outcomes*** rankings out of 100 (where 1 is best):

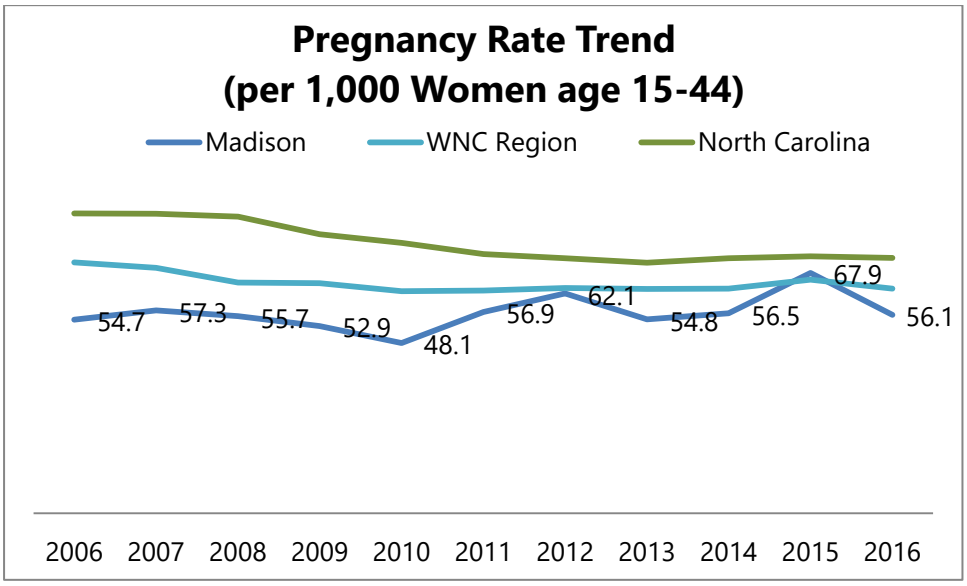
- 9rd in length of life
- 18th for quality of life

Madison County ***health factors*** rankings out of 100 (where 1 is best):

- 30th for health behaviors
- 36th for clinical care
- 40th for social and economic factors
- 33rd for physical environment

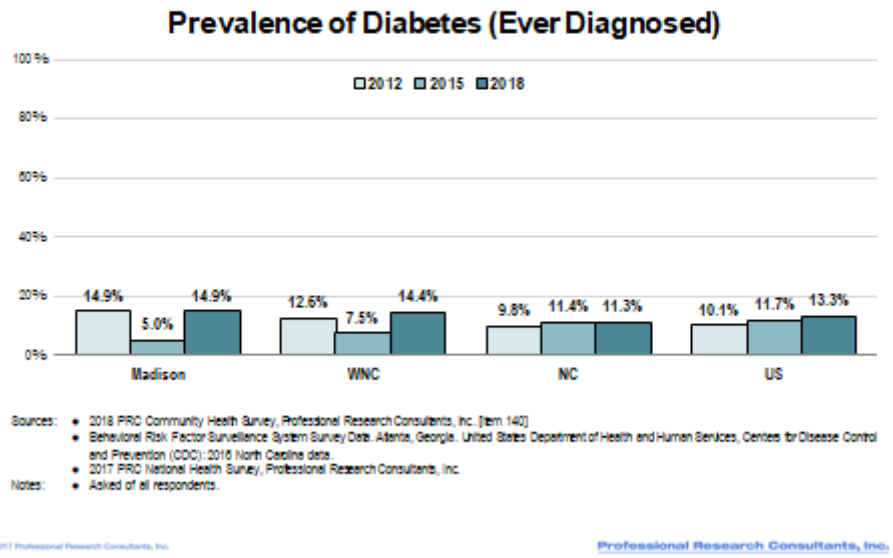
County Health Rankings & Roadmaps, 2016. Retrieved April 14, 2016, from County Health Rankings and Roadmaps website. A collaboration between the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute: http://www.countyhealthrankings.org/

The total pregnancy rate in Madison County was more variable, first falling then rising briefly before falling again. This may be attributed to the growing older population and the decreasing younger population in the county.

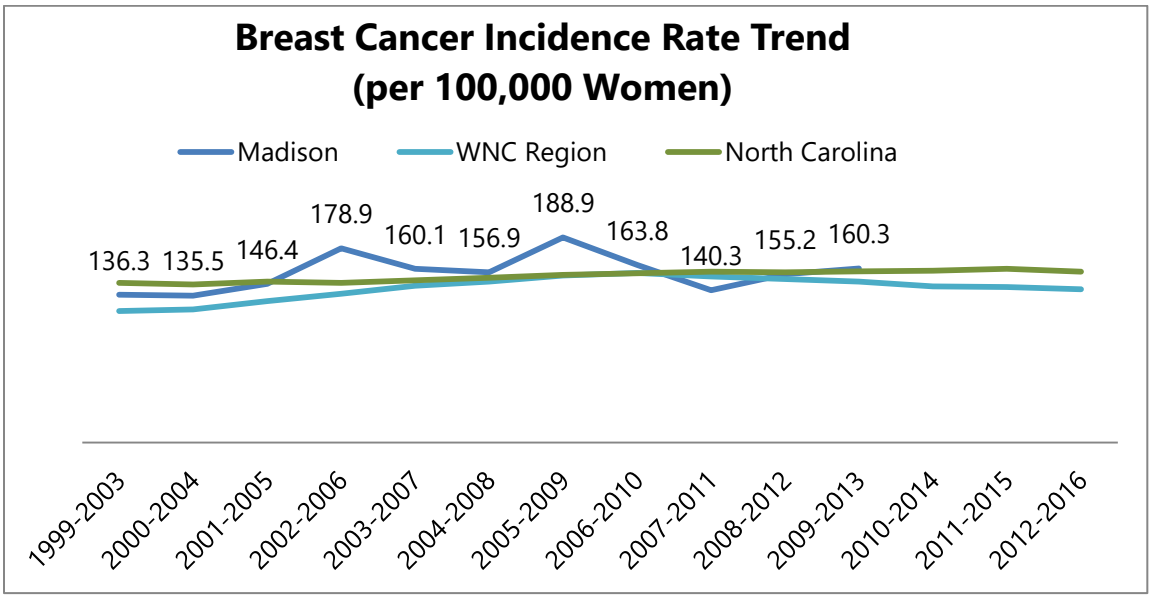


North Carolina State Center for Health Statistics (NC SCHS). (2018). Vital Statistics: Pregnancy, Fertility, and Abortion Rates per 1,000 Population. [Data tables]. Available from https://schs.dph.ncdhhs.gov/data/vital/pregnancies/2016/.

The prevalence of borderline/pre diabetes has decreased slightly from 11.1% to 8.2% according to respondents of the 2018 community survey while the prevalence of being diagnosed with diabetes has increased (WNCHN – WNC Healthy Impact Community Health Survey, 2018).



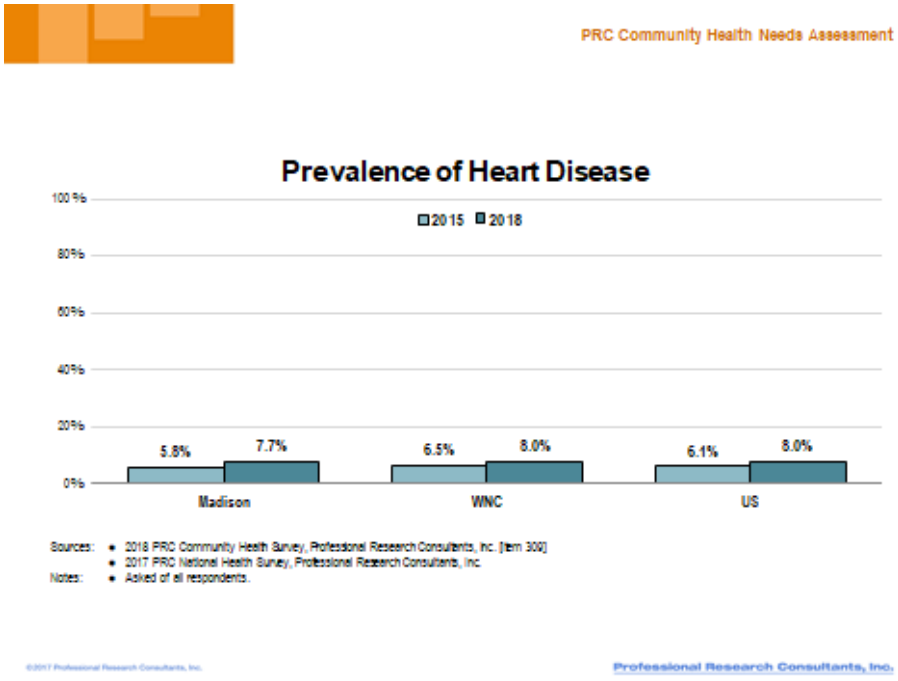
(WNCHN – WNC Healthy Impact Community Health Survey, 2018)



North Carolina State Center for Health Statistics (NC SCHS). (2018). Central Cancer Registry: NC Cancer Incidence Rates per 100,000 Population Age-Adjusted to the 2000 US Census. [Data tables]. Available from http://www.schs.state.nc.us/data/cancer/incidence_rates.htm.

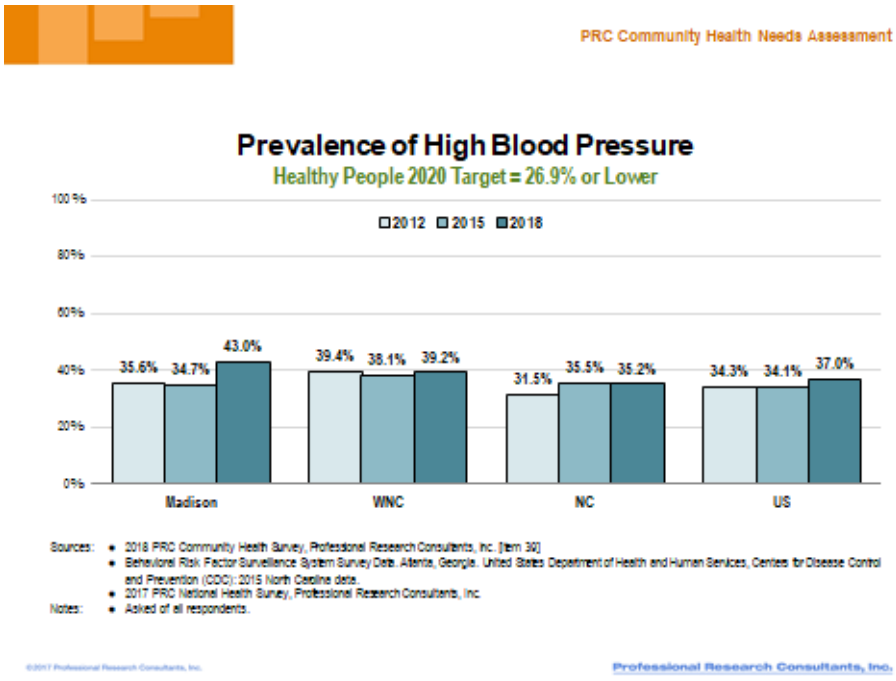
Breast cancer incidence has had some fluctuation in the past but this recent data reflects a stabilization with the state rate yet still slightly higher than the WNC Region. There have been increased initiatives over the past several years to educate women concerning the importance of screening mammograms and also resources to assist with paying for this screening.

The percentage of women age 50-74 that had screening mammograms in the past two years has increased by 6.5% from 2015 (WNCHN – WNC Healthy Impact Community Health Survey, 2018).



(WNCHN – WNC Healthy Impact Community Health Survey, 2018)

The prevalence of heart disease has increased among survey respondents from 2015 to 2018 by 1.9%.



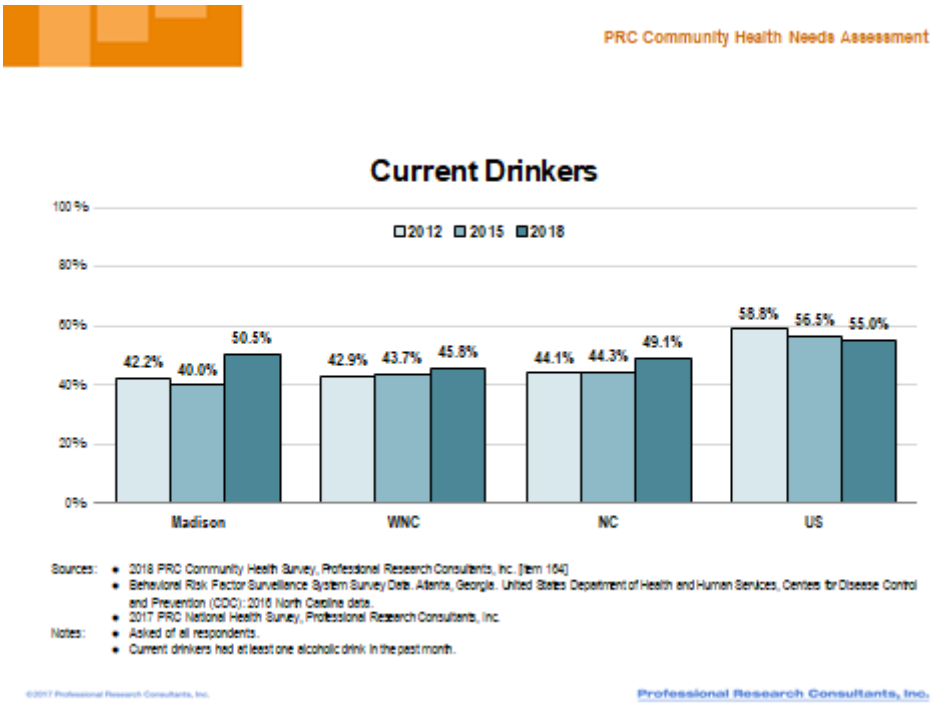
(WNCHN – WNC Healthy Impact Community Health Survey, 2018)

The prevalence of high blood pressure among survey respondents has also increased from 2015 to 2018 and is above the Healthy People 2020 Target.

Of the 11 unintentional poisoning deaths in Madison county (2009-2013), 11 (100%) were due to medication or drug overdoses.

The leading cause of Unintentional Medication/Drug Overdose Deaths, 2009-2013, was from other opioids. Other opioids" could include: hydrocodone (e.g., Vicodin), oxycodone (e.g., OxyContin, Percocet), morphine (e.g., Kadian, Avinza), codeine, and related drugs.

Medication and Drug Poisoning. Prepared April 19, 2015, by the Injury Epidemiology and Surveillance Unit, Injury and Violence Prevention Branch, Chronic Disease and Injury Section, N.C. Division of Public Health.

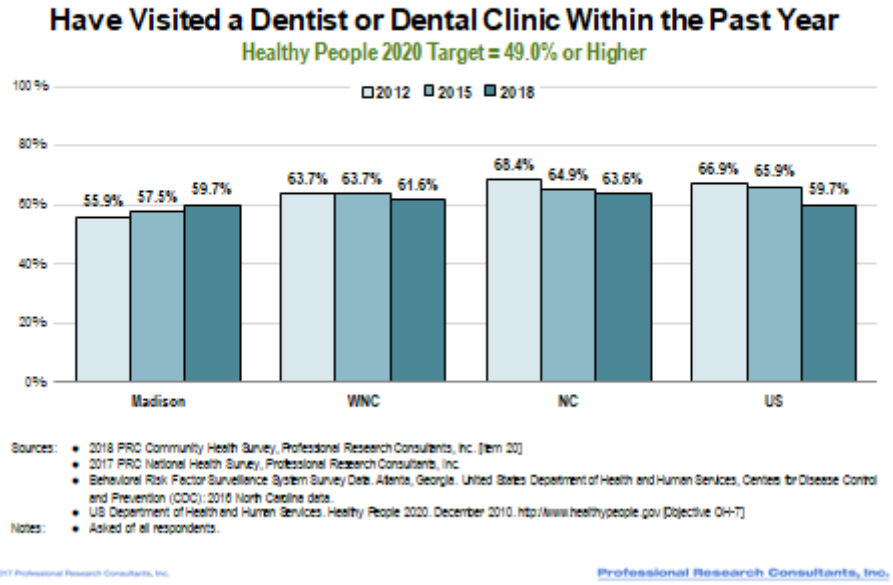


(WNCHN – WNC Healthy Impact Community Health Survey, 2018)

The percent of current drinkers increased by 10.5% from 2015 to 2018 and is higher than the region and state.

The number of persons served in area mental health programs has decreased from 1,921 in 2013 to 869 in 2017.

North Carolina Office of State Budget and Management. (2018). Persons Served in Area Mental Health Programs. [Data tables]. Available from http://data.osbm.state.nc.us/pls/linc/dyn_linc_main.show.



(WNCHN – WNC Healthy Impact Community Health Survey, 2018)

Clinical Care & Access

The number of active health professionals per 10,000 population ratios (2012-2017) revealed 7.6 physicians, 7.2 primary care physicians, and 1.3 dentists. The ratio of physicians and dentists are lower than the region and state. However, the primary care ratio is higher. This reflects the need for specialty care in our community.

Cecil G. Sheps Center for Health Services Research. (2018). North Carolina Health Professions Data System. [Data tables]. Available from http://epi.publichealth.nc.gov/cd/stds/annualrpts.html.

NC-Licensed Facilities
Nursing Homes/Homes for the Aged, Adult Care Homes/Homes for the Aged, and Family Care Homes

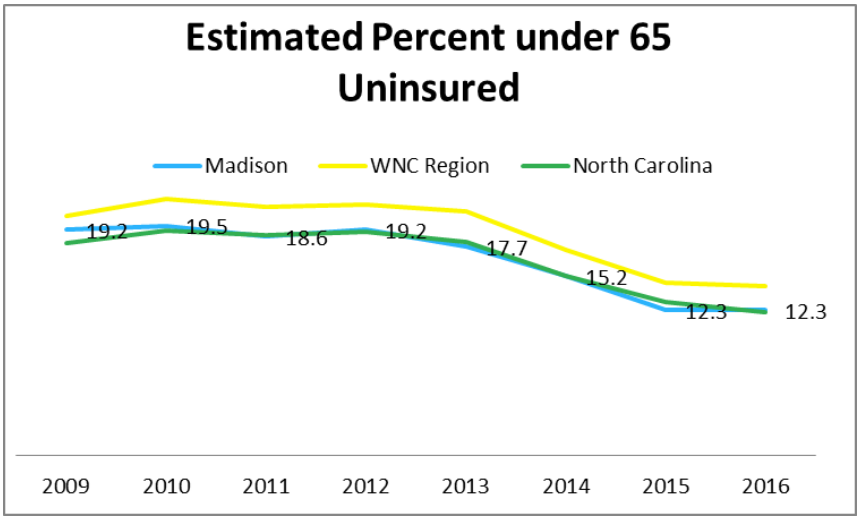
Madison County

Facility Type/Name	Location	Maximum Capacity*	NC ACLS Star Rating (of 5)
Adult Care Homes/Homes for the Aged			
Mars Hill Retirement Community	Mars Hill	69	4
1 Facility		**69**	
Nursing Homes/Homes for the Aged			
Elderberry Health Care	Marshall	80 (20)	n/a
Madison Health and Rehabilitation	Mars Hill	100 (0)	n/a
2 Facilities		**180 (20)**	
Family Care Homes			
Hot Springs Family Care Home #1	Hot Springs	6	3
Hot Springs Family Care Home #2	Hot Springs	6	4
Mintz Family Care Home #2	Marshall	6	0
Mintz Family Care Home #3	Marshall	6	0
Mintz Family Care Home #4	Marshall	6	2
Mintz Family Care Home #5	Marshall	6	3
6 Facilities		**36**	

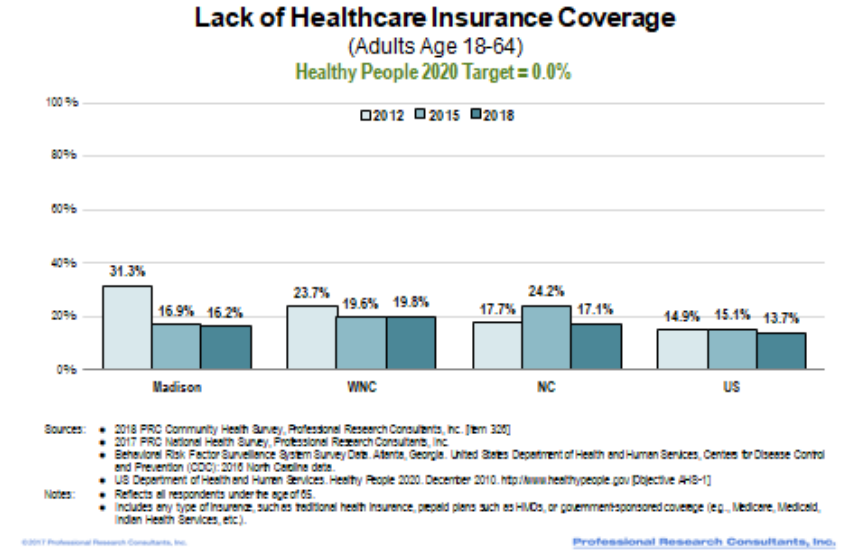
* Skilled Nursing Facility beds (Adult Care Home beds) = Maximum number of nursing or adult care home beds for which the facility is licensed.

Care Homes, Nursing Facilities (by County); https://www.ncdhhs.gov/dhsr/reports.htm

As the number of older adults increases so will the need for adult care and nursing facilities.

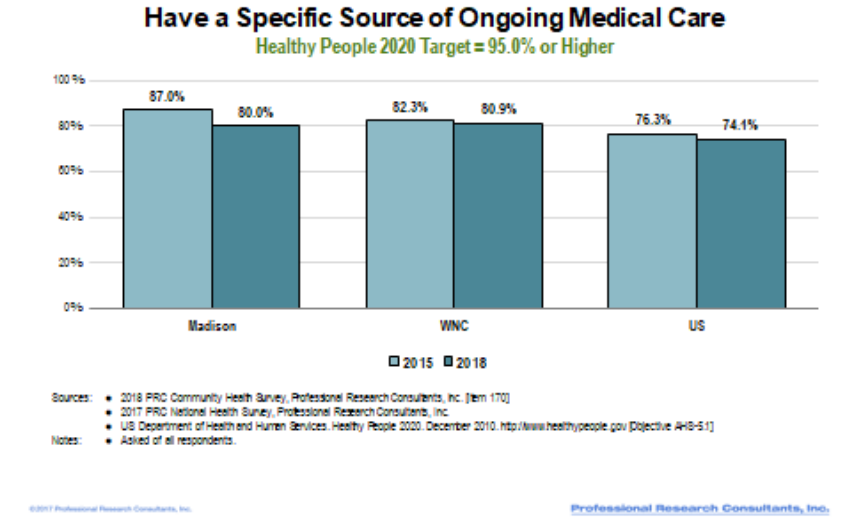


Small Area Health Insurance Estimates, 2016. Retrieved July 10, 2018, from U.S. Census Bureau, Small Area Health Insurance Estimate (SAHIE) Interactive Data Tool website: https://www.census.gov/data-tools/demo/sahie/#/



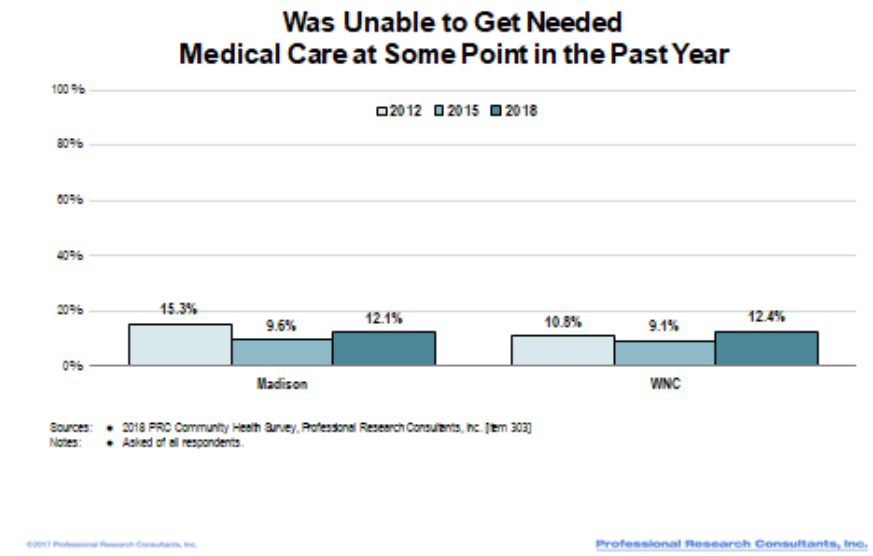
(WNCHN – WNC Healthy Impact Community Health Survey, 2018)

The percent of uninsured and those that lack healthcare insurance are both decreasing overtime as evidenced above.

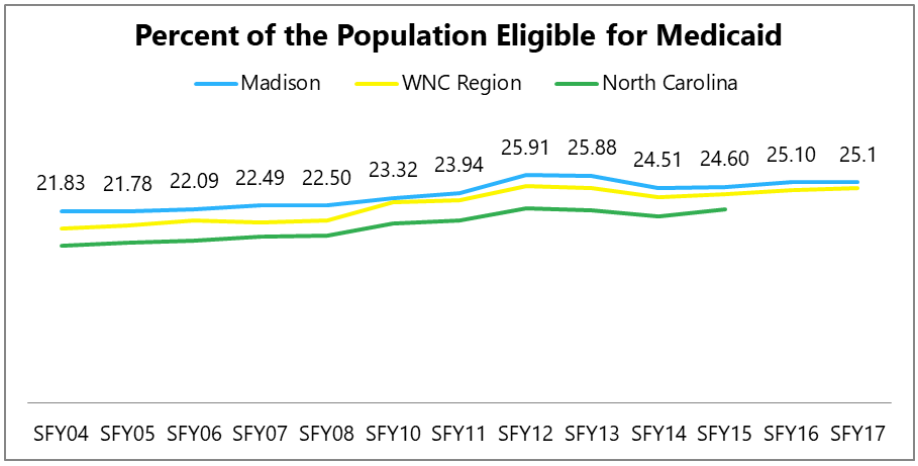


(WNCHN – WNC Healthy Impact Community Health Survey, 2018)

Madison County percentages of individuals having a specific source of ongoing medical care are slightly decreased from 2015 but remains in range with the WNC Region and the state. However, we have not yet reached the Healthy People 2020 target.



(WNCHN – WNC Healthy Impact Community Health Survey, 2018)



NC Department of Health and Human Services. (2018). Monthly Enrollment Counts by County and Budget Groups. [Data tables]. Available from https://dma.ncdhhs.gov/documents/reports/enrollment-reports/medicaid-and-health-choice-enrollment-reports.

The percent of the population eligible for Medicaid has remained relatively stable over time.

At Risk Populations

While Americans as a group are healthier and living longer, segments of the population continue to suffer poor health status. Within Madison County, at risk populations include residents with low income and low literacy.

The geographic layout of the county and a lack of transportation services are disadvantages that add to the health inequities experienced by such groups. Interventions must consider the county's societal conditions, health behaviors of disparate groups, and their access to health care to positively affect health outcomes.

CHAPTER 6 – PHYSICAL ENVIRONMENT

Air & Water Quality

"Clean air and safe water are prerequisites for health. Poor air or water quality can be particularly detrimental to vulnerable populations such as the very young, the elderly, and those with chronic health conditions. Clean air and water support healthy brain and body function, growth, and development. Air pollutants such as fine particulate matter, ground-level ozone, sulfur oxides, nitrogen oxides, carbon monoxide, and greenhouse gases can harm our health and the environment. Excess nitrogen and phosphorus run-off, medicines, chemicals, lead, and pesticides in water also pose threats to well-being and quality of life" (County Health Rankings, 2018).

Outdoor Air Quality

The Air Quality Index (AQI) is an information tool to advise the public. The AQI describes the general health effects associated with different pollution levels, and public AQI alerts (often heard as part of local weather reports) include precautionary steps that may be necessary for certain segments of the population when air pollution levels rise into the unhealthy range. The AQI measures five air pollutants and converts the measures to a number on a scale of 0-500, with 100 representing the National Air Quality Standard. An AQI level in excess of 100 on a given day means that a pollutant is in the unhealthy range that day; an AQI level at or below 100 means a pollutant is in the satisfactory range.
The Environmental Protection Agency reports AQI for eight of the 16 counties in the WNC Region, however Madison County is not included. Source: 2015 Community Health Assessment.

The data below shows that there were no days rated very unhealthy or unhealthy in 2017, only 1 day was rated unhealthy for sensitive groups. Of the 2017 mean of 307 days in WNC with an assigned AQI, 258 had good air quality and 42 had moderate air quality.

Air Quality Index Summary (2017)

County	*No. Days with AQI*	*Number of Days When Air Quality Was:*					*Number of Days When Air Pollutant Was:*					
		Good	**Moderate**	**Unhealthy for Sensitive Groups**	**Unhealthy**	**Very Unhealthy**	**CO**	**NO2**	**O3**	**SO2**	**PM2.5**	**PM10**
Madison	No report											
WNC (Regional) Total	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
WNC (Regional) Arithmetic Mean	307	258	42	1	n/a	n/a	n/a	n/a	139	n/a	122	n/a
State Total	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

Air Quality Index Reports*, 2017*. Retrieved on July 12, 2018, from United States Environmental Protection Agency Air Data website: https://www.epa.gov/outdoor-air-quality-data

Toxic Chemical Releases

The US Toxic Releases Inventory (TRI) program, created in 1986 as part of the Emergency Planning and Community Right to Know Act, is the tool the EPA uses to track these releases. Approximately 20,000 industrial facilities are required to report estimates of their environmental releases and waste generation annually to the TRI program office. These reports do not cover all toxic chemicals, and they omit pollution from motor vehicles and small businesses. (WNCHN – WNC Healthy Impact Community Health Survey, 2018)

County	Total On- and Off-Site Disposal or Other Releases, In Pounds	County Rank (of 86 reporting) for Total Releases	Compounds Released in Greatest Quantity	Quantity Released, In Pounds	Releasing Facility	Facility Location
Madison	1	82	Disocyanates	96	Dynamic Systems Inc.	Leicester
WNC (Regional) Total	14,182,319					
WNC (Regional) Arithmetic Mean	1,090,948					
State Total	62,348,568					
NC County Average	716,650					

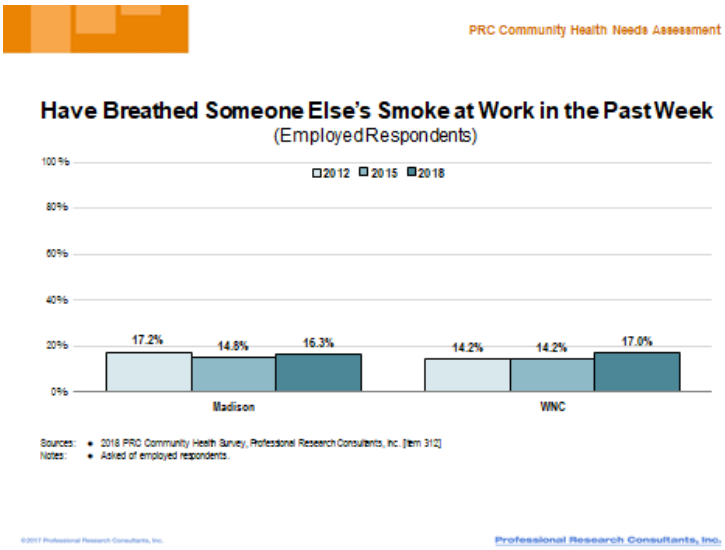
Madison County ranks 82nd among the state's 86 ranked counties. There currently is one less releasing facility, which may account for the change in Madison County's ranking.
TRI Release Reports: Chemical Reports, 2015 (Released March 2017, Updated June 2017).
Retrieved July 11, 2017, from US EPA TRI Explorer, Release Reports, Chemical Reports website:
http://iaspub.epa.gov/triexplorer/tri_release.chemical

Indoor Air Quality

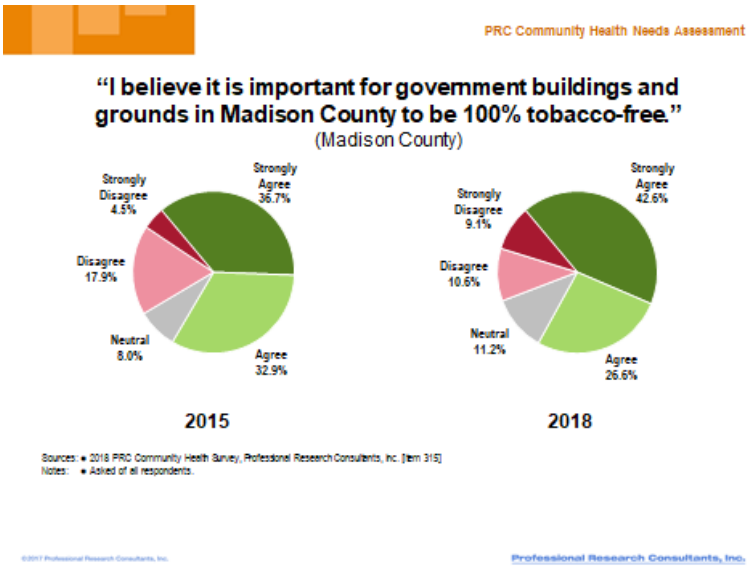
Tobacco smoking has long been recognized as a major cause of death and disease, responsible for hundreds of thousands of deaths each year in the U.S. Smoking is known to cause lung cancer in humans, and is a major risk factor for heart disease. However, it is not only active smokers who suffer the effects of tobacco smoke. In 1993, the EPA published a risk assessment on passive smoking and concluded that the widespread exposure to environmental tobacco smoke (ETS) in the US had a serious and substantial public health impact (US Environmental Protection Agency, 2011).

ETS is a mixture of two forms of smoke that come from burning tobacco: side stream smoke (smoke that comes from the end of a lighted cigarette, pipe, or cigar) and mainstream smoke (smoke that is exhaled by a smoker). When non-smokers are exposed to secondhand smoke it is called involuntary smoking or passive smoking. Non-smokers who breathe in secondhand smoke take in nicotine and other toxic chemicals just like smokers do. The more secondhand smoke that is inhaled, the higher the level of these harmful chemicals will be in the body (American Cancer Society, 2011).

Survey respondents were asked about their second-hand smoke exposure in their workplace. Specifically, they were asked, "During how many of the past 7 days, at your workplace, did you breathe the smoke from someone who was using tobacco?" In 2012, 17.2% of Madison respondents reported that they had breathed someone else's cigarette smoke at work, in 2015, that number decreased slightly however 2018 percentage was slightly higher at 16.3%.



(WNCHN – WNC Healthy Impact Community Health Survey, 2018)



(WNCHN – WNC Healthy Impact Community Health Survey, 2018)

The 2018 survey reflects an increased percentage of respondents that "strongly agree" it is important for government buildings to be 100% tobacco free. Currently there is no county-wide tobacco free policy in Madison County; however the Health Department has had a policy in place for several years.

Water

The source from which the public gets its drinking water is a health issue of considerable importance. Water from all municipal and most community water systems is treated to remove harmful microbes and many polluting chemicals, and is generally considered to be "safe" from the standpoint of public health because it is subject to required water quality standards. Municipal drinking water systems are those operated and maintained by local governmental units, usually at the city/town or county level. Community water systems are systems that serve at least 15 service connections used by year-round residents or regularly serves 25 year-round residents. This category includes municipalities, but also subdivisions and mobile home parks. Madison County Health Department, 2015. Madison County Community Health Assessment, Page 40.

As of July 2018, a regional mean of 46.1% of the WNC population was being served by community water systems and 32.5% in Madison County. The remaining presumably were being served by wells or by some other source, such as springs, creeks, rivers, lakes, ponds or cisterns.

Safe Drinking Water Search for the State of North Carolina, (Data extracted on July 10, 2018). Retrieved on July 12, 2018, from United States Environmental Protection Agency Envirofacts Safe Drinking Water Information System (SDWIS) website: https://www.epa.gov/enviro/sdwis-search

Radon

Radon is a naturally occurring, invisible, odorless gas that comes from soil, rock and water. It is a radioactive decay product of radium, which is in turn a decay product of uranium; both radium and uranium are common elements in soil. Radon usually is harmlessly dispersed in outdoor air, but when trapped in buildings it can be harmful. Most indoor radon enters a home from the soil or rock beneath it, in the same way air and other soil gases enter: through cracks in the foundation, floors, hollow-block walls, and openings around floor drains, heating and cooling ductwork, pipes, and sump pumps. The average outdoor level of radon in the air is normally so low that it is not a problem (NC Department of Environment and Natural Resources).

Radon may also be dissolved in water as it flows over radium-rich rock formations. Dissolved radon can be a health hazard, although to a lesser extent than radon in indoor air. Homes supplied with drinking water from private wells or from community water systems that use wells as water sources generally have a greater risk of exposure to radon in water than homes receiving drinking water from municipal water treatment systems. This is because well water comes from groundwater, which has much higher levels of radon than surface waters. Municipal water tends to come from surface water sources that are naturally lower in radon, and the municipal water treatment process itself tends to reduce radon levels even further (NC Department of Environment and Natural Resources).

There are no immediate symptoms to indicate exposure to radon. The primary risk of exposure to radon gas is an increased risk of lung cancer (after an estimated 5-25 years of exposure). Smokers are at higher risk of developing radon-induced lung cancer than non-smokers. There is no evidence that other respiratory diseases, such as asthma, are caused by radon exposure, nor is there evidence that children are at any greater risk of radon-

induced lung cancer than are adults (NC Department of Environment and Natural Resources).

Elevated levels of radon have been found in many counties in NC, but the highest levels have been detected primarily in the upper Piedmont and mountain areas of the state where the soils contain the types of rock (gneiss, schist, and granite) that have naturally higher concentrations of uranium and radium (NC Department of Environment and Natural Resources). Eight counties in NC historically have had the highest levels of radon, exceeding, on average, 4 pCi/L (pico curies per liter). These counties are Alleghany, Buncombe, Cherokee, Henderson, Mitchell, Rockingham, Transylvania and Watauga, five of which are in the WNC region.

According to one recent assessment, the regional mean indoor radon level for the 16 counties of WNC was 4.1 pCi/L, over three times the national indoor radon level of 1.3 pCi/L. According to this same source, the level for Madison County was 2.9 pCi/L, over twice the national indoor radon level.

Facts about radon: Radon in Water; Radon and Geology. Retrieved on April 27, 2015, from North Carolina Department of Environment and Natural Resources: http://www.epa.gov/radon/states/northcarolina.html

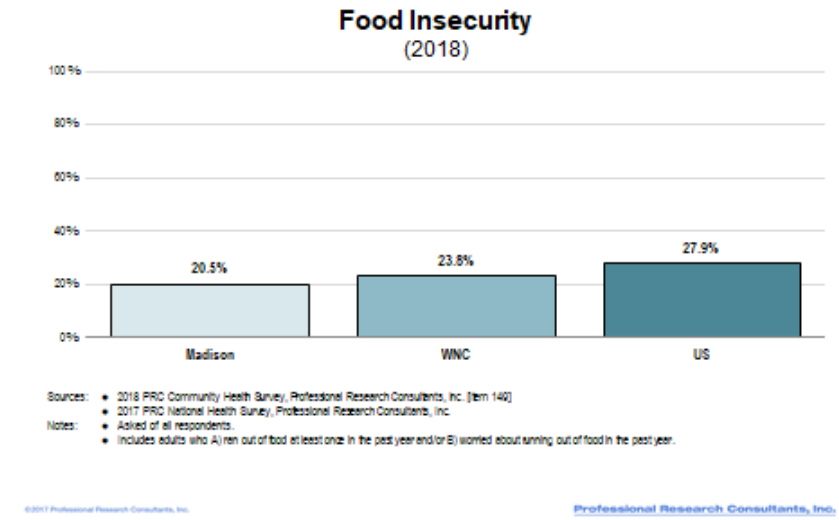
Access to Healthy Food & Places

"Food security exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life (Food and Agriculture Organization, 2006). The environments where we live, learn, work, and play affect our access to healthy food and opportunities for physical activity which, along with genetic factors and personal choices, shape our health and our risk of being overweight and obese. As of 2013, 29 million Americans lived in a food desert, without access to affordable, healthy food. Those with lower education levels, already at-risk for poor health outcomes, frequently live in food deserts" (County Health Rankings, 2018).

Madison County has three farmer's markets located across the county, in Mars Hill, Marshall, and Hot Springs. There are two grocery stores in the county and two food pantries with one that has an initiative to provide fresh fruits and vegetables to clients. In addition, there is a non-profit mobile food delivery program that that delivers basic staple food items throughout the county. Also, Madison Community services operate eight senior adult meal sites four days weekly and coordinate homebound deliveries as well. There are four fast food restaurants and a variety of other individual restaurants throughout the county.

Current data reflects 4.33% of Madison County households have no car and low access to grocery store/farmers market.

U.S. Department of Agriculture Economic Research Service. (2018). Food Environment Atlas: Access and Proximity to Grocery Store. [Data tables]. Available from http://ers.usda.gov/FoodAtlas/.



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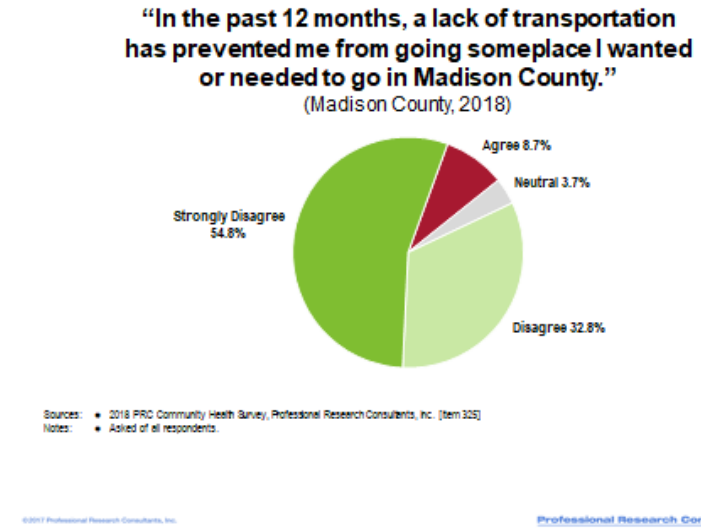
(WNCHN – WNC Healthy Impact Community Health Survey, 2018)



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(WNCHN – WNC Healthy Impact Community Health Survey, 2018)

CHAPTER 7- HEALTH RESOURCES

Health Resources

Process

The Madison County Health Department received through WNC Healthy Impact a data set from United Way's 211. The data set listed health resources available for Madison County residents. The CHA team lead worked with faculty from Mars Hill University's nursing program to develop a course project for students to review and update 211 data as well as to identify resource gaps in the community. The CHA team reviewed the student project results and any missing or incorrect information was shared back with 211 so that the community tool (211) continues to serve as the updated resource list accessible via phone and web 24/7. Our team found this to be more effective than compiling a printed directory.

Below is a link to the 211 updated data set:
https://docs.google.com/spreadsheets/d/1HjiVIK96qLrfCsJ95jaTyUCwo7MrC25qVu4wSPUyTQU/edit#gid=499500632

Findings

There is no hospital located in Madison County. The Madison County Health Department offers WIC, immunizations, child health, dental services, family planning, maternity care, Breast and Cervical Cancer Control Program, health education, community outreach, employee health services and more.

There is one private non-profit medical practice, the Hot Springs Health Program, with four offices located throughout the county. They provide primary health care by a staff of family medicine, internal medicine, and pediatric physicians. They also manage a home health and hospice program along with an in-home rehabilitation program for Madison County residents.

The Madison County Emergency Medical Services offers ambulance transportation from all points in the county. Emergency medical helicopter transport is available from Mission Hospitals in Asheville. The hospital also manages the county's emergency medical services.

There are now three dental offices in the county. The dental clinic at the health department has increased access to care for low income individuals. Mental health services are available through RHA.

Optical and chiropractic services are also available. There is one fitness center in the county. Walking trails can be found across the county. The county has two licensed nursing home facilities, one retirement home, and several group homes.

Resource Gaps

Based on local review of available resources and collaborative discussions around availability of services specifically related to our priority health issues the CHA team identified some resources that are needed but are currently lacking in our community.

- Volunteers for Home Delivered Meals
- Exercise Facilities/Greenways/Classes
- Mental Health/Substance Use Support Groups
- Employment for People with Disabilities or Substance Use
- Transportation
- Specialty and Urgent Care
- Drop In or Part Time Childcare (flexible preschool programs)
- Internet Connectivity throughout Madison County
- Affordable Housing

CHAPTER 8 – IDENTIFICATION OF HEALTH PRIORITIES

Health Priority Identification

Process

Every three years we pause our work to improve community health so that we may step back and take a fresh look at all of the current data from our county that reflects the health of our community. We then use this information to help us assess how well we're doing and what actions we need to take moving forward.

Beginning in September, 2018, our team spent time understanding the data and uncovering what issues were affecting the most people in our community. We also interviewed community leaders to find out what they're most concerned about. To identify the significant health issues in our community, our key partners (see a full list in the Executive Summary) reviewed data and discussed the facts and circumstances of our community.

We used the following criteria to identify significant health issues:

- Data reflects a concerning trend related to size or severity
- Significant disparities exist
- Issue surfaced as a high community concern
- County data deviates notably from the region, state or benchmark

Once our team made sense of the data, we presented key health issues to a wide range of partners and community members. The participants used the information we presented to score each issue, and then vote for their top areas of concern. Some of the factors they considered were how much the issue impacts our community, how relevant the issue is to multiple health concerns, and how feasible it is for our community to make progress on this issue.

This process, often called health issue prioritization, is an opportunity for various community stakeholders, such as Mission Health, Madison County Health Department, and Hot Springs Health Program to agree on which health issues and results we can all contribute to. This increases the likelihood that we'll make a difference in the lives of people in our community.

Identified Issues

During the above process, the Community Health Assessment data team identified the following health issues:

- ***Alzheimer's/Dementia:*** Dementia/Alzheimer's was a health issue of key concern among community leaders in the area of Mental Health from the Online Key Informant Survey, ranking 3rd behind Substance Use and General Mental Health. Secondary data revealed a downward trend in Alzheimer's Mortality rates from 2002-2016 in Madison County.
- ***COPD/Asthma:*** Chronic Obstructive Pulmonary Disease (COPD) and Upper Respiratory (such as Asthma) were issues of key concern in the Online Key Informant Survey. Secondary data revealed COPD ranked 10th among the top ten health indicators.
- ***Diabetes:*** Diabetes was discovered to be an issue of high concern in both secondary data and the Online Key Informant Survey of community leaders in a data review from our Community Health Assessment data team.
- ***Heart Disease:*** Heart Disease was discovered to be an issue of concern in secondary data and ranked 6 out of 9 chronic disease issues on the Online Key Informant Survey in a data review from our Community Health Assessment data team.
- ***Infant/Child Health:*** Infant and child health were discovered to be issues of concern in the Online Key Informant Survey of community leaders in a data review from our Community Health Assessment data team.
- ***Mental Health:*** General Mental Health was discovered to be an issue of high concern in both secondary data and the Online Key Informant Survey of community leaders in a data review from our Community Health Assessment data team.
- ***Overweight/Physical Activity/Nutrition:*** Physical Activity and Nutrition were discovered to be issues of high concern in both secondary data and the Online Key Informant Survey of community leaders in a data review from our Community Health Assessment data team.
- ***Substance Use:*** Substance Use was discovered to be an issue of high concern in both secondary data and the Online Key Informant Survey of community leaders in a data review from our Community Health Assessment data team.

Priority Health Issue Identification

Process

Two Community Health Assessment (CHA) data teams were formed to review the information. The primary data team reviewed information from the PRC survey regarding high concerns and resource issues from the key informant surveys. Members utilized a tool to rank the issues as high, medium, or low concern based on community resources available to address the issues (i.e. people, funding, momentum, etc.). The secondary data team reviewed data from the WNC Healthy Impact Data Workbook which included information from local, regional, and state data.

This team reviewed the top 10 morbidity/mortality measures and used a tool to rank the size and severity of the health indicators that were of concern (on a scale of very serious to not serious) to rank the size of the problem. The teams then met jointly to review and discuss the findings from each team. It was noted there was crossover of primary data and secondary data teams in the areas of physical activity/nutrition, mental health, substance use, and diabetes.

The following 8 health issues were presented to members of the health consortium to prioritize:

- Alzheimer/Dementia
- COPD/Asthma
- Diabetes
- Heart Disease
- Infant/Child Health
- Mental Health
- Overweight/Physical Activity/Nutrition
- Substance Use

Madison Community Health Consortium Prioritization Meeting 11-2018

During our group process, the following criteria were applied to the issues listed above to select priority health issues of focus for our community over the next three years:

- **Criteria 1** – Relevant – How important is this issue? *(Urgency to solve problem; community concern; Focus on equity; Linked to other important issues)*
- **Criteria 2** – Impactful – What will we get out of addressing this issue? *(Availability of solutions/proven strategies; Builds on or enhances current work; Significant consequences of not addressing issue now)*
- **Criteria 3** – Feasible – Can we adequately address this issue? *(Availability of resources (staff, community partners, time, money, equipment) to address the issue; Political capacity/will; Community/social acceptability; Appropriate socio-culturally; Can identify easy, short-term wins)*

Health Consortium members were given an overview and handout of relative data points for each of the eight issues. A prioritization tool was used to rank each health issue on a scale of 1-4 based on relevance, impact, and feasibility. Participants used a modified Hanlon method to rate the priorities using the criteria listed above. Then dot-voting techniques were used to narrow to the top two priority health issues. The following health issues were selected by the membership:

- Substance Use/ Mental Health
- Overweight/Nutrition/Physical Activity

Prioritization Meeting- Dot Voting

Participants felt Substance Use and Mental Health should be a combined priority. In addition, the consensus was to focus on Nutrition and Physical Activity as they are primary prevention strategies that address overweight.

Identified Priorities

The following priority health issues are the final community-wide priorities for our county that were selected through the process described above:

- **Priority 1 – Physical Activity and Nutrition:** Physical Activity and Nutrition were discovered to be issues of high concern in both secondary data and the Online Key Informant Survey of community leaders in a data review from our Community Health Assessment data team.

- **Priority 2- Substance Use and Mental Health:** Substance Use was discovered to be an issue of high concern in both secondary data and the Online Key Informant Survey of community leaders in a data review from our Community Health Assessment data team. General Mental Health was also an issue of high concern in both secondary data and the Online Key Informant Survey of community leaders in a data review from our Community Health Assessment data team.

PHYSICAL ACTIVITY & NUTRITION

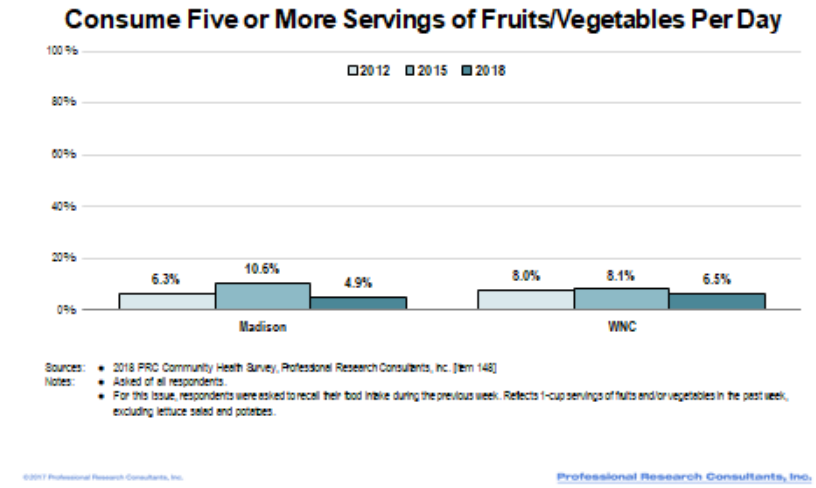
Overweight and obesity pose significant health concerns for both children and adults, including increased risk for chronic diseases such as heart disease and type 2 diabetes. Strong science exists to support the health benefits of eating a healthful diet and maintaining a healthy body weight. Increased physical activity opportunities and access to healthy foods are crucial to helping individuals reach and maintain a healthy weight (Source: 2015 Community Health Assessment).

Obesity prevention for children has been a priority issue for several years in Madison County. There has been a history of collaboration with community partners to identify and implement strategies within schools and the community to provide nutrition and physical activity education to school age children. Collaborative strategies have included annual BMI assessments for K5 students, partnership with the School Health Advisory Council to develop a healthy snack procedure, along with support and promotion of other county and community agency programs that also implement physical activity and nutrition education programs for children and youth.

In 2015 the data revealed a need to also include adult-focused prevention strategies to reach the desired outcomes for *all* citizens. Since then the Healthy Eating Active Living Team (HEAL) formed and has focused on increasing access for the community to fresh fruits and vegetables, providing health education at worksites, developing a physical activity and nutrition calendar, and exploring ways to increase physical activity opportunities in the county. Although much as been done to improve the physical activity and nutrition status of residents, more work is needed in the future to achieve the desired result.

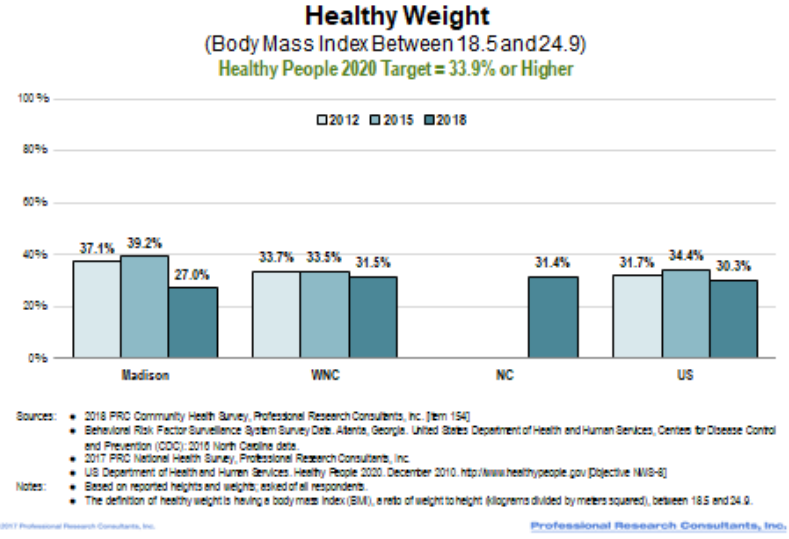
What Do the Numbers Say?

Health Indicators



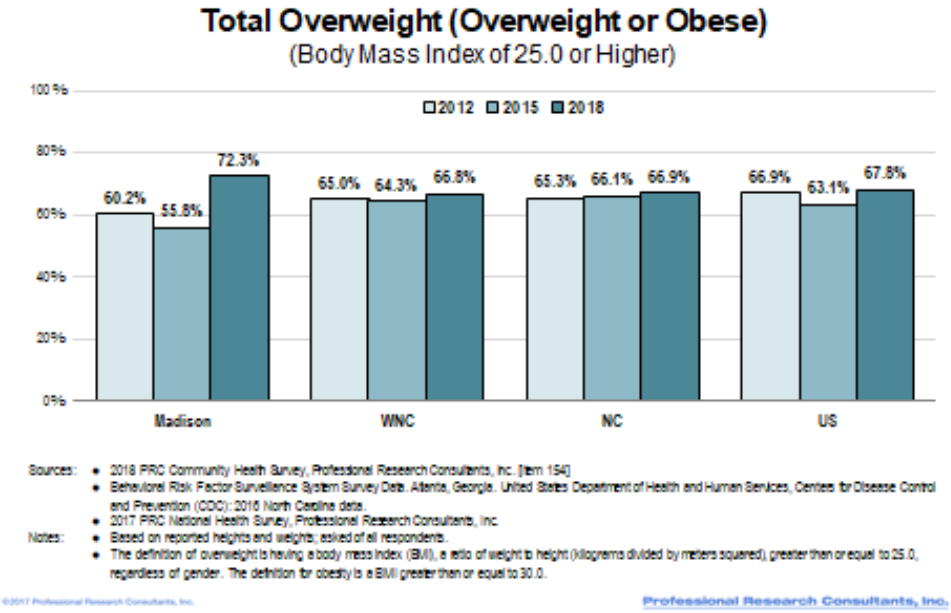
(WNCHN – WNC Healthy Impact Community Health Survey, 2018)

It is recommended that on average adults should consume five or more servings of fruits and vegetables per day. In Madison County only 4.9% of those surveyed met those nutritional guidelines (WNCHN – WNC Healthy Impact Community Health Survey, 2018).



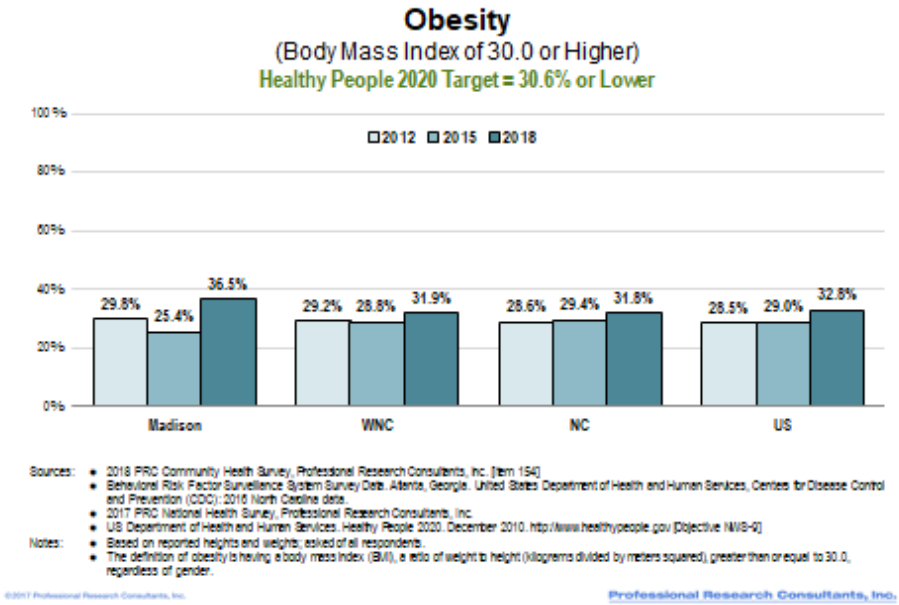
(WNCHN – WNC Healthy Impact Community Health Survey, 2018)

As previously mentioned, overweight and obesity can lead to serious health concerns and is attributed as a risk factor for many chronic diseases. In 2018, 27% of Madison County residents surveyed stated that they were at a healthy weight (BMI of 18.5-24.9). The Healthy People 2020 target is 33.9% or higher.



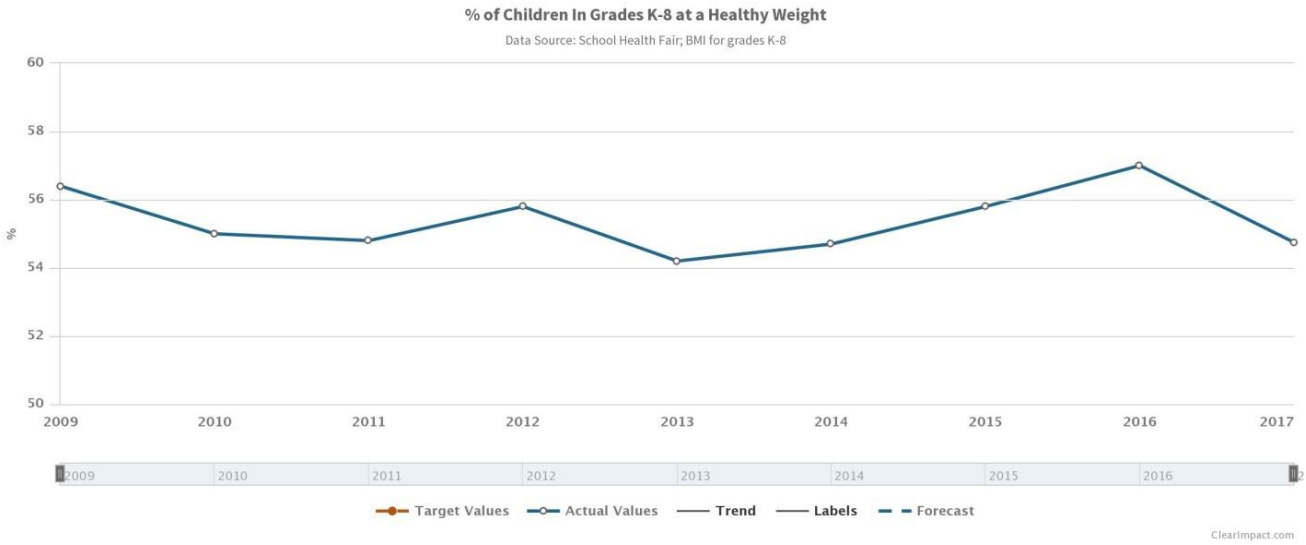
(WNCHN – WNC Healthy Impact Community Health Survey, 2018)

72.3% of respondents stated that they were overweight or obese (BMI of 25 or higher), a percentage that is higher in Madison County than WNC, the state, and the US.



(WNCHN – WNC Healthy Impact Community Health Survey, 2018)

With 36.5% reporting that they were in the obese range (BMI of 30 or higher).



Approximately 55% of children in grades K-8 are at a healthy weight.

What Did the Community Say?

What's Helping?

- Recreational/Outdoor Activities: Greenways, free vegetables, increased education, school/community sponsored 5ks, more public exercise areas

- Awareness/Education: Education

- Specific Programs/Agencies:
  "This has been a focus of the health consortium for the past three years. They have been great at establishing a community calendar, opening green spaces, and creating job programs that encourage healthy living." – Community Leader

  "Good local initiatives to encourage physical activity and helping patients learn proper technique and safe venues to exercise." – Community Leader

  "Healthy eating information is being discussed regularly in the local schools." – Other Health Provider

  "Health department works diligently within our schools and community to help." – Community Leader

- Physical Activity:
  PE programs and more outside activities

- Community Focus:
  Desire of community

- Access to Healthy Food:
  Several healthy food programs offered

What's Hurting?

- Lifestyle: Difficult to get people to change behavior and requires persistent committed volunteer leadership. Client participation

- Denial: Lack of interest.

- Access to Healthy Food: "Obesity and poor eating habits/physical activity habits are a chronic problem in Madison County, as well as most of the country". – Social Services Provider

- Built Environment: "Madison County needs to develop more parks including running/bike trails to encourage strong health habit." – Community Leader

- Funding: "We need to fund Parks and Recreation fully to provide for more activities." – Community Leader
  Staff to help educate community on a broader basis.
  Funds for more exercise programs.

- Lack of Prevention for Youth: "The schools are prioritizing cheap sugars and calories over healthy eating and physical activity. Sugars are used as rewards and withholding recess/physical activity as a punishment. If we don't start kids off right with healthy eating and exercise, then we don't have a chance once they become adults." – Community Leader

- Poverty: "Poverty restricts people's' ability to buy healthier foods, and as a result many of our residents continue to eat a lot of the cheaper, but far less healthy foods." – Other Health Provider

- Parental Influence: "Many parents aren't good role models for their children in this area. Even if they encourage good nutrition and physical activity, if they are not modeling these behaviors their children will likely not see the importance." – Social Services Provider

What Else Do We Know?

Overweight and obesity pose significant health concerns for both children and adults, including increased risk for chronic diseases such as heart disease and type 2 diabetes. Strong science exists supporting the health benefits of eating a healthful diet and maintaining a healthy body weight. Diet and body weight are related to health status. Good nutrition is important to the growth and development of children. A healthful diet also helps individuals reduce their risks for many health conditions, including: overweight and obesity; malnutrition; iron-deficiency anemia; heart disease; high blood pressure; type 2 diabetes; and some cancers. Increased physical activity and improved nutrition are among the many factors that can help individuals reach and maintain a healthy weight.

Rural areas like Madison County often experience higher rates of obesity and overweight, yet many do not have the resources to address this critical health concern.

Rural healthcare facilities are less likely to have nutritionists, dietitians, or weight management experts available. Rural areas often lack exercise facilities and infrastructure to encourage physical activity. Access to healthy and affordable food is also limited in many communities. Prevention efforts to change diet and weight should address individual behaviors, as well as the policies and environments that support these behaviors in settings such as schools, worksites, healthcare organizations, and communities. To address these challenges we can develop programs and services to help residents learn about and adopt healthy habits to control their weight. As a community we must commit to creating an environment that helps residents of all ages make healthy choices and take responsibility for decisions that support good health in our homes, neighborhoods, schools, and workplaces.

Madison County Health Department, 2015. Madison County Community Health Assessment, Page 49.

What is Already Happening?

- HEAL Team (Healthy Eating Active Living)
- Community Calendar
- Senior Games
- Active Aging Week
- Nutrition Classes at Middle School
- Community Exercise Classes
- Walking Trails
- Playgrounds
- Parks and Recreation Summer trips
- Physical Activity Clubs at School (Girls on the Run, Bike Club, Boys on Track)
- 5K's
- Healthy Living Mobile Market
- Fruit and Vegetable Outlet Inventory
- EBT Bonus Bucks at Farmers Market
- Food Distribution Beacon of Hope

- Manna Backpack Program

What Change Do We Want to See?

The desired result to be achieved is Madison County is an active community that eats healthy. The headline indicators that have been used to track this result are obesity prevalence of children and adults and the percentage of adults eating at least five servings of fruits and vegetables per day.

There is a growing awareness of the connection between mental health illnesses and substance abuse. Addiction and mental health illness are dangerous alone. Together, they can be lethal. Substance use and abuse are health issues which often are major contributors to death and disability in North Carolina. Addiction to drugs and/or alcohol is a chronic health problem. People who suffer from abuse or dependence are at risk for premature death, injuries and disability. Prevention of misuse and abuse of substances is critical. In addition, substance use and misuse can have adverse consequences for families, communities, and society.

There has been increasing community concern in Madison County about substance use and misuse and has been a priority in prior CHA years. In 2014 the Madison Substance Awareness Coalition (MSAC) formed with two-year grant funding from Wake Forest School of Medicine and the North Carolina Coalition Initiative (NCCI) to survey and identify community strategies to reduce substance use and misuse of prescription medication. In 2017, Madison County Health Department received the Drug Free Communities (DFC) grant to focus on nicotine/tobacco use and continue the work started on prescription medication misuse and abuse. The goal of the DFC grant is to strengthen the capacity of the coalition (MSAC) in order to properly address the local conditions that increase the risks of substance use among our youth and all residents of Madison County. There has been capacity built with multiple sectors in the community including law enforcement, health department, local health providers, school system, faith community, etc. There have been community strategies implemented such as increased number of permanent drop off boxes, distribution events for personal lock boxes, prevention education with school students, and medication take back events.

2018 accomplishments include integration of ATOD education in high school curriculum, WNC Teen Summit implementation, and new tobacco/e-cigarette prevention signage utilized across school district, and partnership with local Health Department for understanding and treating opioids community forum. Through both additional community surveys and the 2018 Community Health Assessment data results, it is clear there is a need for continuing focus areas around substance use and the need for additional strategies in multiple levels of the community.

Mental health and physical health are closely connected. Mental illnesses, such as depression and anxiety, affect people's ability to participate in health promoting behaviors. In turn,

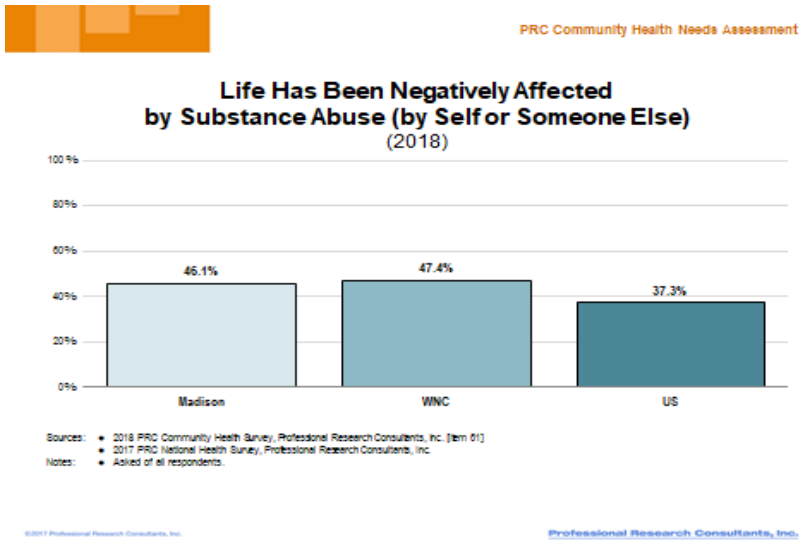
problems with physical health, such as chronic diseases, can have a serious impact on mental health and decrease a person's ability to participate in treatment and recovery. Access to comprehensive, quality health care services is important for the achievement of health equity and for increasing the quality of a healthy life for everyone. It impacts: overall physical, social, and mental health status; prevention of disease and disability; detection and treatment of health conditions; quality of life; preventable death; and life expectancy.
Madison County Health Department, 2015. Madison County Community Health Assessment, Page 54.

Changes in Western North Carolina include the late 2013 consolidation of Western Highlands Network, a Managed Care Organization (MCO) with Smoky Mountain Center (SMC). This transition, which follows a comprehensive one-provider model, resulted in a reduction contracts with many smaller, private practice providers. In late 2016, Smoky Mountain MCO announced they would be operating as Vaya Health. Vaya Health is a public manager of care for individuals facing challenges with mental illness, substance use, and/or intellectual/developmental disabilities. Still with a one-provider comprehensive model, the transition left Madison County with fewer provider choices. Addressing Mental Health is complex and will require the collaborative planning, action, and coordination of multiple partners in our community. Access to preventative mental health services has been a priority issue in Madison for a number of years.

The Mental Health Committee of the Madison Community Health Consortium was formed in 2008 and has played an important role in promoting dialogue between area mental health providers to identify community issues and concerns needing to be addressed in Madison County. Members work to improve access to preventative mental health services with strategies to increase the community awareness of services offered and available while also collaborating to share information among providers, identify service gaps and facilitate collaboration to address identified gaps. While capacity building among behavioral health providers has been very successful, the desired result for the community has not yet been reached. The community must continue to combine resources to help in meeting this critical need.

What Do the Numbers Say?

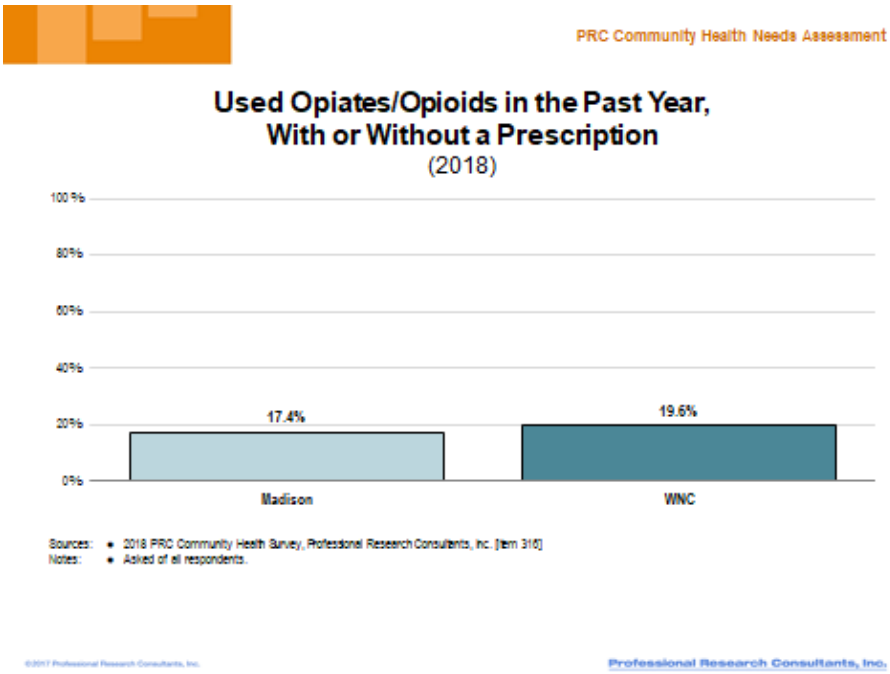
Health Indicators



(WNCHN – WNC Healthy Impact Community Health Survey, 2018)

A Community Survey on Substance Use in Madison County in 2018 revealed that 92.91% of Madison residents think substance use is a problem within our community among youth under the age of 18 years old and 100% of those surveyed thought substance use is a problem within our community among adults. This survey data also reflects 94.83% are concerned/very concerned about pain medication and other prescription medication abuse in our community.

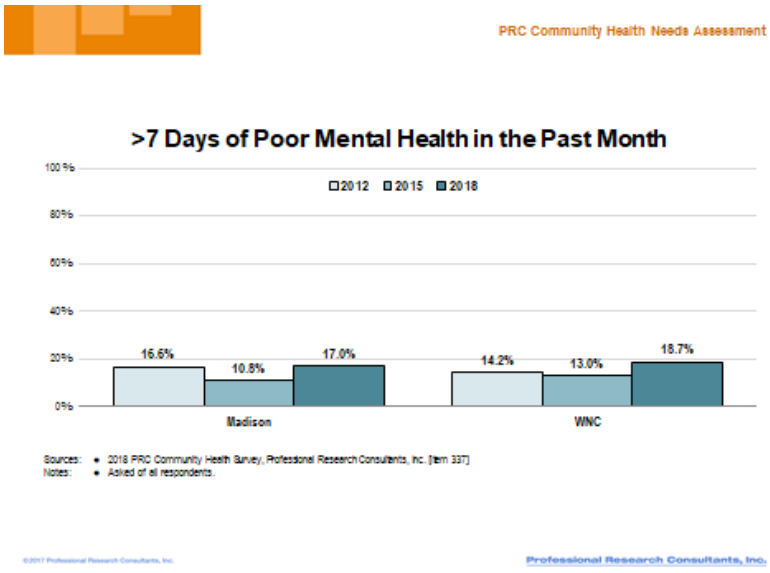
Almost 60% of those surveyed know someone in Madison County who has overdosed or died from an opioid such as pain medication or heroin (Community Survey on Substance Use Madison County, NC 2018).



(WNCHN – WNC Healthy Impact Community Health Survey, 2018)

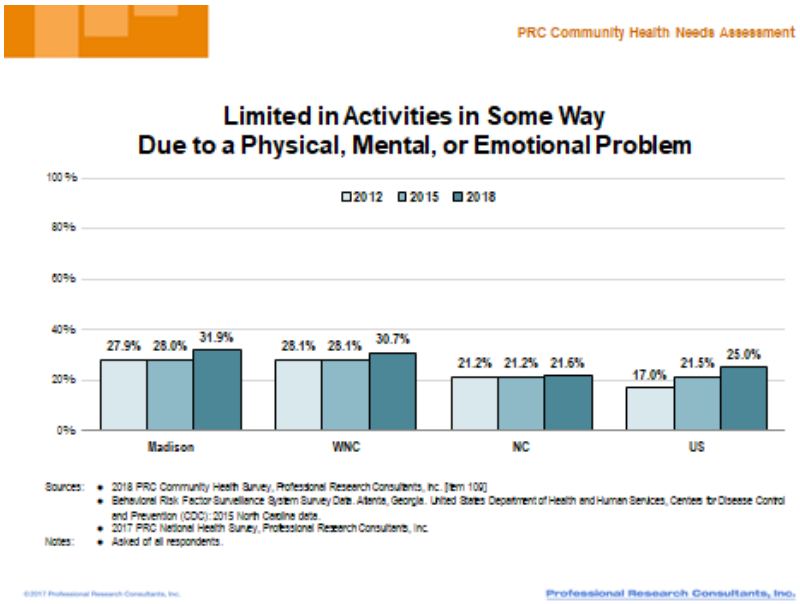
This graph represents a new survey question added in the 2018 WNC Healthy Impact Community Health Survey that reflects Madison County's percentage is slightly lower that the WNC Region.

Unintentional Poisoning Mortality in Madison County reflects an increase from a total of 8 from years 2006-2010 to 14 for years 2012-2016 which are a concerning trend for the community.
North Carolina State Center for Health Statistics (NC SCHS). (2018). Unintentional Poisoning Mortality Rates per 100,000: County Health Data Book. [Data tables].Available from https://schs.dph.ncdhhs.gov/data/.



(WNCHN – WNC Healthy Impact Community Health Survey, 2018)

Madison County survey respondents reported an increased percentage from 2015 of greater than 7 days of poor mental health in the past month in 2018, which is slightly lower that the WNC Region percentage.



(WNCHN – WNC Healthy Impact Community Health Survey, 2018)

13.8% of respondents noted mental/depression as type of problem that limits activities (WNCHN – WNC Healthy Impact Community Health Survey, 2018).

Additional survey information reflected the following changes in data from the 2015 CHA. There was an increase in the percentage (1.2%) of individuals that did not get mental health care or counseling. WNC rate is increased as well from 7.5% (2015) to 12.3% (2018). Also there was an increased percentage (1.2%) of individuals reporting being "Dissatisfied" and "Very Dissatisfied" with life. WNC rate is increased from 5.4% (2015) to 10.5% (2018) (WNCHN – WNC Healthy Impact Community Health Survey, 2018).

What Did the Community Say?

:

What's helping?

- Awareness/Education:" A group sponsored by the health department on education, MSAC-Madison Substance Awareness Coalition- and the group FAN, families against narcotics. Public education on the epidemic is increasing"- Community Leader
  "Madison County is taking strong positive steps to begin educating children at an early age about the consequences of substance use. It is a positive step forward for all" – Community Leader
  Educational programs at all age levels
  Narcan prevalence and distribution

Knowledge about abuse and addiction
"Health department and education provided by them. Grants that we have received as a community to help in this area"- Community Leader
Education, law enforcement
Identifying abuse
"Educating patients, families and community of the extent of mental health issues in the community"- Community Leader
Recognizing the need.

- Collaborative Efforts: "Seen daily, interest in working together to resolve, various groups working together to address" – Public Health Representative
  "We have some good mental health organizations that work together to meet the community need" – Community Leader
  Collaboration and community involvement.
  Great Collaboration

- School Programs: "Some of the early interventions taking place in the school system are helping to a mild degree" – Social Services Provider

- Affordable Care/Services: "Treatment options available to residents at low cost"- Other Health Provider

- Specific Agencies/Programs: "Madison Substance Awareness Coalition's work, and the community support from stakeholders like the Sheriff's Department"- Other Health Provider
  "Active community through the MSAC team"- Other Health Provider

- Opioid Awareness: "There are many groups that are paying attention to the opioid and meth issues in this county. Substance abuse is on the buzz feed"- Community Leader

- Funding: "Work on a grant to establish a local drug court is a positive first step"- Social Services Provider

What's hurting?

- Alcohol/Drug Abuse: "Mental health issues directly related to substance abuse issues which continue to be an intractable problem" – Other Health Provider
  Self-medicating
  Crime
  Lack of education

- Access to Care/Services: Need additional resources
  "Lack of resources within the county. Access barriers. Cost" – Other Health Provider
  "Isolation, lack of resources in the county"- Community Leader
  Resources, money, and staffing

Stigma
Some providers struggle or have yet to figure out how to adapt to provide effective services in a rural community

- Funding: "Lack of funding and services. There is a danger that, if we focus on one thing(opioids) we might not give enough attention to something nearly as bad(meth)- though we have to go where resources are available"- Community Leader

- Availability of Substances: "Constantly evolving low cost choices of new drugs"-Other Health Provider

- Awareness/Education: "Minimal progress is being made, as people begin to realize what a problem it is" Community Leader
  "Degree of the problem is not well understood, services are not readily available, considerable stigma perceived by the patients and community" – Community Leader

- Policies: "Health Care reform. Because of the lack of Medicaid expansion, young people who are no longer on their parent's health care are not able to access affordable prescriptions for their mental health. As a college professor, I have seen this at least 10 times this semester" – Community Leader

- Prevalence/Incidence: "It's just a large, difficult problem to combat. Lack of competent, local substance abuse service provider outside of the Mars Hill area"- Social Services Provider
  Overwhelming numbers involved

- Law Enforcement: "More law enforcement"- Community Leader

- Unemployment: "There are little opportunities for folks to work and thrive in this community. Not to necessarily make a claim that our younger population is idle, but the lack of support to this population in day care options, work options, transportation options and growth of younger stronger communities leaves many finding substance abuse more of an option. This community is changing from a farming/home-based population to an out of home community. This leaves support behind" – Community Leader

- Lack of Providers: Shortage of counselors
  No drug court

What Else Do We Know?

Substance use and abuse are the major contributors to death and disability in North Carolina. Addiction to drugs or alcohol is a chronic health problem, and people who suffer from abuse or dependence are at risk for premature death, comorbid health conditions, injuries, and disability. Therefore, prevention of misuse and abuse of substances is critical. Furthermore, substance

abuse has adverse consequences for families, communities, and society, as it contributes to several negative health outcomes and public health problems, including: cardiovascular conditions, pregnancy complications, teenage pregnancy, human immunodeficiency virus/acquired immunodeficiency syndrome (HIV/AIDS), sexually transmitted diseases (STDs), domestic violence, child abuse, motor vehicle crashes, homicide, and suicide. Several biological, social, environmental, psychological, and genetic factors are associated with substance abuse. These factors can include gender, race and ethnicity, age, income level, educational attainment, and sexual orientation. Substance abuse is also strongly influenced by interpersonal, household, and community dynamics. Understanding these factors is key to reducing the number of people who abuse drugs and alcohol and improving the health and safety of all people in Madison County (Healthy NC 2020 & Healthy People 2020).

What is Already Happening?

- Drug Free Communities Grant (2017-2022)
- Madison Substance Awareness Coalition (MSAC)
- Families Against Narcotics (FAN)
- Madison Patriots Prevention Partners(MP3) at Madison Middle School
- Substance Use education at Madison County Schools
- Permanent Medication Drop Off Locations in the
- Community (4)
- Community Forums
- Hepatitis C Education
- ACEs Resiliency Training
- Naloxone Distribution
- Lock Box Distribution
- Medication Take Back Events
- Collaboration of Mental Health and Madison Substance Awareness Coalition
- Mental Health/Substance Use resource card created and distributed
- Triple P Parenting Program

What Change Do We Want to See?

Residents are free from substance use and are mentally healthy. The headline indicators that have been used to track this progress are opioid overdose and death and reported poor mental health days.

CHAPTER 9 - NEXT STEPS

Collaborative Planning

Collaborative planning with hospitals and other community partners will result in the creation of a community-wide plan that outlines what will be aligned, supported and/or implemented to address the priority health issues identified through this assessment process.

Action is the foundational key to all success.

Pablo Picasso

Sharing Findings

2018 Madison Community Health Assessment findings will be shared with stakeholders, community partners, and the general population in the following ways:

- presentations to Board of Health and County Commissioners
- presentations to health department staff and Madison Community Health Consortium
- article in the local newspaper
- placing copies of the assessment at local libraries and on the health department website

Where to Access this Report

The 2018 Madison Community Health Assessment can be accessed in person and online at the following locations:

- Madison County Health Department Website- www.madisoncountyhealth.org
- WNC Health Network website- www.wnchn.org
- Madison County Public Libraries

For More Information and to Get Involved

For more information or to get involved visit www.madisoncountyhealth.org or call 828-649-3531

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PHOTOGRAPHY CREDITS

Photos used on the cover and in headers from www.pexels.com; accessed October, 2018.

All WNC landscape photos used in the headers courtesy of Patrick Williams, Ecocline Photography.

Local Process Photos courtesy of Deana Stephens, Madison County Health Department.

APPENDICES

Appendix A – Data Collection Methods & Limitations

Appendix B – County Maps

Appendix C – Survey Findings

- Community Health Survey Results
- WNC Healthy Impact Survey Instrument

Appendix D – Key-Informant Survey Findings

APPENDIX A - DATA COLLECTION METHODS & LIMITATIONS

Secondary Data from Regional Core

Secondary Data Methodology

In order to learn about the specific factors affecting the health and quality of life of residents of WNC, the WNC Healthy Impact data workgroup and data consulting team identified and tapped numerous secondary data sources accessible in the public domain. For data on the demographic, economic and social characteristics of the region sources included: the US Census Bureau; Log Into North Carolina (LINC); NC Department of Health and Human Services; NC Office of State Budget and Management; NC Department of Commerce; Employment Security Commission of NC; UNC-CH Jordan Institute for Families; NC Department of Public Instruction; NC Department of Justice; NC Division of Medical Assistance; NC Department of Transportation; and the Cecil B. Sheps Center for Health Services Research. The WNC Healthy Impact data consultant team made every effort to obtain the most current data available at the time the report was prepared. It was not possible to continually update the data past a certain date; in most cases that end-point was August 2018.

The principal source of secondary health data for this report was the NC State Center for Health Statistics (NC SCHS), including its County Health Data Books, Behavioral Risk Factor Surveillance System, Vital Statistics unit, and Cancer Registry. Other health data sources included: NC Division of Public Health (DPH) Epidemiology Section; NC Division of Mental Health, Developmental Disabilities and Substance Abuse Services; the Centers for Disease Control and Prevention; National Center for Health Statistics; NC DPH Nutrition Services Branch; and NC DETECT.

Environmental data was gathered from sources including: US Environmental Protection Agency; US Department of Agriculture; and NC Department of Environment and Natural Resources.

Because in any CHA it is instructive to relate local data to similar data in other jurisdictions, throughout this report representative county data is compared to like data describing the 16-county region and the state of NC as a whole. The WNC regional comparison is used as "peer" for the purposes of this assessment. Where appropriate and available, trend data has been used to show changes in indicators over time.

It is important to note that this report contains data retrieved directly from sources in the public domain. In some cases the data is very current; in other cases, while it may be the most current available, it may be several years old. Note also that the names of organizations, facilities, geographic places, etc. presented in the tables and graphs in this report are quoted exactly as they appear in the source data. In some cases these names may not be those in current or local usage; nevertheless they are used so readers may track a particular piece of information directly back to the source.

Gaps in Available Information

Gaps in information for this CHA include; homelessness numbers, preschool and high school obesity rates, substance use and mental health diagnosis rates, and overdose reversal information.

WNC Healthy Impact Survey (Primary Data)

Survey Methodology

The 2018 WNC Healthy Impact Community Health Survey was conducted from March to June. The purpose of the survey was to collect primary data to supplement the secondary core dataset, allow individual counties in the region to collect data on specific issues of concern, and hear from community members about their concerns and priorities. The survey was conducted throughout the entire WNC Healthy Impact region, which includes the following 16 counties: Buncombe, Cherokee, Clay, Graham, Haywood, Henderson, Jackson, Macon, Madison, McDowell, Mitchell, Polk, Rutherford, Swain, Transylvania and Yancey.

Professional Research Consultants, Inc. (PRC) designed and implemented the survey methodology, which included a combination of telephone (both landline and cell phone) interviews, as well as an online survey. The survey methodology was designed to achieve a representative sample of the regional population that would allow for stratification by certain demographic characteristics, while also maximizing data collection timeliness and efficiency. Survey sampling and implementation methodology is described in greater detail below.

Survey Instrument

The survey instrument was developed by WNC Healthy Impact's data workgroup, consulting team, and local partners, with assistance from PRC. Many of the questions were derived from the CDC Behavioral Risk Factor Surveillance System (BRFSS) and other validated public health surveys. Other questions were developed specifically by WNC Healthy Impact, with input from regional and local partners, to address particular issues of interest to communities in western North Carolina. Each county was given the opportunity to include three additional questions of particular interest to their county, which were asked only of their county's residents.

The three additional county questions included in the 2018 survey were:
1) In the past 12 months, a lack of transportation has prevented me from going someplace I wanted or needed to go in Madison County.
2) I believe it is important for government buildings and grounds in Madison County to be 100% tobacco-free.
3) Frequency of Worry or Stress Over Having Enough Money to Pay Rent or Mortgage in the Past Year

Sampling Approach & Design

PRC designed the survey methodology to minimize sample bias and maximize representativeness by using best practice random-selection sampling techniques. They also used specific data analysis techniques, including post stratification, to further decrease sample bias

and account for underrepresented groups or nonresponses in the population. Post stratification involves selecting demographic variables of interest within the population (here, gender, age, race, ethnicity, and poverty status) and then applying "weights" to the data to produce a sample which more closely matches the actual regional population for these characteristics. This technique preserves the integrity of each individual's responses while improving overall representativeness. In order to determine WNC regional estimates, county responses were weighted in proportion to the actual population distribution to appropriately represent Western North Carolina as a whole. Since the sample design and quality control procedures used in the data collection ensure that the sample is representative, the findings may be generalized to the region with a high degree of confidence.

Survey Administration

PRC piloted the survey through 30 interviews across the region and consulted with WNC Health Network staff to resolve substantive issues before full implementation. PRC used trained, live interviewers and an automated computer-aided telephone interviewing system to administer the survey region-wide. Survey interviews were conducted primarily during evening and weekend hours, with some daytime weekday attempts. Interviewers made up to five call attempts per telephone number. Interviews were conducted in either English or Spanish, as preferred by respondents. The final sample included 29 percent cell phone-based survey respondents and 71 percent landline-based survey respondents. Including cell phone numbers in the sampling algorithm allowed better representation of demographic segments that might otherwise be under sampled in a landline-only model.

PRC also worked with a third-party provider to identify and invite potential respondents for an online survey for a small proportion (20%) of the sample population. The online survey was identical to the telephone survey instrument and allowed better sampling of younger and more urban demographic segments.

About the Madison County Sample

Size: The total regional sample size was 3,265 individuals age 18 and older, with 200 from our county. PRC conducted all analysis of the final, raw dataset.

Sampling Error: For our county-level findings, the maximum error rate at the 95% confidence level is +6.9%.

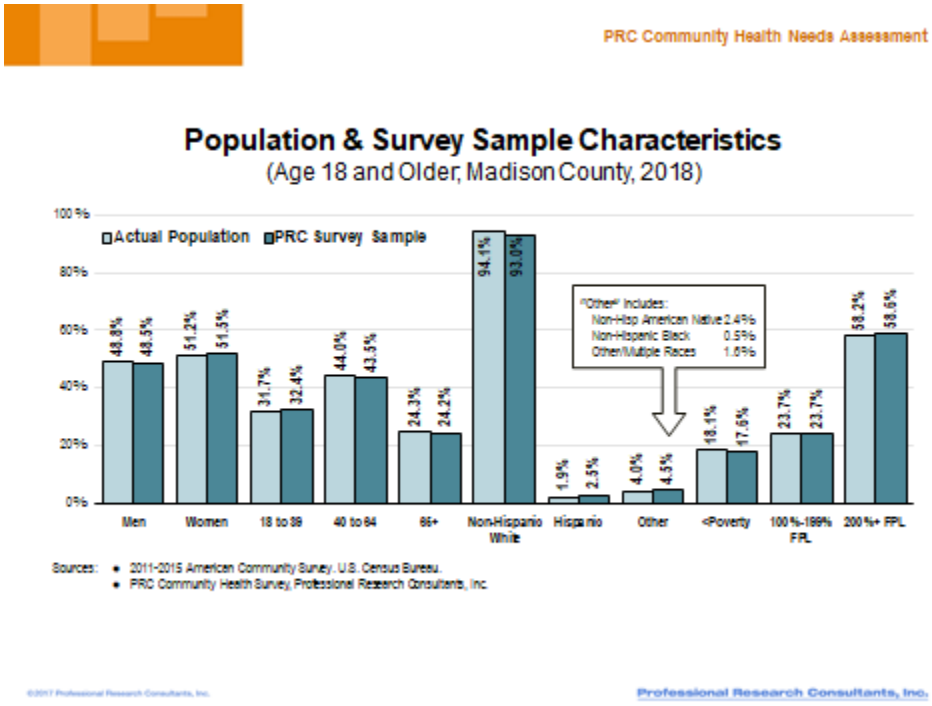
Expected Error Ranges for a Sample of 200
Respondents at the 95 Percent Level of Confidence

Examples:

- If 10% of a sample of 200 respondents answered a certain question with a "yes," it can be asserted that between 5.8% and 14.2% (10% ± 4.2%) of the total population would offer this response.

- If 50% of respondents said "yes," one could be certain with a 95 percent level of confidence that between 43.1% and 56.9% (50% ± 6.9%) of the total population would respond "yes" if asked this question.

Characteristics: The following chart outlines the characteristics of the survey sample for our county by key demographic variables, compared to actual population characteristics from census data. Note that the sample consists solely of area residents age 18 and older.



North Carolina Risk Factor Data

Statewide risk factor data are provided where available as an additional benchmark against which to compare local survey findings; these data are reported in the most recent BRFSS (Behavioral Risk Factor Surveillance System) Prevalence and Trend Data published by the Centers for Disease Control and Prevention and the US Department of Health & Human Services.

Nationwide Risk Factor Data

Nationwide risk factor data, which are also provided in comparison charts where available, are taken from the 2017 PRC National Health Survey; the methodological approach for the national study is identical to that employed in this assessment, and these data may be generalized to the US population with a high degree of confidence.

Healthy People 2020

Healthy People provide science-based, 10-year national objectives for improving the health of all Americans. The Healthy People initiative is grounded in the principle that setting national objectives and monitoring progress can motivate action. For three decades, Healthy People has established benchmarks and monitored progress over time in order to:

- Encourage collaborations across sectors.
- Guide individuals toward making informed health decisions.

- Measure the impact of prevention activities.

Healthy People 2020 is the product of an extensive stakeholder feedback process that is unparalleled in government and health. It integrates input from public health and prevention experts, a wide range of federal, state and local government officials, a consortium of more than 2,000 organizations, and perhaps most importantly, the public. More than 8,000 comments were considered in drafting a comprehensive set of Healthy People 2020 objectives.

Information Gaps

While this assessment is quite comprehensive, it cannot measure all possible aspects of health in the community, nor can it adequately represent all possible populations of interest. It must be recognized that these information gaps might in some ways limit the ability to assess all of the community's health needs.

For example, certain population groups (such as the homeless, institutionalized persons, or those who only speak a language other than English or Spanish) are not represented in the survey data. Other population groups (for example, pregnant women, lesbian/gay/bisexual/transgender residents, undocumented residents, and members of certain racial/ethnic or immigrant groups) might not be identifiable or might not be represented in numbers sufficient for independent analyses.

In terms of content, this assessment was designed to provide a comprehensive and broad picture of the health of the overall community. However, there are certainly a great number of medical conditions that are not specifically addressed.

Online Key Informant Survey (Primary Data)

Online Survey Methodology

Purpose and Survey Administration

WNC Healthy Impact, with support from PRC, implemented an Online Key Informant Survey to solicit input from local leaders and stakeholders who have a broad interest in the health of the community. WNC Healthy Impact shared with PRC a list of recommended participants, including those from our county. This list included names and contact information for physicians, public health representatives, other health professionals, social service providers, and a variety of other community leaders. Potential participants were chosen because of their ability to identify primary concerns of the populations with whom they work, as well as of the community overall.

Key informants were contacted through an email that introduced the purpose of the survey and provided a link to take the survey online. Reminder emails were sent as needed to increase participation.

Online Survey instrument
The survey provided respondents the opportunity to identify critical health issues in their community, the feasibility of collaborative efforts around health issues, and what is helping/hurting their community's ability to make progress on health issues.

Participation
In all, 23 community stakeholders took part in the Online Key Informant Survey for our county, as outlined below:

Local Online Key Informant Survey Participation		
Key Informant Type	**Number Invited**	**Number Participating**
Community Leader	22	13
Other Health Provider	11	4
Physician	2	0
Public Health Representative	4	4
Social Services Provider	2	2

Through this process, input was gathered from several individuals whose organizations work with low-income, minority populations, or other medically underserved populations.

Online Survey Limitations
The Online Key Informant Survey was designed to gather input from participants regarding their opinions and perceptions of the health of the residents in the area. Thus, these findings are based on perceptions, not facts.

To collect this data, purposive sampling (a type of non-probability sampling which targets a specific group of people) was used. Unlike the random sampling technique employed in the telephone survey, the purpose is not to make generalizations or statistical inferences from the sample to the entire population, but to gather in-depth insights into health issues from a group of individuals with a specific perspective.

Local Survey Data

The Madison Substance Awareness Coalition has conducted a community survey for three years (2015, 2016 and 2018).
The Healthy Eating Active Living Team collects BMI data annually on students in grades K-8.
Madison County Schools collected PRIDE substance use survey data from middle and high schools students in 2016 (345 students) and 2018 (248 students).
Information from these local sources our included in this report.

Data Definitions

Reports of this type customarily employ a range of technical terms, some of which may be unfamiliar to many readers. Health data, which composes a large proportion of the information included in this report, employs a series of very specific terms which are important to interpreting the significance of the data. While these technical health data terms are defined in the report at the appropriate time, there are some data caveats that should be applied from the onset.

Error

First, readers should note that there is some error associated with every health data source. Surveillance systems for communicable diseases and cancer diagnoses, for instance, rely on reports submitted by health care facilities across the state and are likely to miss a small number of cases, and mortality statistics are dependent on the primary cause of death listed on death certificates without consideration of co-occurring conditions.

Age-adjusting

Secondly, since much of the information included in this report relies on mortality data, it is important to recognize that many factors can affect the risk of death, including race, gender, occupation, education and income. The most significant factor is age, because an individual's risk of death inevitably increases with age. As a population ages, its collective risk of death increases; therefore, an older population will automatically have a higher overall death rate just because of its age distribution. At any one time some communities have higher proportions of "young" people, and other communities have a higher proportion of "old" people. In order to compare mortality data from one community with the same kind of data from another, it is necessary first to control for differences in the age composition of the communities being compared. This is accomplished by age-adjusting the data.

Age-adjustment is a statistical manipulation usually performed by the professionals responsible for collecting and cataloging health data, such as the staff of the NC State Center for Health Statistics (NC SCHS). It is not necessary to understand the nuances of age-adjustment to use this report. Suffice it to know that age-adjusted data are preferred for comparing most health data from one population or community to another and have been used in this report whenever available.

Rates

Thirdly, it is most useful to use rates of occurrence to compare data. A rate converts a raw count of events (deaths, births, disease or accident occurrences, etc.) in a target population to a ratio representing the number of same events in a standard population, which removes the variability associated with the size of the sample. Each rate has its own standard denominator that must be specified (e.g., 1,000 women, 100,000 persons, 10,000 people in a particular age group, etc.) for that rate.

While rates help make data comparable, it should be noted that small numbers of events tend to yield rates that are highly unstable, since a small change in the raw count may translate to a large change in rate. To overcome rate instability, another convention typically used in the

presentation of health statistics is data aggregation, which involves combining like data gathered over a multi-year period, usually three or five years. The practice of presenting data that are aggregated avoids the instability typically associated with using highly variable year-by-year data, especially for measures consisting of relatively few cases or events. The calculation is performed by dividing the sum number of cases or deaths in a population due to a particular cause over a period of years by the sum of the population size for each of the years in the same period.

Health data for multiple years or multiple aggregate periods is included in this report wherever possible. Sometimes, however, even aggregating data is not sufficient, so the NC SCHS recommends that rates based on fewer than 20 events—whether covering an aggregate period or not—be considered unstable. In fact, in some of its data sets the NC SCHS no longer calculates rates based on fewer than 20 events. To be sure that unstable data do not become the basis for local decision-making, this report will highlight and discuss primarily rates based on 20 or more events in a five-year aggregate period, or 10 or more events in a single year. Where exceptions occur, the text will highlight the potential instability of the rate being discussed.

Regional arithmetic mean

Fourthly, sometimes in order to develop a representative regional composite figure from sixteen separate county measures the consultants calculated a regional arithmetic mean by summing the available individual county measures and dividing by the number of counties providing those measures. It must be noted that when regional arithmetic means are calculated from rates the mean is not the same as a true average rate but rather an approximation of it. This is because most rates used in this report are age adjusted, and the regional mean cannot be properly age-adjusted.

Describing difference and change

Fifthly, in describing differences in data of the same type from two populations or locations, or changes over time in the same kind of data from one population or location—both of which appear frequently in this report—it is useful to apply the concept of percent difference or change. While it is always possible to describe difference or change by the simple subtraction of a smaller number from a larger number, the result often is inadequate for describing and understanding the scope or significance of the difference or change. Converting the amount of difference or change to a percent takes into account the relative size of the numbers that are changing in a way that simple subtraction does not, and makes it easier to grasp the meaning of the change.

For example, there may be a rate of for a type of event (e.g., death) that is one number one year and another number five years later. Suppose the earlier figure is 12.0 and the latter figure is 18.0. The simple mathematical difference between these rates is 6.0. Suppose also there is another set of rates that are 212.0 in one year and 218.0 five years later. The simple mathematical difference between these rates also is 6.0. But are these same simple numerical differences really of the same significance in both instances? In the first example, converting the 6 point difference to a percent yields a relative change factor of 50%; that is, the smaller number increased by half, a large fraction. In the second example, converting the 6 point difference to a

percent yields a relative change factor of 2.8%; that is, the smaller number increased by a relatively small fraction. In these examples the application of percent makes it very clear that the difference in the first example is of far greater degree than the difference in the second example. This document uses percentage almost exclusively to describe and highlight degrees of difference and change, both positive (e.g., increase, larger than, etc.) and negative (e.g., decrease, smaller than, etc.).

Data limitations

Some data that is used in this report may have inherent limitations, due to the sample size, its geographic focus, or its being out-of-date, for example, but it is used nevertheless because there is no better alternative. Whenever this kind of data is used, it will be accompanied by a warning about its limitations.

APPENDIX B – County Maps

Madison County Maps

Community Health (Needs) Assessment
2018

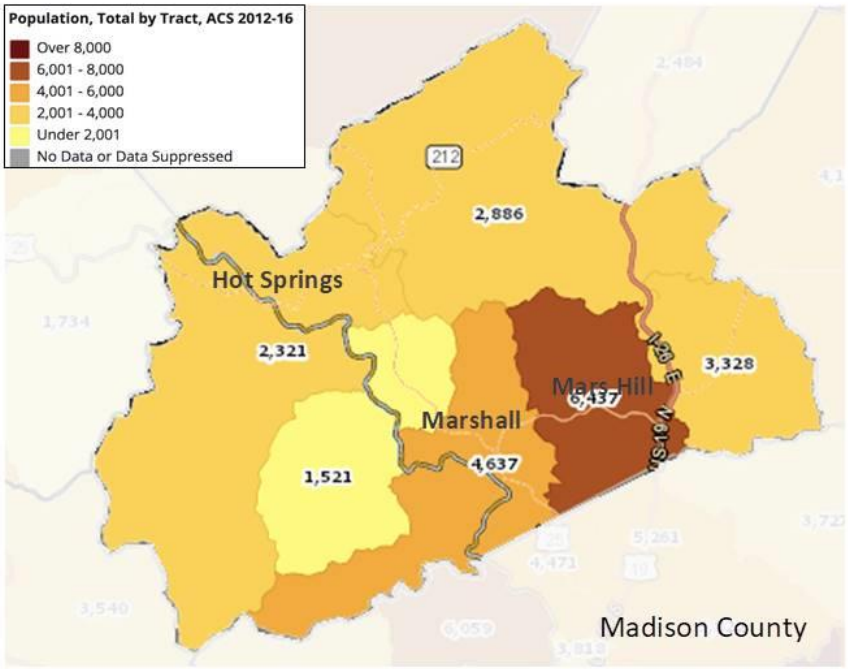
Why use maps?

- To show variation across the county (or a lack of it)
  - Using only one number or statistic to describe the entire county can hide variation across communities. Maps can show if communities are different.
- To show vulnerable populations
  - Mapping demographic information can show us where our most vulnerable populations live.
- To show masked associations
  - Maps can show where specific factors occur simultaneously.

Maps are one piece of the data puzzle

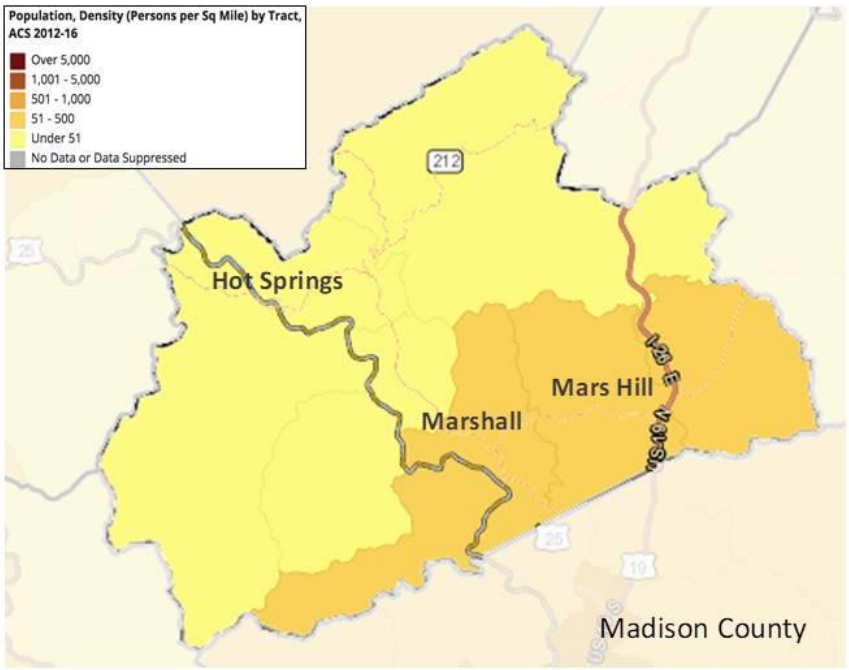
- Maps can be misleading and are best used to highlight which communities to investigate further.
  - Reliability of data decreases as it is cut into smaller and smaller pieces. Therefore, maps of census tract data have greater margins of error than county statistics.
- Maps should be supported by talking with community members or service providers specific to the community of interest to learn more about the community's needs and opportunities.

Population, Total



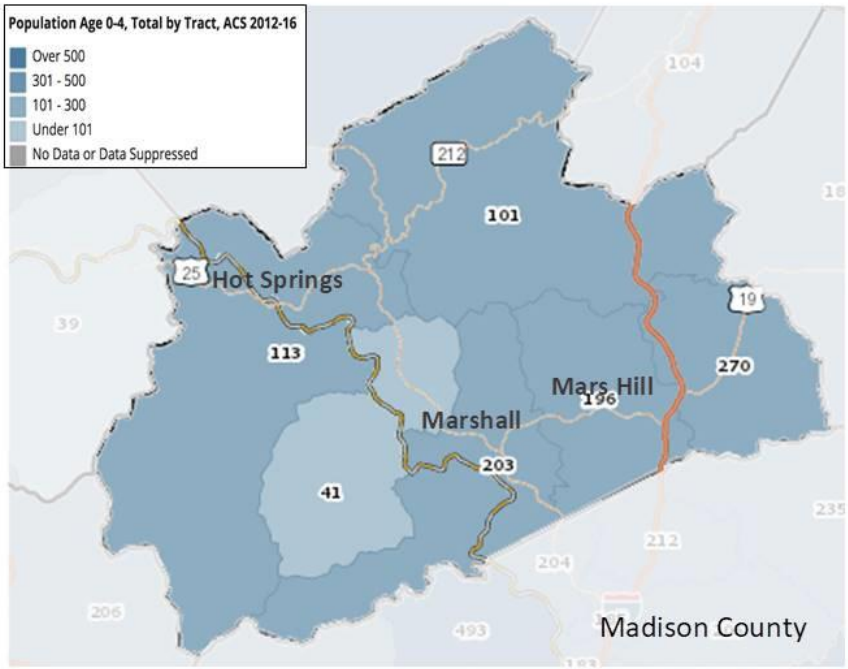
Click to see map in Community Commons

Population, Density



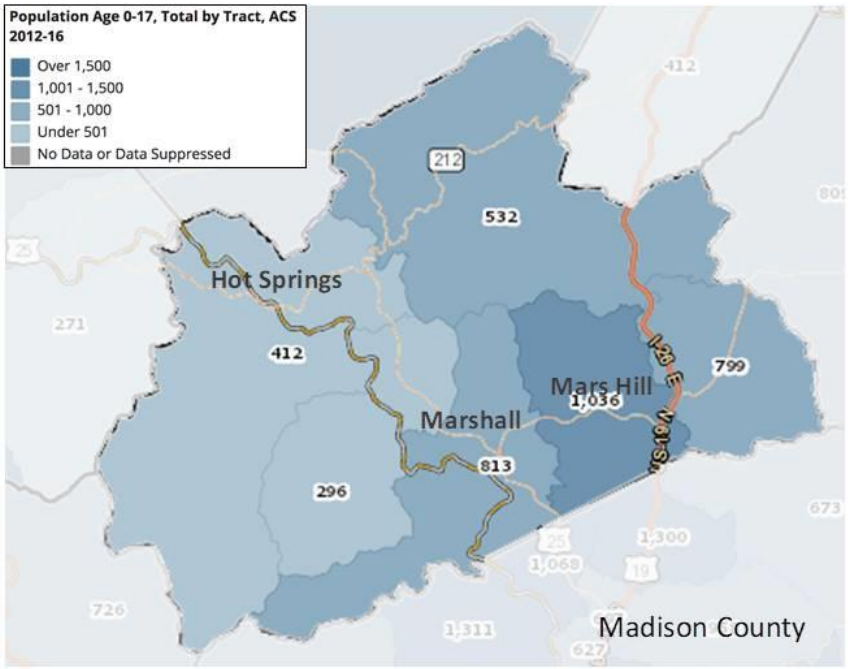
Click to see map in Community Commons

Population, Age 0-4



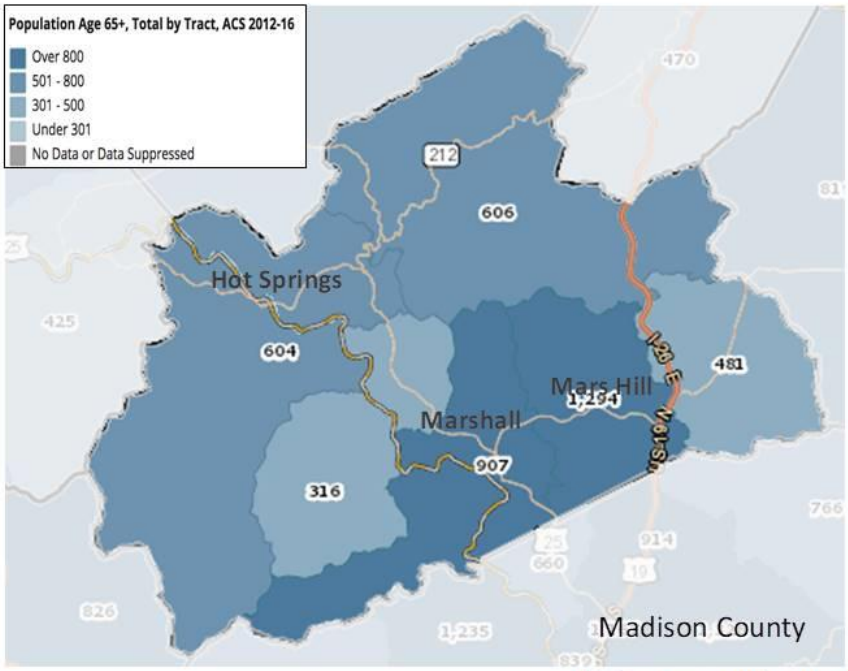
Click to see map in Community Commons

Population, Age 0-17



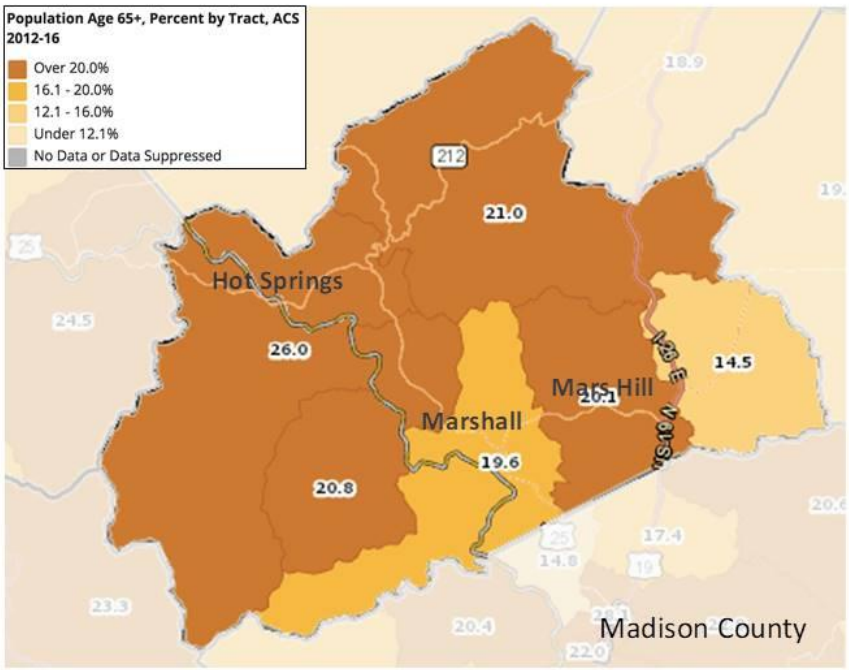
Click to see map in Community Commons

Population, Age 65+



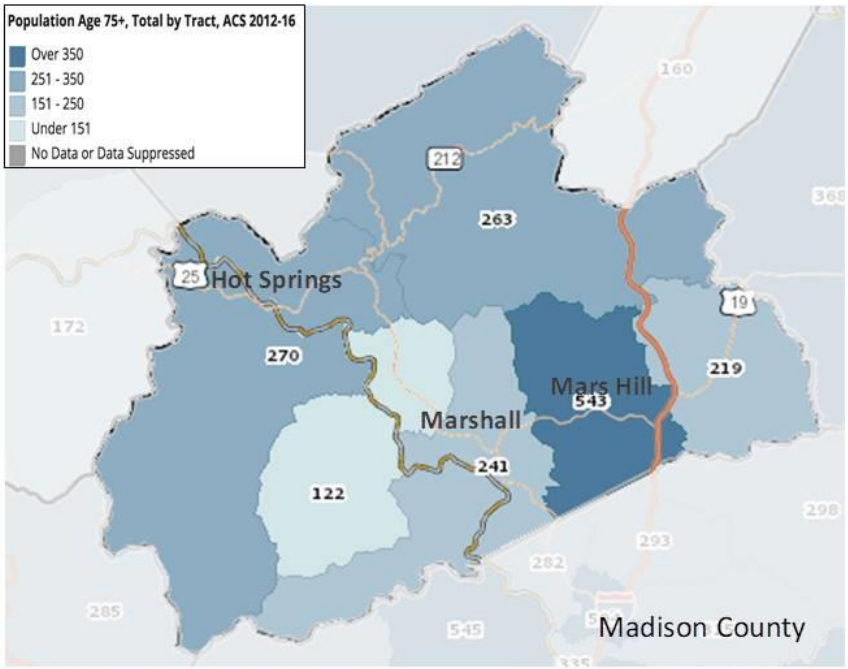
Click to see map in Community Commons

Percent of the Population, Age 65+



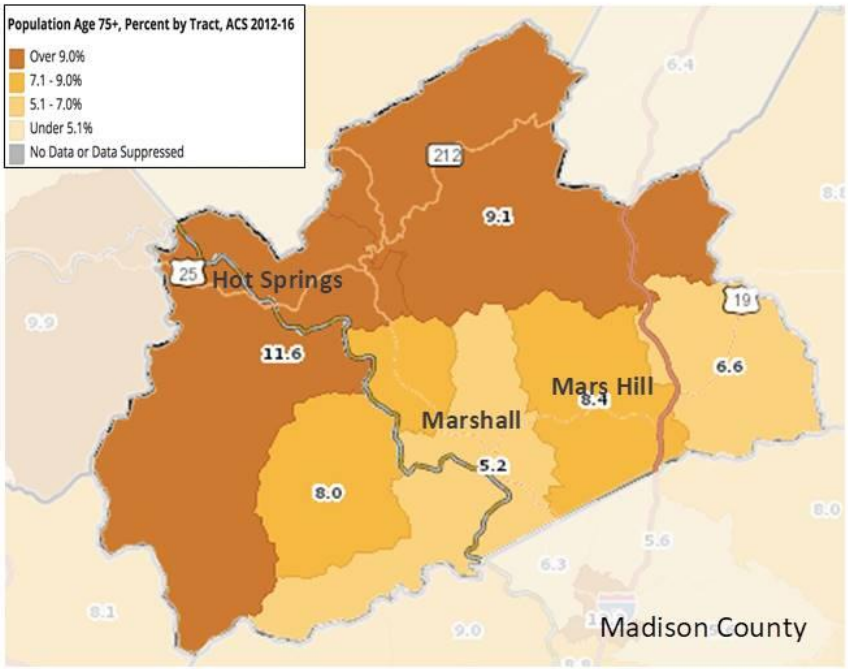
Click to see map in Community Commons

Population, Age 75+



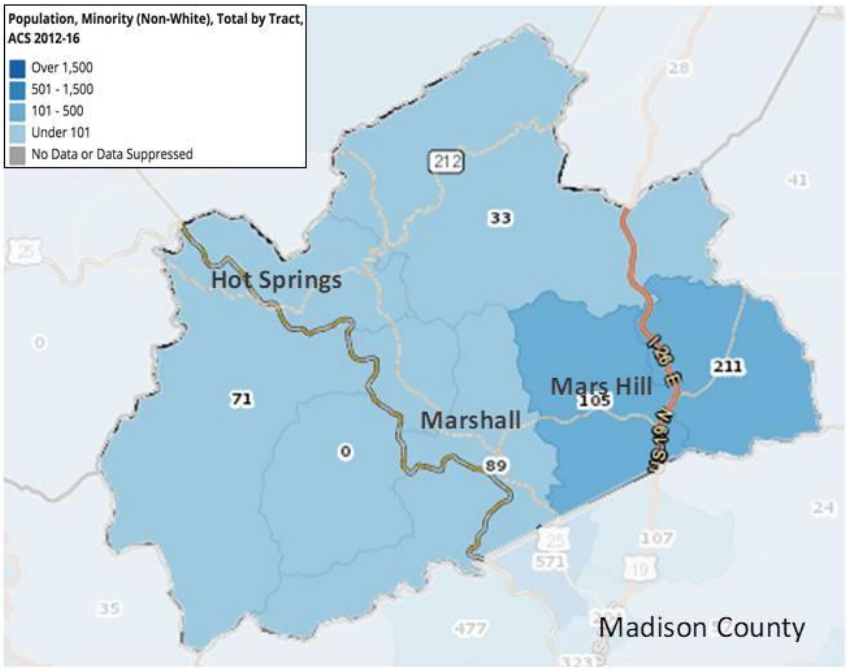
Click to see map in Community Commons

Percent of the Population, Age 75+



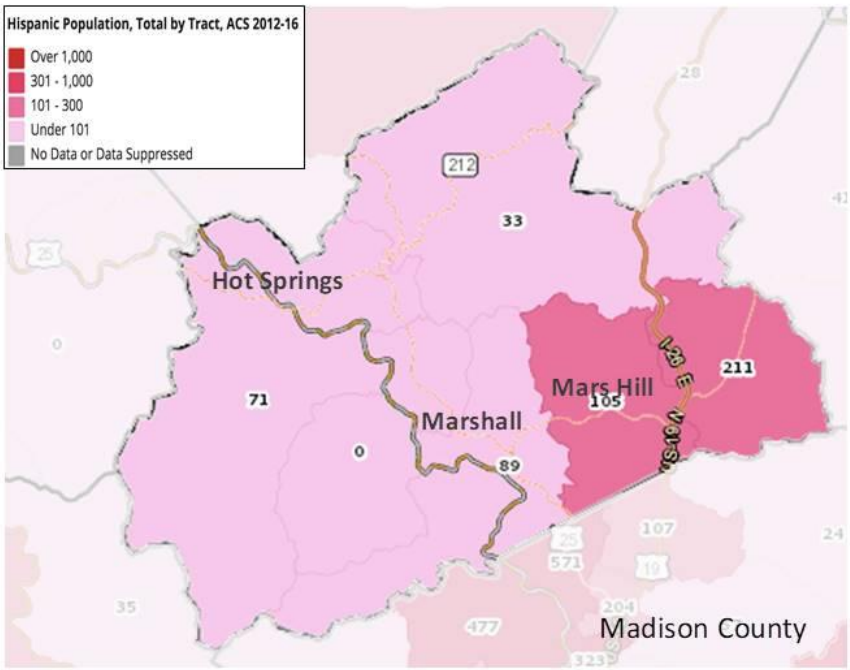
Click to see map in Community Commons

Population, Minority (Non-White)



Click to see map in Community Commons

Population, Hispanic



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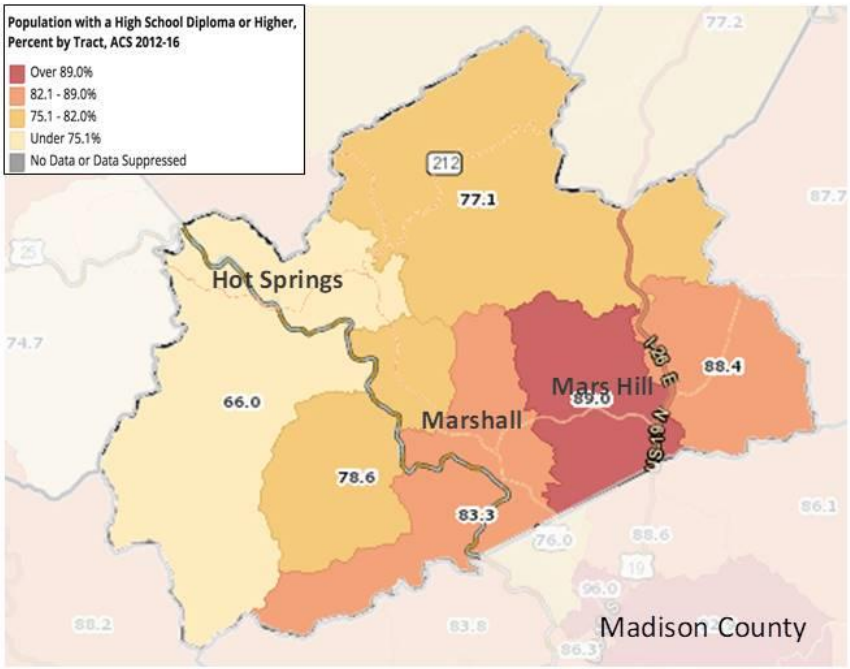
Percent of the Population (Age 25+) with a High School Diploma or Higher Education Level



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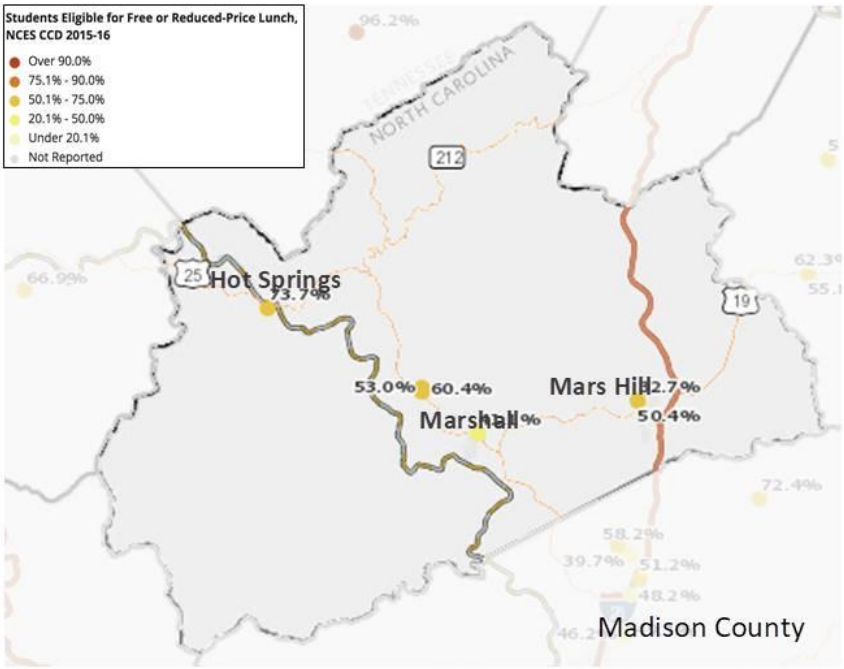
Percent of Students Eligible for Free or Reduced-Price Lunch



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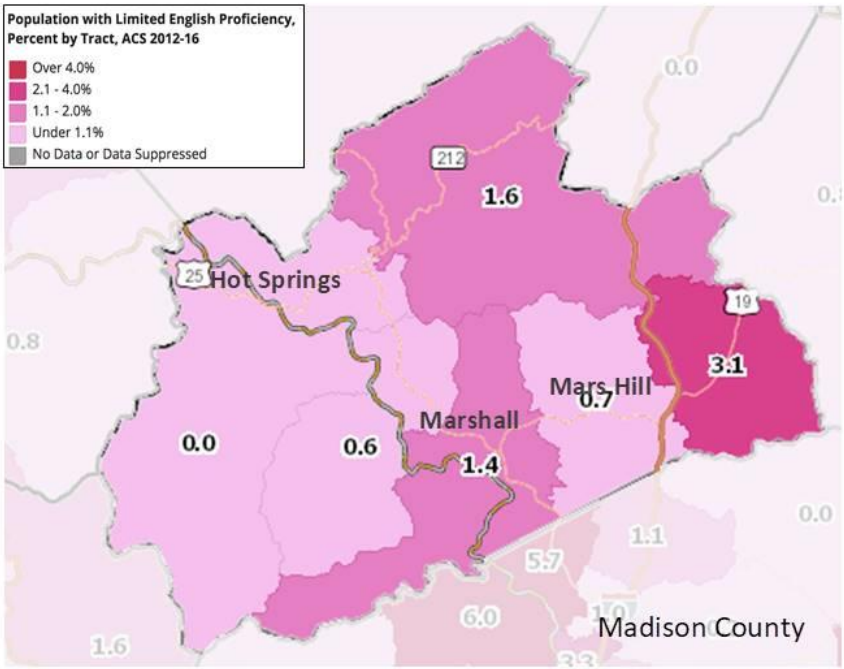
Percent of Population with Limited English Proficiency



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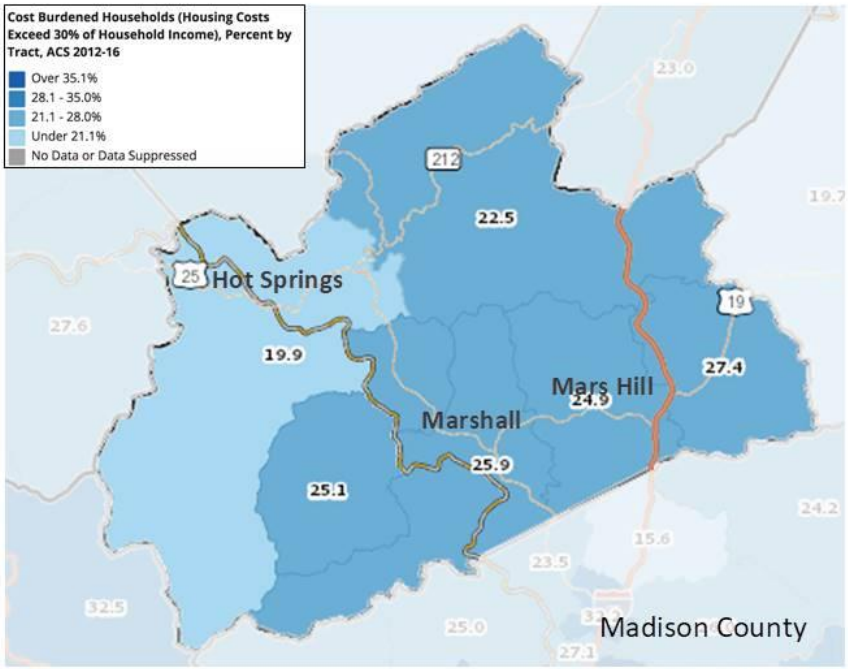
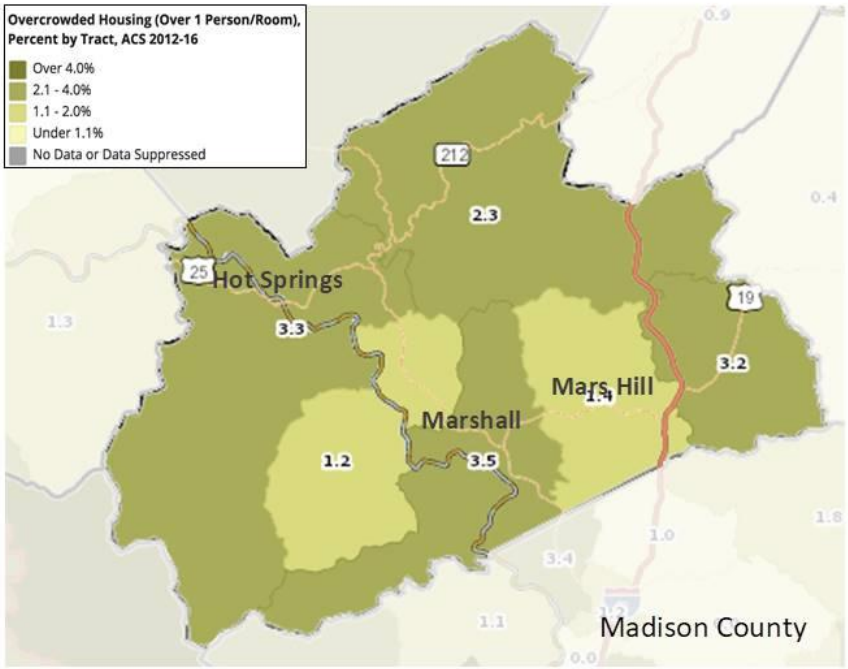
Percent of Cost Burdened Households



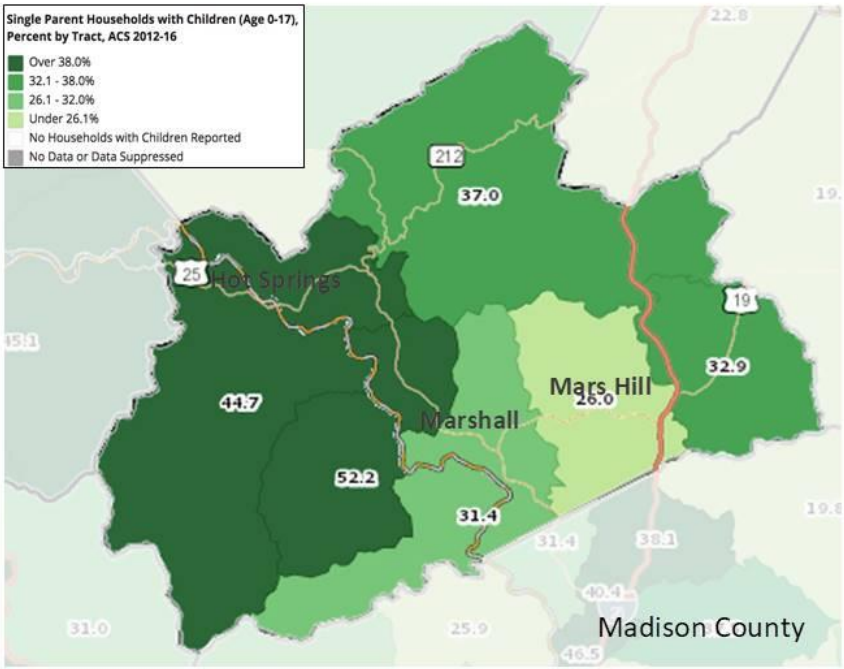
Click to see map in Community Commons

Percent of Overcrowded Households



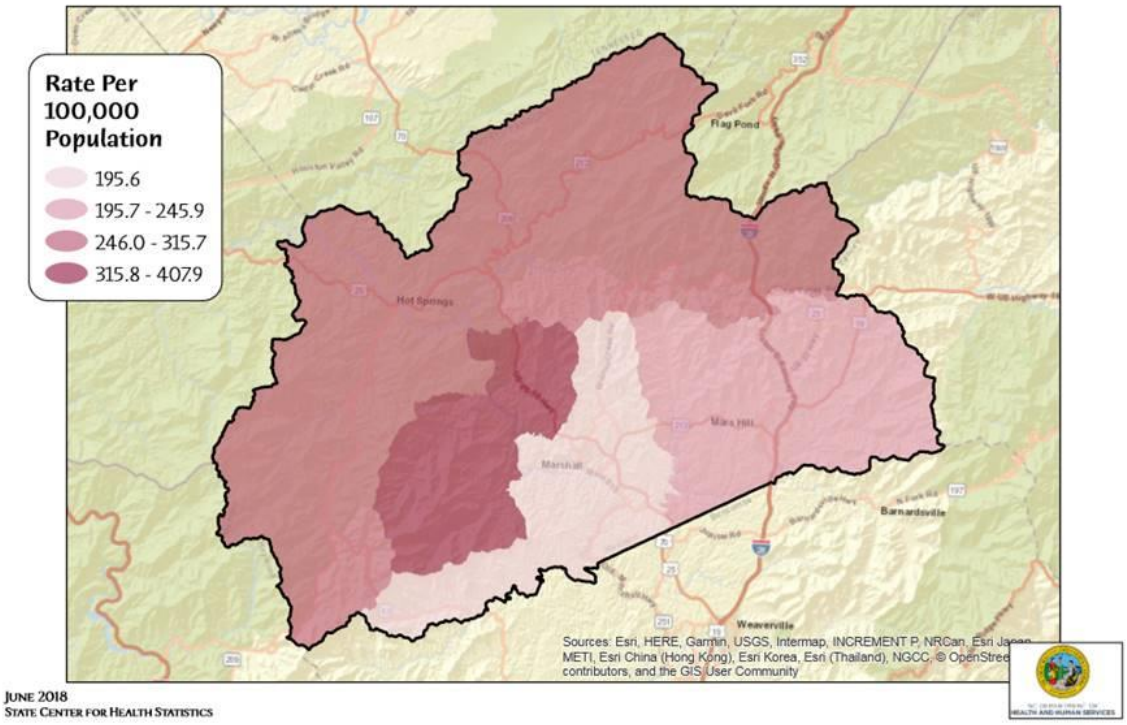
Click to see map in Community Commons

Percent of Single Parent Households



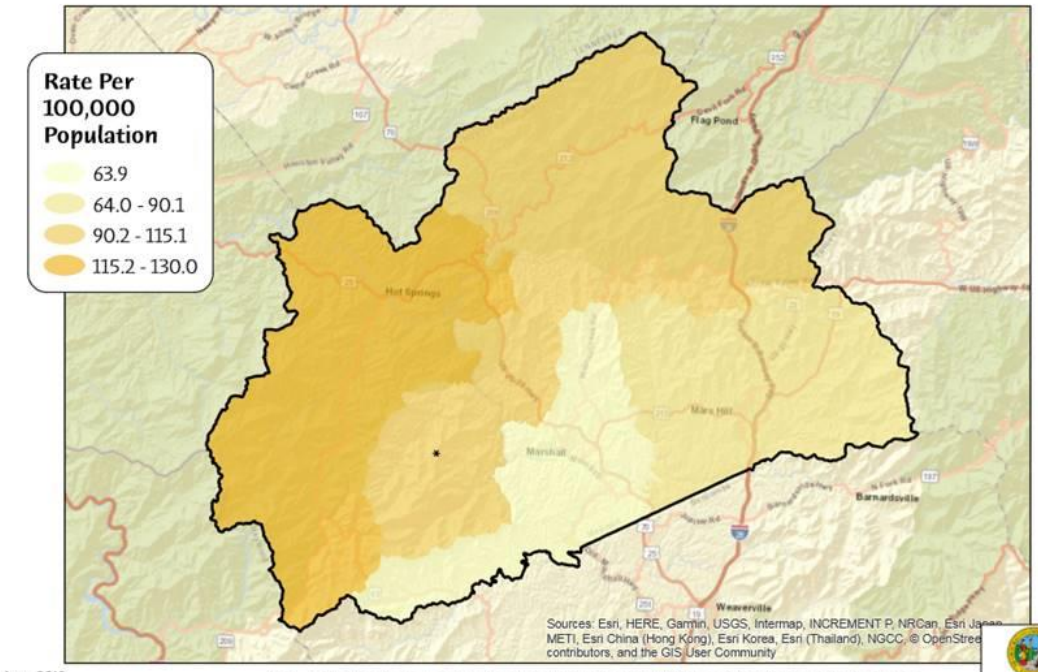
Click to see map in Community Commons

Heart Disease Mortality Rates



JUNE 2018
STATE CENTER FOR HEALTH STATISTICS

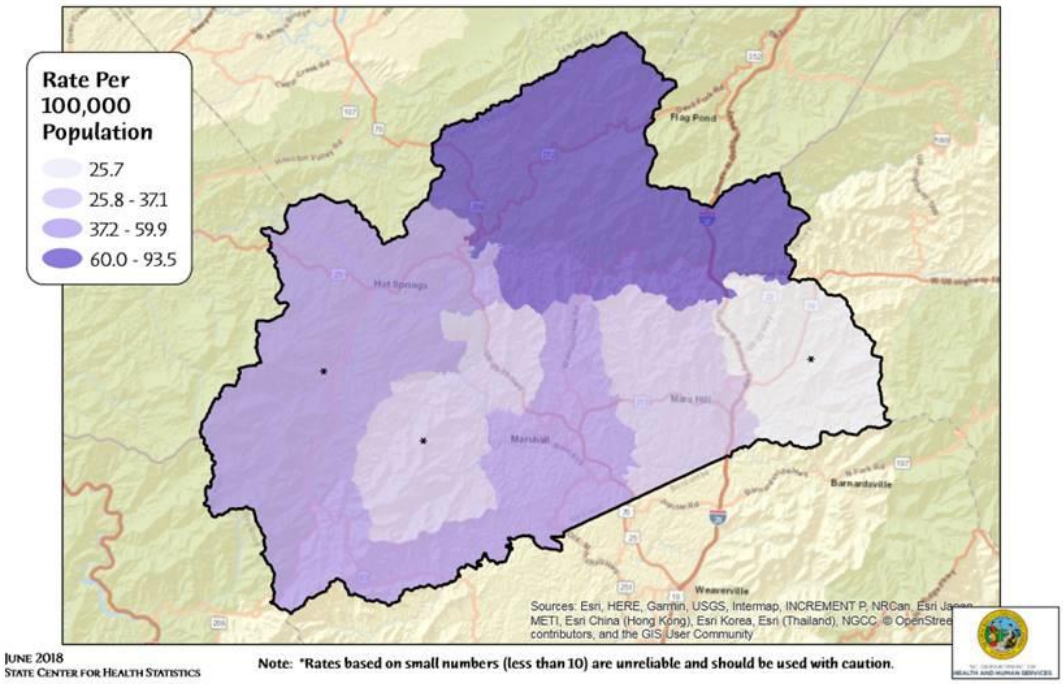
Chronic Lower Respiratory Disease Mortality Rates



JUNE 2018
STATE CENTER FOR HEALTH STATISTICS

Note: *Rates based on small numbers (less than 10) are unreliable and should be used with caution.

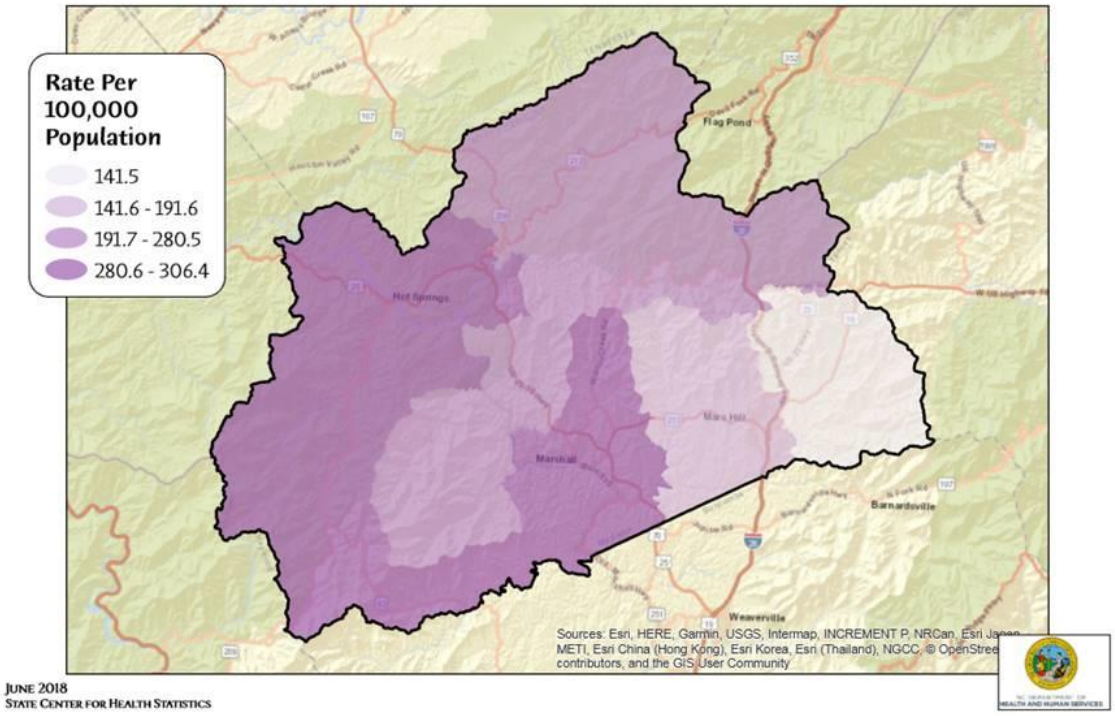
Other Unintentional Injuries Mortality Rates



JUNE 2018
STATE CENTER FOR HEALTH STATISTICS

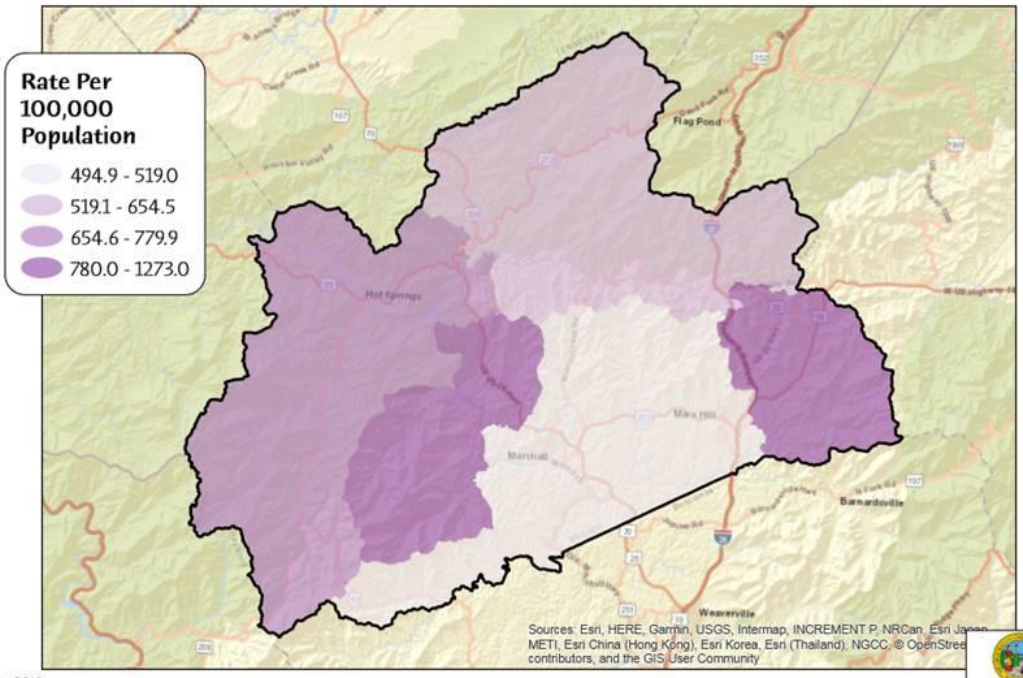
Note: *Rates based on small numbers (less than 10) are unreliable and should be used with caution.

All Cancers Mortality Rates



JUNE 2018
STATE CENTER FOR HEALTH STATISTICS

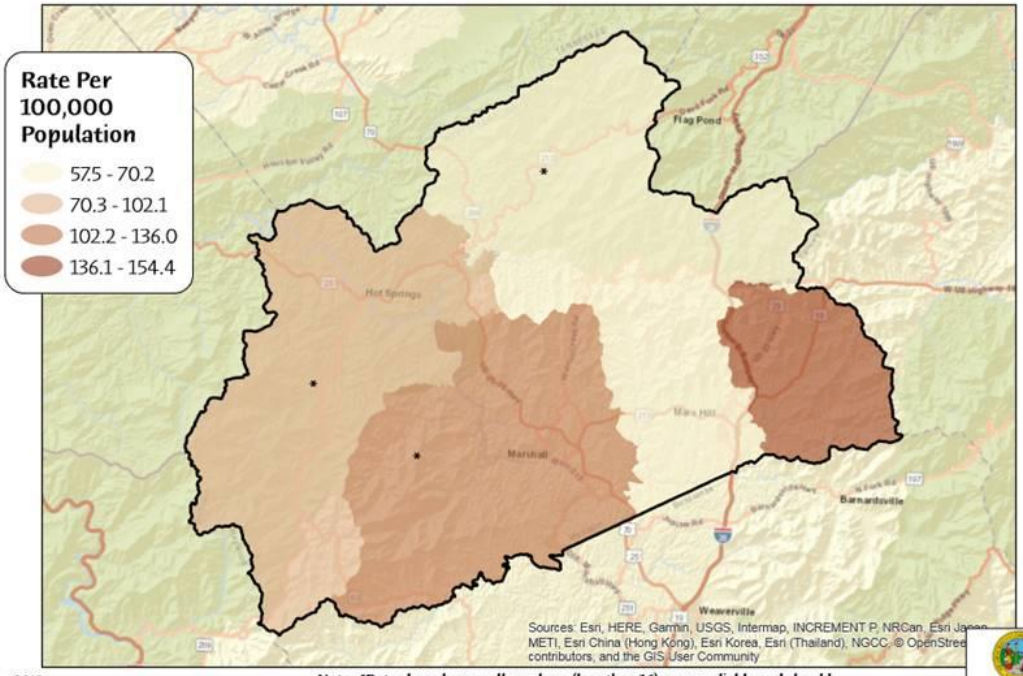
All Cancer Incidence Rates



JUNE 2018
STATE CENTER FOR HEALTH STATISTICS

Note: Information is subject to change as files are updated.

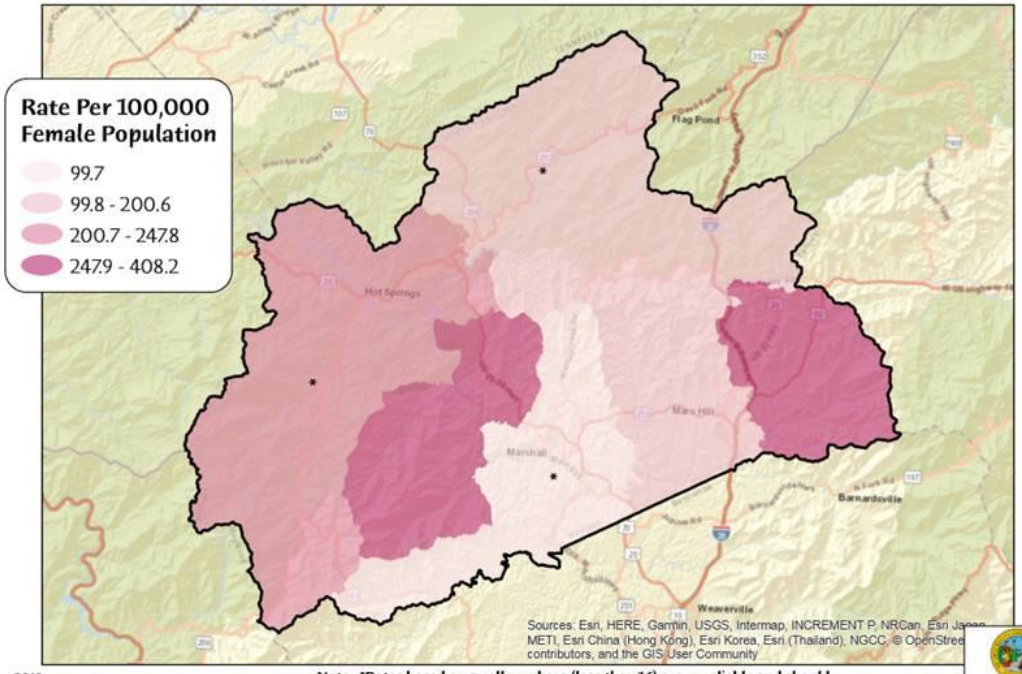
Lung and Bronchus Cancer Incidence Rates



JUNE 2018
STATE CENTER FOR HEALTH STATISTICS

Note: *Rates based on small numbers (less than 16) are unreliable and should be used with caution. Information is subject to change as files are updated.

Breast Cancer Incidence Rates



JUNE 2018
STATE CENTER FOR HEALTH STATISTICS

Note: *Rates based on small numbers (less than 16) are unreliable and should be used with caution. Information is subject to change as files are updated.

APPENDIX C – Survey Findings/Survey Results

Methodology

Survey methodology

- 2,602 surveys were completed via telephone (landline [71%] and cell phone [29%]); while 663 were completed online
- Allows for high participation and random selection
  - These are critical to achieving a sample representative of county and regional populations by gender, age, race/ethnicity, income
- English and Spanish

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Methodology

3,265 surveys throughout WNC

- Adults age 18+
- Gathered data for each of 16 counties
- Weights were added to enhance representativeness of data at county and regional levels

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Methodology

Individual county samples allow for drill-down by:

- Gender
- Income
- Other categories, based on question responses

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Survey Instrument

Based largely on national survey models

- When possible, question wording from public surveys (e.g., CDC BRFSS)

75 questions asked of all counties

- Each county added three county-specific questions
- Approximately 15-minute interviews
- Questions determined by WNC stakeholder input

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Keep in mind

Sampling levels allow for good local confidence intervals, but you should still keep in mind that error rates are larger at the county level than for WNC as a region

- Results for WNC regional data have maximum error rate of +1.7% at the 95% confidence level
- Results for Buncombe County have maximum error rate of +5.6% at the 95% confidence level
- Results for Graham County have maximum error rate of +7.8% at the 95% confidence level
- Results for other individual counties have maximum error rate of +6.9% at the 95% confidence level

PRC indicates in regional report when differences – between county and regional results, different demographic groups, and 2012 to 2015 – are statistically significant

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Keep in mind

For more detailed information on methods, see:

- PRC's Primary Data Collection: Research Approach & Methods document (2018)
- County-specific CH(N)A Templates

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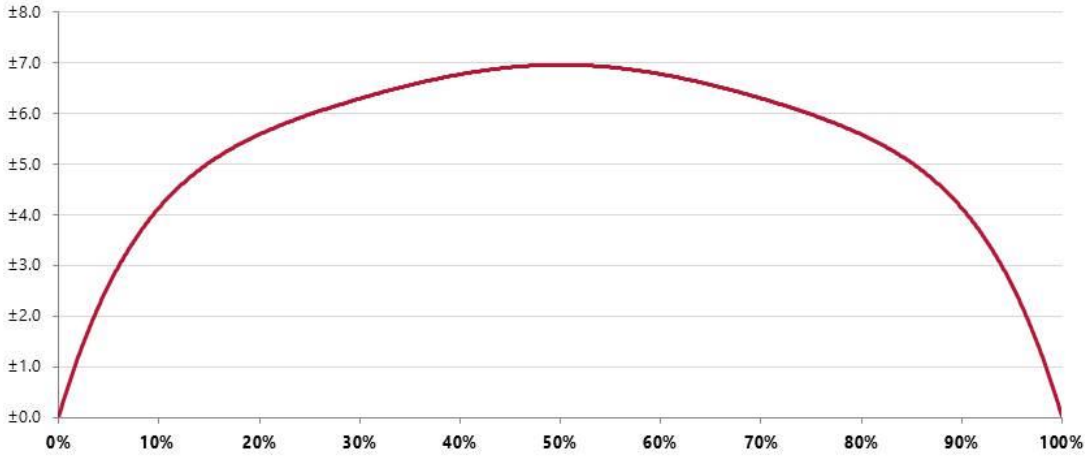
Expected Error Ranges for a Sample of 200 Respondents at the 95 Percent Level of Confidence



Note:
- The "response rate" (the percentage of a population giving a particular response) determines the error rate associated with that response. A "95 percent level of confidence" indicates that responses would fall within the expected error range on 95 out of 100 trials.

Examples:
- If 10% of the sample of 200 respondents answered a certain question with a "yes," it can be asserted that between 5.8% and 14.2% (10% ± 4.2%) of the total population would offer this response.
- If 50% of respondents said "yes," one could be certain with a 95 percent level of confidence that between 43.1% and 56.9% (50% ± 6.9%) of the total population would respond "yes" if asked this question.

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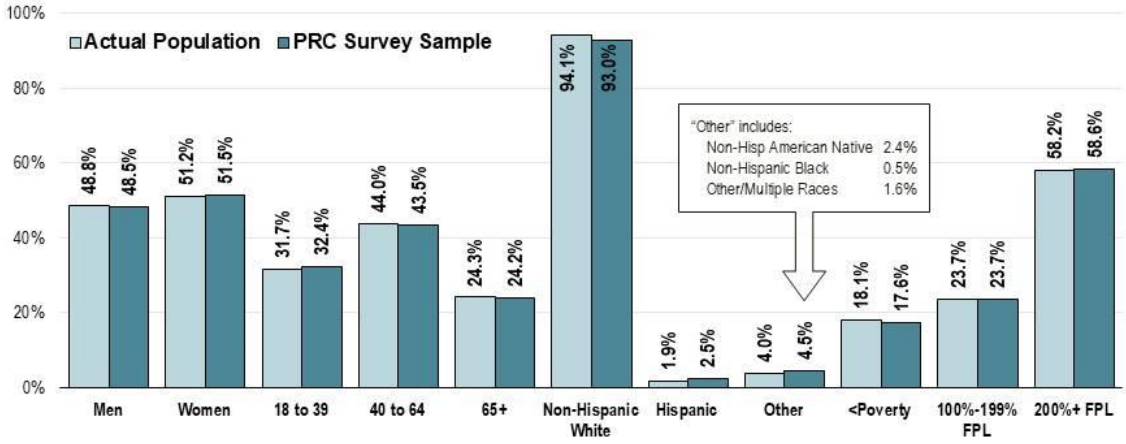
Population & Survey Sample Characteristics

(Age 18 and Older; Madison County, 2018)



Sources:
- 2011-2015 American Community Survey. U.S. Census Bureau.
- PRC Community Health Survey, Professional Research Consultants, Inc.

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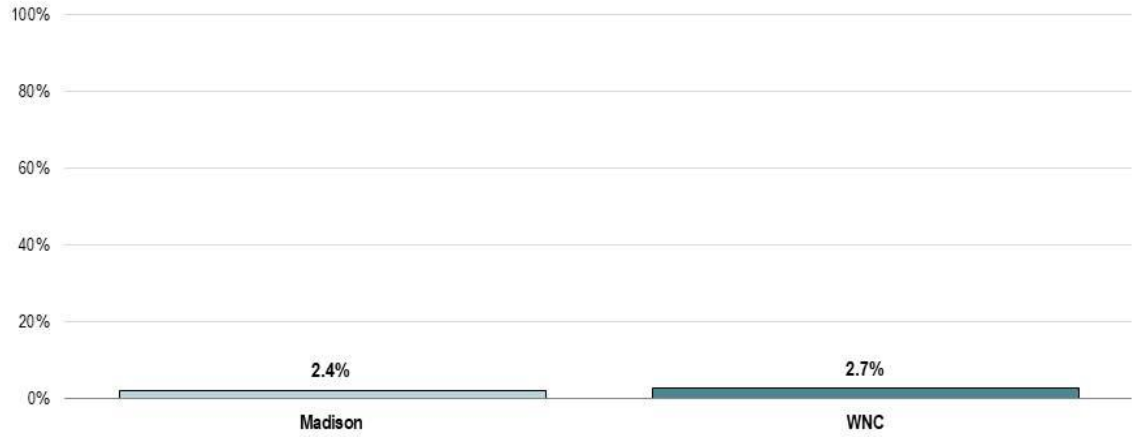
Native American Sample
(2018)



Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 178, 321]
Notes: • Asked of all respondents.

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QUALITY OF LIFE

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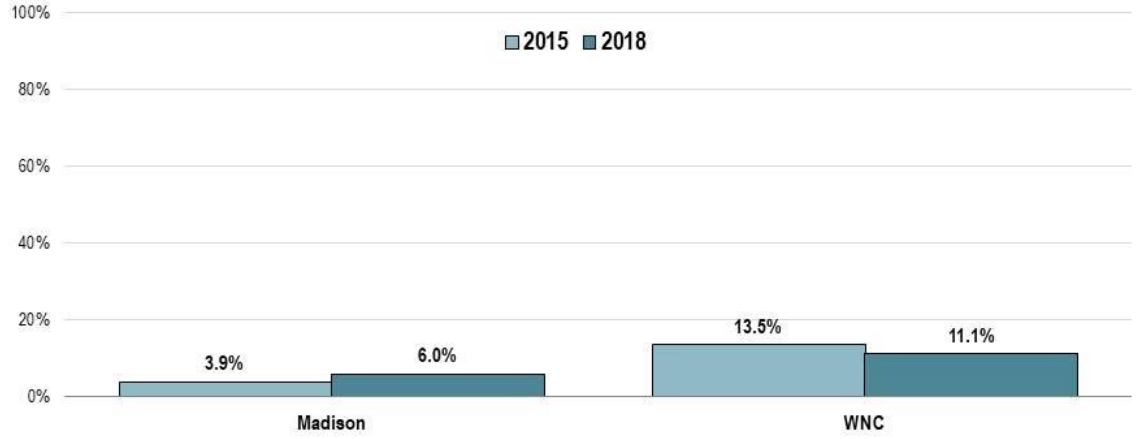
County Is a "Fair/Poor" Place to Live



Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 301]
Notes: • Asked of all respondents.

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Top Three County Issues Perceived as in Most Need of Improvement

(2018)

	Madison	WNC
Availability of Employment	✓	✓
Road Maintenance		✓
Higher Paying Employment		
Drugs		
Affordable/Better Housing		✓
Better/More Affordable Healthcare		
Internet Availability	✓	
The Justice System/Law Enforcement		
Government		
Nothing	✓	

Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 302]
Notes: • Asked of all respondents.

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SELF-REPORTED HEALTH STATUS

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Overall Health

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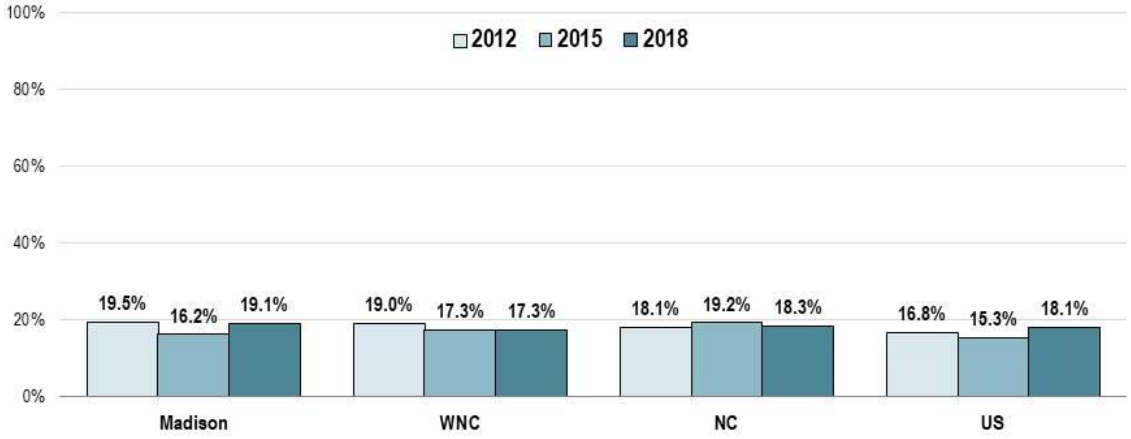
Experience "Fair" or "Poor" Overall Health



Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 5]
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2016 North Carolina data.
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.

Notes:
- Asked of all respondents.

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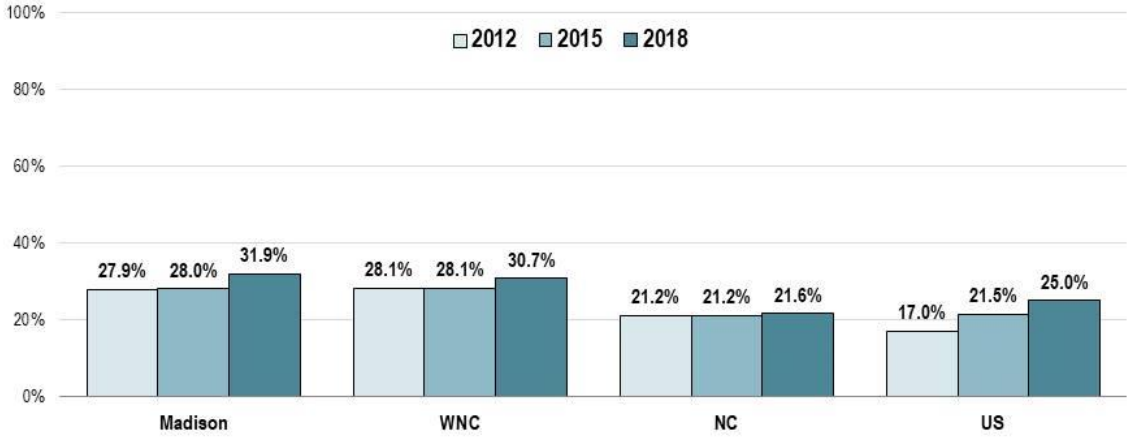
Limited in Activities in Some Way Due to a Physical, Mental, or Emotional Problem



Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 109]
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2015 North Carolina data.
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.

Notes:
- Asked of all respondents.

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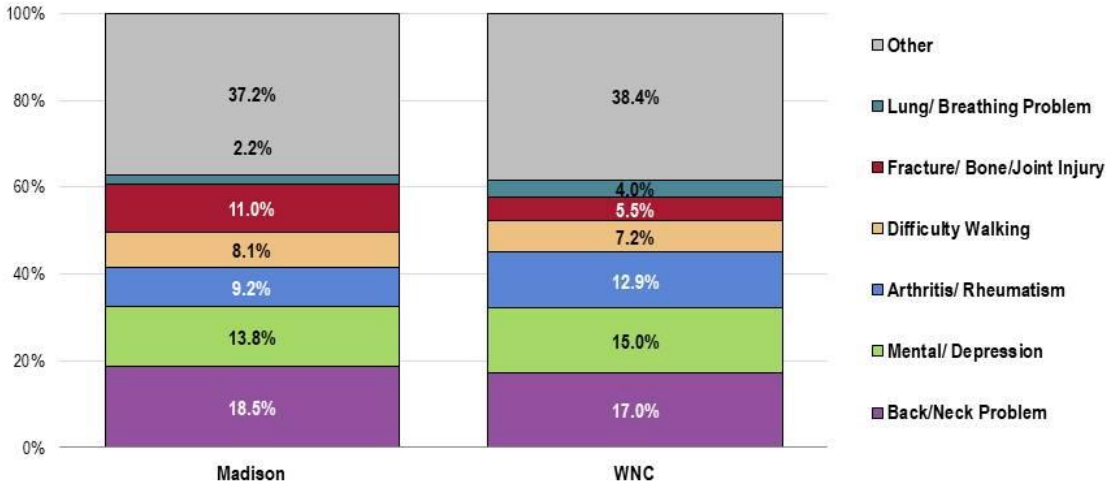
Type of Problem That Limits Activities

(Among Those Reporting Activity Limitations; By County, 2018)



Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 110]
Notes: • Asked of respondents who noted some type of activity limitation.

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Mental Health & Mental Disorders

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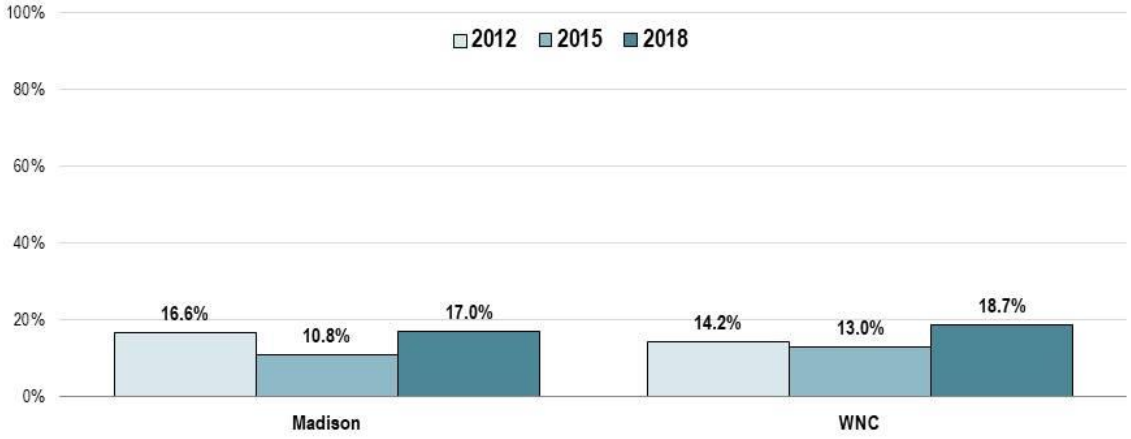
>7 Days of Poor Mental Health in the Past Month



Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 337]
Notes: • Asked of all respondents.

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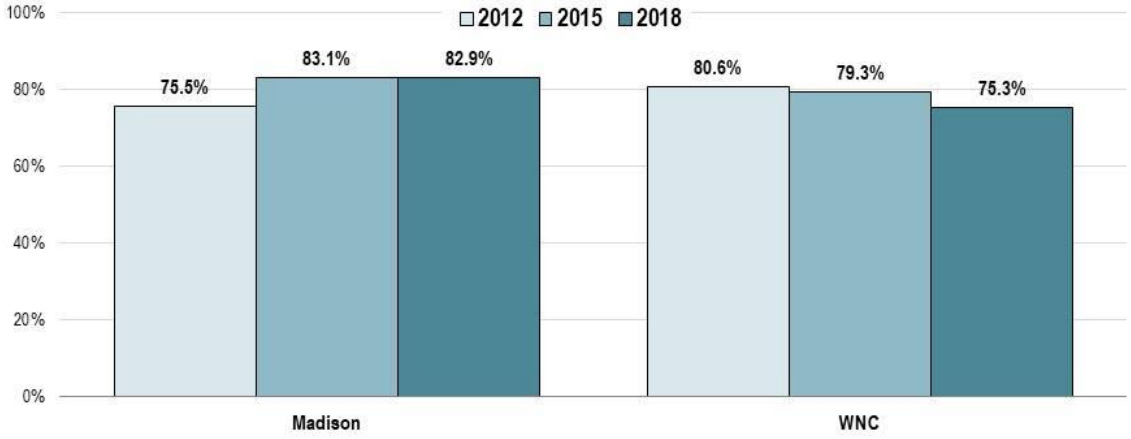
"Always" or "Usually" Get Needed Social/Emotional Support



Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 336]
Notes: • Includes "always" and "usually" responses.

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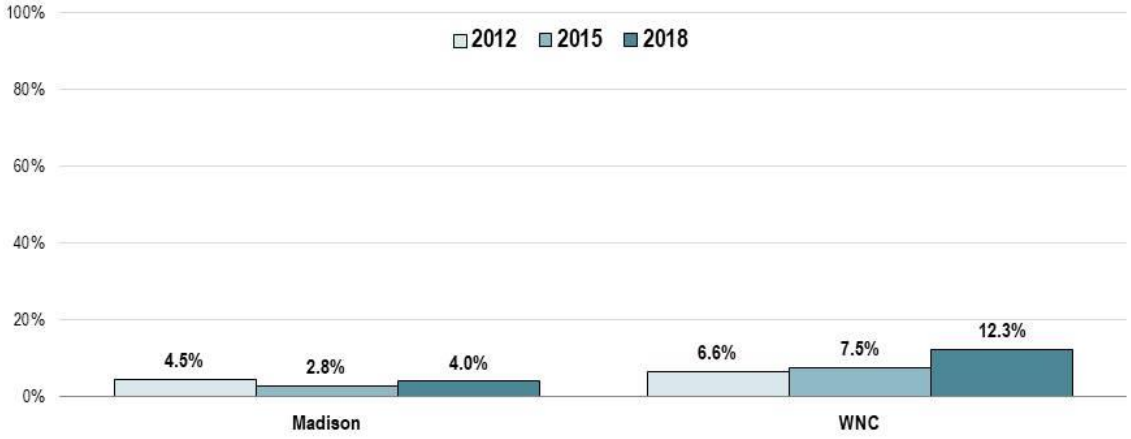
Did Not Get Mental Health Care or Counseling that was Needed in the Past Year



Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 105]
Notes: • Asked of all respondents.

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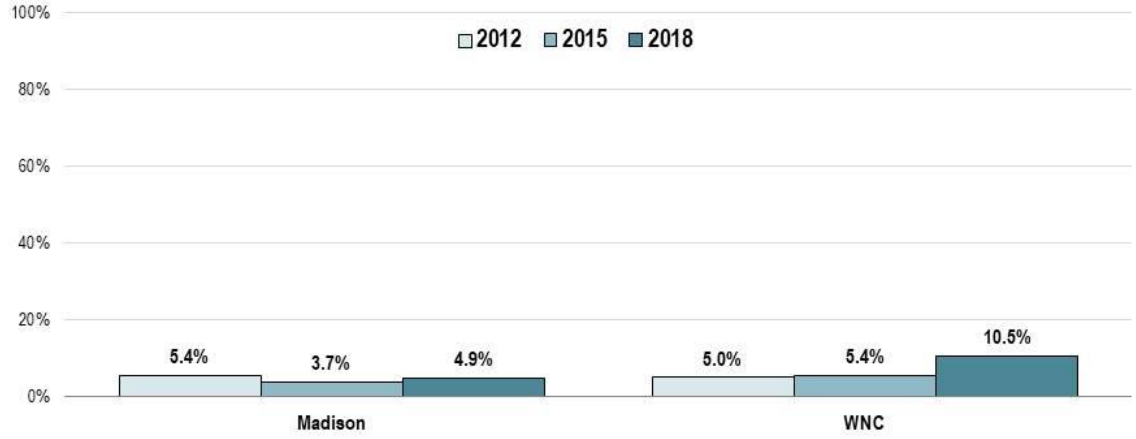
Dissatisfied with Life

("Dissatisfied" and "Very Dissatisfied" Responses)



Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 335]
Notes: • Asked of all respondents.

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Adverse Childhood Experiences (ACEs)

Category	Question
Household Mental Illness	Before you were 18 years of age, did you live with anyone who was depressed, mentally ill, or suicidal?
Household Substance Abuse	Before you were 18 years of age, did you live with anyone who was a problem drinker or alcoholic?
	Before you were 18 years of age, did you live with anyone who used illegal street drugs or who abused prescription medications?
Incarcerated Household Member	Before you were 18 years of age, did you live with anyone who served time or was sentenced to serve time in a prison, jail, or other correctional facility?
Parental Separation or Divorce	Before you were 18 years of age, were your parents separated or divorced?
Intimate Partner Violence	Before age 18, how often did your parents or adults in your home slap, hit, kick, punch or beat each other up?
Physical Abuse	Before age 18, how often did a parent or adult in your home hit, beat, kick, or physically hurt you in any way? Do not include spanking.
Emotional Abuse	Before age 18, how often did a parent or adult in your home swear at you, insult you, or put you down?
Sexual Abuse	Before you were 18 years of age, how often did an adult or anyone at least 5 years older than you touch you sexually?
	Before you were 18 years of age, how often did an adult or anyone at least 5 years older than you try to make you touch them sexually?
	Before you were 18 years of age, how often did an adult or anyone at least 5 years older than you force you to have sex?

Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 339-349, 351-360]
Notes: • Reflects the total sample of respondents.

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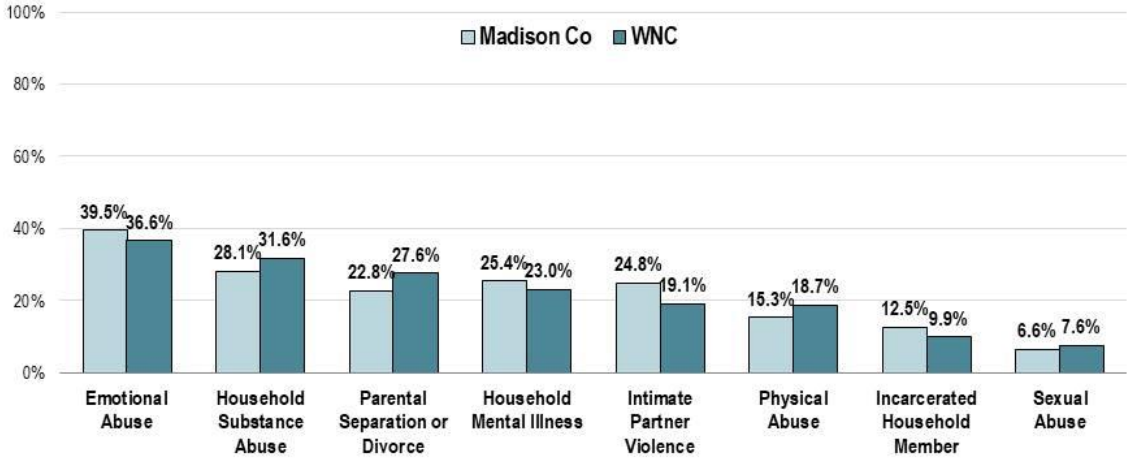
Experienced Adverse Childhood Experiences (ACEs) Prior to Age 18

(2018)



Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 351-358]

Notes:
- Asked of all respondents (Adults 18+).
- ACEs are stressful or traumatic events, including abuse and neglect. They are a significant risk factor for substance abuse disorders and can impact prevention efforts.

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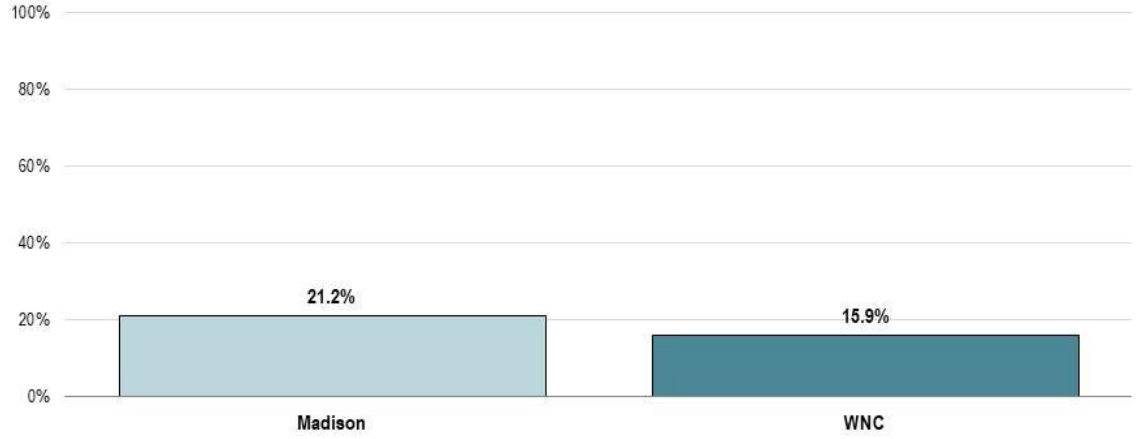
Prevalence of High ACE Scores (4 or More)

(2018)



Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 359]

Notes:
- Asked of all respondents (Adults 18+).
- ACEs are stressful or traumatic events, including abuse and neglect. They are a significant risk factor for substance abuse disorders and can impact prevention efforts.
- Adults with at least one adverse childhood experience (ACE) are categorized as having a low ACE score (1-3 ACEs) or a high score (4+ ACEs).

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CHRONIC CONDITIONS

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Cardiovascular Risk

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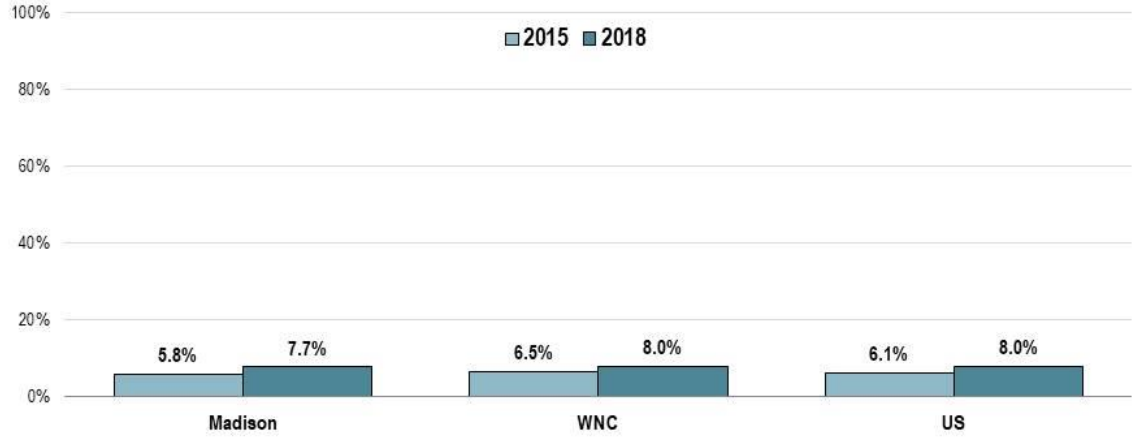
Prevalence of Heart Disease



Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 309]
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.

Notes:
- Asked of all respondents.

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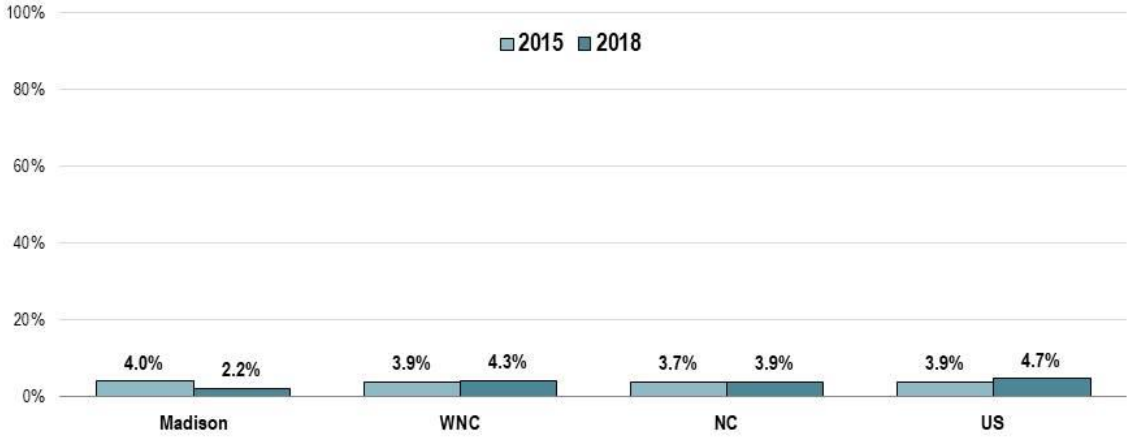
Prevalence of Stroke



Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 33]
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2016 North Carolina data.
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.

Notes:
- Asked of all respondents.

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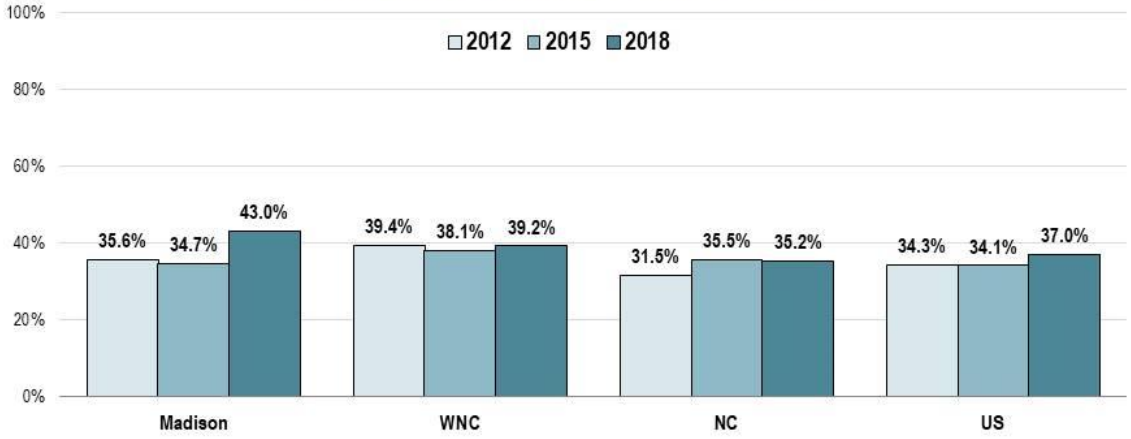
Prevalence of High Blood Pressure

Healthy People 2020 Target = 26.9% or Lower



Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 39]
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2015 North Carolina data.
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.

Notes:
- Asked of all respondents.

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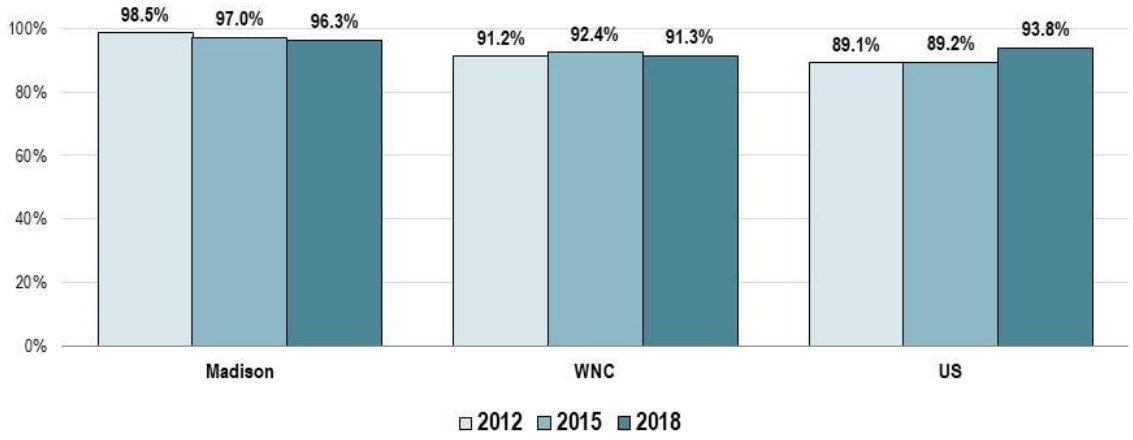
Taking Action to Control High Blood Pressure

(Among Adults with High Blood Pressure)



Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 41]
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.

Notes:
- Asked of respondents reporting having ever been diagnosed with high blood pressure.

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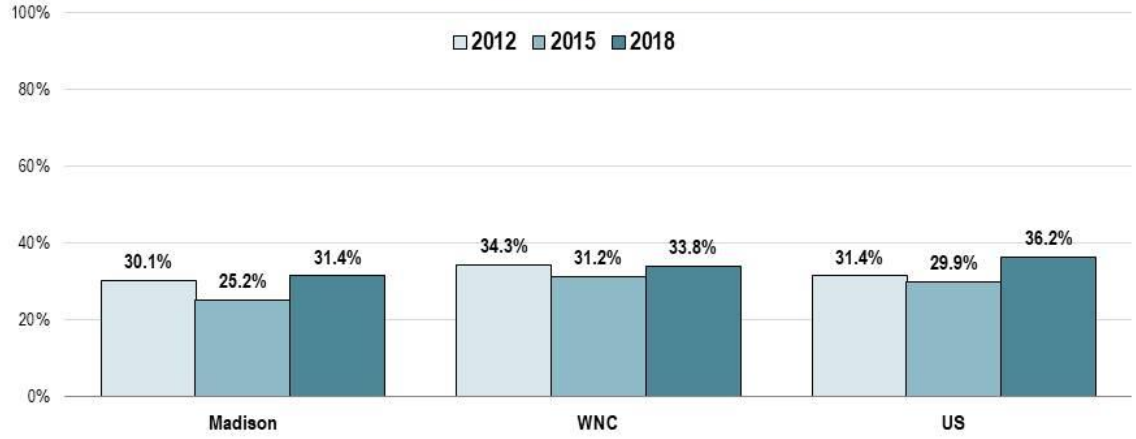
Prevalence of High Blood Cholesterol

Healthy People 2020 Target = 13.5% or Lower



Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 43]
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.

Notes:
- Asked of all respondents.

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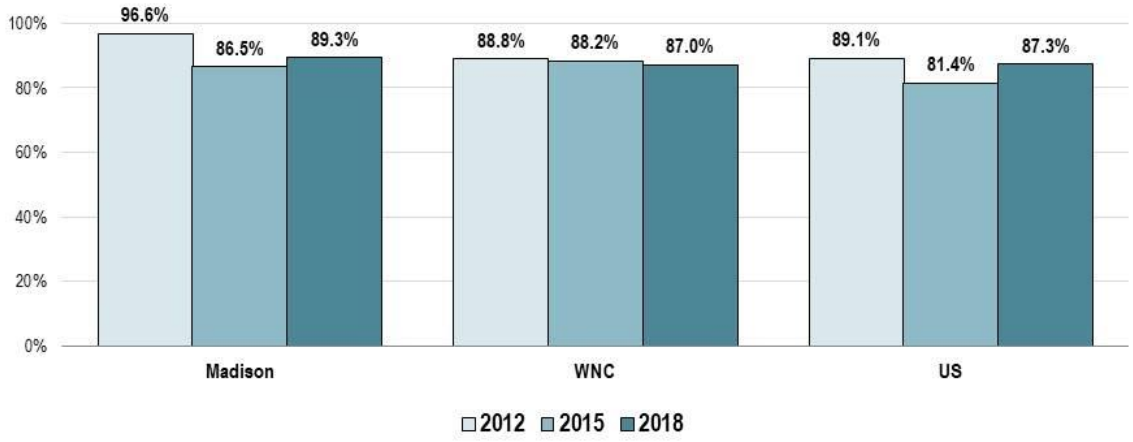
Taking Action to Control High Blood Cholesterol

(Among Adults with High Blood Cholesterol Levels)



Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 44]
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.

Notes:
- Asked of respondents reporting having ever been diagnosed with high blood cholesterol.

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Diabetes

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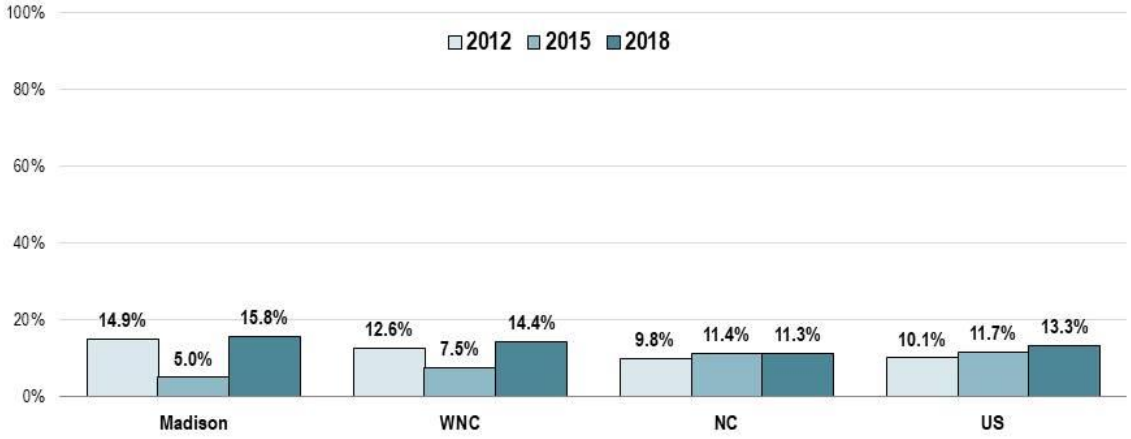
Prevalence of Diabetes (Ever Diagnosed)



Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 140]
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2016 North Carolina data.
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.

Notes:
- Asked of all respondents.

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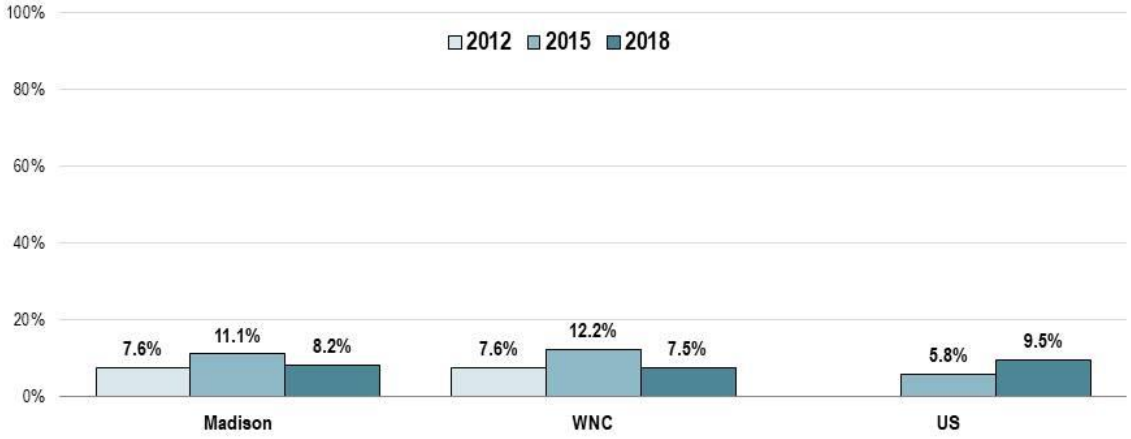
Prevalence of Borderline or Pre-Diabetes



Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 140]
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.

Notes:
- Asked of all respondents.

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Respiratory Conditions

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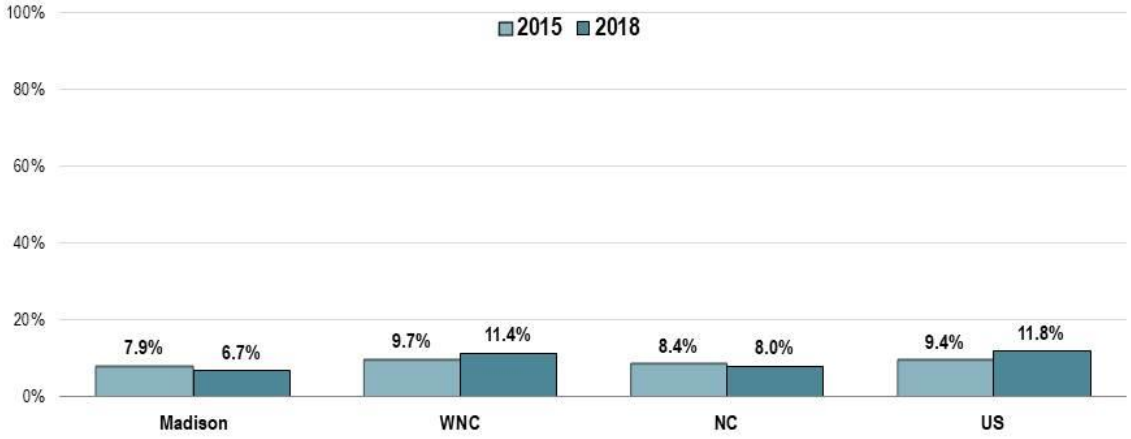
Prevalence of Current Asthma



Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 138]
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2015 North Carolina data.
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.

Notes:
- Asked of all respondents.

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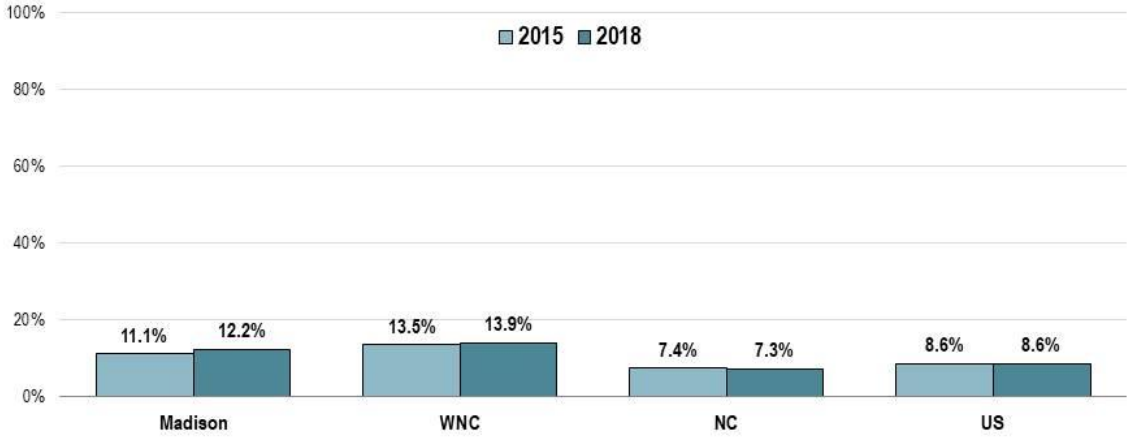
Prevalence of Chronic Obstructive Pulmonary Disease (COPD)



Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 24]
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2016 North Carolina data.
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.

Notes:
- Asked of all respondents.

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MODIFIABLE HEALTH RISKS

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Nutrition

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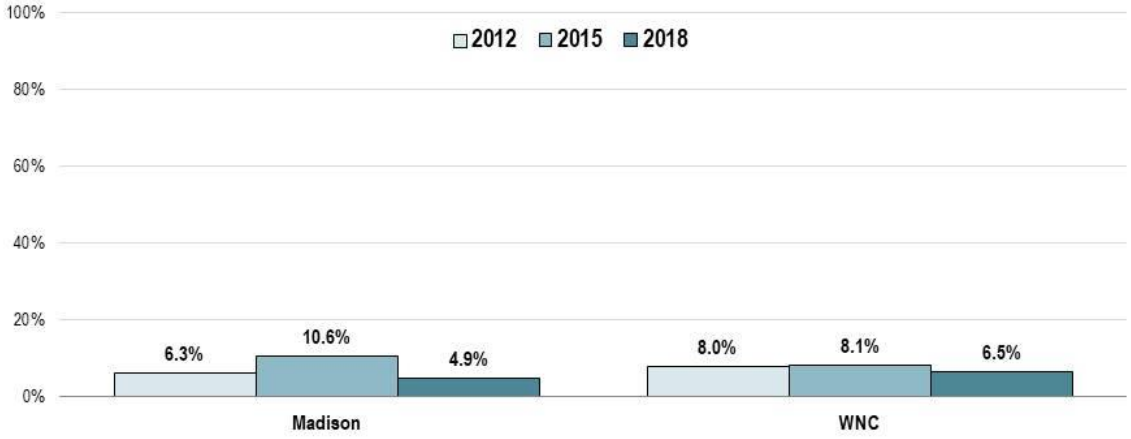
Consume Five or More Servings of Fruits/Vegetables Per Day



Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 148]

Notes:
- Asked of all respondents.
- For this issue, respondents were asked to recall their food intake during the previous week. Reflects 1-cup servings of fruits and/or vegetables in the past week, excluding lettuce salad and potatoes.

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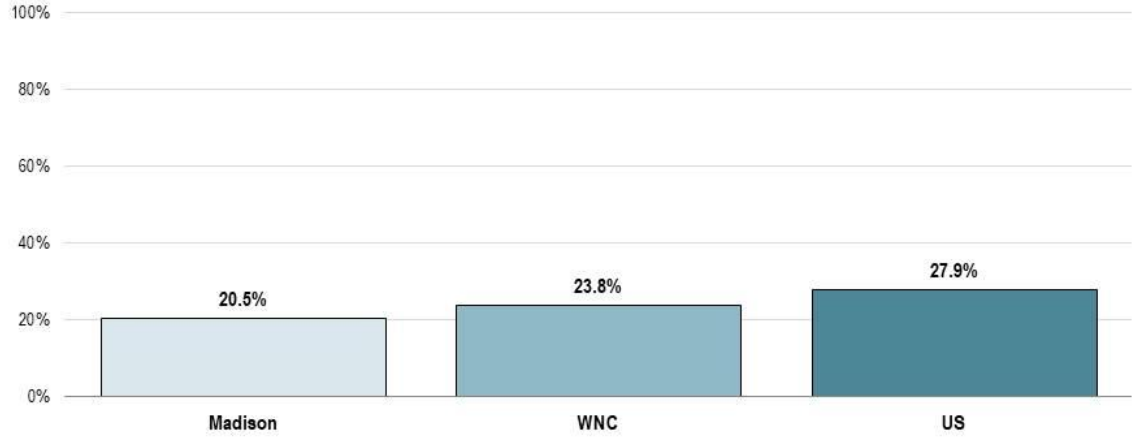
Food Insecurity
(2018)



Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 149]
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.

Notes:
- Asked of all respondents.
- Includes adults who A) ran out of food at least once in the past year and/or B) worried about running out of food in the past year.

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Physical Activity & Fitness

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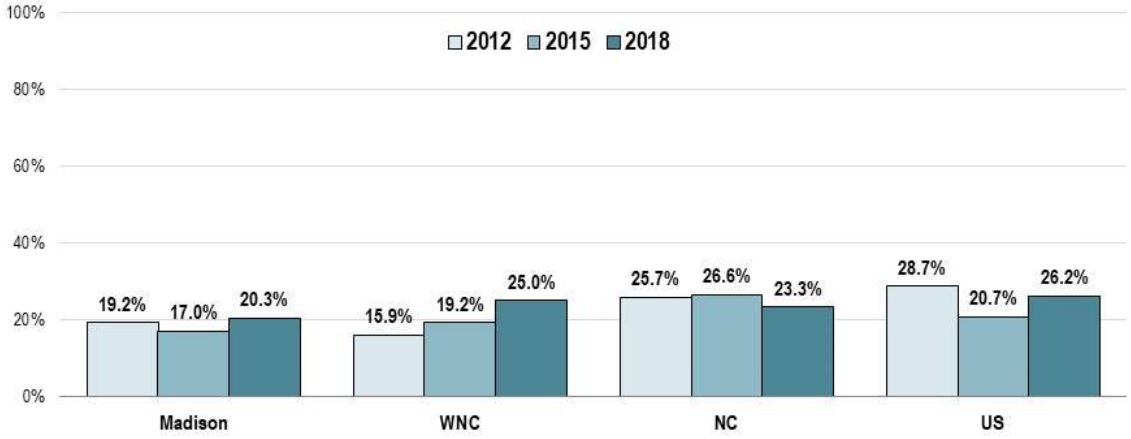
No Leisure-Time Physical Activity in the Past Month

Healthy People 2020 Target = 32.6% or Lower



Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 89]
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2016 North Carolina data.
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective PA-1]

Notes:
- Asked of all respondents.

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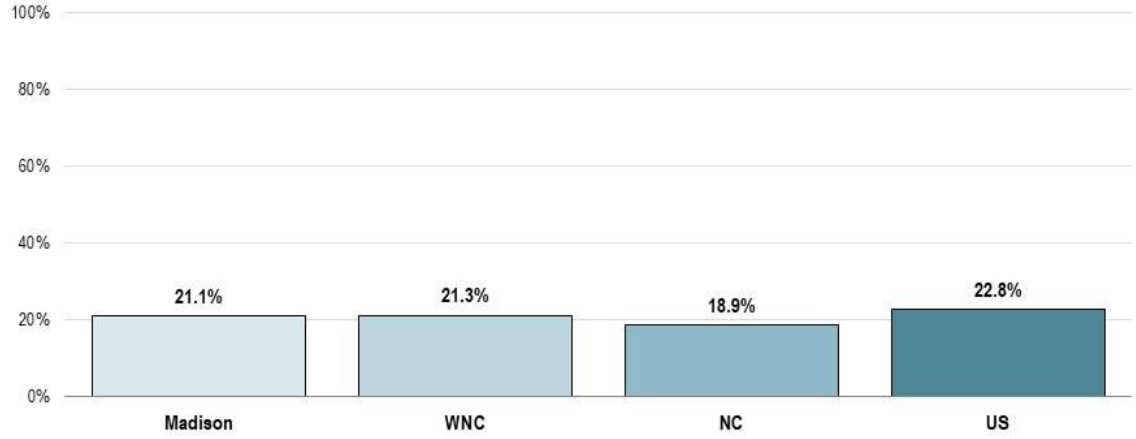
Meets Physical Activity Recommendations

(2018)

Healthy People 2020 Target = 20.1% or Higher



Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 152]
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2015 North Carolina data.
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective PA-2.4]

Notes:
- Asked of all respondents.

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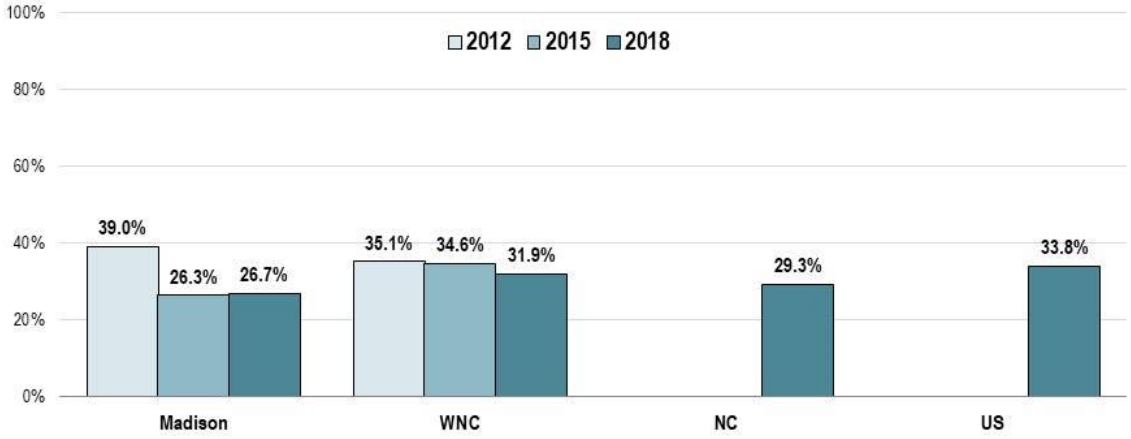
Strengthening Physical Activity



Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 151]
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2015 North Carolina data.
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.

Notes:
- Asked of all respondents.
- Takes part in physical activities or exercises that strengthen muscles at least 2 times per week.

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Body Weight

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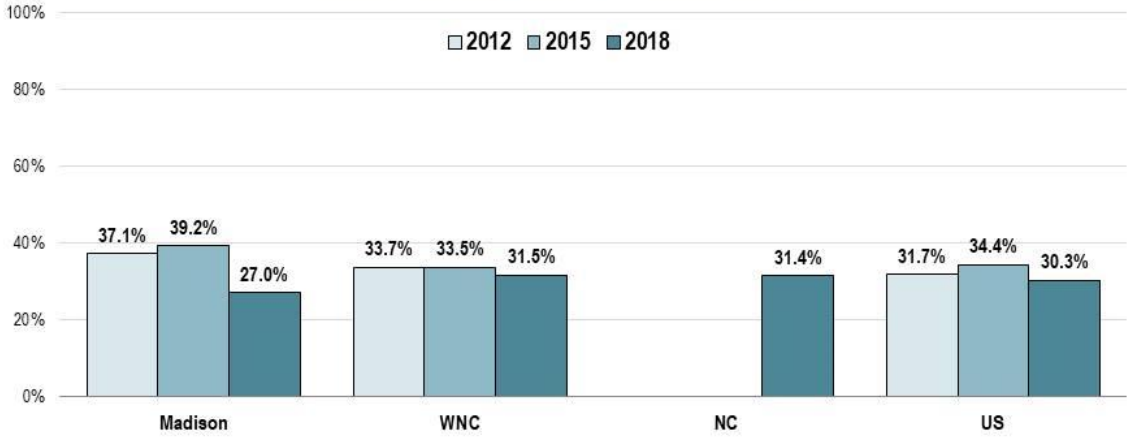
Healthy Weight

(Body Mass Index Between 18.5 and 24.9)

Healthy People 2020 Target = 33.9% or Higher



Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 154]
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2016 North Carolina data.
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective NWS-8]

Notes:
- Based on reported heights and weights; asked of all respondents.
- The definition of healthy weight is having a body mass index (BMI), a ratio of weight to height (kilograms divided by meters squared), between 18.5 and 24.9.

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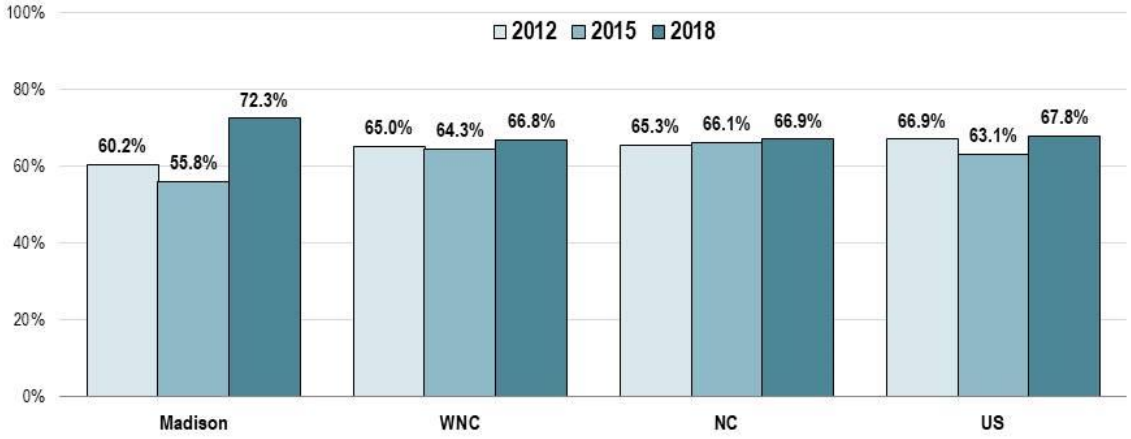
Total Overweight (Overweight or Obese)

(Body Mass Index of 25.0 or Higher)



Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 154]
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2016 North Carolina data.
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.

Notes:
- Based on reported heights and weights; asked of all respondents.
- The definition of overweight is having a body mass index (BMI), a ratio of weight to height (kilograms divided by meters squared), greater than or equal to 25.0, regardless of gender. The definition for obesity is a BMI greater than or equal to 30.0.

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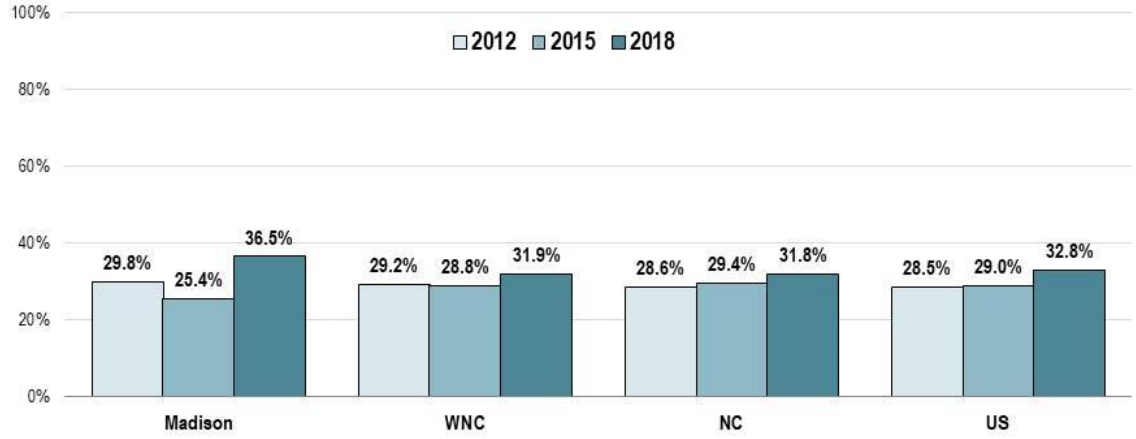
Obesity

(Body Mass Index of 30.0 or Higher)

Healthy People 2020 Target = 30.6% or Lower



Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 154]
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2016 North Carolina data.
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective NWS-9]

Notes:
- Based on reported heights and weights; asked of all respondents.
- The definition of obesity is having a body mass index (BMI), a ratio of weight to height (kilograms divided by meters squared), greater than or equal to 30.0, regardless of gender.

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Substance Abuse

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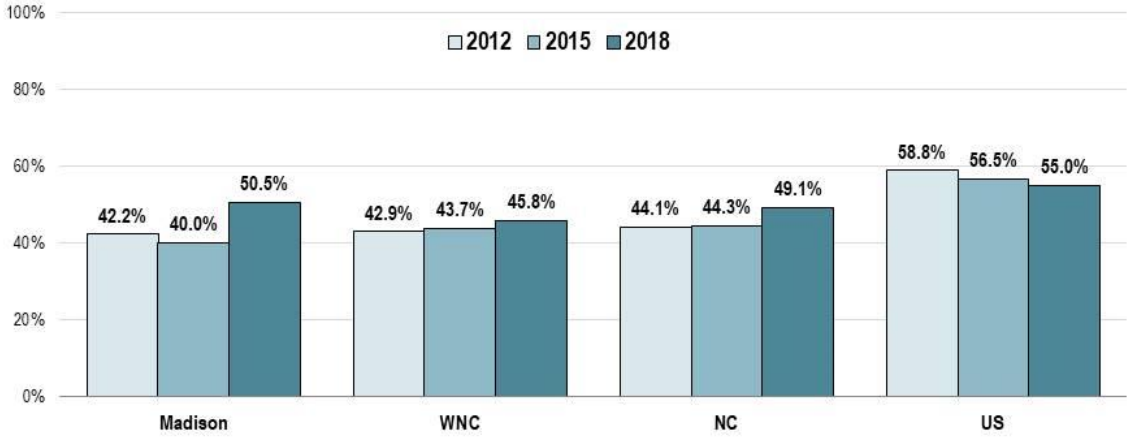
Current Drinkers



Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 164]
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2016 North Carolina data.
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.

Notes:
- Asked of all respondents.
- Current drinkers had at least one alcoholic drink in the past month.

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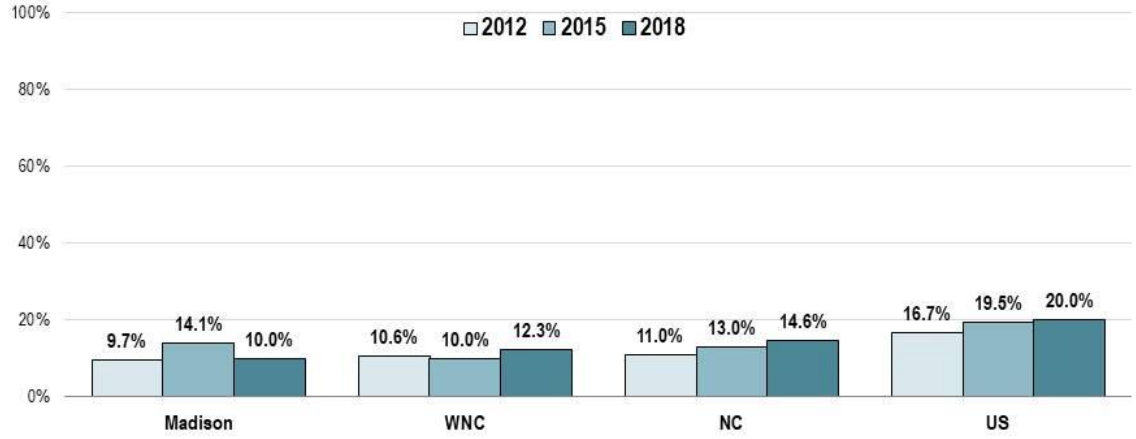
Binge Drinkers

Healthy People 2020 Target = 24.2% or Lower



Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 166]
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2016 North Carolina data.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective SA-14.3]

Notes:
- Asked of all respondents.
- Binge drinkers are defined as men consuming 5+ alcoholic drinks on any one occasion in the past month or women consuming 4+ alcoholic drinks on any one occasion in the past month.
- Previous survey data classified both men and women as binge drinkers if they had 5+ alcoholic drinks on one occasion in the past month.

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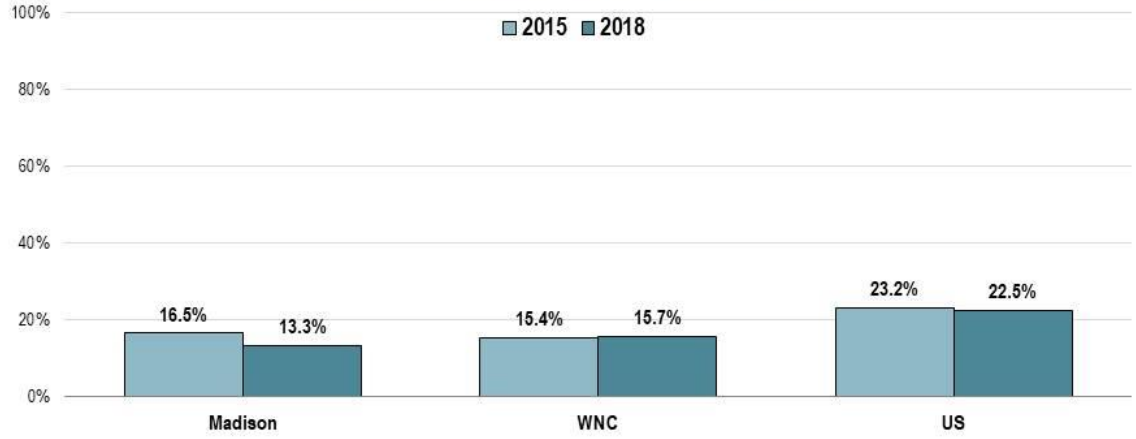
Excessive Drinkers

Healthy People 2020 Target = 25.4% or Lower



Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 168]
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective SA-15]

Notes:
- Asked of all respondents.
- Excessive drinking reflects the number of persons aged 18 years and over who drank more than two drinks per day on average (for men) or more than one drink per day on average (for women) OR who drank 5 or more drinks during a single occasion (for men) or 4 or more drinks during a single occasion (for women) during the past 30 days.

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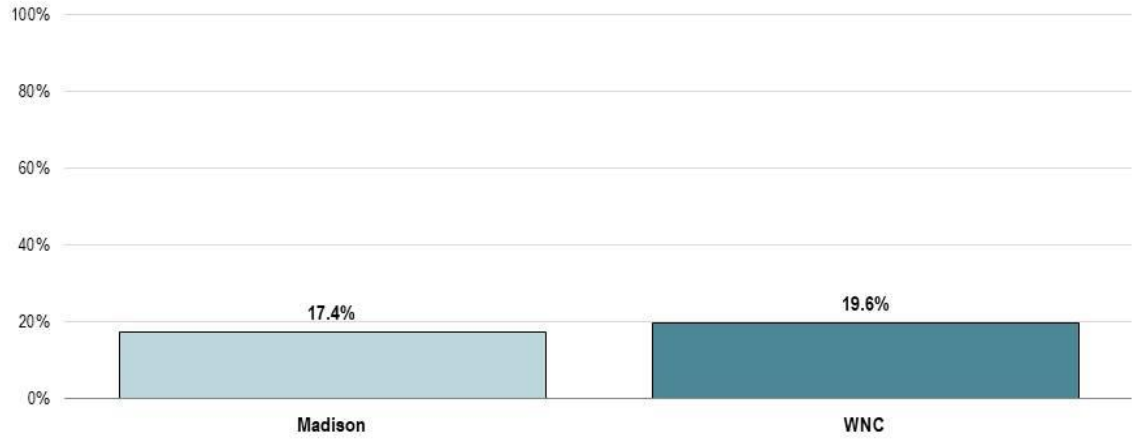
Used Opiates/Opioids in the Past Year, With or Without a Prescription

(2018)



Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 316]
Notes: • Asked of all respondents.

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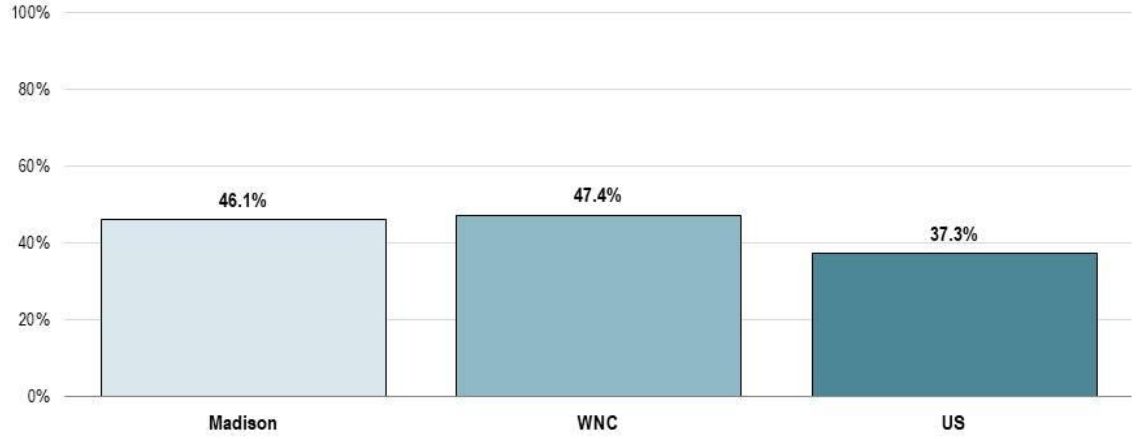
Life Has Been Negatively Affected by Substance Abuse (by Self or Someone Else)

(2018)



Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 61]
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.

Notes:
- Asked of all respondents.

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Tobacco Use

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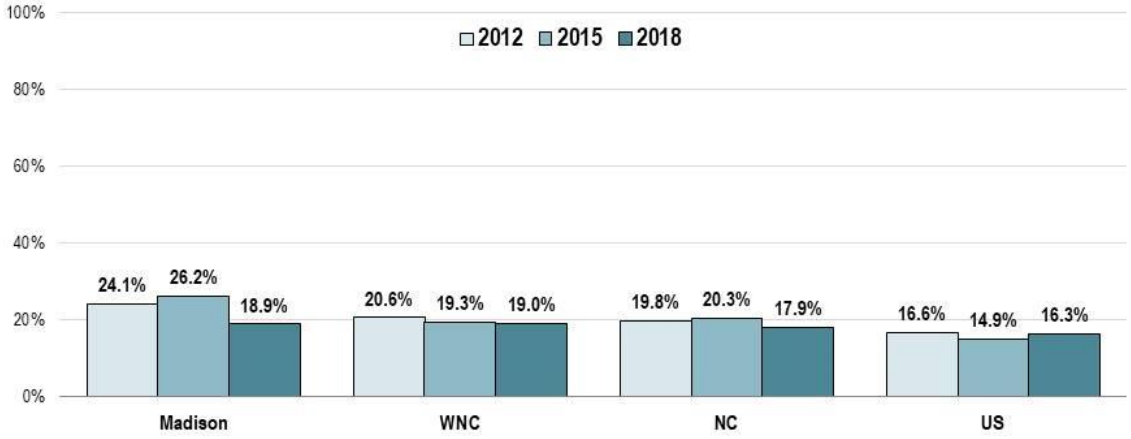
Current Smokers

Healthy People 2020 Target = 12.0% or Lower



Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 49]
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2016 North Carolina data.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective TU-1.1]

Notes:
- Asked of all respondents.
- Includes regular and occasional smokers (everyday and some days).

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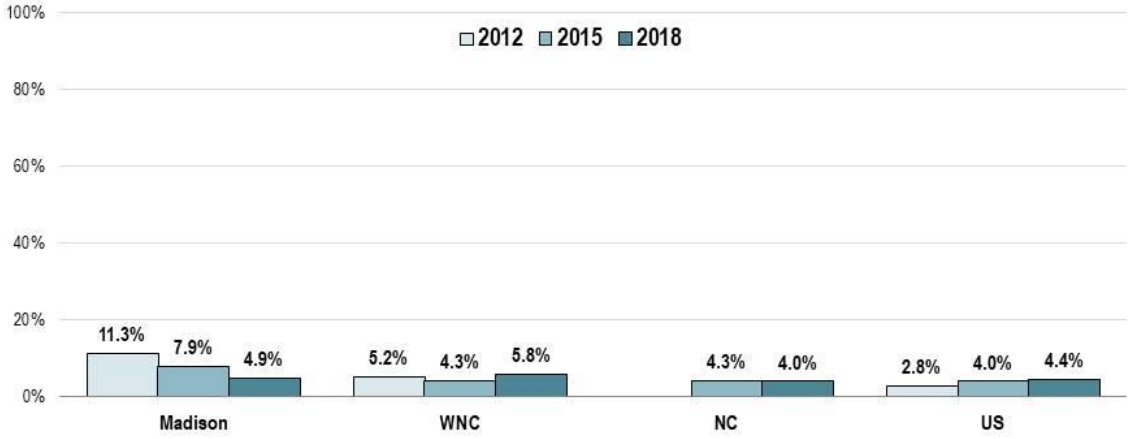
Currently Use Smokeless Tobacco Products

Healthy People 2020 Target = 0.3% or Lower



Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 313]
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2016 North Carolina data.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective TU-1.2]

Notes:
- Asked of all respondents.
- Includes regular and occasional smokers (everyday and some days).

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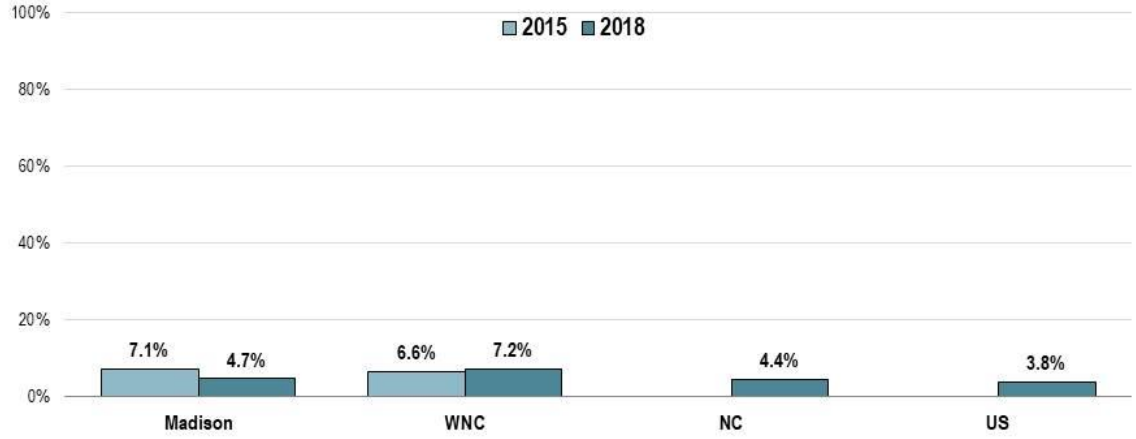
Currently Use Vaping Products (Such as E-Cigarettes)



Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 54]
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2016 North Carolina data.

Notes:
- Asked of all respondents.
- Vaping products (such as electronic cigarettes or e-cigarettes) are battery-operated decides that similar traditional cigarette smoking but do not involve the burning of tobacco. The cartridge or liquid "e-juice" used in these devices produces vapor and comes in a variety of flavors.
- Includes regular and occasional smokers (everyday and some days).

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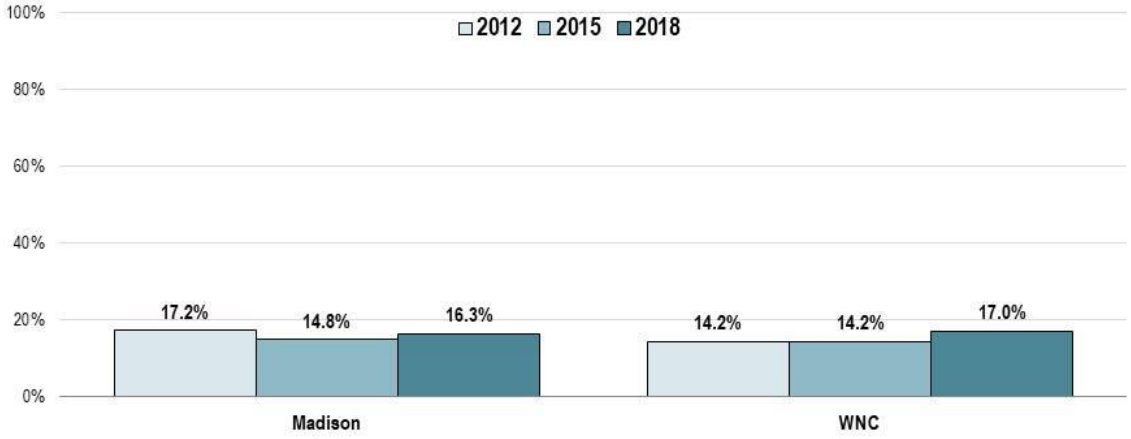
Have Breathed Someone Else's Smoke at Work in the Past Week

(Employed Respondents)



Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 312]
Notes: • Asked of employed respondents.

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Health Insurance Coverage

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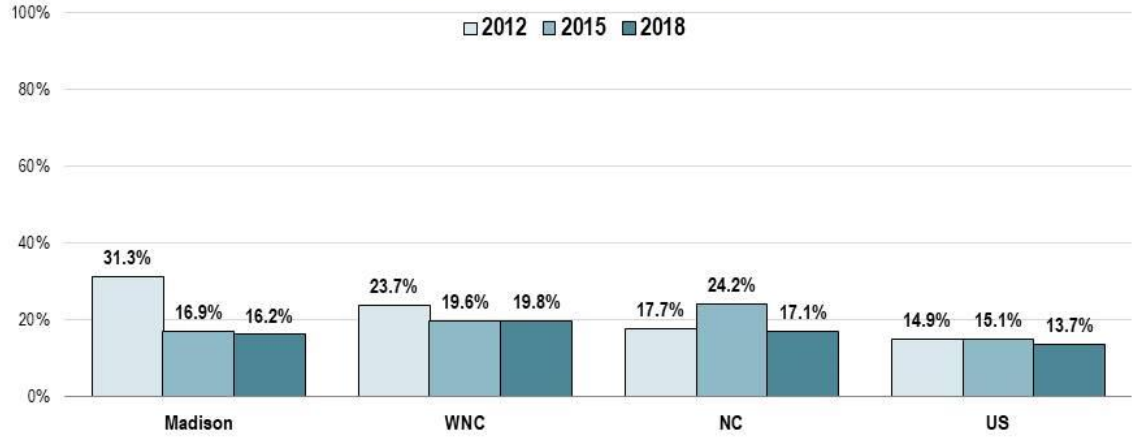
Lack of Healthcare Insurance Coverage

(Adults Age 18-64)

Healthy People 2020 Target = 0.0%



Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 326]
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2016 North Carolina data.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective AHS-1]

Notes:
- Reflects all respondents under the age of 65.
- Includes any type of insurance, such as traditional health insurance, prepaid plans such as HMOs, or government-sponsored coverage (e.g., Medicare, Medicaid, Indian Health Services, etc.).

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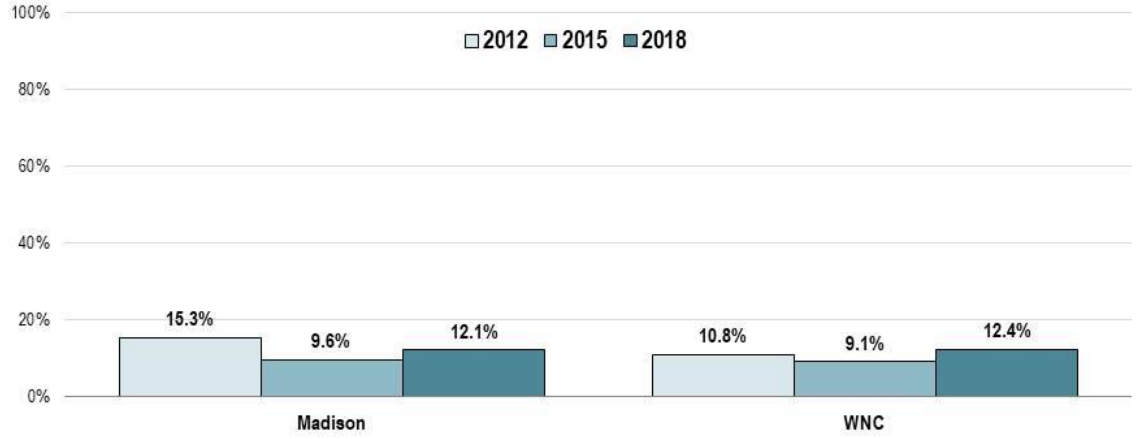
Was Unable to Get Needed Medical Care at Some Point in the Past Year



Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 303]
Notes: • Asked of all respondents.

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Primary Care Services

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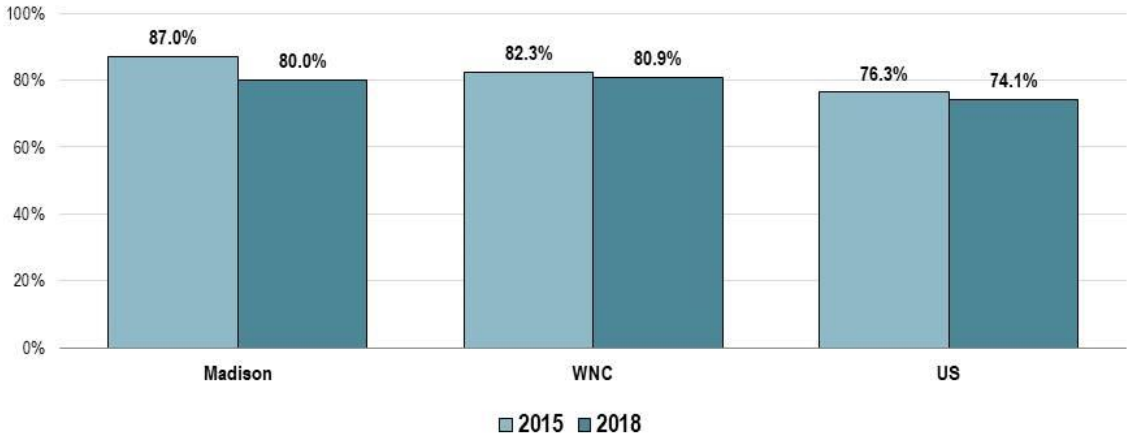
Have a Specific Source of Ongoing Medical Care

Healthy People 2020 Target = 95.0% or Higher



Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 170]
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective AHS-5.1]

Notes:
- Asked of all respondents.

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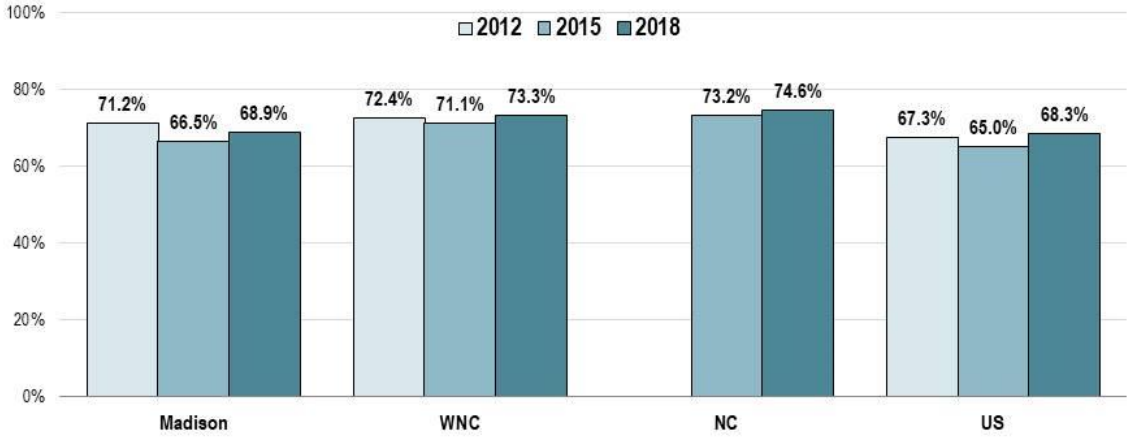
Have Visited a Physician for a Checkup in the Past Year



Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 18]
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2016 North Carolina data.

Notes:
- Asked of all respondents.

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Preventive Screenings

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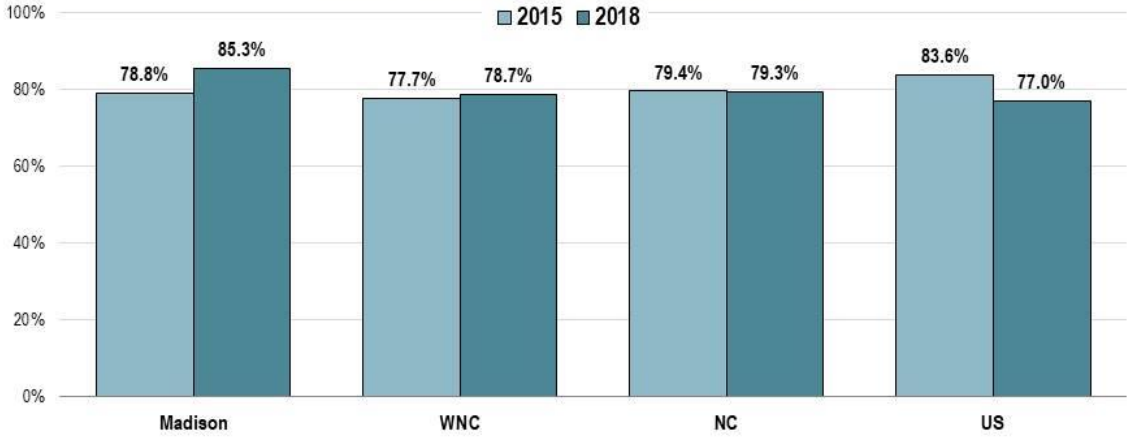
Have Had a Mammogram in the Past Two Years

(Women Age 50-74; By County, 2018)

Healthy People 2020 Target = 81.1% or Higher



Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 133]
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2016 North Carolina data.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective C-17]

Notes:
- Reflects female respondents age 50-74.

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Oral Health

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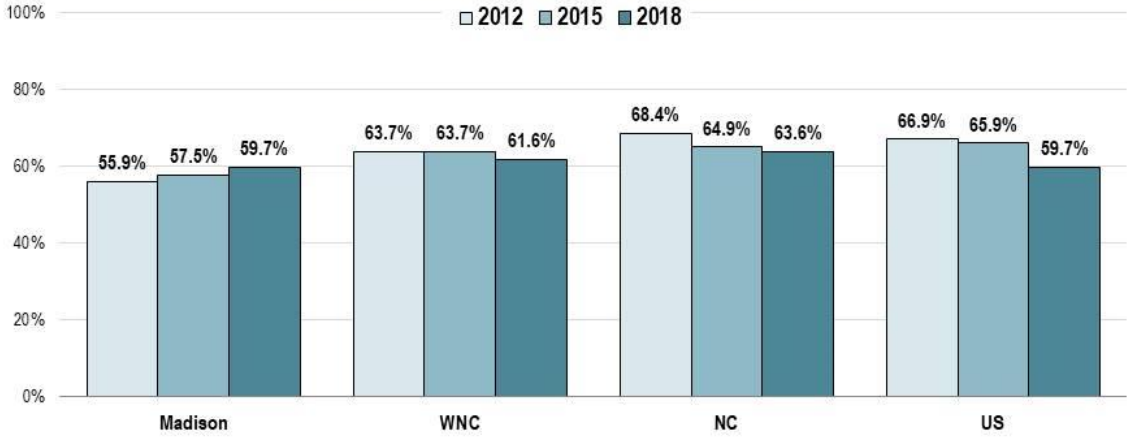
Have Visited a Dentist or Dental Clinic Within the Past Year

Healthy People 2020 Target = 49.0% or Higher



Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 20]
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2016 North Carolina data.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective OH-7]

Notes:
- Asked of all respondents.

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COUNTY-SPECIFIC QUESTIONS

Professional Research Consultants, Inc.

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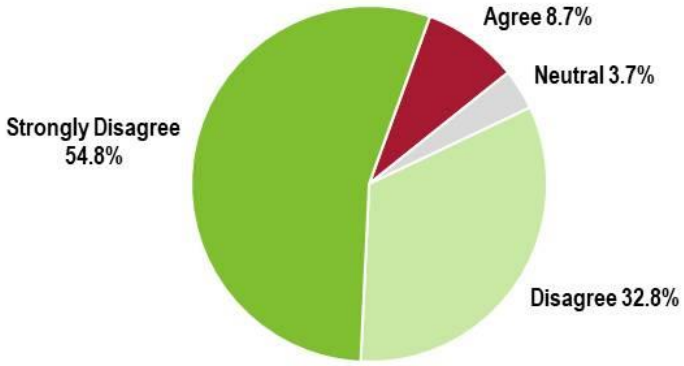
"In the past 12 months, a lack of transportation has prevented me from going someplace I wanted or needed to go in Madison County."

(Madison County, 2018)



Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 325]
Notes: • Asked of all respondents.

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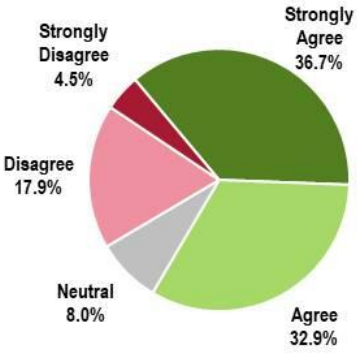
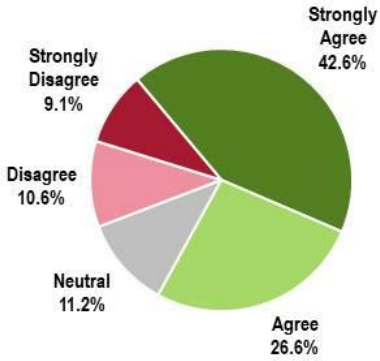
"I believe it is important for government buildings and grounds in Madison County to be 100% tobacco-free."

(Madison County)



2015



2018

Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 315]
Notes: • Asked of all respondents.

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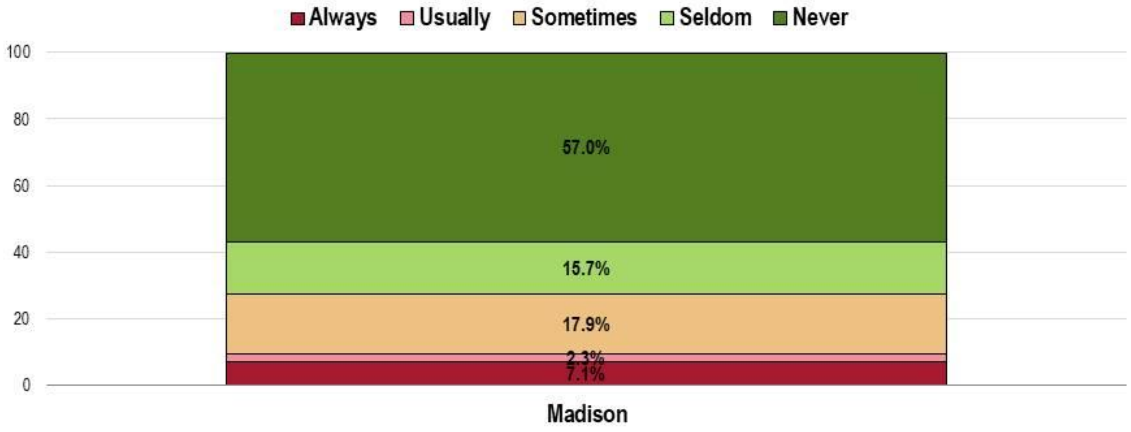
Frequency of Worry or Stress Over Having Enough Money to Pay Rent or Mortgage in the Past Year

(2018)



Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 71]
Notes: • Asked of all respondents.

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Date: _____

Interviewer: _____

Interviewer ID: _____

2017-0791-02

Professional Research Consultants, Inc.

WNC HEALTHY IMPACT
2018 Community Health Needs Assessment
Asheville, North Carolina

Hello, this is _____ with Professional Research Consultants. A collaboration of hospitals and health departments in Western North Carolina has asked us to conduct a survey to study ways to improve the health of your community.

INTRO. (INTERVIEWER: THIS SCREEN IS FOR REINTRODUCTIONS & CLARIFYING THE PURPOSE & SPONSOR OF THE CALL).

(Hello, this is _____ with Professional Research Consultants. A collaboration of hospitals and health departments in Western North Carolina has asked us to conduct a survey to study ways to improve the health of your community.)
(IF NECESSARY, READ:) Your number has been chosen randomly to be included in the study, and we'd like to ask some questions about things people do which may affect their health. Your answers will be kept completely confidential.
(IF Respondent Seems Suspicious, READ:) Some people we call want to know more before they answer the survey. If you would like more information regarding this research study, you can call Jana Distefano of Professional Research Consultants at 877-247-9477 during regular business hours.

CONTINUE

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1. In order to randomly select the person I need to talk to, I need to know how many adults 18 and over live in this household?

One
Two
Three
Four
Five
Six or More

SCRIPTING NOTE: We Will Ask County and ZIP Code of All Respondents for This Study.

Note That We Terminate if "All Others" in Q3 (County), But There Is NO Termination Based on ZIP Code in Q2.

3. Would you please tell me which county you live in?

Buncombe County
Cherokee County
Clay County
Graham County
Haywood County
Henderson County
Jackson County
Macon County
Madison County
McDowell County
Mitchell County
Polk County
Rutherford County
Swain County
Transylvania County
Yancey County
All Others

NOTE: If Q3 is "All Others", THANK & TERMINATE.

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2. Would you please tell me which ZIP Code area you live in?

[Don't Know/Not Sure]
[Refused]
28018
28019
28020
28024
28040
28043
28074
28076
28114
28139
28160
28167
28701
28702
28704
28705
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28803
28804
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28810
28813
28814
28815
28816
28901
28902
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28904
28905
28906
28909
Other (Specify)

This survey may be recorded for quality assurance.

4. Sex of Respondent. (Do Not Ask - Just Record)

Male
Female

301. First I would like to ask, overall, how would you describe your county as a place to live? Would you say it is:

Excellent
Very Good
Good
Fair
or Poor
[Don't Know/Not Sure]
[Refused]
[Terminate Interview]

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302. What is the ONE THING that needs the most improvement in your county?

	[Don't Know/Not Sure]
(SKIP to 5)	[Refused]
	[Nothing]
(SKIP to 5)	Animal Control
(SKIP to 5)	Availability of Employment
(SKIP to 5)	Better/More Health Food Choices
(SKIP to 5)	Child Care Options
(SKIP to 5)	Counseling/Mental Health/Support Groups
(SKIP to 5)	Culturally Appropriate Health/Support Groups
(SKIP to 5)	Elder Care Options
(SKIP to 5)	Healthy Family Activities
(SKIP to 5)	Higher Paying Employment
(SKIP to 5)	More Affordable Health Care
(SKIP to 5)	More Affordable/Better Housing
(SKIP to 5)	Number of Health Care Providers
(SKIP to 5)	Positive Teen Activities
(SKIP to 5)	Recreational Facilities (Parks, Trails, Community Ctrs)
(SKIP to 5)	Road Maintenance
(SKIP to 5)	Road Safety
(SKIP to 5)	Safe Places to Walk/Ride Bike for Commuting
(SKIP to 5)	Safe Places to Walk/Ride Bike for Recreation
(SKIP to 5)	Services for Disabled People
(SKIP to 5)	Transportation Options
(SKIP to 5)	Other (Specify)

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IVAR302A. Is there anything at all you can think of?

[Don't Know/Not Sure]
[Refused]
[Nothing]
Animal Control
Availability of Employment
Better/More Health Food Choices
Child Care Options
Counseling/Mental Health/Support Groups
Culturally Appropriate Health/Support Groups
Elder Care Options
Healthy Family Activities
Higher Paying Employment
More Affordable Health Care
More Affordable/Better Housing
Number of Health Care Providers
Positive Teen Activities
Recreational Facilities (Parks, Trails, Community Ctrs)
Road Maintenance
Road Safety
Safe Places to Walk/Ride Bike for Commuting
Safe Places to Walk/Ride Bike for Recreation
Services for Disabled People
Transportation Options
Other (Specify)

SCRIPTING NOTE: Force Responses from IVAR302A Back Into Q302.

5. Would you say that, in general, your health is:

Excellent
Very Good
Good
Fair
or Poor
[Don't Know/Not Sure]
[Refused]
[Terminate Interview]

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PROCESSING NOTE: Collapse N/A into No in Q303.

303. Was there a time in the past 12 months when you needed medical care, but could not get it?

	Yes
(SKIP to 16)	No
(SKIP to 16)	[Not Applicable]
(SKIP to 16)	[Don't Know/Not Sure]
(SKIP to 16)	[Refused]
	[Terminate Interview]

304. What was the MAIN reason you did NOT get this needed medical care?

[Don't Know/Not Sure]
[Refused]
Cost/No Insurance
Didn't Accept My Insurance
Distance Too Far
Inconvenient Office Hours/Office Closed
Lack of Child Care
Lack of Transportation
Language Barrier
No Access for People With Disabilities
Too Long of Wait for Appointment
Too Long of Wait in Waiting Room
Other (Specify)

16. Do you have ONE place where you usually go if you are sick or need advice about your health?

	Yes
(SKIP to 18)	No
(SKIP to 18)	[Don't Know/Not Sure]
(SKIP to 18)	[Refused]
	[Terminate Interview]

17. What kind of place is it:

(SKIP to 18)	A Doctor's Office
(SKIP to 18)	A Health Department or A Public Health Clinic
(SKIP to 18)	Community Health Center
(SKIP to 18)	An Urgent Care/Walk-In Clinic
(SKIP to 18)	A Hospital Emergency Room
(SKIP to 18)	A Military or Other VA Healthcare Facility
(SKIP to 18)	Indian Health Services
	or Some Other Place
(SKIP to 18)	[Don't Know/Not Sure]
(SKIP to 18)	[Refused]
	[Terminate Interview]

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250. What kind of place do you go to?

[Don't Know/Not Sure]
[Refused]
Other (Specify)

18. A routine checkup is a general physical exam, not an exam for a specific injury, illness or condition. About how long has it been since you last visited a doctor for a routine checkup?

Within the Past Year (Less Than 1 Year Ago)
Within the Past 2 Years (1 Year But Less Than 2 Years Ago)
Within the Past 5 Years (2 Years But Less Than 5 Years Ago)
5 or More Years Ago
[Never]
[Don't Know/Not Sure]
[Refused]
[Terminate Interview]

NOTE:	If Q3 is "Polk County", ASK Q305. All Others, SKIP to 20.

POLK COUNTY

305. Now I would like to mention that some doctor's offices are beginning to offer tele-health visits. In a tele-health visit, a patient uses a computer or smartphone to communicate with a doctor in real time without being face-to-face.

If it were available to you, how likely would you be to use this type of visit for health care? Would you be:

Very Likely
Somewhat Likely
or Not At All Likely
[Don't Know/Not Sure]
[Refused]
[Terminate Interview]

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20. About how long has it been since you last visited a dentist or a dental clinic for any reason? This includes visits to dental specialists, such as orthodontists.

Within the Past Year (Less Than 1 Year Ago)
Within the Past 2 Years (1 Year But Less Than 2 Years Ago)
Within the Past 5 Years (2 Years But Less Than 5 Years Ago)
5 or More Years Ago
[Never]
[Don't Know/Not Sure]
[Refused]
[Terminate Interview]

NOTE: If Q3 is "Henderson County", ASK Q306.

If Q3 is "Haywood County", SKIP to 307.

All Others, SKIP to 24.

HENDERSON COUNTY

306. Do you have any dental needs that have gone untreated in the past 12 months due to lack of insurance or because you did not have enough insurance to cover the needed dental care costs?

Yes
No
[Don't Know/Not Sure]
[Refused]
[Terminate Interview]

NOTE: SKIP to 24.

HAYWOOD COUNTY

307. Was there a time during the past 12 months when you needed dental care but did not get it?

Yes
(SKIP to 24) No
(SKIP to 24) [Don't Know/Not Sure]
(SKIP to 24) [Refused]
[Terminate Interview]

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HAYWOOD COUNTY

308. What was the MAIN reason you did not get this needed dental care?

[Don't Know/Not Sure]
[Refused]
Cost/No Insurance
Didn't Accept My Insurance
Distance Too Far
Inconvenient Office Hours/Office Closed
Lack of Child Care
Lack of Transportation
Language Barrier
No Access for People With Disabilities
Too Long of Wait for Appointment
Too Long of Wait in Waiting Room
Other (Specify)

24. Now I would like to ask you about some specific medical conditions.

Have you ever suffered from or been diagnosed with COPD, or Chronic Obstructive Pulmonary Disease, including Bronchitis or Emphysema?

Yes
No
[Don't Know/Not Sure]
[Refused]
[Terminate Interview]

Has a doctor, nurse or other health professional EVER told you that you had any of the following: (Insert Qs in BOLD)?

309. A Heart Attack, Also Called a Myocardial Infarction, OR Angina or Coronary Heart Disease

Yes
No
[Don't Know/Not Sure]
[Refused]
[Terminate Interview]

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33. A Stroke

Yes
No
[Don't Know/Not Sure]
[Refused]
[Terminate Interview]

(End of Rotate)

34. Have you ever been told by a doctor, nurse, or other health professional that you had asthma?

Yes
(SKIP to 36) No
(SKIP to 36) [Don't Know/Not Sure]
(SKIP to 36) [Refused]
[Terminate Interview]

35. Do you still have asthma?

Yes
No
[Don't Know/Not Sure]
[Refused]
[Terminate Interview]

36. Have you ever been told by a doctor, nurse, or other health professional that you have diabetes?

Yes
(SKIP to SCRIPTING NOTE before 38) No
(SKIP to SCRIPTING NOTE before 38) [Yes, But Female Told Only During Pregnancy]
(SKIP to SCRIPTING NOTE before 38) [Pre-Diabetes or Borderline Diabetes]
(SKIP to SCRIPTING NOTE before 38) [Don't Know/Not Sure]
(SKIP to SCRIPTING NOTE before 38) [Refused]
[Terminate Interview]

NOTE:	If Q4 is "Male", SKIP to NOTE before 38. If Q4 if "Female", ASK IVAR36A.

IVAR36A. Was this only when you were pregnant?

Yes
No
[Don't Know/Not Sure]
[Refused]
[Terminate Interview]

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SCRIPTING NOTE: If IVAR36A is "Yes"/"Si", Recode Initial Q36 Response of "Yes"/"Si" to "[Yes, but Female Told Only During Pregnancy]".

NOTE:	If Q36 is "Yes"/"Si", SKIP to 39. If Q36 is "[Pre-Diabetes or Borderline Diabetes]" AND Q4 is "Female", Force Q38 to "Yes"/"Sí" and SKIP to IVAR38A. If Q36 is "[Pre-Diabetes or Borderline Diabetes]" AND Q4 is "Male", Force Q38 to "Yes"/"Sí" and SKIP to 39. All Others, CONTINUE.

38. Have you ever been told by a doctor, nurse, or other health professional that you have pre-diabetes or borderline diabetes?

	Yes
(SKIP to 39)	No
(SKIP to 39)	[Yes, But Female Told Only During Pregnancy]
(SKIP to 39)	[Don't Know/Not Sure]
(SKIP to 39)	[Refused]
	[Terminate Interview]

NOTE:	If Q4 is "Male", SKIP to 39. If Q4 is "Female", ASK IVAR38A.

IVAR38A. Was this only when you were pregnant?

Yes
No
[Don't Know/Not Sure]
[Refused]
[Terminate Interview]

SCRIPTING NOTE: If IVAR38A is "Yes"/"Si", Recode Initial Q38 Response of "Yes"/"Si" to "[Yes, But Female Told Only During Pregnancy]".

If Q38 is "Yes"/"Sí", FORCE Q36 to "[Pre-Diabetes or Borderline Diabetes]".

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39. Have you ever been told by a doctor, nurse or other health professional that you had high blood pressure?

	Yes
(SKIP to 43)	No
(SKIP to 43)	[Don't Know/Not Sure]
(SKIP to 43)	[Refused]
	[Terminate Interview]

41. Are you currently taking any action to help control your high blood pressure, such as taking medication, changing your diet, or exercising?

Yes
No
[Don't Know/Not Sure]
[Refused]
[Terminate Interview]

43. Blood cholesterol is a fatty substance found in the blood. Have you ever been told by a doctor, nurse, or other health professional that your blood cholesterol is high?

	Yes
(SKIP to NOTE before 310)	No
(SKIP to NOTE before 310)	[Don't Know/Not Sure]
(SKIP to NOTE before 310)	[Refused]
	[Terminate Interview]

44. Are you currently taking any action to help control your high cholesterol, such as taking medication, changing your diet, or exercising?

Yes
No
[Don't Know/Not Sure]
[Refused]
[Terminate Interview]

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NOTE: If Q3 is "Cherokee County", ASK Q310.

If Q3 is "Transylvania County", SKIP to 311.

All Others, SKIP to 49.

CHEROKEE COUNTY

310. Do you feel existing community resources or services for chronic diseases such as diabetes, heart disease, and COPD are:

More Than Sufficient
Sufficient
Insufficient
or Not Available
[Don't Know/Not Sure]
[Refused]
[Terminate Interview]

NOTE: SKIP to 49.

TRANSYLVANIA COUNTY

311. The hepatitis C virus causes inflammation and damage to the liver. A person contracts this virus by coming into contact with blood or other bodily fluids from someone else who is already infected with hepatitis C virus.

Except for donating or giving blood, have you ever had your blood tested for hepatitis C?

Yes
No
[Don't Know/Not Sure]
[Refused]
[Terminate Interview]

49. The next questions are about tobacco use. Do you NOW smoke cigarettes "Every Day," "Some Days," or "Not At All"?

Every Day
Some Days
Not At All
[Don't Know/Not Sure]
[Refused]
[Terminate Interview]

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SCRIPTING NOTE: If Q49 is "Every Day" or "Some Days", set '+temp44+' to "other than yourself"/"diferente a Ud.".
All Others, set '+temp44+' to NULL.

312. During how many of the past 7 days, at your workplace, did you breathe the smoke from someone '+temp44+' who was using tobacco?

(INTERVIEWER: Code "Not Applicable" as 8.)

0 to 7/8
[Don't Know/Not Sure]
[Refused]

313. Do you currently use chewing tobacco, dip, snuff, or snus (pronounced "snoose"; rhymes with goose) "Every Day," "Some Days," or "Not At All"?

Every Day
Some Days
Not At All
[Don't Know/Not Sure]
[Refused]
[Terminate Interview]

NOTE:	If Q3 is "Cherokee County", "Graham County", or "Macon County", ASK Q314. If Q3 is "Madison County", SKIP to 315. All Others, SKIP to 54.

CHEROKEE, GRAHAM, AND MACON COUNTIES

314. Please tell me your level of agreement or disagreement with the following statement:

I believe it is important for ALL PUBLIC PLACES to be 100% tobacco free.

Do you:

Strongly Agree
Agree
Neither Agree Nor Disagree
Disagree
or Strongly Disagree
[Not Applicable]
[Don't Know/Not Sure]
[Refused]
[Terminate Interview]

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NOTE: SKIP to 54.

MADISON COUNTY

315. Please tell me your level of agreement or disagreement with the following statement:

I believe it is important for GOVERNMENT BUILDINGS AND GROUNDS in Madison County to be 100% tobacco free.

Do you:

Strongly Agree
Agree
Neither Agree Nor Disagree
Disagree
or Strongly Disagree
[Not Applicable]
[Don't Know/Not Sure]
[Refused]
[Terminate Interview]

54. Electronic "vaping" products, such as electronic cigarettes, are battery-operated devices that simulate traditional cigarette smoking, but do not involve the burning of tobacco.

Do you NOW use electronic "vaping" products, such as electronic cigarettes, "Every Day," "Some Days," or "Not At All"?

Every Day
Some Days
Not At All
[Don't Know/Not Sure]
[Refused]
[Terminate Interview]

SCRIPTING NOTE: If Interviewing During the Months of December, January, or February, Change "During the past 30 days" to "During a typical month" in the Following Questions.

55. The next few questions are about alcohol use. Keep in mind that one drink is equivalent to a 12-ounce beer, a 5-ounce glass of wine, or a drink with one shot of liquor.

During the past 30 days, on how many days did you have at least one drink of any alcoholic beverage such as beer, wine, a malt beverage, or liquor?

(NOTE: A 40-ounce beer would count as 3 drinks, or a cocktail drink with 2 shots would count as 2 drinks.)

1 to 30
0 (SKIP to 316)
[Don't Know/Not Sure] (SKIP to 316)
[Refused] (SKIP to 316)

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56. On the day(s) when you drank, about how many drinks did you have on the average? (If "None", PROBE)

1 to 10
[Don't Know/Not Sure]
[Refused]

SCRIPTING NOTE: If Respondent is "Male", Set "temp57" to "5".

If Respondent is "Female", Set "temp57" to "4".

57. Considering all types of alcoholic beverages, how many TIMES during the past 30 days did you have '+temp57+' or more drinks on an occasion?

0 to 30
[Don't Know/Not Sure]
[Refused]

316. Opiates ("OH-pee-its") or opioids ("OH-pee-oids") are drugs that doctors prescribe to treat pain. Examples of prescription opiates include morphine ("MORE-feen"), codeine ("KOH-deen"), hydrocodone ("HYE-droh-KOH-dohn"), oxycodone ("OX-ee-KOH-dohn"), methadone ("METH-uh-dohn"), and fentanyl ("FEN-ten-ill").

In the PAST YEAR, have you used any of these prescription opiates, whether or not a doctor had prescribed them to you?

(INTERVIEWER For Reference Only: Common Brand Name Opiates are Vicodin, Dilaudid, Percocet, Oxycontin, and Demerol.)

Yes
No
[Don't Know/Not Sure]
[Refused]
[Terminate Interview]

NOTE: If Q3 is "Jackson County", ASK Q317.

If Q3 is "Henderson County", "Macon County", "Mitchell County", "Rutherford County", "Swain County", "Transylvania County", or Yancey County", SKIP to 318.

If Q3 is "Clay County" or "Graham County", SKIP to 319.

All Others, SKIP to 61.

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JACKSON COUNTY

317. During the past 30 days, have you taken a prescription drug that was not prescribed to you?

Yes
No
[Don't Know/Not Sure]
[Refused]
[Terminate Interview]

NOTE: SKIP to 61.

HENDERSON, MACON, MITCHELL, RUTHERFORD, SWAIN, TRANSYLVANIA, AND YANCEY COUNTIES

318. During the past 30 days, have YOU or has SOMEONE THAT YOU KNOW used an illegal drug or taken a prescription drug that was not prescribed to them?

Yes
No
[Don't Know/Not Sure]
[Refused]
[Terminate Interview]

NOTE: If Q3 is "Henderson County", "Rutherford County", "Swain County", or "Transylvania County", SKIP to 61.

All Others, ASK Q319.

CLAY, GRAHAM, MACON, MITCHELL, AND YANCEY COUNTIES

319. Do you keep your medicine in a locked place so that no one else can access it?

Yes
No
[Don't Know/Not Sure]
[Refused]
[Terminate Interview]

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61. To what degree has your life been negatively affected by YOUR OWN or SOMEONE ELSE's substance abuse issues, including alcohol, prescription, and other drugs? Would you say:

A Great Deal
Somewhat
A Little
or Not at All
[Don't Know/Not Sure]
[Refused]
[Terminate Interview]

109. The following questions are about health problems or impairments you may have.

Are you limited in any way in any activities because of physical, mental or emotional problems?

Yes
(SKIP to 64) No
(SKIP to 64) [Don't Know/Not Sure]
(SKIP to 64) [Refused]
[Terminate Interview]

110. What is the major impairment or health problem that limits you?

Arthritis/Rheumatism
Back or Neck Problem
Cancer
Depression/Anxiety/Emotional Problem
Diabetes
Eye/Vision Problem
Fractures, Bone/Joint Injury
Hearing Problem
Heart Problem
Hypertension/High Blood Pressure
Lung/Breathing Problem
Stroke Problem
Walking Problem
Other Impairment/Problem
[Don't Know/Not Sure]
[Refused]
[Terminate Interview]

64. Next, I'd like to ask you some general questions about yourself.

What is your age?

18 to 110
[Don't Know/Not Sure]
[Refused]

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SCRIPTING NOTE: If Qlang is "Spanish", Set Q65 to "Sí" and SKIP to 66.

65. Are you of Hispanic or Latino origin, or is your family originally from a Spanish-speaking country?

Yes
No
[Don't Know/Not Sure]
[Refused]
[Terminate Interview]

66. What is your race? Would you say:

(Do Not Read the Latino/Hispanic Code.)

[Don't Know/Not Sure]
[Refused]
American Indian, Alaska Native
Native Hawaiian, Pacific Islander
Asian
Black/African American
White
[Latino/Hispanic]
Other (Specify)

NOTE: If Q3 is "Buncombe County", ASK Q320.

All Others, SKIP to NOTE before 321.

BUNCOMBE COUNTY

320. Within the past 30 days, have you felt emotionally upset--for example, angry, sad, or frustrated--as a result of how you were treated based on your race?

Yes
No
[Don't Know/Not Sure]
[Refused]
[Terminate Interview]

NOTE: If Q66 is "American Indian, Alaska Native"/"Indígena Americano(a), Nativo(a) de Alaska", ASK Q321.

All Others, SKIP to 68.

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321. Which of the following BEST describes you? Are you:

An Enrolled Member of the Eastern Band of Cherokee Indians, or EBCI, living ON the Qualla (KWAH-lah) boundary;
An Enrolled Member of the Eastern Band of Cherokee Indians, or EBCI, living OFF the Qualla (KWAH-lah) boundary,
or An Enrolled Member of a Different Federally-Recognized Tribe?

Enrolled EBCI on Boundary
Enrolled EBCI off Boundary
Enrolled Other Tribe
[Not a Member]
[Don't Know/Not Sure]
[Refused]
[Terminate Interview]

68. What is the highest grade or year of school you have completed?

Never Attended School or Kindergarten Only
Grades 1 through 8 (Elementary)
Grades 9 through 11 (Some High School)
Grade 12 or GED (High School Graduate)
College 1 Year to 3 Years (Some College or Technical School)
Bachelor's Degree (College Graduate)
Postgraduate Degree (Master's, M.D., Ph.D., J.D.)
[Don't Know/Not Sure]
[Refused]
[Terminate Interview]

69. Are you currently:

Employed for Wages
Self-Employed
Out of Work for More Than 1 Year
Out of Work for Less Than 1 Year
A Homemaker
A Student
Retired
or Unable to Work
[Don't Know/Not Sure]
[Refused]
[Terminate Interview]

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115. How many children under the age of 18 are currently LIVING in your household?

	One
	Two
	Three
	Four
	Five or More
(SKIP to NOTE before 71)	[None]
(SKIP to NOTE before 71)	[Refused]
	[Terminate Interview]

NOTE: If Q3 is "Polk County", ASK Q322.

All Others, SKIP to NOTE before 71.

POLK COUNTY

322. In the PAST 12 MONTHS, has a lack of child care arrangements made it difficult for you to seek healthcare, keep a job, or further your education?

Yes
No
[Don't Know/Not Sure]
[Refused]
[Terminate Interview]

NOTE: If Q3 is "Buncombe County", "Henderson County", "Jackson County", "Madison County", "McDowell County", or "Transylvania County", ASK Q71.

If Q3 is "Clay County", SKIP to 323.

All Others, SKIP to 326.

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BUNCOMBE, HENDERSON, JACKSON, MADISON, MCDOWELL, AND TRANSYLVANIA COUNTIES

71. In the past 12 months, how often were you worried or stressed about having enough money to pay your rent or mortgage? Would you say you were worried or stressed:

(INTERVIEWER: This Response List is Different Than All Others in This Survey.)

Always
Usually
Sometimes
Rarely
or Never
[Not Applicable]
[Don't Know/Not Sure]
[Refused]
[Terminate Interview]

NOTE: If Q3 is "Clay County" or "McDowell County", ASK Q323.

If Q3 is "Jackson County", SKIP to 324.

If Q3 is "Madison County", SKIP to 325.

All Others, SKIP to 326.

CLAY AND MCDOWELL COUNTIES

323. Was there a time in the past 12 months when you did not have electricity, water, or heating in your home?

Yes
No
[Don't Know/Not Sure]
[Refused]
[Terminate Interview]

NOTE: SKIP to 326.

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JACKSON COUNTY

324. Thinking about your current home, over the past 12 months have you experienced ongoing problems with water leaks, rodents, insects, mold, or other housing conditions that might make living there unhealthy or unsafe?

Yes
No
[Don't Know/Not Sure]
[Refused]
[Terminate Interview]

NOTE: SKIP to 326.

MADISON COUNTY

325. Please tell me your level of agreement or disagreement with the following statement:

In the past 12 months, a lack of transportation has prevented me from going someplace I wanted or needed to go in Madison County.

Do you:

Strongly Agree
Agree
Neither Agree Nor Disagree
Disagree
or Strongly Disagree
[Not Applicable]
[Don't Know/Not Sure]
[Refused]
[Terminate Interview]

326. Do you have any kind of health care coverage, including health insurance, a prepaid plan such as an HMO, or a government-sponsored plan such as Medicare, Medicaid, Military, or Indian Health Services?

Yes
No
[Don't Know/Not Sure]
[Refused]
[Terminate Interview]

NOTE: If Q3 is "McDowell County" or "Rutherford County", ASK Q327.

All Others, SKIP to 78.

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327. Do you currently have access to the internet for PERSONAL use, either at home, work, or school?

Yes
No
[Don't Know/Not Sure]
[Refused]
[Terminate Interview]

78. Now I would like to ask, about how much do you weigh without shoes?

(INTERVIEWER: Round Fractions Up)

40 to 600
[Don't Know/Not Sure]
[Refused]

79. About how tall are you without shoes?

(INTERVIEWER: Round Fractions Down)

300 to 311
400 to 411
500 to 511
600 to 611
700 to 711
800 to 811
[Don't Know/Not Sure]
[Refused]

NOTE: If Q4 is "Male", SKIP to 328.

If Q4 is "Female", CONTINUE.

80. A mammogram is an x-ray of each breast to look for cancer. How long has it been since you had your last mammogram?

Within the Past Year (Less Than 1 Year Ago)
Within the Past 2 Years (1 Year But Less Than 2 Years Ago)
Within the Past 3 Years (2 Years But Less Than 3 Years Ago)
Within the Past 5 Years (3 Years But Less Than 5 Years Ago)
5 or More Years Ago
[Never]
[Don't Know/Not Sure]
[Refused]
[Terminate Interview]

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328. Now I would like you to think about the food you ate during the past week.

About how many 1-cup servings of fruit did you have in the past week? For example, one apple equals 1 cup.

0 to 100
[Don't Know/Not Sure]
[Refused]

329. And, NOT counting lettuce salad or potatoes, about how many 1-cup servings of vegetables did you have in the past week? For example, 12 baby carrots equal 1 cup.

0 to 100
[Don't Know/Not Sure]
[Refused]

87. Now I am going to read two statements that people have made about their food situation. Please tell me whether each statement was "Often True," "Sometimes True," or "Never True" for you in the past 12 months.

The first statement is: "I worried about whether our food would run out before we got money to buy more."

Was this statement:

Often True
Sometimes True
or Never True
[Don't Know/Not Sure]
[Refused]
[Terminate Interview]

88. The next statement is: "The food that we bought just did not last, and we did not have money to get more."

Was this statement:

Often True
Sometimes True
or Never True
[Don't Know/Not Sure]
[Refused]
[Terminate Interview]

NOTE:	If Q3 is "Mitchell County" or "Yancey County", ASK Q330.
	If Q3 is "Rutherford County", SKIP to 331.
	All Others, SKIP to READ BOX before 89.

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MITCHELL AND YANCEY COUNTIES

330. In the last 12 months, did you or someone in the household cut the size of your meals or skip meals because there wasn't enough money for food?

Yes
No
[Don't Know/Not Sure]
[Refused]
[Terminate Interview]

NOTE: SKIP to READ BOX before 89.

RUTHERFORD COUNTY

331. How often in the past 12 months would you say you were worried or stressed about having enough money to buy or make nutritious meals? Would you say you were worried or stressed:

Always
Usually
Sometimes
Seldom
or Never
[Not Applicable]
[Don't Know/Not Sure]
[Refused]
[Terminate Interview]

The next questions are about physical activity.

SCRIPTING NOTE: If Q69 is "Out of Work for More Than 1 Year", "Out of Work for Less Than 1 Year", or "or Unable to Work", Set temp89 to NULL.

If Q69 is Any Other Response, Set temp89 to '', OTHER THAN YOUR REGULAR JOB,"/", OTRO QUE EN SU TRABAJO,".

89. During the past month'+temp89+' did you participate in any physical activities or exercises, such as running, calisthenics, golf, gardening, or walking for exercise?

Yes
(SKIP to 96) No
(SKIP to 96) [Don't Know/Not Sure]
(SKIP to 96) [Refused]
[Terminate Interview]

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90. During the past month, what type of physical activity or exercise did you spend the MOST time doing?

(INTERVIEWER: If "Cardio," PROBE for Specific Type of Exercise.)

(SKIP to 91)	Active Gaming Devices (Wii Fit, Dance Dance Revolution)
(SKIP to 91)	Aerobics Video or Class (aka Gym, Gym Class, Zumba, etc.)
(SKIP to 91)	Backpacking
(SKIP to 91)	Badminton
(SKIP to 91)	Basketball
(SKIP to 91)	Bicycling Machine Exercise (aka Spinning, Spin Class, Bike, Cycling)
(SKIP to 91)	Bicycling (aka Bike, Cycling)
(SKIP to 91)	Boating (Canoeing, Rowing, Kayaking, Sailing for Pleasure, Camping)
(SKIP to 91)	Bowling
(SKIP to 91)	Boxing
(SKIP to 91)	Calisthenics
(SKIP to 91)	Canoeing, Rowing in Competition
(SKIP to 91)	Carpentry
(SKIP to 91)	Dancing-Ballet, Ballroom, Latin, Hip Hop, etc.
(SKIP to 91)	Elliptical, EFX Machine Exercise
(SKIP to 91)	Fishing from River Bank or Boat
(SKIP to 91)	Frisbee
(SKIP to 91)	Gardening (Spading, Weeding, Digging, Filling) (aka Yardwork)
(SKIP to 91)	Golf (with Motorized Cart)
(SKIP to 91)	Golf (without Motorized Cart)
(SKIP to 91)	Handball
(SKIP to 91)	Hiking-Cross-Country
(SKIP to 91)	Hockey
(SKIP to 91)	Horseback Riding
(SKIP to 91)	Hunting Large Game-Deer, Elk
(SKIP to 91)	Hunting Small Game-Quail
(SKIP to 91)	Inline Skating
(SKIP to 91)	Jogging
(SKIP to 91)	Lacrosse
(SKIP to 91)	Mountain Climbing
(SKIP to 91)	Mowing Lawn (aka Yardwork)
(SKIP to 91)	Paddleball
(SKIP to 91)	Painting, Papering House
(SKIP to 91)	Pilates
(SKIP to 91)	Racquetball
(SKIP to 91)	Raking Lawn (aka Yardwork)
(SKIP to 91)	Running (aka Treadmill)
(SKIP to 91)	Rock Climbing
(SKIP to 91)	Rope Skipping (aka Jump Roping)
(SKIP to 91)	Rowing Machine Exercise
(SKIP to 91)	Rugby
(SKIP to 91)	Scuba Diving
(SKIP to 91)	Skateboarding
(SKIP to 91)	Skating-Ice or Roller
(SKIP to 91)	Sledding, Tobogganing
(SKIP to 91)	Snorkeling
(SKIP to 91)	Snow Blowing

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(SKIP to 91)	Snow Shoveling by Hand
(SKIP to 91)	Snow Skiing
(SKIP to 91)	Snowshoeing
(SKIP to 91)	Soccer
(SKIP to 91)	Softball, Baseball
(SKIP to 91)	Squash
(SKIP to 91)	Stair Climbing, Stairmaster
(SKIP to 91)	Stream Fishing in Waders
(SKIP to 91)	Surfing
(SKIP to 91)	Swimming
(SKIP to 91)	Swimming in Laps
(SKIP to 91)	Table Tennis
(SKIP to 91)	Tai Chi
(SKIP to 91)	Tennis
(SKIP to 91)	Touch Football
(SKIP to 91)	Volleyball
(SKIP to 91)	Walking (aka Treadmill)
(SKIP to 91)	Housework/Cleaning
(SKIP to 91)	Waterskiing
(SKIP to 91)	Weight Lifting (aka Gym, Gym Class)
(SKIP to 91)	Wrestling
(SKIP to 91)	Yoga
	Other
(SKIP to 96)	[No Other Activity]
(SKIP to 96)	[Don't Know/Not Sure]
(SKIP to 96)	[Refused]
	[Terminate Interview]

251. (INTERVIEWER: Enter Verbatim Response From Previous Question, or READ If Necessary:) During the past month, what type of physical activity or exercise did you spend the most time doing?

	[Don't Know/Not Sure]
	[Refused]
	Other (Specify)

91. And during the past month, how many TIMES per week or per month did you take part in this activity?

	TIMES PER WEEK
(SKIP to IVAR91B)	TIMES PER MONTH
(SKIP to 92)	[Don't Know/Not Sure]
(SKIP to 92)	[Refused]
	[Terminate Interview]

IVAR91A. INTERVIEWER: Enter the times per week specified in the previous question.

1 to 25

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NOTE: SKIP to 92.

IVAR91B. INTERVIEWER: Enter the times per month specified in the previous question.

1 to 100

92. And when you took part in this activity, for how many minutes or hours did you usually keep at it?

	MINUTES
(SKIP to IVAR92B)	HOURS
(SKIP to 93)	[Don't Know/Not Sure]
(SKIP to 93)	[Refused]
	[Terminate Interview]

IVAR92A. INTERVIEWER: Enter the minutes specified in the previous question.

1 to 600

NOTE: SKIP to 93.

IVAR92B. INTERVIEWER: Enter the hours specified in the previous question.

1 to 24

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93. During the past month, what OTHER type of physical activity gave you the NEXT most exercise?

(INTERVIEWER: If "Cardio," PROBE for Specific Type of Exercise.)

(SKIP to 94)	Active Gaming Devices (Wii Fit, Dance Dance Revolution)
(SKIP to 94)	Aerobics Video or Class (aka Gym, Gym Class, Zumba, etc.)
(SKIP to 94)	Backpacking
(SKIP to 94)	Badminton
(SKIP to 94)	Basketball
(SKIP to 94)	Bicycling Machine Exercise (aka Spinning, Spin Class, Bike, Cycling)
(SKIP to 94)	Bicycling (aka Bike, Cycling)
(SKIP to 94)	Boating (Canoeing, Rowing, Kayaking, Sailing for Pleasure, Camping)
(SKIP to 94)	Bowling
(SKIP to 94)	Boxing
(SKIP to 94)	Calisthenics
(SKIP to 94)	Canoeing, Rowing in Competition
(SKIP to 94)	Carpentry
(SKIP to 94)	Dancing-Ballet, Ballroom, Latin, Hip Hop, etc.
(SKIP to 94)	Elliptical, EFX Machine Exercise
(SKIP to 94)	Fishing from River Bank or Boat
(SKIP to 94)	Frisbee
(SKIP to 94)	Gardening (Spading, Weeding, Digging, Filling) (aka Yardwork)
(SKIP to 94)	Golf (with Motorized Cart)
(SKIP to 94)	Golf (without Motorized Cart)
(SKIP to 94)	Handball
(SKIP to 94)	Hiking-Cross-Country
(SKIP to 94)	Hockey
(SKIP to 94)	Horseback Riding
(SKIP to 94)	Hunting Large Game-Deer, Elk
(SKIP to 94)	Hunting Small Game-Quail
(SKIP to 94)	Inline Skating
(SKIP to 94)	Jogging
(SKIP to 94)	Lacrosse
(SKIP to 94)	Mountain Climbing
(SKIP to 94)	Mowing Lawn (aka Yardwork)
(SKIP to 94)	Paddleball
(SKIP to 94)	Painting, Papering House
(SKIP to 94)	Pilates
(SKIP to 94)	Racquetball
(SKIP to 94)	Raking Lawn (aka Yardwork)
(SKIP to 94)	Running (aka Treadmill)
(SKIP to 94)	Rock Climbing
(SKIP to 94)	Rope Skipping (aka Jump Roping)
(SKIP to 94)	Rowing Machine Exercise
(SKIP to 94)	Rugby
(SKIP to 94)	Scuba Diving
(SKIP to 94)	Skateboarding
(SKIP to 94)	Skating-Ice or Roller
(SKIP to 94)	Sledding, Tobogganing
(SKIP to 94)	Snorkeling
(SKIP to 94)	Snow Blowing

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(SKIP to 94)	Snow Shoveling by Hand
(SKIP to 94)	Snow Skiing
(SKIP to 94)	Snowshoeing
(SKIP to 94)	Soccer
(SKIP to 94)	Softball, Baseball
(SKIP to 94)	Squash
(SKIP to 94)	Stair Climbing, Stairmaster
(SKIP to 94)	Stream Fishing in Waders
(SKIP to 94)	Surfing
(SKIP to 94)	Swimming
(SKIP to 94)	Swimming in Laps
(SKIP to 94)	Table Tennis
(SKIP to 94)	Tai Chi
(SKIP to 94)	Tennis
(SKIP to 94)	Touch Football
(SKIP to 94)	Volleyball
(SKIP to 94)	Walking (aka Treadmill)
(SKIP to 94)	Housework/Cleaning
(SKIP to 94)	Waterskiing
(SKIP to 94)	Weight Lifting (aka Gym, Gym Class)
(SKIP to 94)	Wrestling
(SKIP to 94)	Yoga
	Other
(SKIP to 96)	[No Other Activity]
(SKIP to 96)	[Don't Know/Not Sure]
(SKIP to 96)	[Refused]
	[Terminate Interview]

256. (INTERVIEWER: Enter Verbatim Response From Previous Question, or READ If Necessary:) During the past month, what OTHER type of physical activity or exercise did you spend the most time doing?

	[Don't Know/Not Sure]
	[Refused]
	Other (Specify)

94. And during the past month, how many TIMES per week or per month did you take part in this activity?

	TIMES PER WEEK
(SKIP to IVAR94B)	TIMES PER MONTH
(SKIP to 95)	[Don't Know/Not Sure]
(SKIP to 95)	[Refused]
	[Terminate Interview]

IVAR94A. INTERVIEWER: Enter the times per week specified in the previous question.

1 to 25

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NOTE: SKIP to 95.

IVAR94B. INTERVIEWER: Enter the times per month specified in the previous question.

1 to 100

95. And when you took part in this activity, for how many minutes or hours did you usually keep at it?

	MINUTES
(SKIP to IVAR95B)	HOURS
(SKIP to 96)	[Don't Know/Not Sure]
(SKIP to 96)	[Refused]
	[Terminate Interview]

IVAR95A. INTERVIEWER: Enter the minutes specified in the previous question.

1 to 600

NOTE: SKIP to 96.

IVAR95B. INTERVIEWER: Enter the hours specified in the previous question.

1 to 24

96. During the past month, how many TIMES per week or per month did you do physical activities or exercises to STRENGTHEN your muscles? Do NOT count aerobic activities like walking, running, or bicycling. Please include activities using your own body weight, such as yoga, sit-ups or push-ups, and those using weight machines, free weights, or elastic bands.

	TIMES PER WEEK
(SKIP to IVAR96B)	TIMES PER MONTH
(SKIP to NOTE before 332)	[Never]
(SKIP to NOTE before 332)	[Don't Know/Not Sure]
(SKIP to NOTE before 332)	[Refused]
	[Terminate Interview]

IVAR96A. INTERVIEWER: Enter the times per week specified in the previous question.

1 to 25

NOTE: SKIP to NOTE before 332.

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IVAR96B. INTERVIEWER: Enter the times per month specified in the previous question.

1 to 100

NOTE:	If Q3 is "Cherokee County", ASK Q332. If Q3 is "Clay County" or "Graham County", SKIP to 333. If Q3 is "Swain County", SKIP to 334. All Others, SKIP to 335.

CHEROKEE COUNTY

332. Please tell me your level of agreement or disagreement with the following statement:

I believe my county provides the facilities and programs needed for ADULTS, CHILDREN and YOUTH to be physically active throughout the year.

Do you:

Strongly Agree
Agree
Neither Agree Nor Disagree
Disagree
or Strongly Disagree
[Not Applicable]
[Don't Know/Not Sure]
[Refused]
[Terminate Interview]

NOTE: SKIP to 335.

CLAY AND GRAHAM COUNTIES

333. The next question is about some pets you may have. Are ALL dogs, cats, and ferrets that you own as pets up-to-date on their rabies vaccinations?

Yes
No
[No Pets]
[Don't Know/Not Sure]
[Refused]
[Terminate Interview]

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NOTE: SKIP to 335.

SWAIN COUNTY

334. Do you feel existing community resources or services for SENIORS are:

More Than Sufficient
Sufficient
Insufficient
or Not Available
[Don't Know/Not Sure]
[Refused]
[Terminate Interview]

335. Now I would like to ask, in general, how satisfied are you with your life? Would you say:

Very Satisfied
Satisfied
Dissatisfied
or Very Dissatisfied
[Don't Know/Not Sure]
[Refused]
[Terminate Interview]

336. How often do you get the social and emotional support you need? Would you say:

Always
Usually
Sometimes
Seldom
or Never
[Not Applicable]
[Don't Know/Not Sure]
[Refused]
[Terminate Interview]

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NOTE: If Q3 is "Swain County", ASK Q99.

All Others, SKIP to SCRIPTING NOTE before 337.

SWAIN COUNTY

99. Now thinking about your MENTAL health, which includes stress, depression and problems with emotions, would you say that, in general, your mental health is:

Excellent
Very Good
Good
Fair
or Poor
[Don't Know/Not Sure]
[Refused]
[Terminate Interview]

SCRIPTING NOTE: If Q3 is "Swain County", set '+temp337+' to "For"/"¿Por".

All Others, set '+temp337+' to "Now thinking about your MENTAL health, which includes stress, depression and problems with emotions, for"/"Pensando ahora en su salud MENTAL, la cual incluye estrés, tensión, depresión y problemas emocionales, ¿por".

337. '+temp337+' how many days during the past 30 days was your mental health NOT good?

0 to 30
[Don't Know/Not Sure]
[Refused]

NOTE: If Q3 is "Buncombe County", ASK Q100.

If Q3 is "Haywood County", SKIP to 101.

All Others, SKIP to 105.

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BUNCOMBE COUNTY

100. Have you had two years or more in your life when you felt depressed or sad most days, even if you felt okay sometimes?

Yes
No
[Don't Know/Not Sure]
[Refused]
[Terminate Interview]

NOTE: SKIP to 105.

HAYWOOD COUNTY

101. Thinking about the amount of stress in your life, would you say that most days are:

Extremely Stressful
Very Stressful
Moderately Stressful
Not Very Stressful
or Not At All Stressful
[Don't Know/Not Sure]
[Refused]
[Terminate Interview]

105. Was there a time in the past 12 months when you needed mental health care or counseling, but did not get it at that time?

Yes
No
[Don't Know/Not Sure]
[Refused]
[Terminate Interview]

NOTE: If Q3 is "Polk County", ASK Q338.

All Others, SKIP to READ BOX before 339.

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POLK COUNTY

338. In the past 12 months, have mental or emotional problems made it difficult for you or someone in your household to HOLD A JOB?

Yes
No
[Don't Know/Not Sure]
[Refused]
[Terminate Interview]

Now I would like to ask you some questions about events that happened during your childhood. This information will allow us to better understand problems that may occur early in life, and may help others in the future. This is a sensitive topic and some people may feel uncomfortable with these questions. Please keep in mind that you can ask me to skip any question you do not want to answer.

At the end of this section, I will give you a phone number for an organization that can provide information and referrals for these issues.

As you answer these questions, please think back to the time period before you were 18 years of age.

339. Before you were 18 years of age, did you live with anyone who was depressed, mentally ill, or suicidal?

Yes
No
[Don't Know/Not Sure]
[Refused]
(SKIP to GOODBYE) [Terminate Interview]

340. Before you were 18 years of age, did you live with anyone who was a problem drinker or alcoholic?

Yes
No
[Don't Know/Not Sure]
[Refused]
(SKIP to GOODBYE) [Terminate Interview]

341. Before you were 18 years of age, did you live with anyone who used illegal street drugs or who abused prescription medications?

Yes
No
[Don't Know/Not Sure]
[Refused]
(SKIP to GOODBYE) [Terminate Interview]

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342. Before you were 18 years of age, did you live with anyone who served time or was sentenced to serve time in a prison, jail, or other correctional facility?

Yes
No
[Don't Know/Not Sure]
[Refused]
(SKIP to GOODBYE) [Terminate Interview]

343. Before you were 18 years of age, were your parents separated or divorced?

Yes
No
[Parents Never Married]
[Don't Know/Not Sure]
[Refused]
(SKIP to GOODBYE) [Terminate Interview]

344. Before age 18, how often did your parents or adults in your home slap, hit, kick, punch or beat each other up? Would you say:

Never
Once
or More Than Once
[Don't Know/Not Sure]
[Refused]
(SKIP to GOODBYE) [Terminate Interview]

345. Before age 18, how often did a parent or adult in your home hit, beat, kick, or physically hurt you in any way? Do not include spanking. Would you say:

Never
Once
or More Than Once
[Don't Know/Not Sure]
[Refused]
(SKIP to GOODBYE) [Terminate Interview]

346. Before age 18, how often did a parent or adult in your home swear at you, insult you, or put you down? Would you say:

Never
Once
or More Than Once
[Don't Know/Not Sure]
[Refused]
(SKIP to GOODBYE) [Terminate Interview]

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347. Before you were 18 years of age, how often did an adult or anyone at least 5 years older than you touch you sexually? Would you say:

Never
Once
or More Than Once
[Don't Know/Not Sure]
[Refused]
(SKIP to GOODBYE) [Terminate Interview]

348. Before you were 18 years of age, how often did an adult or anyone at least 5 years older than you try to make you touch them sexually? Would you say:

Never
Once
or More Than Once
[Don't Know/Not Sure]
[Refused]
(SKIP to GOODBYE) [Terminate Interview]

349. Before you were 18 years of age, how often did an adult or anyone at least 5 years older than you force you to have sex? Would you say:

Never
Once
or More Than Once
[Don't Know/Not Sure]
[Refused]
(SKIP to GOODBYE) [Terminate Interview]

I mentioned when we started this section that I would give you a phone number for an organization that can provide information and referrals for these issues. This number is for the National Hotline for child abuse, and the number is 1-800-4-A-CHILD, or 1-800-422-4453.

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114. Total Family Household Income.

Under $12,100
$12,100 to $16,199
$16,200 to $20,399
$20,400 to $24,399
$24,400 to $28,799
$28,800 to $32,799
$32,800 to $37,099
$37,100 to $41,099
$41,100 to $45,499
$45,500 to $49,499
$49,500 to $53,899
$53,900 to $57,799
$57,800 to $65,899
$65,900 to $74,299
$74,300 to $82,599
$82,600 to $90,999
$91,000 to $99,399
$99,400 to $107,699
$107,700 to $116,099
$116,100/Over
[Don't Know/Not Sure]
[Refused]
(SKIP to GOODBYE) [Terminate Interview]

350. And finally, other than what we've covered in this survey, what other health issue, if any, do you feel is a major problem in your community?

[Don't Know/Not Sure]
[Refused]
[No Other Health Issue]
Other (Specify)

That's my last question. Everyone's answers will be combined to give us information about the health of residents in this community. Thank you very much for your time and cooperation.

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2018 Community Health Needs Assessment

Online Key Informant Survey Results

Madison County, North Carolina

Prepared for:
WNC Healthy Impact

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Introduction

Approach

To solicit input from key informants, those individuals who have a broad interest in the health of the community, an Online Key Informant Survey was implemented as part of the broader Community Health Needs Assessment process. A list of recommended participants was provided by local sponsors; this list included names and contact information for physicians, public health representatives, other health professionals, social service providers, and a variety of other community leaders.

Participation

Key informants were contacted by email, introducing the purpose of the survey and providing a link to take the survey online; reminder emails were sent as needed to increase participation. In all, 23 community stakeholders took part in the Online Key Informant Survey.

Participating Organizations

Through this process, input was gathered from several individuals whose organizations work with low-income, minority populations, or other medically underserved populations. Participating organizations included the following:

- American Cancer Society
- Community Housing Coalition
- Hot Springs Health Program
- Land of Sky Regional Council
- Madison County
- Madison County Board of Health
- Madison County Department of Community Services
- Madison County DSS
- Madison County Government
- Madison County Health Department
- Madison County Parks and Recreation
- Madison County Public Library
- Madison County Schools
- Mars Hill Baptist Church
- Mars Hill University
- NC Department of Public Safety
- Triple P

In the online survey, key informants were asked to list characteristics of a healthy community. They were also asked to select the health issues or behaviors that they feel are the most critical to address collaboratively in their own community over the next three years or more. Follow-up questions asked them to describe which contributors to progress and impediments of progress exist for these issues. Results of their ratings, as well as their verbatim comments, are included throughout this report.

NOTE: These findings represent qualitative rather than quantitative data. The Online Key Informant Survey was designed to gather input from participants regarding their opinions and perceptions of the health of the residents in the area. Thus, these findings are based on perceptions, not facts.

Characteristics of a Healthy Community

"In your opinion, what are the most important characteristics of a healthy community?"

Key informants could list up to 3 responses.

Key informants characterized a healthy community as containing the following (percentages represent the proportion of respondents identifying each characteristic as one of their top 3 responses):

Characteristic	Mentioned By (%)
Access to care/services	50.1%
Recreational/Outdoor Activities	31.7%
Affordable Care/Services	20.9%
Access to Healthy Foods	15.6%
Preventative Health Care	15.6%
Safe Environment	15.6%
Healthy Lifestyles	15.4%
Physical Activity	14.3%
Access to Schools/Adequate Education	11.1%
Access to Mental Health Care	9.8%
Good Health Care	9.5%
Social Connectiveness	9.5%
Collaboration	5.6%
Cultural Pride	5.6%
Economic and Social Justice for All	5.6%
Good Leadership	5.6%
Well Vaccinated School Population	5.6%
Agencies/Community Organizations	5.0%
Caring for the Less Fortunate	5.0%
Employment	5.0%
Low Alcohol/Drugs Rates	5.0%
Awareness/Education	4.8%
Communication	4.8%
Engaged in Community	4.8%
Equity in Access to Health Care	4.8%
Good Economy	4.8%
Respect of Each Other	4.8%
Sense of Community	4.8%

Chronic Disease

Ranking of Chronic Disease Issues as Critical to Address

Key informants in the online survey were given a list of chronic diseases and known factors that contribute to them, then asked to select up to three health issues or behaviors that are the most critical to address collaboratively in their community over the next three years or more.

The following chart outlines the rank order of chronic disease conditions identified by key informants as critical to address.

Rank	Health Issue	Identified as Critical to Address
1	Obesity/Nutrition/Physical Activity	17
2	Cancer	12
3	Diabetes	12
4	Chronic Pain	8
5	Chronic Obstructive Pulmonary Disease (COPD)	7
6	Heart Disease & Stroke	5
7	Upper Respiratory Diseases (such as Asthma)	3
8	Arthritis/Osteoporosis	2
9	Chronic Kidney Disease	1

Obesity, Nutrition, and Physical Activity

Contributors to Progress

Those identifying this as a critical issue were asked: "What is contributing to progress on this issue in your community?"

Recreational/Outdoor Activities

> *Greenways, free vegetables, increased education, school/community sponsored 5ks. – Community Leader (Madison County)*

> *More public exercise areas. – Community Leader (Madison County)*

Awareness/Education

> *Education. – Community Leader (Madison County)*

Specific Programs/Agencies

> *This has been a focus of the health consortium for the past three years. They have been great at establishing a community calendar, opening green spaces, and creating job programs that encourage healthy living. – Community Leader (Madison County)*

> *Good local initiatives to encourage physical activity and helping patients learn proper technique and safe venues to exercise. – Community Leader (Madison County)*

School Programs

> *Healthy eating information is being discussed regularly in the local schools. – Other Health Provider (Madison County)*

> *Health department works diligently within our schools and community to help. – Community Leader (Madison County)*

Physical Activity

> *PE programs and more outside activities. – Community Leader (Madison County)*

Community Focus

> *Desire of community. – Other Health Provider (Madison County)*

Nothing/No Progress

> *There is not real progress on any of these issues in the community. – Social Services Provider (Madison County)*

Access to Healthy Food

> *Several healthy food programs offered. – Community Leader (Madison County)*

Impediments of Progress

Those identifying this as a critical issue were asked: "What is getting in the way of progress on this issue in your community?"

Lifestyle

> *Difficult to get people to change behavior and requires persistent committed volunteer leadership. – Community Leader (Madison County)*

> *Client participation. – Community Leader (Madison County)*

Denial

> *Lack of interest. – Community Leader (Madison County)*

Access to Healthy Food

> *Obesity and poor eating habits/physical activity habits are a chronic problem in Madison County, as well as most of the country. – Social Services Provider (Madison County)*

Built Environment

> *Madison County needs to develop more parks including running/bike trails to encourage strong health habit. – Community Leader (Madison County)*

Funding

> *We need to fund Parks and Recreation fully to provide for more activities. – Community Leader (Madison County)*
>
> *staff to help educate community on a broader basis... – Community Leader (Madison County)*
>
> *Funds for more exercise programs. – Community Leader (Madison County)*
>
> *Lack of funds. – Other Health Provider (Madison County)*

Lack of Prevention for Youth

> *The schools are prioritizing cheap sugars and calories over healthy eating and physical activity. Sugars are used as rewards and withholding recess/physical activity as a punishment. If we don't start kids off right with healthy eating and exercise, then we don't have a chance once they become adults. – Community Leader (Madison County)*

Poverty

> *Poverty restricts peoples' ability to buy healthier foods, and as a result many of our residents continue to eat a lot of the cheaper, but far less healthy foods. – Other Health Provider (Madison County)*

Parental Influence

> *Many parents aren't good role models for their children in this area. Even if they encourage good nutrition and physical activity, if they are not modeling these behaviors their children will likely not see the importance. – Social Services Provider (Madison County)*

Cancer

Contributors to Progress

Those identifying this as a critical issue were asked: "What is contributing to progress on this issue in your community?"

Awareness/Education

> *Active cancer society programs. – Community Leader (Madison County)*
>
> *Education and early prevention. – Community Leader (Madison County)*
>
> *Education. – Community Leader (Madison County)*

Prevention/Screenings

> *Added screenings. – Other Health Provider (Madison County)*

Collaborative Efforts

> *Clinical partners collaborating to increase access to cancer screenings. – Other Health Provider (Madison County)*

Focus on Tobacco Use

> *There seems to be less tobacco use. Cancer treatment continues to improve. Knowledge about healthy diet has increased. There are many local producers of healthy foods (small farms, etc.). – Community Leader (Madison County)*

Community Interest

> *Interest, desire to improve our situation. – Public Health Representative (Madison County)*

Access to Care/Services

> *The access of medical professionals is positive. Transportation services do many trips to AVL and surrounding areas to get treatment. – Community Leader (Madison County)*

Funding

> *Money. – Public Health Representative (Madison County)*

Impediments of Progress

Those identifying this as a critical issue were asked: "What is getting in the way of progress on this issue in your community?"

Awareness/Education

> *Lack of information and early screening. – Community Leader (Madison County)*
>
> *Lack of education. – Other Health Provider (Madison County)*

Funding

> *Funding for transportation to doctor visits. – Community Leader (Madison County)*
>
> *Money. – Public Health Representative (Madison County)*
>
> *Lack of funds. – Community Leader (Madison County)*

Community Participation

> *There is a lack of support in the community to address the residual effects after the immediate care. Support in side effects, mental health support, and support with errands/groceries to maintain them once they are in and immediately after care. – Community Leader (Madison County)*
>
> *Lack of engagement, desire to participate in screenings. – Other Health Provider (Madison County)*
>
> *Client participation. – Community Leader (Madison County)*

Leadership

> *Creation of a team. – Public Health Representative (Madison County)*

Prevalence/Incidence

> *It is a large problem and not just a community issue. – Social Services Provider (Madison County)*

Fear/Denial

> *Some folks, especially males, avoid going to the doctor until they are very sick. Schools struggle when they offer healthy foods- expenses can go up, and children and some parents complain. Schools then default back to unhealthy food to save money and avoid the outcry. It could be interesting to consult with places that have pulled off healthy school food to see how that happened. – Community Leader (Madison County)*

Diabetes

Contributors to Progress

Those identifying this as a critical issue were asked: "What is contributing to progress on this issue in your community?"

Awareness/Education

> *Health department tries to educate people with diabetes or people curious about the disease. – Public*

> *Health Representative (Madison County)*
>
> *Education being done in preschools and the schools around healthy eating and healthy weight. – Social Services Provider (Madison County)*
>
> *More awareness. – Other Health Provider (Madison County)*

Access to Care/Services

> *The access to health care and prevention programs, prior to being diagnosed with diabetes. – Community Leader (Madison County)*

Access to Healthy Food

> *Healthy foods initiatives at local food pantries. – Community Leader (Madison County)*

Lifestyle

> *Case management by insurers is identifying these patients, and providers focusing on this diagnosis are encouraging physical activity and nutrition. – Other Health Provider (Madison County)*

Impediments of Progress

Those identifying this as a critical issue were asked: "What is getting in the way of progress on this issue in your community?"

Access to Healthy Food

> *Primary schools providing cheap sugars to children. There is no reason to give candy out at public schools, but it is used daily as a treat and reward. Parents are quite powerless to prevent their children from being fed processed sugars at school. This creates and feeds a sugar addiction that is then easily-fed by cheap sugary drinks and food at stores. – Community Leader (Madison County)*

Lifestyle

> *People and self-control. – Other Health Provider (Madison County)*
>
> *Lifestyle choices and lack of education. – Other Health Provider (Madison County)*

Awareness/Education

> *The collaboration of health, food services, and general healthy lifestyle education for each who are diagnosed with diabetes. A support team on a community level to teach and support change or decrease diabetes in the community. – Community Leader (Madison County)*
>
> *Needing more education in certain pockets of the county, access to care. – Public Health Representative (Madison County)*

Prevention/Diagnosis

> *Early screening. – Community Leader (Madison County)*

Chronic Pain

Contributors to Progress

Those identifying this as a critical issue were asked: "What is contributing to progress on this issue in your community?"

Awareness/Education

> *Lots of publicity about chronic pain medications. Public being informed their local provider cannot by law give large quantities of prescription medications. – Other Health Provider (Madison County)*
>
> *Health department and medical community having awareness of the problem. – Public Health Representative (Madison County)*

Prescribing Practices/Policies

> *Offering patients other methods of pain management besides medication. – Community Leader (Madison County)*

Community Involvement and Interest

> *Interest, common issue, often contributing to the opioid epidemic. – Public Health Representative (Madison County)*

Specific Agencies/Programs

> *Hot Springs Health's programs and offerings through their hospice program. – Other Health Provider (Madison County)*

Nothing/No Progress

> *Nothing. – Social Services Provider (Madison County)*

Impediments of Progress

Those identifying this as a critical issue were asked: "What is getting in the way of progress on this issue in your community?"

Drug/Alcohol Addiction

> *People self-medicate with opiates and marijuana. – Social Services Provider (Madison County)*
>
> *Patient's perception that it is okay to get a prescription for pain medications. Patients self-medicating their selves. – Other Health Provider (Madison County)*

Lack of Collaboration

> *Creation of a team, resources. – Public Health Representative (Madison County)*

Access to Care/Services

> *Limited programs and offerings. – Other Health Provider (Madison County)*

Denial/Stigma

> *Stigma, admitting there is an issue on the behalf of the person addicted to substances. Fear. – Public Health Representative (Madison County)*

Employment

> *I think chronic pain has to deal with the types of jobs folks have. In this area, individuals start hard labor jobs at a young age. In order to make a difference, we will have to raise the socio-economic status of our community and recruit jobs that do not involve physical labor. – Community Leader (Madison County)*

Chronic Obstructive Pulmonary Disease (COPD)

Contributors to Progress

Those identifying this as a critical issue were asked: "What is contributing to progress on this issue in your community?"

Decrease in Tobacco Use

> *Health department's focus on smoking cessation and prevention. – Other Health Provider (Madison County)*

Nothing/No Progress

> *More effective communication to young people about the dangers of smoking. – Other Health Provider*

> *(Madison County)*

Access to Care/Services

> *Insurers are now paying based on quality measures. Patients with this diagnosis are being identified, and case management is occurring for these patients. Some patients are taking ownership of their care. – Other Health Provider (Madison County)*
>
> *Access to medical care. – Community Leader (Madison County)*

Drug Overdoses

> *Community is seeing increase in overdose deaths, and realization that, long-term pain medications often lose effectiveness. – Community Leader (Madison County)*

Impediments of Progress

Those identifying this as a critical issue were asked: "What is getting in the way of progress on this issue in your community?"

Tobacco Use/Vaping

> *There is a segment of our population where smoking is just part of the historic social fabric. – Other Health Provider (Madison County)*
>
> *The tobacco culture and cheap cigarettes. – Community Leader (Madison County)*
>
> *Tobacco use culture when it comes to smoking. – Other Health Provider (Madison County)*

Awareness/Education

> *An educational system that begins to address this issue long before COPD is an issue. The preventable side of this concern is an opportunity to reduce the likelihood of someone to have COPD. – Community Leader (Madison County)*

Medication

> *Black market in pain pills is disrupting proper prescribing and control. – Community Leader (Madison County)*

Heart Disease and Stroke

Contributors to Progress

Those identifying this as a critical issue were asked: "What is contributing to progress on this issue in your community?"

Awareness/Education

> *Diabetic and healthy weight-related information is being more effectively communicated. – Other Health Provider (Madison County)*
>
> *Health department and medical community raise awareness of risk factors and treating the disease. – Public Health Representative (Madison County)*

Community Focus

> *Interest and common issue. – Public Health Representative (Madison County)*

Access to Health Care

> *Access to health care providers knowledgeable of the issue. – Community Leader (Madison County)*

Impediments of Progress

Those identifying this as a critical issue were asked: "What is getting in the way of progress on this issue in your community?"

Awareness/Education

> *The debilitating effects of heart disease and stroke is a dramatic change in most lives. The support to both mental and physical health is important. Their lives and the lives of their families is immediate. Education and support to these individuals is important. – Community Leader (Madison County)*

Access to Care/Services

> *Access to care, more education needed. – Public Health Representative (Madison County)*

Lack of Collaboration

> *Creation of a team and resources and guidance. – Public Health Representative (Madison County)*

Upper Respiratory Diseases (Such as Asthma)

Contributors to Progress

Those identifying this as a critical issue were asked: "What is contributing to progress on this issue in your community?"

Health Department

> *Heath department is extremely willing to help within our community. – Community Leader (Madison County)*

Impediments of Progress

Those identifying this as a critical issue were asked: "What is getting in the way of progress on this issue in your community?"

Tobacco Use/Vaping

> *Long standing history of tobacco use. – Community Leader (Madison County)*

Funding

> *Funding sources that help educate our population, as well as providing medicines to people that need it and not able to purchase it. – Community Leader (Madison County)*

Arthritis/Osteoporosis

Contributors to Progress

Those identifying this as a critical issue were asked: "What is contributing to progress on this issue in your community?"

No Contributors

> *Very little progress. – Social Services Provider (Madison County)*

Health Department

> *Solid health department and staff. – Community Leader (Madison County)*

Impediments of Progress

Those identifying this as a critical issue were asked: "What is getting in the way of progress on this issue in your community?"

Funding

> *County management has not put the needed funding into these issues for years and [could better engage] new opportunities to attract services that would contribute to change. – Social Services Provider (Madison County)*
>
> *Funding. – Community Leader (Madison County)*

Chronic Kidney Disease

Contributors to Progress

Those identifying this as a critical issue were asked: "What is contributing to progress on this issue in your community?"

Diagnosis/Treatment

> *There is adequate diagnosis and health care providers to attend to the needs of chronic kidney disease. – Community Leader (Madison County)*

Impediments of Progress

Those identifying this as a critical issue were asked: "What is getting in the way of progress on this issue in your community?"

Support

> *Mental health support and family support in the community to care for these individuals. – Community Leader (Madison County)*

Mental Health and Substance Use

Ranking of Mental Health Conditions as Critical to Address

Key informants in the online survey were given a list of mental health conditions and known factors that contribute to them, then asked to select up to three health issues or behaviors that are the most critical to address collaboratively in their community over the next three years or more.

The following chart outlines the rank order of mental health conditions identified by key informants as critical to address.

Rank	Health Issue	Identified as Critical to Address
1	Substance Use	21
2	General Mental Health	16
3	Dementia/Alzheimer's Disease	12
4	Depression/Anxiety/Stress	10
5	Suicide	5

Substance Use

Contributors to Progress

Those identifying this as a critical issue were asked: "What is contributing to progress on this issue in your community?"

Awareness/Education

> *A group sponsored by the health department on education, MSHAC and the group FAN, family against Narcotics. Public education on the epidemic is increasing. – Community Leader (Madison County)*
>
> *Madison County is taking strong positive steps to begin educating children at an early age about the consequences of substance use. It is a positive step forward for all. – Community Leader (Madison County)*
>
> *Many educational programs at all age levels. – Community Leader (Madison County)*
>
> *Knowledge about abuse and addiction. Narcan prevalence and distribution. – Public Health Representative (Madison County)*
>
> *Health department and education provided by them. Grants that we have received as a community to help in this area. – Community Leader (Madison County)*
>
> *Better education to young people. – Other Health Provider (Madison County)*
>
> *Education, law enforcement. – Community Leader (Madison County)*
>
> *Identifying abuse. – Community Leader (Madison County)*

Collaborative Efforts

> *Seen daily, interest in working together to resolve, various groups working to address. – Public Health*

Representative (Madison County)

Great collaboration. – Community Leader (Madison County)

Specific Agencies/Programs

Madison Substance Awareness Coalition's work, and the community support from stakeholders like the Sherriff's Department. – Other Health Provider (Madison County)

Active community through the MSAC team. – Other Health Provider (Madison County)

Opioid Awareness

There are many groups that are paying attention to the opioid and meth issues in this county. Substance abuse is on the buzz feed. – Community Leader (Madison County)

Funding

Work on a grant to establish a local drug court is a positive first step. – Social Services Provider (Madison County)

Focus grant. – Other Health Provider (Madison County)

Impediments of Progress

Those identifying this as a critical issue were asked: "What is getting in the way of progress on this issue in your community?"

Access to Care/Services

Need additional resources. – Public Health Representative (Madison County)

Funding

Lack of funding and services. There is a danger that, if we focus all attention on one thing (opioids) we might not give enough attention to something nearly as bad (meth)- though we have to go where resources are available. – Community Leader (Madison County)

Availability of Substances

Constantly evolving low cost choices of new drugs. – Other Health Provider (Madison County)

Denial/Stigma

Stigma, the abuser wanting help. – Public Health Representative (Madison County)

Awareness/Education

Minimal progress is being made, as people begin to realize what a problem it is. – Community Leader (Madison County)

Prevalence/Incidence

It's just a large, difficult problem to combat. Lack of competent, local substance abuse service provider outside of the Mars Hill area. – Social Services Provider (Madison County)

Overwhelming numbers involved. – Community Leader (Madison County)

Too much to handle. – Other Health Provider (Madison County)

Law Enforcement

More law enforcement. – Community Leader (Madison County)

Unemployment

There are little opportunities for folks to work and thrive in this community. Not to necessarily to make a claim that our younger population are idle, but the lack of support to this population in day care options, work options, transportation options and growth of younger stronger communities leaves many finding substance abuse more an option. This community is changing from a farming/home-based population to an out of home community. This leaves support behind. – Community Leader (Madison County)

Alcohol/Drug Abuse

> *Self-medicating, crime, lack of education. – Other Health Provider (Madison County)*

Lack of Providers

> *Shortage of counselors and no drug court. – Community Leader (Madison County)*

General Mental Health

Contributors to Progress

Those identifying this as a critical issue were asked: "What is contributing to progress on this issue in your community?"

Awareness/Education

> *Educating patients, families and community of the extent of mental health issues in the community. – Community Leader (Madison County)*
>
> *Recognizing the need. – Other Health Provider (Madison County)*

Collaborative Efforts

> *We have some good mental health organizations that work together to meet the community need. – Community Leader (Madison County)*
>
> *Collaboration, community involvement. – Community Leader (Madison County)*
>
> *Great collaborative. – Other Health Provider (Madison County)*

Community Focus

> *Common issue that is encountered daily. – Public Health Representative (Madison County)*

School Programs

> *Some of the early interventions taking place in the school system are helping to a mild degree. – Social Services Provider (Madison County)*

Affordable Care/Services

> *Treatment options available to residents at low cost. – Other Health Provider (Madison County)*

Staffing

> *Good employees. – Community Leader (Madison County)*

Natural Environment

> *Not sure, but the beautiful natural environment is a resource that is proven to be beneficial to mental health. – Community Leader (Madison County)*

Impediments of Progress

Those identifying this as a critical issue were asked: "What is getting in the way of progress on this issue in your community?"

Access to Care/Services

> *Lack of resources within the county. Access barriers. Cost. – Other Health Provider (Madison County)*
>
> *Isolation. Lack of resources in the county. – Community Leader (Madison County)*
>
> *Resources, money, and staffing. – Public Health Representative (Madison County)*
>
> *Lack of services. – Social Services Provider (Madison County)*
>
> *Resources. – Public Health Representative (Madison County)*

Funding

> *Lack of funding. – Community Leader (Madison County)*

Denial/Stigma

> *Stigma. – Other Health Provider (Madison County)*

Lack of Providers

> *Some providers struggle or have yet to figure out how to adapt. Reaching out/driving to a parent one time to get forms signed for child mental health might lead to the child becoming a client, getting the help, and helping the provider's bottom line, where having a current phone system where parents often are not called back or not followed-up with or reached out to beyond a courtesy call is not effective. – Community Leader (Madison County)*

> *Lack of a competent, local mental health provider. – Social Services Provider (Madison County)*

Awareness/Education

> *Degree of the problem is not well understood, services are not readily available, considerable stigma perceived by the patients and community. – Community Leader (Madison County)*

Policies

> *Health Care reform. Because of the lack of Medicaid expansion, young people who are no longer on their parent's health care are not able to access affordable prescriptions for their mental health. As a college professor, I have seen this at least 10 times this semester. – Community Leader (Madison County)*

Alcohol/Drug Abuse

> *Mental health issues directly related to substance abuse issues which continue to be an intractable problem. – Other Health Provider (Madison County)*

Dementia and Alzheimer's Disease

Contributors to Progress

Those identifying this as a critical issue were asked: "What is contributing to progress on this issue in your community?"

Awareness/Education

> *Programs to make people aware of the problems. – Community Leader (Madison County)*

> *Public awareness by TV ads and personal experiences with our aging population. – Community Leader (Madison County)*

> *Recognizing the diagnosis. – Other Health Provider (Madison County)*

Nothing/No Progress

> *Services. – Other Health Provider (Madison County)*

Specific Agencies/Programs

> *There are good health care resources. – Community Leader (Madison County)*

> *Good programs. – Community Leader (Madison County)*

Community Focus

> *Good volunteer leadership is focusing dealing with the issue and helping educate the community. – Community Leader (Madison County)*

Impediments of Progress

Those identifying this as a critical issue were asked: "What is getting in the way of progress on this issue in your community?"

Family/Caregiver Support

> *Family support is key. The support to care givers allows for the person to get a healthy assessment if they are ready for increased levels of care or can remain in the home. Advanced in care options that are clean, innovative and positive for the individual with this disease. A team of professionals that can come together and help the family and client make supportive choices in navigating the disease progression and subsequent needs. – Community Leader (Madison County)*

> *There are a lot of family caregivers that don't acknowledge a need for additional support or do not know how to utilize resources available to them. – Other Health Provider (Madison County)*

Access to Care/Services

> *Lack of resources. Caregiver burnout. – Other Health Provider (Madison County)*

Funding/Research

> *Scientific research is required to provide better understanding and more effective treatment options. – Other Health Provider (Madison County)*

> *Funding and lack of resources. This is a large and growing problem, not only for this community, but across the country. – Social Services Provider (Madison County)*

> *Research money. – Community Leader (Madison County)*

> *Lack of funds. – Community Leader (Madison County)*

Denial/Stigma

> *Also an issue where there is stigma and stereotyping, slowing progress. – Community Leader (Madison County)*

> *Willingness to identify. – Community Leader (Madison County)*

> *Pride. – Community Leader (Madison County)*

Depression, Anxiety, and Stress

Contributors to Progress

Those identifying this as a critical issue were asked: "What is contributing to progress on this issue in your community?"

Community Focus

> *Community organizing to deal with mental health issues. – Community Leader (Madison County)*

School Programs

> *There is a little headway in the schools and with some providers. – Social Services Provider (Madison County)*

Prevalence/Incidence

> *Common issue. – Public Health Representative (Madison County)*

Impediments of Progress

Those identifying this as a critical issue were asked: "What is getting in the way of progress on this issue in your community?"

Access to Care/Services

> *VAYA/RHA services [could be vastly improved]. – Social Services Provider (Madison County)*
>
> *Resources. – Public Health Representative (Madison County)*

Denial/Stigma

> *Pride. – Community Leader (Madison County)*

Multi-Faceted Issue

> *Depression/anxiety/stress are a global issue. Educational initiatives at an early age will help break the stigma associated with this issue. No one wants to talk about depression/anxiety/stress/suicide. It is time to educate and quit pretending it does not exist. – Community Leader (Madison County)*

Suicide

Contributors to Progress

Those identifying this as a critical issue were asked: "What is contributing to progress on this issue in your community?"

Collaborative Efforts

> *School health/mental health partnership. Stakeholder willingness to address. – Community Leader (Madison County)*

Access to Care/Services

> *Community cohesion and mental health resource availability. – Other Health Provider (Madison County)*

Recognition Of The Problem

> *Response to past instances. – Community Leader (Madison County)*

Impediments of Progress

Those identifying this as a critical issue were asked: "What is getting in the way of progress on this issue in your community?"

Awareness/Education

> *Depression, anxiety, and stress are a global issue. Educational initiatives at an early age will help break the stigma associated with this issue. No one wants to talk about depression/anxiety/stress/suicide. It is time to educate and quit pretending it does not exist. – Community Leader (Madison County)*
>
> *It can be hard to transmit the knowledge and skills out to front line teachers, etc. We are overall doing a good job but don't want to forget getting the knowledge and conversation directly to kids is important. – Community Leader (Madison County)*

Early Diagnosis/Prevention

> *Ability to identify at-risk folks. – Community Leader (Madison County)*
>
> *No direct focus on this issue, especially prevention as it pertains to older adults. – Other Health Provider (Madison County)*

Social Determinants of Health

Ranking of Social Determinants of Health as Critical to Address

Key informants in the online survey were given a list of conditions in which people are born, grow, live, work, and age, as well as known factors that contribute to a person's health. They were then asked to select up to three health issues or behaviors that are the most critical to address collaboratively in their community over the next three years or more.

The following chart outlines the rank order of social determinants of health identified by key informants as critical to address.

Rank	Health Issue	Identified as Critical to Address
1	ACEs	12
2	Early Childhood Education	11
3	Employment Opportunities	11
4	Food Insecurity	9
5	Access to Health Care Services	7
6	Housing	7
7	Transportation	7
8	IPV	6

Adverse Childhood Experiences (ACEs)

Contributors to Progress

Those identifying this as a critical issue were asked: "What is contributing to progress on this issue in your community?"

Awareness/Education

> *We can't help everything, but ACEs is great for awareness and resilience building is a key we are already looking at. – Community Leader (Madison County)*
>
> *Better awareness of the impact of ACEs to the future wellbeing of residents. Improving mechanisms for detecting when children are experiencing ACEs. – Other Health Provider (Madison County)*

School Resources

> *School awareness. – Other Health Provider (Madison County)*
>
> *Impacting our residents and causing many of the issues we see in the school system and jail. – Public*

> *Health Representative (Madison County)*

Impediments of Progress

Those identifying this as a critical issue were asked: "What is getting in the way of progress on this issue in your community?"

Awareness/Education

> *Awareness. – Community Leader (Madison County)*

Access to Care/Services

> *Lack of resources for children in county. – Other Health Provider (Madison County)*
>
> *Need resources and education. – Public Health Representative (Madison County)*

Poverty

> *Poverty and substance abuse. – Other Health Provider (Madison County)*

Early Childhood Education

Contributors to Progress

Those identifying this as a critical issue were asked: "What is contributing to progress on this issue in your community?"

Specific Agencies/Programs

> *A strong HeadStart program and preschool component of the public schools. – Community Leader (Madison County)*
>
> *There are many groups and organizations that are aware of the importance of this issue and are trying different programs to address it. – Other Health Provider (Madison County)*
>
> *The resources available at the health department and throughout the county. – Other Health Provider (Madison County)*
>
> *Madison County Partnership for Children is a great advocate for quality early childhood education. – Community Leader (Madison County)*

School Programs

> *School health fairs and collaboration with medical facilities like the health department. – Public Health Representative (Madison County)*
>
> *New school board chair, hopefully. New superintendent. – Other Health Provider (Madison County)*

Collaborative Efforts

> *Madison County is beginning to take positive steps to collaborate as a community to help provide information and opportunities for early education. – Community Leader (Madison County)*

Community Interest

> *Dedicated volunteers. – Community Leader (Madison County)*

Impediments of Progress

Those identifying this as a critical issue were asked: "What is getting in the way of progress on this issue in your community?"

Funding

> *A way to fund a four-year-old program in our community. – Community Leader (Madison County)*
>
> *Funding never increases. – Community Leader (Madison County)*
>
> *Funding. – Community Leader (Madison County)*

Awareness/Education

> *Outreach to families can be difficult. – Other Health Provider (Madison County)*
>
> *Lack of knowledge of the resources. – Other Health Provider (Madison County)*

Government/Policies

> *The community needs to have a recognized authority on the issue, who has the charter to coordinate the many disparate approaches. – Other Health Provider (Madison County)*
>
> *State government. Our state is currently devaluing educators by paying them less. We need to pay early childhood education workers a living wage in order to get quality professionals. – Community Leader (Madison County)*

Employment Opportunities

Contributors to Progress

Those identifying this as a critical issue were asked: "What is contributing to progress on this issue in your community?"

Economic Development

> *We have a county manager that has made economic development a priority. – Community Leader (Madison County)*
>
> *The employers in Madison County are invested and committed to the community (e.g. manufactures like Printpack, Mars Hill University). – Other Health Provider (Madison County)*

Specific Agencies/Programs

> *Mars Hill University, County Government and a few manufacturing jobs exist in Madison County. – Community Leader (Madison County)*

Government/Policies

> *New program by the governor and others seeking companies to bring jobs to area. – Community Leader (Madison County)*

Low Unemployment

> *Community realization that we have lost many good jobs in our community and we have to start emphasizing education, staying in school, and training a workforce; employers will be interested in hiring. – Community Leader (Madison County)*

Other Comments

> *Natural resources. – Community Leader (Madison County)*

Impediments of Progress

Those identifying this as a critical issue were asked: "What is getting in the way of progress on this issue in your community?"

Low Wages

> *Higher paying jobs in Buncombe. – Other Health Provider (Madison County)*

Employment

> *There is a lack of new and innovative employment in the county. The Early College and access to MHU boost our education and opportunities to attract employers. It is imperative that we being to court employers to see the top level of educated individuals that we produce. – Community Leader (Madison County)*
>
> *No new businesses entering our county. – Public Health Representative (Madison County)*
>
> *No industry. – Community Leader (Madison County)*

Unwillingness to See Growth

> *Lack of desire to have outsiders come to community. – Community Leader (Madison County)*

Limited Infrastructure

> *Infrastructure. We need high speed internet and established work spaces to attract companies. – Community Leader (Madison County)*

Community Focus

> *This issue requires a community commitment to make progress with a long-term focus as it will not be changed easily or quickly. – Community Leader (Madison County)*

Food Insecurity

Contributors to Progress

Those identifying this as a critical issue were asked: "What is contributing to progress on this issue in your community?"

Specific Agencies/Programs

> *A significant back pack program exists in the county, school system trying to push the applications for free and reduced lunches. – Community Leader (Madison County)*
>
> *Beacon is booming. – Other Health Provider (Madison County)*
>
> *Beacon of Home, Neighbors in Need and other food services are available in this community. – Community Leader (Madison County)*

Collaborative Efforts

> *Many programs and people working hard to feed the community. – Community Leader (Madison County)*

Awareness/Education

> *Education and publicity are making the problem better known. – Social Services Provider (Madison County)*

Community Gardens

> *The many efforts by the community to secure food for the community. – Other Health Provider (Madison County)*

Economic Development

> *Efforts to make employment improvements are a major part of addressing food insecurity. – Community Leader (Madison County)*

Transportation

> *Transportation provided to food distribution sites. More days for distribution. Distributions in a variety of locations, including congregate meal sites. – Other Health Provider (Madison County)*

Impediments of Progress

Those identifying this as a critical issue were asked: "What is getting in the way of progress on this issue in your community?"

Access to Healthy Food

> *Advertising the availability of food. Lack of knowledge of what is offered in the community. – Other Health Provider (Madison County)*

> *Still not meeting the need. Limited number of grocery stores/ food deserts. – Other Health Provider (Madison County)*

Funding

> *Funds. – Community Leader (Madison County)*

Transportation

> *Better support of transportation services to bring the citizens to the food disbursement areas. – Community Leader (Madison County)*

> *Transportation. – Other Health Provider (Madison County)*

Access to Care/Services

> *Resources; can only do so much with what is available. – Social Services Provider (Madison County)*

Denial/Stigma

> *Pride. – Community Leader (Madison County)*

Community Focus

> *Progress will be slow and require buy-in from the whole community. – Community Leader (Madison County)*

Access to Health Care Services

Contributors to Progress

Those identifying this as a critical issue were asked: "What is contributing to progress on this issue in your community?"

Specific Agencies/Programs

> *Good health department staff. – Community Leader (Madison County)*

Access to Care/Services

> *We have access and have a solid health department and have maintained community health provider. We are close to more specialized services in Asheville. – Community Leader (Madison County)*

Collaborative Efforts

> *The health department and Hot Springs Health do a great job with offering care to Madison County. – Community Leader (Madison County)*

Affordable Care/Services

> *Great affordable health care system with the health department and Hot Springs Health care working together. – Community Leader (Madison County)*

Transportation

> *County transportation. – Public Health Representative (Madison County)*

Community Focus

> *Desire to help our residents. – Public Health Representative (Madison County)*

Impediments of Progress

Those identifying this as a critical issue were asked: "What is getting in the way of progress on this issue in your community?"

Insurance/Medicaid Issues

> *Our state has yet to expand Medicaid. Also, insurance companies and Mission [might not] have our best interests at heart. Some of this is the ongoing national issue but we can influence our providers and stakeholders here locally. The more local access Madison County has, the more likely Madison folks will go get healthcare before they have a major event. – Community Leader (Madison County)*

Funding

> *Funding. – Community Leader (Madison County)*

Access to Care/Services

> *Again, health care reform needs to happen. We must go to a single payer system in order for everyone to be able to access the health care they need. – Community Leader (Madison County)*
>
> *The follow-up of services which are often small or nonexistent. CAAP or other in-home services are difficult to access. These essential services keep our patients in the community. – Community Leader (Madison County)*

Awareness/Education

> *Lack of education. – Public Health Representative (Madison County)*

Access for Uninsured/Underinsured

> *Residents that are uninsured or underinsured who don't seek care due to costs. Need resources. Health department cannot slide labs and those can be expensive. – Public Health Representative (Madison County)*

Housing

Contributors to Progress

Those identifying this as a critical issue were asked: "What is contributing to progress on this issue in your community?"

Specific Agencies/Programs

> *There are HUD and low-income housing in Madison County. – Community Leader (Madison County)*

Recognition Of The Problem

> *Community members acknowledge the issue and are beginning to discuss ways to provide more low-income housing opportunities in the county. – Community Leader (Madison County)*

Affordable/Low Income Housing

> *Some affordable housing built. – Community Leader (Madison County)*

Collaborative Efforts

> *There are several organizations working on increasing the availability of ow cost housing. – Other Health Provider (Madison County)*

Impediments of Progress

Those identifying this as a critical issue were asked: "What is getting in the way of progress on this issue in your community?"

Affordable Housing

> *Expensive to live here. – Community Leader (Madison County)*
>
> *Housing costs. – Community Leader (Madison County)*
>
> *There needs to be a greater assessment of mean income and the HUD dollars spent in this county. HUD housing or sliding scales, according to income, need to be built closer to town centers. Habitat for Humanity and other "sharing" entities should be invited to build and provide for citizens that encourage growth in more innovative ways. – Community Leader (Madison County)*
>
> *There are very few opportunities for low income housing in Madison County. – Community Leader (Madison County)*

Poverty

> *Poverty, substance abuse and lack of the right employment opportunities continues to result in too many people living in sub-standard conditions. – Other Health Provider (Madison County)*

Transportation

Contributors to Progress

Those identifying this as a critical issue were asked: "What is contributing to progress on this issue in your community?"

Specific Agencies/Programs

> *Madison Community Services is responsive to community needs for transportation. – Other Health Provider (Madison County)*
>
> *There is an existing county transportation authority. – Community Leader (Madison County)*
>
> *Limited programs available try to do as much as possible. – Community Leader (Madison County)*

Recognition Of The Problem

> *There is an awareness. Some strong community leaders have looked into the issue over time. Partnerships like the school/GEAR UP after school bus. – Community Leader (Madison County)*

Impediments of Progress

Those identifying this as a critical issue were asked: "What is getting in the way of progress on this issue in your community?"

Funding

> *There needs to be more support with increased funding. There are 11 vans in the current fleet and only 7 drivers. The opportunities that could arise for increased transportation would allow greater access to medical, social, errands, educations, employment, food services, senior centers. – Community Leader (Madison County)*

Access to Transportation

> *Resources are limited and efficiency in service delivery is a challenge in rural areas. – Other Health Provider (Madison County)*
>
> *Large issue. Need more public transportation choices. – Social Services Provider (Madison County)*

Lack Vision/Strategic Planning

> *Thinking it is too big to fix. Maybe we have not looked at some outside of the box ideas (recruit some locals/pay for Uber or Lyft type services to cut through red tape?) Expect funded providers to address transportation up front or lose some funding. – Community Leader (Madison County)*
>
> *Finding reasonable answers. – Community Leader (Madison County)*

Affordable Care/Services

> *Money and pride. – Community Leader (Madison County)*

Interpersonal Violence (IPV)

Contributors to Progress

Those identifying this as a critical issue were asked: "What is contributing to progress on this issue in your community?"

Specific Agencies/Programs

> *My Sisters Place has been a wonderful community resource. – Other Health Provider (Madison County)*

Recognition Of The Problem

> *Identifying this as a problem in the community is a major first step. – Community Leader (Madison County)*

Home Life

Impediments of Progress

Those identifying this as a critical issue were asked: "What is getting in the way of progress on this issue in your community?"

Denial/Stigma

> *Embarrassment; frightened to speak out. – Other Health Provider (Madison County)*
>
> *Also, a stigmatizing issue that is difficult for people to acknowledge. – Community Leader (Madison County)*

Community Focus

> *Folks willing to get help. – Community Leader (Madison County)*

Other Issues

Ranking of Other Issues as Critical to Address

Key informants in the online survey were given a list of other health conditions not previously addressed in the survey, then asked to select up to three health issues or behaviors that are the most critical to address collaboratively in their community over the next three years or more.

The following chart outlines the rank order of other health conditions identified by key informants as critical to address.

Rank	Health Issue	Identified as Critical to Address
1	Family Planning	12
2	Dental Care/Oral Health	11
3	Infant and Child Health	11
4	Injury and Violence	11
5	Immunizations and Infectious Diseases	10
6	Hearing and Vision Conditions	4
7	Sexually Transmitted Infections	1
8	HIV/AIDS	0

Family Planning

Contributors to Progress

Those identifying this as a critical issue were asked: "What is contributing to progress on this issue in your community?"

Health Department

> *Family planning services are available through the health department, but more people need to seek them out. – Other Health Provider (Madison County)*
>
> *Madison County Health Department offers strong family planning resources and education. – Community Leader (Madison County)*
>
> *We have a good health department and access to community health. – Community Leader (Madison County)*
>
> *Health department is so willing to work with our girls/women. – Community Leader (Madison County)*
>
> *Health department has a program. – Public Health Representative (Madison County)*

Impediments of Progress

Those identifying this as a critical issue were asked: "What is getting in the way of progress on this issue in your community?"

Awareness/Education

> *Too many young people are starting families without adequate education about what it takes to raise children properly and without adequate employments opportunities. – Other Health Provider (Madison County)*
>
> *Getting good information out. – Community Leader (Madison County)*
>
> *Educating children about family planning. – Public Health Representative (Madison County)*
>
> *Not enough parenting classes. – Community Leader (Madison County)*

Lack of Prevention in Schools

> *More frank discussion needs to occur at the high school level about family planning. – Community Leader (Madison County)*
>
> *We may need to update sex education in schools and jails/facilities. – Community Leader (Madison County)*

Dental Care and Oral Health

Contributors to Progress

Those identifying this as a critical issue were asked: "What is contributing to progress on this issue in your community?"

Specific Agencies/Programs

> *Dental program at health department. – Community Leader (Madison County)*
>
> *Dental center in health department. – Public Health Representative (Madison County)*

Access to Care/Services

> *There is one county dental care facility and a few private. – Community Leader (Madison County)*
>
> *Several dental providers in community. – Other Health Provider (Madison County)*

Affordable Care/Services

> *The Madison County Health Department provides some low-cost treatment availability. – Other Health Provider (Madison County)*

School Programs

> *Health department and school nurses provide help with all areas of health and are quick to diagnose areas of need. – Community Leader (Madison County)*

Impediments of Progress

Those identifying this as a critical issue were asked: "What is getting in the way of progress on this issue in your community?"

Affordable Care/Services

> *The need for affordable and good denture care. So many of our seniors have ill-fitting dentures. It increases their lack of healthy eating, socialization, and can bring on gum disease which sparks other health issues. Medicaid is only so helpful with the cost of dentures. An affordable or even free clinic,*

> *using dental students in the area, could improve the quality of care. – Community Leader (Madison County)*
>
> *Many people cannot afford the proper periodic checkups required for good dental health. When they have problems, the cost of corrective help is prohibitive for a great many people in this county. Insurance does not adequately cover it. – Other Health Provider (Madison County)*
>
> *Many residents do not seek dental care due to the costs. – Public Health Representative (Madison County)*

Awareness/Education

> *Making sure the community knows about the dental center and importance of dental health. – Public Health Representative (Madison County)*

Insurance Issues

> *Do all providers accept Medicaid? Who handles indigent patients? – Other Health Provider (Madison County)*
>
> *Most insurances have minimal coverage for dental benefits and limited local providers. – Other Health Provider (Madison County)*

Lack of Providers

> *Lack of providers. – Community Leader (Madison County)*

Community Focus

> *Pride. – Community Leader (Madison County)*

Infant and Child Health

Contributors to Progress

Those identifying this as a critical issue were asked: "What is contributing to progress on this issue in your community?"

Health Department

> *Good health department. – Community Leader (Madison County)*

Awareness/Education

> *Education, good health department and access to community health. – Community Leader (Madison County)*

Collaborative Efforts

> *Community cohesion from service providers. – Other Health Provider (Madison County)*

Physician Focus

> *New pediatrician. – Other Health Provider (Madison County)*

Many Resources

> *Several medical centers in the county. – Public Health Representative (Madison County)*

Impediments of Progress

Those identifying this as a critical issue were asked: "What is getting in the way of progress on this issue in your community?"

Access to Care/Services

> *no local hospital/ limited local pediatric care providers. – Other Health Provider (Madison County)*

Awareness/Education

> *Educating parents. – Community Leader (Madison County)*

Nothing

> *Unsure. – Public Health Representative (Madison County)*

Alcohol/Drug Abuse

> *for many reasons, including substance abuse, a large and growing number of children are being raised by grandparents or other non-parents. This strains everyone and everything. – Community Leader (Madison County)*

Injury and Violence

Contributors to Progress

Those identifying this as a critical issue were asked: "What is contributing to progress on this issue in your community?"

Specific Agencies/Programs

> *Our domestic violence shelter and our sheriff's office are strengths in our community. – Community Leader (Madison County)*

Effective Law Enforcement

> *Large law enforcement presence. Education about injury prevention. – Other Health Provider (Madison County)*
>
> *Good law enforcement. – Community Leader (Madison County)*

Impediments of Progress

Those identifying this as a critical issue were asked: "What is getting in the way of progress on this issue in your community?"

Alcohol/Drug Abuse

> *Substance use. – Other Health Provider (Madison County)*
>
> *Violence due to drug or alcohol abuse. Culture. – Other Health Provider (Madison County)*
>
> *Drug abuse. – Community Leader (Madison County)*

Denial/Stigma

> *Willingness of those involved to seek help. – Community Leader (Madison County)*

Law Enforcement

> *Lack of law enforcement presence. – Community Leader (Madison County)*

Immunizations and Infectious Diseases

Contributors to Progress

Those identifying this as a critical issue were asked: "What is contributing to progress on this issue in your community?"

Awareness/Education

> *Strong PR from the health department and public schools. – Community Leader (Madison County)*

Specific Agencies/Programs

> *Active programs. – Community Leader (Madison County)*
>
> *The HSHP has instituted a vaccine policy. – Other Health Provider (Madison County)*
>
> *Good programs. – Community Leader (Madison County)*

Access to Care/Services

> *Access to medical care to address these issues. – Community Leader (Madison County)*

Physician Focus

> *Staff. – Other Health Provider (Madison County)*

Affordable Care/Services

> *Plenty of choices for low cost services. – Other Health Provider (Madison County)*

Impediments of Progress

Those identifying this as a critical issue were asked: "What is getting in the way of progress on this issue in your community?"

Awareness/Education

> *Preconceived ideas that vaccines hurt children. – Community Leader (Madison County)*
>
> *Getting people educated. – Community Leader (Madison County)*
>
> *Lack of knowledge. – Community Leader (Madison County)*
>
> *Need education. – Other Health Provider (Madison County)*

Cultural/Personal Beliefs

> *Growing movement against vaccination. – Social Services Provider (Madison County)*
>
> *Too many people are counting on others to get these immunizations to keep various diseases at bay. – Other Health Provider (Madison County)*

Access to Medications/Supplies

> *We need to make sure we receive adequate supplies in a timely manner. Not unique to Madison but we have a pocket of folks who think a lot about health and community but have unfortunately bought in to the lie that immunization is bad. Building relationships with them over time could help. – Community Leader (Madison County)*

Parental Influence

> *Parents or caregivers who do not want to vaccinate their children. – Other Health Provider (Madison County)*

Follow Up/Support

> *The support after seeing the medical professionals to follow up with necessary medication, life changes and access to understanding the gravity of the diseases. – Community Leader (Madison County)*

Hearing and Vision Conditions

Contributors to Progress

Those identifying this as a critical issue were asked: "What is contributing to progress on this issue in your community?"

Nothing/No Progress

> *Little being done. – Community Leader (Madison County)*

Impediments of Progress

Those identifying this as a critical issue were asked: "What is getting in the way of progress on this issue in your community?"

Affordable Care/Services

> *This is an expensive adventure. Getting out into the community to check for hearing issues, affording care or hearing aids is unobtainable for many and the lack of support of citizens to have follow up care. So many were able to finally get hearing aids but are then discouraged when the don't fit properly. Education that hearing aids are relationships with your ENT or hearing program to often go for fittings and assessments. – Community Leader (Madison County)*
>
> *Many residents don't get eye exams and glasses, due to the costs. They wear their old glasses for many years, they don't get hearing test and cannot afford hearing aids. – Public Health Representative (Madison County)*

Funding

> *Funding. – Community Leader (Madison County)*

Sexually Transmitted Infections

Contributors to Progress

Those identifying this as a critical issue were asked: "What is contributing to progress on this issue in your community?"

No comments

Impediments of Progress

Those identifying this as a critical issue were asked: "What is getting in the way of progress on this issue in your community?"

Lack of Prevention in Schools

> *Our local college campus does not do education on this topic and does not provide condoms for students to protect themselves against the spread of infectious disease. – Community Leader (Madison County)*

HIV/AIDS

Contributors to Progress

Those identifying this as a critical issue were asked: "What is contributing to progress on this issue in your community?"

No comments

Impediments of Progress

Those identifying this as a critical issue were asked: "What is getting in the way of progress on this issue in your community?"

No comments

Additional Comments

Other issues uncovered through the online key informant survey include the following:

Substance Abuse

> *Can't stress enough the need in Madison County for substance use treatment and mental health treatment. We have very limited services and our residents desperately need these. – Public Health Representative (Madison County)*

Aging Population Needs Community Support

> *We have an aging population that needs community support as they transition from healthy and active to fragile and needing support to make it through the day. This issue of aging and the changing of needs is critical. Access to support, medical care, transportation and a network of care professionals is necessary to allow our Seniors the support they need. – Community Leader (Madison County)*

Need a Drug Court

> *We need a drug court in Madison County. – Community Leader (Madison County)*

Our State is Divided

> *At present, our State is in many ways divided. We have several large/booming urban areas with people, money, resources pouring in. We also have one of the largest rural populations in the United States, and many of those are losing people, closing schools etc. Madison County will need to collaborate with smaller and larger surrounding areas to advocate and gain resources to help us all have a healthy community. – Community Leader (Madison County)*

Patient Compliance

> *patient compliance and understanding of their role in health improvement. – Community Leader (Madison County)*