Jackson County 2015 Community Health Assessment

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JACKSON COUNTY COMMUNITY HEALTH ASSESSMENT

ACKNOWLEDGEMENTS

This document was developed by the Jackson County Department of Public Health in collaboration with the Healthy Carolinians of Jackson County Partnership and other key partners as part of a local community health assessment process. We would like to thank and acknowledge several agencies and individuals for their contributions and support in conducting this health assessment:

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JACKSON COUNTY 2015 CHA EXECUTIVE SUMMARY

Purpose and Process

During the 2015 Community Health Assessment (CHA), the Jackson County Department of Public Health (JCDPH) partnered with WNC Healthy Impact to complete the process. WNC Healthy Impact is a partnership between 16 counties of hospitals and health departments in Western North Carolina (WNC), working towards a vision of improved community health. This partnership consisted of working together locally and regionally on a community health improvement process to assess the health needs, develop collaborative plans, take coordinated action, and evaluate progress and impact. (WNC Healthy Impact, 2015)

Throughout 2015, a variety of data collection took place for the CHA. JCDPH, in partnership with WNC Healthy Impact, collected both primary and secondary data to not only determine the health status of Jackson County but also see how its status relates to that of the region. In working with WNC Healthy Impact, the CHA Work Team and Steering Committee of Jackson County collected data through a Core Survey of 200 residents, 13 key stakeholder interviews, and five listening sessions. Further, secondary data from the NC State Center for Health Statistics, US Census Bureau, CDC's Behavioral Risk Factor Surveillance System, and more was collected to supplement the primary data, filling in any data gaps. All collected data was analyzed and prioritized with the input of the community via a prioritization process based on the *Rating/Ranking Key Health Issues* (Health Resources in Action) and the *Hanlon Method for Prioritizing Health Problems* (NACCHO). Three health priorities were selected for the community to focus efforts on, aiming to make a collective impact over the next three years.

Many key partners participated in this process. Partners included JCDPH, WNC Healthy Impact, Western Carolina University, Jackson County Parks and Recreation Department, Jackson County Department on Aging, Jackson County Department of Social Services, Mountain Projects Inc., Harris Regional Hospital, Jackson County Government, Town of Sylva, and Jackson County Public Schools. All entities and organizations provided great insight into this process, offering opinions on the health status of this community. It is through their partnership and collaboration that we were able to make this a product **about** the community, **by** the community, and **for** the community.

Data Summary

Community

Jackson County is a rural, Tier 1 county in the southwestern mountains of North Carolina. The county has four main townships, additional residential areas, and the Qualla Boundary—a tribal reservation for the Eastern Band of Cherokee Indians. In 2014, Jackson County had 40,981 residents. The majority of residents are Caucasian (85.2%) with minorities represented as follows: American Indian/Alaskan Native (9.6%), Hispanic/Latino (5.1%), African Americans (2.3%), and Asian (1.0%). (QuickFacts, Jackson County, North Carolina, 2014) Additionally, Jackson County has a rapidly growing older adult population. By 2030, projections estimate that

there will be more than 9,500 persons age 65+ in Jackson County—approximately 25% of the total population. (US Census Bureau, Profile of General Demographic Characteristics: 2000 (DP-1), SF1, 2000)

As a result of geographic isolation and a lack of resources and employment opportunities in the area, 21.8% of the population lives below the poverty level. (QuickFacts, Jackson County, North Carolina, 2014) Jackson County is located closer to three other state capitols (Atlanta, GA; Knoxville, TN; and Columbia, SC) than its own state capitol. This geographic distance lends to a feeling of disconnect and often isolation from both state lawmakers and resources. This separation also supports the characteristic of "rugged individualism" that many Jackson County residents possess—residents here take care of themselves and their families, priding themselves on not asking for help. While rugged individualism can be an asset, it can also be a downfall as many do not know who to turn to and how to ask for help when they truly need it.

Health Outcomes

In 2011, the CHA process identified Healthy Eating, Physical Activity, and Substance Abuse Prevention as health priorities. The community devoted much effort to each priority area, making some progress and highlighting areas that are still in need of attention. To begin, the three leading causes of death (cancer, diseases of the heart, chronic lower respiratory disease) in Jackson County have not changed—they are on par with the region and the state. A long-standing and wide-spread problem involves males faring poorly compared to females in terms of mortality. In five (cancer, diseases of the heart, chronic lower respiratory disease, unintentional injuries, diabetes mellitus) of the seven leading causes of death, the rate of mortality of males is much higher than that of females. (NC SCHS, 2009-2013 Race-Specific and Sex-Specific Age-Adjusted Death Rates by County (CD21B), 2009-2013)

Our community noticed a spike in unintentional injuries (both falls and poisonings) that requires additional attention. In 2015, 37.8% of seniors age 65+ reported a fall within the past year; this is an increase from 22.9% in 2012. (Professional Research Consultants, Inc, 2015) Additionally, from 2009-2013, 34 residents died as a result of unintentional poisoning with 76% of these deaths due to medication or drug overdoses. (Injury and Violence Prevention Branch, 2015) Unfortunately high mortality rates due to unintentional poisoning (especially by medication and drug overdose) is becoming a general characteristic of WNC.

Both adult diabetes and obesity prevalence continues to rise in Jackson County and WNC. The average self-reported prevalence of Jackson County adults with diabetes was 10.7% in the period of 2005-2011. (CDC, County Level Estimates of Diagnosed Diabetes- of Adults in NC, 2005 [and other years as noted], 2005) Additionally, the self-reported prevalence of prediabetes for 2015 was 10.0%. This apparent rising of both pre-diabetes and diabetes may be correlated with the high prevalence of adult overweight and obesity. In 2015, 68% of adults were overweight or obese with 36.3% of adults self-reporting as obese. (Professional Research Consultants, Inc, 2015)

Populations at risk

Jackson County in its entirety is a Tier 1, economically distressed community indicating that all of its residents are at-risk for developing health issues. Digging deeper, it is important to focus our efforts on those who are most vulnerable, underserved, and facing disparities to ensure health equity among our residents. Those at-risk populations in Jackson County include **low-income residents**, the un- or under-insured, residents with limited educational attainment, and minorities (ex: Native Americans and Hispanics).

Health Priorities

The Jackson County CHA Work Team worked to gather both primary and secondary data as described above. Once gathered, the Team analyzed the data and narrowed it down to 10 health issues. The issues were presented during a Community Meeting. From there, the community prioritized the issues, selecting three health priorities. The CHA Facilitator presented these priorities to the CHA Steering Committee for confirmation. The three health priorities selected by our community members include:

- Physical Activity and Nutrition
- Injury and Substance Abuse Prevention
- Chronic Disease

Next Steps

The 2015 CHA will be disseminated in a variety of ways. To begin, the document will be made available online at http://health.jacksonnc.org/community-health-data-1. Hard copies will also be available at the Health Department, local library, and printed upon request. The CHA Facilitator will present the CHA data during a Board of Health Meeting, Healthy Carolinians Steering Committee meeting, JCDPH staff meeting, School Health Advisory Council (SHAC) meeting, and upon request.

Next steps include the development of a community health improvement plan based on the findings from the CHA. The CHA Facilitator will convene community members and partners interested in "moving the needle" on the selected health priorities. Action teams will emerge from the selected health priorities and the teams will begin brainstorming evidence-based strategies. While much work has already been done to improve the health of our community's residents, much work is left to do to ensure that Jackson County is the healthiest place to live, learn, work, and play.

CHAPTER 1 – COMMUNITY HEALTH ASSESSMENT PROCESS

Purpose

Community health assessment (CHA) is an important part of improving and promoting the health of county residents. **Community-health assessment is a key step in the ongoing community health improvement process**.

A community health assessment (CHA), which is both a process and a product, investigates and 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.

Definition of Community

Community is defined as "county" for the purposes of the North Carolina Community Health Assessment Process. Harris Regional Hospital serves the residents of Jackson County as a for-profit hospital. Regardless,

Compile Act on what's Health-related important and Data - Needs Evaluate and Assets Engaged Partners & Community Collaborative Analysis and Implementation Interpretation **Planning** Prioritization of Needs

Harris Regional Hospital was a partner in the local level assessment though it did not have to complete a community health (needs) assessment as required of not-for-profit hospitals.

WNC Healthy Impact

WNC Healthy Impact is a partnership between hospitals and health departments in western North Carolina to improve community health. As part of a larger, and continuous, community health improvement process, these partners are collaborating to conduct community health assessments across western North Carolina. Learn more by visiting: www.WNCHealthyImpact.com. Our county and partner hospitals are involved in this regional/local vision and collaboration. Participating counties include: Buncombe, Cherokee, Clay, Graham, Haywood, Henderson, Jackson, Macon, Madison, McDowell, Mitchell, Polk, Rutherford, Swain, Transylvania and Yancey.

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 product we share a general overview of health and influencing factors then focus more on priority health issues identified through this 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 publically available secondary data metrics with our county compared to the sixteen county WNC region as "peer"
- Set of maps accessed from Community Commons and NC Center for Health Statistics
- Telephone survey of a random sample of adults in the county

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

Additional Community-Level Data

Additional community-level data was collected beyond the core data set collection. The CHA Work Team conducted 13 interviews with a variety of key stakeholders throughout Jackson County. Further, the CHA Work Team implemented five listening sessions with the following community groups—older adults, adults who rely on the local free health clinic, Western Carolina University students who live on campus, Western Carolina University nutrition students, and high school students.

All qualitative data collected by the CHA Work Team was coded and analyzed as a group, looking for key themes. Many patterns arose from the key stakeholder interviews and listening sessions. This qualitative data was presented with the core data set to community members during the prioritization process to select health priorities.

Health Resources Inventory

An inventory of available resources of our community was conducted through reviewing a subset of existing resources currently listed in the 2-1-1 database for our county as well as working with partners to fill in 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 an important element of the community health assessment process. Our county included community input and engagement in a number a ways:

- Partnership on conducting the health assessment process via the CHA Work Team and CHA Steering Committee
- Through primary data collection efforts (survey, listening sessions, and key stakeholder interviews)
- In the identification and prioritization of health issues.

In addition, community engagement is an ongoing focus for our community and partners as we move forward to the collaborative action 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 assure 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 and product, 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. In particular, for the purposes of the overall community health assessment, we aimed to understand variability in health outcomes and access of medically underserved, low-income, minority, and others experiencing health disparities.

To assist in data analysis, reporting, prioritization and health improvement planning, we came up with the following definitions and examples for underserved, at-risk, and vulnerable populations.

- The underserved are community members who do not access health care either because there is a lack of services or providers available or because of limitations of income, literacy, or understanding on how to access services. Jackson County has high Health Professional Shortage Area (HPSA) scores (Mental Health: 12, Primary Care: 17, and Dental Health: 18) proving that all residents in Jackson County are underserved. (HRSA, 2015) More specific examples of underserved populations in Jackson County include the un- or under-insured, residents living below the poverty level, residents with limited educational attainment, etc.
- Those **at-risk** are community members of a particular group who are likely to, or have the potential to, get a specified health condition. Examples of at-risk populations in Jackson County include residents who are low income, minorities, who are un- or underinsured, who smoke, who abuse substances, are obese/overweight, who are sedentary, do not eat the recommended amount of fruits and vegetables, etc.
- The **vulnerable** are community members that may be more susceptible than the general population to risk factors that lead to poor health outcomes. Examples of vulnerable populations in Jackson County include residents living below the poverty level, residents using WIC/FNS services, older adults, etc.

CHAPTER 2 – JACKSON COUNTY

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Picture courtesy of UNC School of Social Work.

Location and Geography

Jackson County is a Tier 1, rural county located in the heart of Western North Carolina (WNC), surrounded by the Great Smoky

Mountains and the Blue Ridge Parkway. Jackson County consists of 494 square miles of mountains, rolling hills, and fertile valleys. Elevations in this community range from 2,000 to 6,000 feet. (Hotaling, 2015) Because of the pleasant climate and scenic beauty, Jackson County attracts not only many tourists but also many retirees to the area.

Jackson County is home to four main towns (Sylva as the county seat, Dillsboro, Webster, and Cashiers), many residential areas (Cullowhee, Forest Hills, and Tuckaseigee), and the Qualla Boundary—a tribal reservation for the Eastern Band of Cherokee Indians. Notable geographic features of Jackson County include Richland Balsam (the county's tallest peak at 6,410 ft.), Whitewater Falls (411 ft.), and Panthertown in Cashiers, which has been described as the "Yosemite of the East." Additionally, the picturesque Tuckaseigee River flows 40 miles through



Photo courtesy of main.nc.us/jackson/

the county. (Hotaling, 2015) There are many lakes and streams, ideal for water activities such as rafting, kayaking, and fishing. Jackson County is a perfect place for those seeking the adventure of recreational activities or those seeking the peace and tranquility of the mountains.

Jackson County is considered centrally located to surrounding metropolitan areas, many of which are out-of-state. It is 150 miles from Atlanta, GA; 111 miles from Knoxville, TN; and 195 miles from Columbia, SC. Coincidently, Jackson County is 292 miles from Raleigh, NC—its own state capital. This distance from the capital lends to a feeling of isolation from state lawmakers and inaccessibility to state resources at times. Adding to the feelings of isolation and inaccessibility, Jackson County has mountainous terrain, rough roads, and can experience harsh winters.

History

Named for President Andrew Jackson, Jackson County was founded in 1851. (Martin, 2015) This county was formed from parts of Haywood and Macon Counties. Jackson County is shaped by the unique identities of its several towns and residential areas, each having its own rich history. Webster, the original county seat of Jackson County, was created in the mid-1800s and incorporated in 1859. During the construction of the Western NC Railroad (now the Great Smoky Mountain Railroad), Webster's residents expected the railroad to run through their town's center. However, the railroad was built through the town of Sylva instead. Cullowhee is an unincorporated township comprised mostly of Western Carolina University and the surrounding businesses/residences designed to serve faculty and students. Dillsboro is a small village of shops and crafters. During the 1880s when the Western NC Railroad was built, Dillsboro was a center of railway activity. Finally, Sylva is the county's retail and professional

center. Named for William D. Sylva, Sylva's development rose with the construction of the Western NC Railroad. The railroad's route through Sylva made it a prime location for the county's seat but the issue of relocation resulted in years of bitter dispute between representatives of Sylva and Webster. The state legislature settled the dispute, giving Sylva permission to construct a courthouse and to pay the moving costs to relocate. (Martin, 2015). To this day, that courthouse (now home to the Jackson County Public Library Complex) is touted to be the most photographed courthouse in the state.

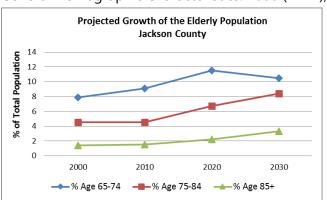


Photo courtesy of The Sylva Herald.

Population

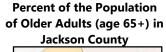
In 2014, 40,981 residents lived in Jackson County—a 1.8% increase from 2010. The majority of residents are Caucasian (85.2%) with minorities represented as follows: American Indian/Alaskan Native (9.6%), Hispanic/Latino (5.1%), African Americans (2.3%), and Asian (1.0%). (QuickFacts, Jackson County, North Carolina, 2014) Jackson County has a significantly higher proportion of American Indians and significantly lower proportion of African Americans (and other minority groups) than the WNC region and NC as a whole. The median age of Jackson County residents is 36.3 years—8.4 years younger than the WNC regional average and 1.1 years younger than the NC average. Nevertheless, Jackson County has a lower proportion of younger persons and a higher proportion of older persons than NC.

In fact, the population in each major age group age 65 years and older in Jackson County will increase between 2010 and 2030. The proportion of the population age 85 years and older will more than double in that period—a predicted increase of 87%. By 2030, estimates project that there will be more than 9,500 persons age 65+ in Jackson County. (US Census Bureau, Profile of General Demographic Characteristics: 2000 (DP-1), SF1, 2000) This aging



Source: US Census Bureau and NC State Office of Budget and Management

population begs the question—are there sufficient health and human service resources (such as adult day care, respite care, congregate meals, and more) adequate to meet the needs of 9,500+ seniors in 2030?





Population Age 65+, Percent by Tract, US Census 2010

Over 19.1%
16.1 - 19.0%

13.1 - 16.0% Under 13.1%

No Data or Data Suppressed

Source: Community Commons

CHAPTER 3 – A HEALTHY JACKSON COUNTY

Elements of a Healthy Community

When key stakeholders were asked to describe what elements they felt contributed to a healthy community, they reported:

- Access to healthcare to include preventative care
- Keeping health at the forefront in all policies
- More and better health education at all ages
- Access to affordable, healthy foods
- Plentiful, safe places to recreate

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

In Jackson County, a community health improvement coalition exists called the Healthy Carolinians of Jackson County Partnership. Founded in the early 1970s, this coalition has grown and developed to become a community-based advocacy group of volunteer agencies and individual community members, working to improve the quality of health for all residents of Jackson County through:

- Improved health services
- Increased efficient utilization of health services
- Community empowerment

Healthy Carolinians of Jackson County works through a Steering Committee and three Action Teams to:

- Build and promote collaborative partnerships
- Identify critical needs in the community
- Guide local planning efforts to improve health
- Support innovative health programs
- Advocate for health-promoting policies

Additionally, Healthy Carolinians of Jackson County plays a large role in the CHA process. Members of the



"I moved here, like many

others, for a job. But what I

like most about this place is

the opportunities available for

me to help out, the challenges

set forth that I can make an

impact on. That's what

drives me. That's what I find

cool."

Members of the Healthy Carolinians of Jackson County Partnership work to select health priorities for the 2015 CHA. Photo courtesy of Melissa McKnight

Steering Committee act as the CHA Steering Committee, advising the process, providing input, and confirming the identified health priorities. Action Teams are formed around selected health priorities and charged with developing strategies to address each health priority. See http://health.jacksonnc.org/healthy-carolinians for more information on the Partnership, Action Teams, and notable accomplishments.

Community Assets

We also asked key stakeholders to share some of the assets or "gems" they thought were important in our community. They shared the following information and ideas:

- The natural resources, environment, and geography all lead to recreation opportunities
- Compassionate community members
- Tourism
- Access to and collaboration with educational institutions like Western Carolina University (WCU) and Southwestern Community College (SCC)
- Proactive approach to services offered to residents
- Strong connection with the outdoors community gardens, farmers markets, farm-to-school programs
- Peaceful culture
- Synergies and collaborative relationships between agencies allows much to be done with little resources
- Self-reliant community, prideful in their sense of "rugged individualism"
- Caring, compassionate leaders who truly care for the residents of Jackson County
- Outstanding health and educational system



Photo courtesy of @cynematravels on Instagram

CHAPTER 4 – SOCIAL & ECONOMIC FACTORS

Income

Income provides economic resources that shape a variety of choices—choices about housing, education, child care, food, medical care, and more. Further, income allows residents to not only purchase health insurance and medical care but also make choices that support healthy lifestyles. While the starkest difference in health is between those in the highest and lowest income brackets, the relationship of income affecting health persists throughout all brackets. Additionally, the ongoing challenges associated with low income leads to cumulative health damage—physical, mental, chronic, and more. (CDC, CDC Community Health Improvement Navigator, 2015)

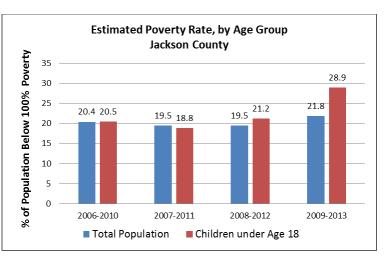
Jackson County is a Tier 1, economically distressed county. (NC Department of Commerce, 2015) According to the NC Department of Commerce, Jackson County earned this Tier 1 designation based on its unemployment rate, median household income, percentage growth in population, and adjusted property tax base per capita. For the 2009-2013 aggregate period, the median household income in Jackson County was \$36,951. This is a \$239 decrease from the 2006-2010 aggregate period and is both lower than the WNC region (by \$1,936) and NC (by \$9,383) average. (QuickFacts, Jackson County, North Carolina, 2014).

County	Percent Total Population Below 100% Poverty Level			
	2006-2010	2007-2011	2008-2012	2009-2013
Jackson County	20.4	19.5	19.5	21.8
WNC Region	15.7	16.1	16.9	18.0
State of NC	15.5	16.1	16.8	17.5

(FactFinder, Poverty Status in the Past 12 Months. 2006-2010 [and other years as noted], 2015)

In the WNC region and the state of NC, the total poverty rate has increased in each period cited from 2006-2010 to 2009-2013. Though often increasing, the rate in Jackson County is more variable. Of note, however, the total poverty rate in Jackson County is higher than the regional and NC rates in each period cited.

In much of NC, children suffer disproportionately from poverty. In our community, this disparity is less obvious.



Source: US Census Bureau

Referring to the graph above, the estimated poverty rate among children under age 18 was similar to the overall poverty rate in every year cited except 2009-2013. During the aggregate period of 2009-2013, the poverty rate for children exceeded the overall rate by 33%. (FactFinder, Poverty Status in the Past 12 Months. 2006-2010 [and other years as noted], 2015)

Employment

Employment provides income and benefits that can support healthy lifestyle choices. Conversely, unemployment and under-employment can limit these choices. With adults spending nearly half of their waking hours at work, it is ideal to work in a supportive workplace that provides benefits such as health insurance, paid sick leave, and even workplace wellness programs. Unfortunately, the "working poor" do not see many of these opportunities—they may not be able to afford quality child care and can lack paid leave to care for their families and themselves. Further, the unemployed face challenges such as low income, lack of health insurance, and greater risk of increased stress, high blood pressure, heart disease, and depression. (CDC, CDC Community Health Improvement Navigator, 2015)

As of 2013, the three employment sectors in Jackson County with the largest proportions of workers (and average weekly wages) were:

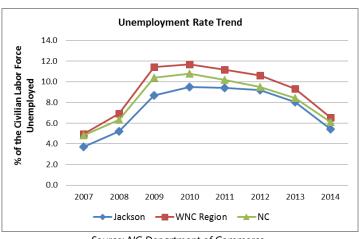
- Educational Services: 22.43% of workforce (\$790)
- Accommodation and Food Service: 16.10% of workforce (\$271)
- Health Care and Social Assistance: 14.86% of workforce (\$711) (LEAD, 2013)

Take note of the gap in average weekly wages between the Educational Services sector and the Accommodation and Food sector (a difference of \$517 per week). Persons working in the Accommodation and Food sector tend to lack employment benefits like health insurance and retirement programs. Additionally, many in this sector work part-time and often at multiple jobs. This is a sector whose relative poverty leaves them vulnerable to emotional stress and poor health outcomes.

Throughout the period cited in the graph to the right (2007-2014), the unemployment rate in

Jackson County was lower than the comparable rates in the WNC region and NC as a state. (LAUS, 2014) It is important to note that a person is defined as unemployed if they:

- Had no employment during the week that includes the 12th of the month but were available to work
- Had made specific efforts to find employment during the four weeks prior
- Were waiting to be recalled to a job from which they had been laid off



Source: NC Department of Commerce

• Were waiting to report to a new job within 30 days

Persons who have given up on finding employment are not included in this rate.

Education

Studies show that better educated individuals live longer, healthier lives than those with less education. Further, children of better educated individuals are more likely to thrive as well, even when factors like income are taken into account. More schooling is linked to many important factors that influence health—higher income, better employment options, increased social support, increased 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. Perhaps the greatest evidence for continuing education is connected to lifespan—on average, college graduates live nine more years than high school dropouts. These benefits of education trickle down to children as well; children whose mothers graduate from college are twice as likely to live past their first birthday, have decreased risk of cognitive development, decreased risk of tobacco and drug use, and lower risk of many chronic conditions. (CDC, CDC Community Health Improvement Navigator, 2015)

Compared with the WNC region, Jackson County has:

- 13% lower percentage of persons in the population over age 25 having only a high school diploma or equivalent (2009-2013 estimate) (US Census Bureau, Educational Attainment 2006-2010 [and other years as noted] American Community Survey 5-Year Estimates (S1501), 2015)
- 32% **higher** percentage of persons in the population over age 25 having a Bachelor's degree or higher (2009-2013 estimate) (US Census Bureau, Educational Attainment 2006-2010 [and other years as noted] American Community Survey 5-Year Estimates (S1501), 2015)
- 5% **higher** overall high school graduation rate (for a 4-year cohort of 9th graders entering the school in SY2010-2011 and graduating in SY2013-2014 or earlier) (Public Schools of North Carolina, 2015)

Community Safety

Injuries through accidents or violence are the third leading cause of death in the United States. Accidents and violence affect health and quality of life in both the short- and long-term for both those directly and indirectly affected. Community safety includes not only violent acts in neighborhoods and homes but also injuries caused unintentionally. Many injuries are preventable—car accidents, poisonings, falls, fires, assaults, rape, robbery, and more. The chronic stress of living in an unsafe neighborhood can lead to accelerated aging, anxiety, depression, higher rates of pre-term births, etc. (CDC, CDC Community Health Improvement Navigator, 2015)

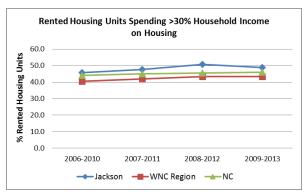
The index crime (the sum of all violent and property crime), property crime (burglary, arson, and motor vehicle theft), and violent crime (murder, forcible rape, robbery, aggravated assault) rates

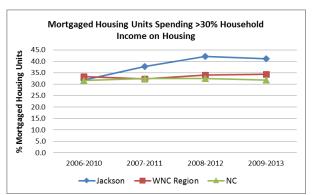
were higher in Jackson County than in WNC for most years from 2001-2012. (NC Department of Justice, 2003)

Housing

Housing options shape our community; the choices we make about housing and the opportunities to make these choices affect our health. Housing structures protect residents from weather while providing safe environments for families to live, learn, grow, and more. Unfortunately, houses and apartments can be unhealthy and unsafe. Exposure to lead paint, improper insulation, the growth of mold and other indoor allergens all lead to unhealthy conditions. (CDC, CDC Community Health Improvement Navigator, 2015)

Further, housing is a substantial expense. In fact, a measure of economic burden in a community is the percent of housing units spending more than 30% of household income on housing. In Jackson County, larger proportions of both renters and mortgage holders spend >30% of household income on housing than in the WNC region or NC average. (US Census Bureau, Gross Rent as a Percentage of Household Income in the Past 12 Months, 2006-2010 American Community Survey 5-Year Estimates (B25070) [and other years as noted], 2015)





Source: US Census Bureau

Family & Social Support

People with greater social support, less isolation, and greater interpersonal trust live longer lives than those who are socially isolated. Therefore, neighborhoods richer in social capital provide residents with greater access to support and resources than those with less social capital. Social support stems from relationships—relationships with family members, friends, colleagues, neighbors, acquaintances. All of these relationships protect physical and mental health while facilitating healthy behaviors and choices. Conversely, those without social support are at increased risk for poor health outcomes such as increased vulnerability to the effects of stress, cardiovascular disease, overeating in adults, smoking in adults, and obesity in children. (CDC, CDC Community Health Improvement Navigator, 2015)

Social associations are a way to measure family and social support. Social associations are the number of membership associations (civic organizations, bowling centers, golf clubs, fitness centers, sports organizations, religious organizations, and more) per 10,000. In Jackson County,

the social association rate is 12.4 for 2012, higher than the rate in the state of NC. (County Health Rankings, Health Factors: Social Associations in Jackson County, 2015).

Another measure of family and social support is the percentage of children in family households that live in a household headed by a single parent. Adults and children in single-parent households are at risk for adverse health outcomes such as mental health problems (substance abuse, depression, suicide) and unhealthy behaviors (smoking, excessive alcohol use). In Jackson County, 41% of children live in single parent-households, greater than that of the state of NC. (County Health Rankings, Health Factors: Children in Single-Parent Households, 2015)

CHAPTER 5 – HEALTH DATA FINDINGS SUMMARY

Mortality

The overall life expectancy for residents in Jackson County is 78.6 years. This is both higher than that of WNC (77.7 years) and NC (78.2 years). For persons born in 2011-2013, life expectancy among comparator jurisdictions is longest among women. (NC SCHS, 2011-2013 State-Level Life Expectancies by Age, Sex, Race, and Race by Sex, 2014)

Life Expectancy at Birth for Persons Born in 2011-2013

	Sex		×	Race	
County	Overall	Male	Female	White	African- American
Jackson	78.6	76.7	80.6	78.9	n/a
WNC (Regional) Arithmetic Mean	77.7	75.3	80.2	77.9	75.2
State Total	78.2	75.7	80.6	78.8	75.9

Source: NC State Center for Health Statistics

The leading causes of death in Jackson County mirror both those of WNC and NC. Total cancer, diseases of the heart, and chronic lower respiratory disease (CLRD) are the top three leading causes of death in our community. (NC SCHS, 2013 North Carolina Vital Statistics, Volume 2: Leading Causes of Death, 2013)

Leading Causes of Death: Overall					
Age-Adjusted Rates (2009-13)	Jackson No.	Jackson	Rate Difference		
	of Deaths	Mortality Rate	from NC		
1. Total cancer	420	177.8	+2.6%		
2. Diseases of the heart	362	163.0	-4.1%		
3. Chronic lower respiratory disease	107	47.9	+3.9%		
4. All other unintentional non-motor vehicle injuries	82	41.2	+40.6%		
5. Alzheimer's disease	62	29.9	+3.8%		
6. Cerebrovascular disease	66	29.8	-31.8%		
7. Pneumonia and influenza	41	19.2	+7.3%		
8. Diabetes mellitus	42	17.0	-21.7%		
9. Nephritis, nephrotic syndrome, nephrosis	34	16.0	-9.1%		
10. Suicide	31	16.0	+31.1%		
11. Septicemia	24	10.8	-31.7%		
12. Chronic liver disease and cirrhosis	23	10.4	+9.5%		
13. Unintentional motor vehicle injuries	20	9.5	-30.7%		
14. Homicide*	4	1.5	-74.1%		
15. AIDS*	1	0.6	-79.3%		

^{*:} Rate unstable

Source: NC State Center for Health Statistics

According to the above data, people in Jackson County have lower mortality than the population statewide for six of the thirteen leading causes of death for which county rates are stable. Mortality rates in Jackson County are higher than the comparable state rates for cancer, CLRD, unintentional non-motor vehicle injuries, Alzheimer's disease, pneumonia and influenza, suicide, and liver disease. (NC SCHS, 2013 North Carolina Vital Statistics, Volume 2: Leading Causes of Death, 2013)

When compared by gender, the leading causes of death differ greatly among males and females in Jackson County.

Leading Causes of Death: Gender Comparison					
Jackson County	Rate Among	Rate Among	% Male Rate		
Rank by Descending Overall Age-Adjusted	Males	Females	Difference from		
Rates (2009-13)			Females		
1. Total cancer	219.2	146.6	+49.5%		
2. Diseases of the heart	196.9	130.8	+50.5%		
3. Chronic lower respiratory disease	60.0	40.5	+48.1%		
4. All other unintentional injuries	58.7	25.3	1.3X		
5. Alzheimer's disease	25.7	32.3	-20.4%		
6. Cerebrovascular disease	27.8	30.6	-9.2%		
7. Pneumonia and influenza	n/a	18.2	n/a		
8. Diabetes mellitus	19.5	15.1	+29.1%		
9. Nephritis, nephrotic syndrome, nephrosis	n/a	n/a	n/a		
10. Suicide	28.5	n/a	n/a		
11. Septicemia	n/a	n/a	n/a		
12. Chronic liver disease and cirrhosis	n/a	n/a	n/a		
13. Unintentional motor vehicle injuries	n/a	n/a	n/a		
14. Homicide	5.4	n/a	n/a		
15. AIDS	n/a	n/a	n/a		

Source: NC State Center for Health Statistics

Note how poorly males in Jackson County fare compared to females in terms of mortality due to five of the seven gender-stratified leading causes of death for which there are stable rates for both males and females. This is not a new observation, neither is it unique to WNC. This is a long-standing and wide-spread problem that remains unsolved. (NC SCHS, 2011-2013 State-Level Life Expectancies by Age, Sex, Race, and Race by Sex, 2014) Potential reasons as to why females fare better on these gender-stratified leading causes of death include utilization of preventative care, medical check-ups, and participation in screening events generally is higher among women while participation in risky behaviors (smoking, substance abuse, poor diet, lack of exercise) is generally higher among men.

Health Status & Behaviors

Overall Health Status

According to American's Health Rankings, the state of NC ranked 35th overall out of 50 United States of America (where #1 is "best"). Bringing this closer to home, the 2015 County Health Rankings ranked Jackson County 24th overall among 100 NC counties. (County Health Rankings, Jackson: Overall Rank, 2015) In terms of health outcomes, Jackson County ranked:

- 28th in length of life (Includes premature death)
- 26th in quality of life (Includes poor or fair health, poor physical health days, poor mental health days, low birthweight)

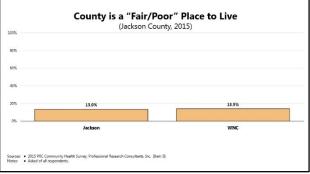
In terms of health factors, Jackson County ranked:

- 34nd in health behaviors (Includes adult smoking, adult obesity, physical inactivity, access to exercise opportunities, alcohol-impaired driving deaths, and more)
- 65th in clinical care (Includes uninsured, primary care physicians, dentists, mental health providers, mammography screenings, and more)
- 36^h in social and economic factors (Includes high school graduation, unemployment, children in poverty, social associations, violent crime, and more)
- 93rd in physical environment (Includes air pollution-particulate matter, drinking water violations, severe housing problems, and more)

Though ranked in the top quartile of all counties in North Carolina, there is still much area to

improve upon, especially in terms of health factors.

Much data was collected throughout the CHA process on self-reported health status. Only 13% of Jackson County residents that were surveyed stated that this county is a fair/poor place to live. Additionally, only 14.8% of residents stated that they experience "fair" or "poor" overall health. Finally, of those who reported that they were limited in activity in some way due to physical, mental, or emotional problems, most listed difficulty walking, back/neck problems, and "other" as the types of problems that limit activity. (Professional Research Consultants, Inc, 2015)

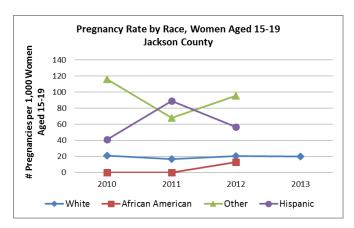


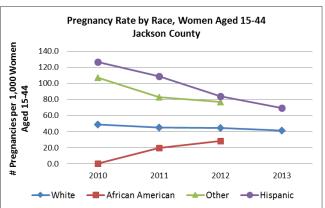
Source: Professional Research Consultants, Inc.

Maternal & Infant Health

The pregnancy rate in Jackson County for women aged 15-44 years appears to have fallen overall since 2006. This downward trend is mirrored in that of the WNC and NC rates, with rates being 46.9 (Jackson), 63.4 (WNC), and 70.8 (NC) in 2013. The teen pregnancy rates in Jackson County, WNC, and NC have fallen significantly since 2007 and appear to be falling still in Jackson County. Among Jackson County women age 15-44 years, the highest pregnancy rates appear to occur among Hispanics. Further, among teens age 15-19 years in Jackson County, the highest

pregnancy rates appear to occur almost frequently among Hispanics or the group identified as "Other." Up until recently, "Other" would have included Native Americans—in 2013, pregnancy rates for Native Americans were reported separately for the first time. (NC SCHC, 2008-2013)





*Minority rates unstable in 2013 and therefore not graphed Source: NC State Center for Health Statistics

A few pregnancy risk factors are of note in Jackson County and WNC women. To begin, the WNC region in general has very high percentages of women who smoke during pregnancy. Jackson County is one of the many counties in the region where the percentage of women who smoked during pregnancy exceeds 20% (24% in 2013). In the past, the percent of Jackson County women accessing early prenatal care has been expecially high (76% of women received prenatal care in the first trimester), so pregnant women should have received messages from materinity care providers about the hazards of smoking while pregnant. (NC SCHS, Selected Vital Statistics, Volume 1- 2008 and 2004-2008 [and other years as noted], 2008-2013) (NC SCHS, County Resident Births for 2008 [and other years as noted] By Month Prenatal Care Began and Age of Mother For All Women (Table 6), 2008-2013) Despite the percentage of women in the county getting early prenatal care being the highest among comparators after 2011, the percentage of women who smoked while pregnant actually rose.

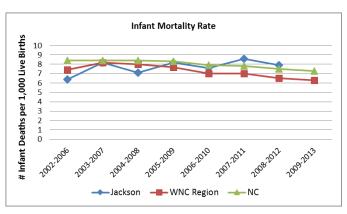
County	Percent of Births	Percent of Births to Mothers Who Smoked While Pregnant			
	2011	2013			
Jackson County	22.3	21	24		
WNC Region	20.1	19.2	19.4		
State of NC	10.9	10.6	10.3		

Source: NC SCHS, Vital Statistics Volume I

County	Percent of Pregna	Percent of Pregnancies Receiving Prenatal Care in 1st Trimester			
	2011	2011 2012 2013			
Jackson County	75.9	78.2	76.0		
WNC Region	75.6	76.5	75.5		
State of NC	71.2	71.3	70.3		

Source: NC SCHS, Baby Book

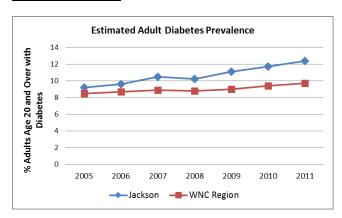
The infant mortality rate in Jackson County appears to be rather variable. Until recently, infant mortality was lower in Jackson County than in NC as a whole. The overall infant mortality rates of the county are unstable or suppressed, as are all the racially stratified rates. Additionally, the NC SCHS suppressed infant mortality rates based on small numbers of infant deaths in 12 of the 16 WNC counties for the 2009-2013 reporting period. The regional rate is based on the stable rates from only Buncombe, Henderson, and Rutherford counties. (NC SCHS,



Source: NC State Center for Health Statistics

Infant Death Rates per 1,000 Live Births, 2007-2011 [and other years as noted], 2013-2015)

Chronic Disease



Source: Centers for Disease Control and Prevention, via BRFSS

report that they have been diagnosed with borderline or pre-diabetes, a condition that will lead

to diabetes if lifestyle changes are not adopted. (Professional Research Consultants, Inc, 2015)

Cancer is the leading cause of death in Jackson County. Lung, prostate, breast, and colorectal cancers all lead in terms of site-specific cancers for this community. Jackson County mortality rates have decreased over time for three of the four major site-specific cancers, the exception being lung cancer. Incidence rates, however, have increased for all four of the major site-specific cancers. Three of these site-specific cancers—prostate, breast, and colorectal cancers—are subjects for periodic community screening efforts. Jackson County may work to assess the pattern and frequency of screening efforts in the community to understand if increased

Chronic disease is a notable issue in Jackson County, especially diabetes, cancer, cardiovascular disease, and CLRD. The average self-reported prevalence of Jackson County adults with diabetes was 10.7% in the period from 2005-2011. Over the same period, the WNC average was 9.0%. Both jurisdictions have seen a rise in diabetes over time. (CDC, County Level Estimates of Diagnosed Diabetes- of Adults in NC, 2005 [and other years as noted], 2005) Further, 10.0% of Jackson County residents self-

Site-Specific Cancer Trends Jackson County

Incidence: 1999-2003 to 2008-2012 *Mortality:* 2002-2006 to 2009-2013

Cancer Site	Parameter	Overall Trend Direction	
Lung Cancer	Incidence Mortality	*	
Prostate Cancer	Incidence Mortality	\$	
Breast Cancer	Incidence Mortality	\$	
Colorectal Cancer	Incidence Mortality	\$	

Source: Sheila Pfaender, Public Health Consultant; based on data from NC SCHS

surveillance may be contributing to an increase in incidence. Lung cancer, however, is not a cancer usually subject to routine screening. While there are many possible contributors to increase lung cancer incidence in Jackson County (smoking, air pollution, radon), we are not able

to establish a cause/effect relationship. (NC SCHS, 2009-2013 Race-Specific and Sex-Specific Age-Adjusted Death Rates by County (CD21B), 2009-2013) (NC SCHS, 2008-2012 NC Incidence Rates per 100,000 Population Age-Adjusted to the 2000 US Population, 2008-2012)

Additionally, cardiovascular disease is a leading cause of death in Jackson County. Over 5% of Jackson County residents have been diagnosed with heart disease (to include heart attack, angina, or coronary disease). This prevalence is less than that of WNC (6.5%) and NC (6.1%). (Professional Research Consultants, Inc, 2015) According to maps developed by the NC State Center of Health Statistics, heart disease mortality is clustered geographically in the Sylva/Balsam area of Jackson County with a rate of 200.7-283.2/100,000 in 2009-2013. Higher pockets of heart disease are just over the county border (near Highlands in the south and Maggie Valley in the east).

<u>Injury & Violence</u>

For age groups 00-19, 20-39, and 40-64 years, injuries (whether motor vehicle or intentional) are a leading cause of death for residents in Jackson County. (NC SCHS, 2013 North Carolina Vital Statistics, Volume 2: Leading Causes of Death, 2013) The main

injuries that lead to death or debilitation in our community include falls, unintentional poisonings, and motor vehicle crashes.

Jackson County Heart Disease Mortality Rates, 2009-2013



Rate per 100,000 Population

60.9 - 200.6 200.7 - 283.2 283.3 - 426.1 426.2 - 699.8 County Boundary

Source: NC SCHS 2009-2013

Mental Health & Substance Abuse

Between 2006 and 2013, the number of Jackson County residents served by the Area Mental Health Program decreased overall from 1,629 to 1,410 (a 13% decrease). Over the same 8-year period, the number of Jackson County residents served in State Psychiatric Hospitals decreased from 24 to 2 (a 92% decrease). It is doubtful that the decrease in Jackson County utilization of state psychiatric hospitals means decreased need for psychiatric services for the most severely impaired mental health patients. (NC Office of State Budget Management, 2006-2013) Rather, this decrease in utilization begs the question—where are those in need being treated? Emergency rooms? Jails? Not at all? When asked if they got needed social/emotional support, 20% of residents in Jackson County indicated that they did not. (Professional Research Consultants, Inc, 2015) It is of note that mental health and substance abuse services came up as a need over and over again during listening sessions and key stakeholder interviews. In fact, a lack of mental health services in our area is defined as a Resource Gap below.

Oral Health

Only 59.6% of residents in Jackson County indicate that they have visited a dentist or dental clinic within the past year. This percentage is lower than the comparator jurisdictions of WNC and NC (63.7% and 64.9% respectively). (Professional Research Consultants, Inc, 2015) A lower percentage of residents visiting a dentist could be attributed to the closing of the Health Department's dental clinic in 2012 and community partners no longer offering the Missions of Mercy free dental clinic annually—both due to financial constraints. East Carolina University School of Medicine opened a Community Service Learning Center in Sylva in 2015 with the hopes of bridging this gap. This dental clinic is committed to offering comprehensive general dental services for adults, children, and special needs patients.

Clinical Care & Access

With the passage of the Affordable Care Act in 2010 and it being upheld in 2012, many looked forward to the opportunity of increased coverage by health insurance. However, in NC a few factors made this increased coverage less accessible. To begin, NC did not develop its own insurance exchange system, relying on the exchange developed by the federal government.

"With an overall poverty level of 22% in Jackson County, we have to expand Medicaid. This is a huge need in our community."

Further, NC did not expand Medicaid, leaving many in a "hole" of making too much to qualify for Medicaid under the current guidelines but not enough for private insurance. Though many insurance navigators work tirelessly to assist those seeking insurance through the exchange and helping them qualify for subsidies, many are still unable to afford policies. In fact, the percent uninsured adults aged 18-64 years in Jackson County, WNC, and NC increased between 2009 and 2010. It has since decreased, but only slightly. Jackson County has the highest percent uninsured among comparators in both age groups in every year cited. Note that the age group 0-18 years has a significantly lower percentage of uninsured than the adult age group, due at least partly to their inclusion in NC Health Choice. (US Census Bureau, Small Area Health Insurance Estimates, 2009 [and other years as noted], 2009)

Percent of Population without Health Insurance, by Age Group

County	2009		2010		2011		2012		2013	
County			_5_5							
	0-18	18-64	0-18	18-64	0-18	18-64	0-18	18-64	0-18	18-64
Jackson	11.7	25.2	10.2	31.4	11.7	30.7	12.1	30.1	10.0	29.0
County										
WNC	9.9	24.2	9.7	26.0	9.1	25.2	9.3	25.4	8.6	25.0
NC	8.7	21.9	8.3	23.5	7.9	23.0	7.9	23.4	6.9	22.5

Source: US Census Bureau

A Health Professional Shortage Area (HPSA), is a geographic area, population group, or health care facility that has been designated by the federal government as having a shortage of health professionals. Three categories of HPSAs exist—primary care, dental, and mental health. HPSAs are designated and provided a score (0-26) using several criteria, one of which is a population-to-clinician ratios; the population-to-clinician ratios for each area are as follows: primary care: 3,500 to 1, dental health: 5,000 to 1, and mental health: 30,000 to 1. Jackson County has high HPSA scores (Mental Health: 12, Primary Care: 17, and Dental Health: 18). (HRSA, 2015)

Number of Active Health Professionals per 10,000 Population

	2012					
County	Physicians	Primary Care Physicians*	Dentists	Registered Nurses	Pharmacists	
Jackson	19.37	7.85	3.92	88.51	7.36	
WNC (Regional) Arithmetic Mean	14.29	6.84	3.61	76.94	7.97	
State Total	22.31	7.58	4.51	99.56	10.06	
National Ratio (date)	23.0 (2011)	8.1 (2011)	5.3 (2012)	91.6 (2012)	9.1 (2012)	

Source: Cecil G. Sheps Center for Health Services Research, US Census Bureau, and US Bureau of Labor Statistics

"The biggest problem our county has experienced over the past three years? Well, that'd be access to healthcare. Either folks don't have it or they can't afford it."

From the chart above, one can glean that Jackson County has a higher ratio of active health professionals than the WNC region in all provider categories except pharmacists. The ratio of primary care physicians in Jackson County was higher than the WNC and NC average for this same time period. (Cecil G Sheps Center for Health Services Research, 2009-2012) Despite this difference among comparators, Jackson County still qualifies as a HPSA and

experiences a variety of access to healthcare issues. Residents may have difficulties scheduling

appointments with providers if providers are not accepting new patients or if providers do not accept patient's insurance (ex. Medicaid). A 2011 study indicated that 31% of physicians said they would not accept new Medicaid patients, 17% wouldn't accept new Medicare patients, and 18% would not accept new privately insured patients. (Decker, 2012) In NC, 18% of residents are on Medicaid, 14% on Medicare, and 57% are privately insured (to include Employer, Non-Group,

"There's been a 47% increase in the need for food pantry services this past year. If people can't afford food, how can we expect them to be able to afford insurance?"

and Other Public insurances). (The Henry J. Kaiser Family Foundation, 2014) Research indicates that physicians are more willing to accept Medicaid if payment rates increase which ideally will occur with the implementation of the Affordable Care Act and Medicaid expansion. (Decker, 2012) However, NC has not yet expanded Medicaid.

Additional factors that inhibit access to healthcare include lack of reliable transportation, financial constraints, lack of childcare, being un- or under-insured, and lack of knowledge about available resources, etc. Specific care and services were noted by key stakeholders as lacking during the CHA interview process. They are:

- Subspecialty care (Endocrinology, neurology)
- Mental health care
- Substance abuse treatment services

At Risk Populations

At-risk populations in Jackson County include (but are not limited to) those that are minorities, un- and under-insured, and low-income. Often times, these populations are likely to, or have the potential to, get a specified health condition.

At-risk population	Health condition/consequence
Minorities (Native Americans)	Diabetes, substance abuse, cancer, heart
	disease, smoking, violence (OWH, 2012)
Un- and under-insured	Premature death, poorer quality of
	healthcare, lower rates of preventative care,
	uncontrolled chronic conditions, lower rates
	of early stage diagnosis (National
	Immigration Law Center, 2014)
Low-income	Premature death, poor nutrition, inadequate
	preventative care, poor access to medical
	care, increased death from injuries (Starfield,
	1992)
Residents who smoke	Cancer, CLRD, stroke
Residents abuse substances	Overdose, death
Residents who are obese/overweight	Diabetes, heart disease, hypertension, stroke,
	cancer
Residents who are sedentary	Obesity, overweight, heart disease, cancer
Residents who consume poor nutrition	Obesity, overweight
Older adults	Falls

CHAPTER 6 – PHYSICAL ENVIRONMENT

Air Quality

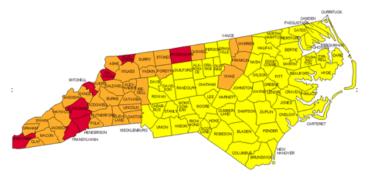
Clean air is a prerequisite for health. To build on this idea, poor air quality can be particularly detrimental to vulnerable populations like the very young, the elderly, and those with chronic health conditions like asthma (Jackson County prevalence: 9.7%) and chronic obstructive pulmonary disorder (Jackson County prevalence: 13.5%) (Professional Research Consultants, Inc, 2015). Air pollutants such as fine particulate matter, ground-level ozone, sulfur oxides, nitrogen oxides, and more can harm our health. (CDC, CDC Community Health Improvement Navigator, 2015) In 2014, the Air Quality Index (AQI) measurement for Jackson County were as follows:

- 71/80 days with good air quality
- 9/80 days with moderate air quality
- Small particulate matter was present at the level of pollutant on 80 of 80 monitored days (EPA, 2014)

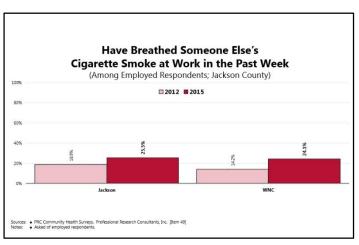
Major concerns for human health from exposure to particulate matter are effects on breathing and respiratory systems, damage to lung tissues, and premature death. Small particulate matter in air pollution has the best chance of reaching the lower respiratory tract.

Exposure to radon is perhaps the most significant undervalued health problem in WNC. While the current average indoor radon level in Jackson County is 2.8 pCi/L (2 times the national average), there are counties in WNC with much higher levels. For reference, a screening level over 4 pCi/L is the EPA's recommended action level for radon exposure. Radon is the number one cause of lung cancer among non-smokers. Overall, radon is the second leading cause of lung cancer. People who smoke have an even higher risk of lung cancer from radon exposure than people who don't smoke. (NC Radon Information, 2015)

Additionally secondhand smoke, or environmental tobacco smoke (ETS), is a known human carcinogen with more than 7,000 chemical compounds, 250 of which are known to be harmful and 69 of which cause cancer. (ACS, 2014) Over one-fourth of residents in Jackson County indicate that they have breathed someone else's cigarette smoke at work in the past week. (Professional Research Consultants, Inc,



Source: NC Radon Information



Source: Professional Research Consultants, Inc.

2015) Secondhand smoke is a "hot topic" in our community—65.2% believe it is important that public walk/biking trails should be 100% smoke-free. (Professional Research Consultants, Inc, 2015) Further, Jackson County high school students who participated in a listening session for the 2015 CHA believe banning tobacco use in public places as the best way to improve the health of Jackson County. Students took this idea one step further, adding that designated smoking areas should be in inconvenient places to further discourage tobacco use.

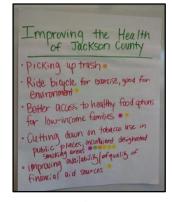


Photo courtesy of Melissa McKnight

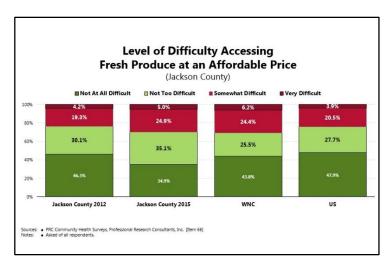
Water

Clean water is also a prerequisite for health. Having access to clean water supports healthy brain and body function, growth, and development. While drinking water safety is improving, many contaminants still pollute our water sources—pharmaceuticals, chemicals, pesticides, and microbiological contaminants. In Jackson County, only 21,541 (or 54%) of the county's 2010 population was served by community water systems. (SDWIS, 2014) The remainder of the population accesses water from wells, directly from a body of surface water, or from bottled water.

Beyond drinking, poor surface water quality can make lakes and streams unsafe for swimming and fish unsafe for consumption. In an area that prides itself on outdoor water sports, water quality is of utmost importance in Jackson County. In 2015, the Jackson County Department of Public Health informed residents of an advisory not to eat some fish in Lake Glenville. Based on a findings of high levels of mercury by the NC Department of Environment and Natural Resources (DENR), residents were advised not to eat walleye and largemouth bass fish. Toxicologists believed aerial deposition to be the cause for the mercury, which rises into the air from fossil fuels burning and over time settles to the bottom of the waterway where fish feed off algae. No change in the mercury levels is expected, barring human or weather changes.

Access to Healthy Food & Places

Access to healthy foods and places to recreate are both indicators of health. Without access and the financial means to purchase healthy foods, residents do not have the environmental supports to live a healthy lifestyle. In Jackson County, seven grocery stores and three farmers markets exist to serve approximately 40,000 residents. Close to 5% of residents live in a food desert, meaning that they live below the poverty level, have no car, and low access to a grocery store. (USDA ERS, Access and Proximity to Grocery Store, 2012) Close to 30% of surveyed residents say that they find it very or somewhat difficult to access fresh produce at an affordable price. In 2015, 27.5% of surveyed residents



Source: Professional Research Consultants, Inc.

indicated that they have worried in the past year about food running out before having money to buy more—an increase from 21.4% in 2012. (Professional Research Consultants, Inc, 2015)

Additionally, if residents do not have access to a safe place to recreate—whether that is a park, greenway, walking trail, playground, etc., they are less likely to live an active lifestyle. Research indicates that proximity to parks and recreational resources affects the development of childhood obesity— a significant inverse relationship exists between children who live within 500 meters of a park and BMI. (Wolch, et al., 2011). In Jackson County, there are two public recreation and fitness facilities to serve approximately 40,000 residents—less than the arithmetic mean of WNC (4 facilities). (USDA ERS, Health and Physical Activity, 2014)

CHAPTER 7- HEALTH RESOURCES

Health Resources

Process

To compile a Health Resource List, the CHA Work Team began by reviewing the Health Resource List developed during the 2011 CHA. Any outdated or incorrect information was edited and saved for future reference. The Team split the list into three categories:

- Health resources
- Supportive services
- Needed resources

Additionally, the CHA Facilitator met with the local Community Resource Coordinator (CAC) at the Department on Aging to compare our Health Resource List with her Resource List. Further additions and edits were made. Finally, the CHA Facilitator compared all data gathered to the 2-1-1 dataset provided by WNC Healthy Impact. Further additions and edits were made and sent to the 2-1-1 coordinator so that the 2-1-1 online directory could be updated. In lieu of a printed directory, the CHA Work Team opted to focus on updating the 2-1-1 online directory for a number of reasons. The reasons are as follows:

- 2-1-1 is an easy to remember, three-digit telephone number that connects people with important community services to meet every day needs and the immediate needs of people in crisis.
- 2-1-1 is free, confidential, and available 24 hours a day.
- 2-1-1 can be accessed through the internet (<u>www.nc211.org</u>) or by calling 2-1-1 from any home, office or cell phone or the toll-free number of 1-888-892-1162.
- 2-1-1 can be updated in real-time, by sending updates to the 2-1-1 coordinator out of Asheville, NC.

Online/telephone directories such as 2-1-1 have an advantage over printed directories as they are accessible remotely, can be updated easily, and do not require printing costs.

Findings

In working with the 2011 Community Resource List and the CAC from the Department on Aging, the CHA Work Team updated the 2-1-1 Directory for Jackson County. Resources available to our residents can be found by visiting www.nc211.org or by calling 2-1-1 or 1-888-892-1162. During this updating process, much was found in terms of available health resources and supportive services.

To begin, Jackson County has many health and supportive services in place for older adults. The CAC at the Department on Aging works closely with older adults, identifying their needs—whether they be housing-, insurance-, medical-, or else-related—and assists the older adults in accessing these services. Our community has access to many support groups (such as

Alcoholics Anonymous, Appalachian Community Services, Leukemia and Lymphoma Society, Memory Care, and more). Further, our community provides resources for those who are uninsured or under-insured (Blue Ridge Free Dental Clinic, Mountain Area Pro Bono PT Clinic, Good Samaritan Clinic, Nurse Family Partnership, and more). Finally, Jackson County offers a plethora of county services to its residents (Health Department, Animal Shelter, Department on Aging, Recreation Department, Department of Social Services, Emergency Management, and more).

Resource Gaps

Though many resources are available, there are gaps that need to be filled so that Jackson County residents have adequate access to services. The following is a list of gaps identified through reviewing available resources, key stakeholder interviews, and listening sessions:

- **Affordable childcare**: High-quality, affordable childcare is a huge need in the community. Many parents have difficulty balancing work with childcare costs.
- Affordable housing: Few affordable housing options are available for residents, especially seniors.
- **Communication channels**: Living in a remote and isolated community, there needs to be more communication channels (newspapers, internet connectivity, radio stations, etc.).
- **Greenway system/sidewalks**: An extended, connected greenway would increase physical activity and active living opportunities for residents.
- **Healthy food options**: Healthy food options in the form of grocery stores, farm stands, etc. are needed to meet the needs of residents.
- **Homeless shelter**: A plan for a homeless shelter, not a handout, is recommended for those in need in the community.
- **Medicaid expansion**: A large number of residents would benefit from Medicaid expansion.
- **Mental health services**: Services such as housing and treatment facilities would help those suffering from mental health issues. Helping our residents avoid incarceration or ED admittance is vital.
- **Protection for renters**: Many feel that renters have no rights or protection. Increased protection is needed as there are many renters (especially among older adults) in this community.
- Access to health care (including subspecialty care): Residents have difficulty accessing
 healthcare due to a lack of providers, financial constraints, and more. Further, many
 residents travel out of county for subspecialty care (neurology, endocrinology, etc.)
 Often, residents don't have the means to travel and go without care.

CHAPTER 8 – IDENTIFICATION OF HEALTH PRIORITIES

Health Issue Identification

Process

To identify the significant health issues in our community, our key partners reviewed data and discussed the facts and circumstances of our community. We used the following criteria to identify significant health issues:

- County data deviates notably from the region, state or benchmark
- Significant disparities exist
- Data reflects a concerning trend related to burden, scope or severity
- Surfaced as a priority community concern via listening sessions or key stakeholder interviews

Identified Issues

The following health issues were surfaced through the above process:

- **Falls**: Jackson County has an increasing aging population. It is vital that we plan for this aging population in terms of health and human services—long-term care facilities, services for persons with Alzheimer's, services that support aging-in-place, transportation systems, special needs registries, and more. Further, with an aging population comes an increased risk of falls and fall-related deaths among adults age 65+ years.
- **Substance Abuse/Overdose**: Unintentional injuries, including overdose, are a leading cause of death in Jackson County. We have expanded this to include substance abuse to account for the high tobacco use and other drug use rates our community is experiencing.
- **Prevalence of Diabetes**: Similar to the US rates, the prevalence of diabetes is rising in Jackson County. Our community's rate of diabetes is greater than that of WNC and NC as a whole.
- **Food Insecurity**: Close to one-third of residents in Jackson County have stated that they experience difficulty accessing fresh produce at an affordable price. Further, a similar percentage of residents state that they have worried in the past year about food running out before having money to buy more.
- **Fruit and Vegetable Consumption**: The USDA recommends that adults eat five servings of fruits and vegetables daily. In Jackson County, residents are eating closer to two serving of fruits and vegetables daily (6.8 servings of fruit/week and 8.2 servings of vegetables/week).
- **Physical Inactivity**: To experience health benefits, it is recommended that adults exercise for 150 minutes/week. In Jackson County, only 52.2% of residents meet this recommendation—less than that of WNC.

- **Obesity**: The prevalence of obesity (residents with a BMI of 29.9 or greater) in Jackson County is increasing and is higher in Jackson County than in WNC.
- **Access to Healthcare**: Access to healthcare can refer to many things—the presence or absence of resources that facilitate healthcare (having health insurance, having a primary care provider, having an adequate ratio of providers to patients), how easily a patient can gain access to that care (transportation, financial means), successful receipt of needed services, and more. Time and time again, access to healthcare was listed as an issue in Jackson County by key stakeholders and during listening sessions.
- **Affordable Housing**: One measure of economic burden in a community is the percent of housing units spending more than 30% of household income on housing. In Jackson County, larger proportions of both renters and mortgage holders spend >30% of household income on housing than the WNC or NC average.
- *Insurance Coverage*: With the implementation of the Affordable Care Act, many communities saw a decrease in the percent of population without health insurance. In Jackson County, the percent of uninsured adults age 18-64 increased between 2009 and 2010 but has decreased since. However, Jackson County has the highest percent uninsured among WNC and NC in all age groups from 2009-2013.

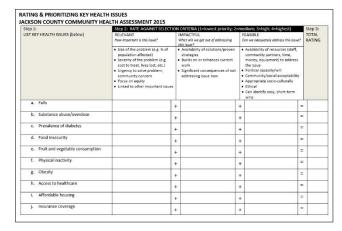
Priority Health Issue Identification

Process

During our group process, the following criteria were used to select priority health issues for our community to focus on over the next three years:

- Criteria 1 How important or relevant is this issue?
 - In answering this question, community members were asked to consider the following:
 - Size of the problem (ex. Percent of the population affected)
 - Severity of the problem (ex. Cost to treat, lives lost, etc.)
 - Urgency to solve the problem; community concern
 - Focus on equity
 - Linked to other important issues
- Criteria 2 What will we get out of addressing this issue or how **impactful** is it?
 - In answering this question, community members were asked to consider the following:
 - Availability of solutions/proven strategies
 - Builds on or enhances current work
 - Significant consequences of not addressing issue now
- Criteria 3 Can we adequately address this issue or how feasible is it?
 - In answering this question, community members were asked to consider the following:
 - Availability of resources (staff, community partners, time, money, equipment) to address the issue
 - Political capacity/will
 - Community/social acceptability
 - Appropriate socio-culturally
 - Ethical
 - Can identify easy, short-term wins

Community members reviewed data from the previously mentioned identified health issues during a community meeting. A summarized list of common themes identified through the key stakeholder interview and listening session process was also made available for those in attendance at the meeting. After a question and answer session on the data provided, community members ranked the identified issues using the criteria (relevancy, impact, and feasibility) explained above and a tool developed by WNC Healthy Impact, adapted from *Rating/Ranking Key Health Issues* (Health Resources in Action) and the *Hanlon Method for Prioritizing Health*



Rating & Prioritization Worksheet

Problems (NACCHO). Community members then voted on the issues that scored the highest leading to the following identified priorities.

Identified Priorities

The following priority health issues were selected through the process described above:

- Physical Activity and Nutrition Healthy eating and physical activity emerged as health priorities during the 2011
 Community Health Assessment. Much progress has occurred in these areas but much is still to be done, based on our fruit/vegetable consumption rates, physical inactivity rates, and overweight/obesity rates. During the prioritization process, many community members voted for the following identified health issues:
 - o Fruit and vegetable consumption
 - Physical inactivity
 - Obesity



Photo courtesy of Melissa McKnight

The CHA Steering Committee opted to combine these similar health issues to form one health priority (Physical Activity and Nutrition) with hopes of addressing all aspects of this priority. This health priority is also in line with the NC Healthy People 2020 objectives:

- Increase the percentage of high school students who are neither overweight nor obese (from 72% to 79.2%)
- Increase the percentage of adults getting the recommended amount of physical activity (from 46.4% to 60.6%)
- o Increase the percentage of adults who consume five or more servings of fruits and vegetables daily (from 20.6% to 29.3%)
- <u>Injury and Substance Abuse Prevention</u> Substance abuse emerged as a health priority during the 2011 CHA. During the prioritization process for the 2015 CHA, the community decided to expand this health priority to include injury prevention based on notable rates of not only substance abuse (to include illicit drugs, prescription drugs, and tobacco) but also falls in our elderly population.
- <u>Chronic Disease</u> Prevalence of diabetes emerged as the highest ranked health issue during the prioritization process. To encompass many diseases affecting Jackson County residents, chronic disease was selected as the final health priority. Further, chronic disease is in line with the NC Healthy People 2020 objectives:
 - o Reduce the cardiovascular disease mortality rate (from 256.6 to 161.5)
 - o Decrease the percentage of adults with diabetes (from 9.6% to 8.6%)
 - o Reduce the colorectal cancer mortality rate (from 15.7 to 10.1)

PRIORITY ISSUE #1: PHYSICAL ACTIVITY & NUTRITION



Photo courtesy of Melissa McKnight

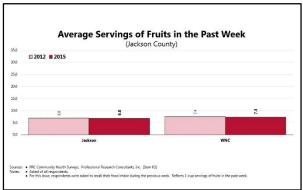
Physical Activity and Nutrition has been a priority issue in Jackson County for many years, going by a variety of names. In the 2011 CHA, two priorities and action teams emerged (Healthy Eating and Physical Activity) to address this health priority. Action teams worked diligently to increase the percentage of Jackson County residents consuming five or more one-cup servings of fruits and vegetable daily and increasing the percentage of Jackson County residents exercising 150 minutes or more weekly. The Health Department partnered with a variety of agencies and organizations to tackle these health issues—Jackson County Parks and

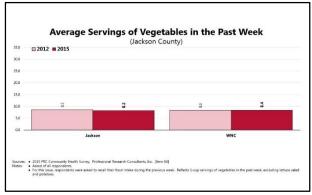
Recreation Department, Jackson County Department on Aging, Harris Regional Hospital, Jackson County Public Schools, Jackson County Department of Social Services, and more. With a collective effort, we were able to "move the needle," increasing the physical activity of Jackson County residents while keeping consumption of fruits and vegetables among Jackson County residents the same. Much work has been completed in this area but much work is still to be done based on both primary and secondary data collected during the 2015 CHA process. The CHA Work Team and CHA Steering Team, using input from the community, decided that **Physical Activity and Nutrition** was still a prominent health issue in Jackson County and deserved to be tackled further as a priority issue.

Data Highlights

Health Indicators

When asked about their consumption of fruits and vegetables within the past week, Jackson County residents indicated that they are significantly less than the recommended 35 servings/week (or 5 servings per day). In fact, Jackson County residents are only 6.8 servings of fruit and 8.2 servings of vegetables within the past week. (Professional Research Consultants, Inc, 2015)





Source: Professional Research Consultants, Inc.

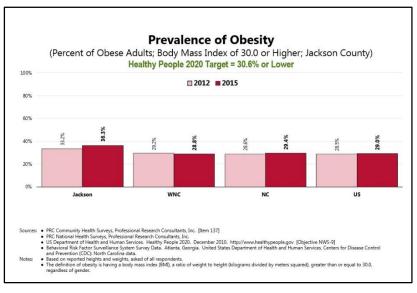
As one can see from the graphs on the previous page, despite Healthy Eating being selected as a priority issue in the 2011 CHA, no significant increase in fruit and vegetable consumption occurred from 2012 to 2015. Further, Jackson County residents eat fewer servings of fruits and vegetables than WNC residents. (Professional Research Consultants, Inc, 2015)

Over half (52.2%) of Jackson County residents indicate that they meet physical activity recommendations, exercising 150 minutes or more per week. When split among moderate, vigorous, and strengthening physical activity, Jackson County residents participate in these activities as follows:

- Moderate activity at least 5 times per week: 36.2%
- Vigorous at least 3 times per week: 42.3%
- Strengthening at least 2 times per week: 40.8%

Jackson County residents exceed comparator jurisdictions for all above mentioned activities. (Professional Research Consultants, Inc, 2015)

As poor nutrition and physical inactivity often go hand-in hand, the outcome of both can be overweight/obesity. The Healthy People 2020 Target for healthy weight (percent of adults with a body mass index between 18.5 and 24.9) is 33.9% or higher. In Jackson County, only 30.3% of residents are at a selfreported healthy weight. This is a decrease from what was reported in 2012 (37.6%). Consequently, 68% of residents are classified as overweight/obese, and 36.3% as obese. More residents in Jackson County selfreport as being obese than in WNC, NC, or the US. (Professional Research Consultants, Inc, 2015)



Source: Professional Research Consultants, Inc.

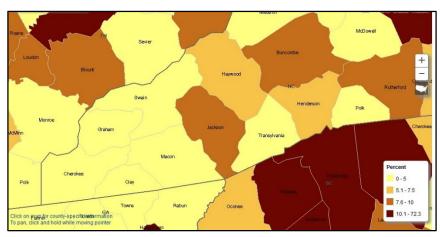
Understanding the Issue

Digging a little deeper into this issue, we know that it is difficult to adopt healthy behaviors if we do not live in an environment that supports these behaviors. To begin, 22% of residents in Jackson County live below the poverty level. This, combined with the fact that 29.9% of residents stated that it is somewhat or very difficult to access fresh produce at an affordable price could explain the low fruit and vegetable consumption rates in Jackson County. (Professional Research Consultants, Inc, 2015) In 2015, 27.5% of residents stated that they worried in the past year about food running out before having money to buy more—up from 21.4% in 2012. (Professional Research Consultants, Inc, 2015) When 27% of WNC children are

food insecure—that's 1 in 4 children—many are looking for any food to feed their families and are less concerned with the nutritional quality of that food. (The Community Table, 2014)

Food deserts are defined as urban or rural areas without ready access to fresh, healthy, and affordable food. To qualify as a food desert, a census tract must be low income (have a poverty rate of 20% or greater) and have low access (500 persons and/or at least 33% of the census tract's population live more than 10 miles from a grocery store). Jackson County has only seven grocery stores and three farmers markets that serve the whole community. (USDA ERS, Access and Proximity to Grocery Store, 2012) As

Low Income & Low Access to Store (%), 2010



Source: USDA ERS

compared to other counties in NC, Jackson County experiences both low income and low access to grocery stores, explaining why many may have difficulties purchasing and consuming fruits and vegetables. (USDA ERS, Food Environment Atlas, 2010)

Again, without the proper supportive environment, it is difficult if not impossible to adopt healthy lifestyle changes. While approximately 50% of residents meet the physical activity recommendations, much of our community is without environmental provisions to support an active lifestyle. Jackson County has only two recreation facilities serving the community. (USDA ERS, Health and Physical Activity, 2014) Further, the county has one greenway that serves the entire community. This greenway, located in Cullowhee, is used frequently indicating that residents are looking for places to recreate but may not have adequate access.

Monteith Greenway Traffic Data, July-Oct 2015

Year	Site	July	Aug	Sept	Oct	ADT*	ADT x 365
2015	Greenway Monteith	1316	1355	1331	926	42.5241	15527

*ADT: Average Daily Traffic

Source: Jackson County Parks and Recreation Department

Throughout the listening session and key stakeholder interview process, access to places to recreate came up. Residents in the south end of the county (Cashiers) spoke at length on the need for a community pool. Cashiers is a community of primarily older adults who believe that they would benefit from a pool as a means of gentle exercise. Other stakeholders identified the northwest end of the county (Whittier) as in dire need of any recreation facilities. And finally,

many spoke of the need to expand out county's sidewalk and greenway system in general. This expansion would help connect our community and support an active lifestyle in general.

Specific Populations At-Risk

While all residents in Jackson County can benefit from strategies that focus on physical activity and nutrition, the lives of at-risk populations may be improved even greater. Food insecurity and obesity often coexist. Both food insecurity and obesity can be consequences of poverty, resulting in the lack of access to enough nutritious food and from the stresses of poverty. (FRAC, 2015) **Low income and food**

CASHIERS SENDR CTR: 9/13/15
More Services in Community
- South end of county
- bp a sugar check, ex

Pool (indoor at Rec (enter) in Cashiers
3 w/ programs — year round/
Hulp people when they need helf
Bon't turn folks down regardless
of St

Open Cashiers UCDPH IX/WK or more
— promote in Cashiers Chronicle
— Highlands radio station, school hambats
more Services in schools w/ more
I parental in volvement

Photo courtesy of Melissa McKnight

insecure residents often deal with a lack of full-service grocery stores, are less likely to have their own vehicle for regular food shopping, have greater availability of fast food restaurants, and cycle between deprivation and over-eating. Further, low income residents often live in neighborhoods with fewer physical activity resources, are less likely to participate in organized sports, and students of lower-income schools spend less time being active during physical education than students of higher-income schools. (FRAC, 2015)

Health Resources available/needed

As Healthy Eating and Physical Activity were noted as health priorities from the 2011 CHA, many health resources are available in our community. Further, many health resources are still needed.

Available Health Resources				
Resource	Lead Agency	2014-15 Highlights		
Eat Smart, Move More,	JCDPH	21 participants		
Weight Less				
BlastOff	Harris Regional Hospital	~15 participants		
Worksite Wellness Programs	Jackson County Government,	Working to create healthy,		
	Jackson County Public	supportive work		
	Schools, Harris Regional	environments with our		
	Hospitals, MountainWise	largest employers		
Living Healthy: Chronic	Area Agency on Aging	More trainers needed and in		
Disease Self-Management		the pipeline to be trained in		
		2016		
5-2-1-Almost None	Healthy Carolinians of	Shared throughout the		
campaign	Jackson County	community annually through		
		various venues		
Food of the Month Campaign	Healthy Carolinians of	Food highlighted monthly;		
	Jackson County	Cooking demos; Press		
		releases		
Food relief agencies	The Community Table, United	Assist those in need, reaching		
	Christian Ministries, MANNA	~30% suffering from food		
		insecurity		

School-based gardens	Cullowhee Valley School, WCU	Teach students the importance of gardening and where food comes from
Community gardens	Cullowhee Community Garden, Sylva Community Garden	Half of harvest donated to food relief agencies as a means of plot rental; 530 lbs donated from one garden alone
Cooking Matters at the Store	JCDPH	Grocery store tours
Healthy Snack Competition	School Health Advisory Council	13 participants
Community Eligibility Program	Jackson County Schools	Free lunch and breakfast for all students at schools that qualify based on federal guidelines (Smokey Mt. High School, Blue Ridge School, Blue Ridge Early College, The School of Alternatives)
Summer Feeding Program	Jackson County Schools	Feeding sites set up annually to help students and families in need throughout the summer
Annual Healthy Living Festival	Healthy Carolinians of Jackson County	43 vendors, 153 participants
Home delivered meals	Jackson County Department on Aging	Reach seniors who are unable to leave their homes easily
Arthritis Foundation Exercise Program	Jackson County Department on Aging	1193 participants
Walk with Ease	Jackson County Department on Aging	423 participants
Tai Chi for Arthritis	Jackson County Department on Aging	525 participants
WNC Get Fit Challenge	Healthy Carolinians of Jackson County	539 participants
Senior Games	Jackson County Parks and Recreation	Large participation from older adults throughout the community

Needed Health Resources		
Resource Potential Lead Agency(ies)		
Greenways/sidewalks	Public Works, NC DOT, Planning Commission, Department of	
	Parks & Recreation	

Additional recreation centers	Department of Parks & Recreation
Sliding scale recreation	Department of Parks & Recreation
resources	
Healthy food options	Planning Commission, Chamber of Commerce
Cooking classes	JCDPH, Cooperative Extension
Nutritious food donations	Food relief agencies
Additional health education	JCDPH, Harris Regional Hospital, Cooperative Extension
for youth	
Additional health education	JCDPH, Harris Regional Hospital, Cooperative Extension
for parents	

PRIORITY ISSUE #2: INJURY & SUBSTANCE ABUSE PREVENTION



Photo courtesy of Melissa McKnight

The 2011 CHA identified substance abuse prevention as a health priority. An action team emerged and worked diligently to reduce the percentage of 12-19 year old students that report the use of illicit drugs, alcohol, and tobacco within the past 30 days. Over the course of four years, our action team saw a new health priority arise in this field and responded. We incorporated the Project Lazarus model into our action plan, working persistently to increase knowledge and awareness about prescription drug abuse, reduce the presence of unwanted medication in our community, educate the public about naloxone, and reduce prescription drug

overdose in Jackson County. During data collection for the 2015 CHA, we learned unintentional injuries (to include overdose, falls, and more) were a leading cause of death in our community. To continue the work we had begun in 2011 but account for all unintentional injuries, we expanded this health priority to **Injury and Substance Abuse**

expanded this nealth priority to **injury and Substance Abuse**

Prevention.

Data Highlights

Health Indicators

Unintentional injuries are injuries that are unplanned yet predictable and preventable when proper safety precautions are taken. These injuries are not accidents. Often, these injuries occur in a short period of time and the harmful outcome was not sought. The most common unintentional injuries result from motor vehicle crashes, suffocation, drowning, poisoning, fires/burns, falls, and sports/recreation. (CDC, Protect the Ones You Love: Child Injuries are Preventable, 2012)

In Jackson County, unintentional injuries (especially falls and overdoses) are notable. Unintentional injuries (both from and not from motor vehicle injures) are a leading cause of death for residents aged 00-64 years. (NC SCHS, 2009-2013 Race-Specific and Sex-Specific Age-Adjusted Death Rates by County (CD21B), 2009-2013) When mapped by census district, "pockets" of mortality from unintentional injuries emerge—residents in Glenville, Cashiers, and Balsam experience higher unintentional injury mortality rates that other communities in Jackson County.

Jackson County Other
Unintentional Injuries Mortality
Rate 2009-2013



Rates per 100,000 Population

5.9 - 30.1 30.2 - 45.9 46.0 - 65.9 66.0 - 126.9

County Boundary
Source: NC State Center for Health
Statistics, 2009-2013

For seniors age 65+, 38.7% have fallen in the past year. This is an increase from 22.9% in 2012 and greater than the comparator jurisdiction of WNC (25.2% in 2012 and 33.0% in 2015). (Professional Research Consultants, Inc, 2015) Further, from 2011 through 2013, 13 Jackson County residents died as a result of an unintentional fall. Of those 13 fall-related deaths 54% occurred in the population 65 years and older while 31% occurred in the population 85 years and older. From this data, one can glean that older adults are not only at greater risk for falls but also at greater risk of dying from a fall-related injury.

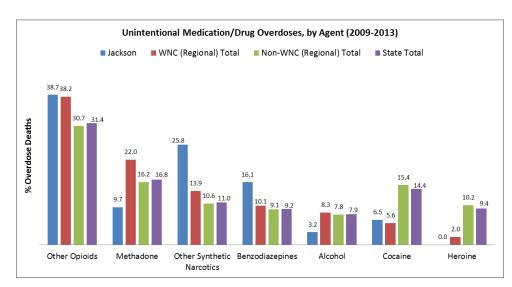
A general characteristic of WNC is high mortality rates due to unintentional poisoning, especially by medication and drug overdose. Jackson County is one of the WNC counties with higher than state average poisoning and drug overdose mortality rates. In the period 2009-2013, 34 Jackson County residents died as a result of unintentional poisoning. Of the 34 unintentional poisoning deaths in the county in that period, 76% were due to medication or drug overdoses—significantly higher than the NC average but lower than the WNC average. (Injury and Violence Prevention Branch, 2015)

		oning Deaths for Selection	Rate of Unintentional Medication/Drug Overdose Deaths (2009-2013)**		
County	#	Rate per 100,000 NC Residents	% that are Medication/Drug Overdoses	#	Rate per 100,000 NC Residents
Jackson	34	17.1	76.5	26	13.1
WNC (Regional) Total	560	14.8	90.0	506	13.3
Non-WNC (Regional) Total	4,749	10.7	91.0	4,320	9.7
State Total	5,309	11.0	90.9	4,826	10.0

Source: NC State Center for Health Statistics and NC DPH, Chronic Disease and Injury Section, Injury and Violence Prevention Branch

The following medications/drugs were used in drug overdose deaths in Jackson County:

- Other opioids: Examples include hydrocodone (Vicodin), oxycodone (OxyContin, Percocet), morphine (Kadian, Avinza), codeine, and related drugs
- Methadone: A synthetic opioid usually associated with treatment for drug abuse
- Other synthetic narcotics: Examples include bath salts, synthetic marijuana, incense, air fresheners, things known as "designer drugs"
- **Benzodiazepines**: Anti-anxiety medications such as sleeping pills, anti-seizure drugs, and muscle relaxers (Xanax, Klonopin, Valium, Rohypnol, Ativan)
- Alcohol
- Cocaine
- Heroin



Source: NC DPH, Chronic Disease and Injury Section, Injury and Violence Prevention Branch

"Other" opioids contributed to the highest percent of drug overdose deaths (38.7%) in Jackson County in the period 2009-2013—the highest among all comparator jurisdictions. (Injury and Violence Prevention Branch, 2015) Other

medications of note include synthetic narcotics (25.8%) and benzodiazepines (16.1%).

Unintentional injuries like falls and overdose/poisonings often result in residents utilizing hospital services. When broken down by category, 9% of all hospital discharges in Jackson County in 2012 were due to injuries and poisonings. (NC SCHS, Inpatient Hospital Utilization and Charges by Principal Diagnosis, and County of Residence, North Carolina 2012 (Excluding Newborns & Discharges from Out of State Hospitals), 2014) By working on preventative measures, we could have a large impact on inpatient hospital utilization and healthcare cost overall.

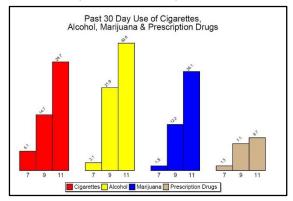
Jackson County Inpatient Hospital Utilization, 2012			
Diagnostic Category	Overall Percent		
Cardiovascular and circulatory diseases	14%		
Heart disease (10%)			
Cerebrovascular disease (2%)			
Respiratory diseases	14%		
Pneumonia and influenza (4%)			
COPD, excluding asthma (2%)			
• Asthma (0.4%)			
Pregnancy and childbirth	11%		
Digestive system diseases	10%		
Chronic liver disease and cirrhosis (0.5%)			
Injuries and poisonings 9%			

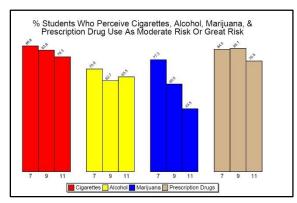
Source: NC State Center for Health Statistics

While overdose and poisonings are significant in Jackson County, other abused substances (tobacco and alcohol) should not be ignored. These substances are often the gateway to illicit drugs and can lead to unintentional injuries as they can inhibit the user's faculties. In Jackson County, 22% of residents are current smokers—greater than the Healthy People 2020 target of 12%. More residents in Jackson County are smokers than that of all comparator jurisdictions—

WNC, NC, and the US. Further, 4.3% of residents use smokeless tobacco—again, greater than the Healthy People 2020 target of 0.3% or lower. Finally, the newer phenomena of e-cigarettes has reached the residents of Jackson County. Currently, 6.6% of residents state that they are e-cigarette users. Finally, over one-fourth (25.5%) of residents surveyed indicate that they have breathed someone else's cigarette smoke at work in the past week (Professional Research Consultants, Inc, 2015)

Intervening early, before drug use or excessive alcohol use progresses to addiction, is among the most cost-effective ways to address substance abuse, reduce cost to society, and improve public health. (Office of National Drug Control Policy, 2012) Through data collected in 2013, we learned that drug use increases with age among high school students. Further, as student age, their perception of risk of cigarettes, alcohol, marijuana, and prescription drugs decreases dramatically. (Pride Surveys, 2013)





Source: Pride Survey

Understanding the Issue

Jackson County has a growing older adult population. In fact, the US Census Bureau predicts that the population in each major age group age 65 years and older in Jackson County will increase between 2010 and 2030. The proportion of the population age 85 years and older will more than double in that period and the population age 75-84 years will increase by 87%. By 2030, projections estimate that there will be more than 9,500 persons (roughly 25% of the total

population) age 65+years in Jackson County. (US Census Bureau, Profile of General Demographic Characteristics: 2000 (DP-1), SF1, 2000) With a growing aging population, it is pertinent that we plan with sufficient health and human service resources—resources such as long-term care facilities, services for persons with Alzheimer's, adult day care, respite care, congregate feeding sites, transportation systems, special needs registries, and programs that support the medical needs of residents as they age (balance programs, fall support groups,

"Seniors are so concerned with how they can stay in their homes after a loved one dies or after a medical issue like a fall... Anything we can do to help people age gracefully."

aging-in-place support, home modification, etc.). As residents age, they are more likely to experience a fall and die from a fall-related injury. We as a community need to assist our aging population to not only help seniors recover from falls but put measures in place to prevent falls

from happening. By partnering with local senior centers, assisted living facilities, EMS, environmental health and more, we can develop a multi-pronged community approach to address falls through fall risk identification, home assessments, balance classes, and more.

It is evident from the data shown above that Jackson County, in line with the rest of the United States, is dealing with a drug overdose and poisoning epidemic. Since 1999, the amount of prescription painkillers prescribed and sold in the US has nearly quadrupled yet there has not been an overall change in the amount of pain that Americans report. (CDC, Injury Prevention and Control: Prescription Drug Overdose, 2015) Addressing this epidemic will require the multifaceted approach of Project Lazarus:

- Community education
- Provider education
- Hospital ED policies
- Diversion control
- Pain patient support
- Harm reduction
- Addiction treatment



Source: Project Lazarus

However, talking about drugs is still viewed as taboo in this community. Residents don't know who to turn to if their loved ones are battling addiction. Many do not believe their loved ones are at risk or do not understand the risk of overdose. To clarify, 99.5% of Jackson County residents said that they had not taken a prescription drug that was not prescribed to them in the past month. Additionally, 97.5% of residents stated that they had never shared a prescription with someone else. (Professional Research Consultants, Inc, 2015) Finding an effective way to communicate the severity and change the "not in my backyard" mentality of this public health issue to our residents coupled with other spokes of the Project Lazarus wheel will prove effective at reducing drug/poisoning overdose and death.

Finally, all injury and substance abuse interventions should begin in the early years of life. Intervening early is not only a cost-effective way to address these issues but also works to vastly improve public health in the long run. Fall prevention programs (such as Otago Exercise Program, Stepping On) can have a return-on-investment (ROI) ranging from \$1.36-2.27. (CDC,

"Education and prevention are key—the only way we can get a handle on health issues like drug abuse."

Preventing Falls: A Guide to Implementing Effective Community-Based Fall Prevention Programs, 2015) Programs that prevent drug abuse and other problem behaviors also produce benefits for the community that outweigh monetary costs; for every dollar spent, up to a \$10 ROI results. (Ingebrigtsen)

Specific Populations At-Risk

While all residents in Jackson County can benefit from strategies that focus on injury and substance abuse prevention, the lives of at-risk populations may be improved even greater. **Older adults**, those 65+ years, are at greater risk of not only falling but of dying from a fall-

related injury. Seniors may be secluded, without social support, putting them at greater risk. Implementing programs and environmental changes that target this population is vital to address this health priority. Further, **minorities** (like Native Americans) and **white males** are at greater risk of both substance abuse and overdose in our community. (OWH, 2012) (Paulozzi, 2012) Additionally, anyone who has a history of substance abuse, history of chronic pain, or is living with mental health problems is also an at-risk population for this health behavior. Finally, low-income residents are at greater risk for all unintentional injuries, including overdose.

Health Resources available/needed

As Substance Abuse was noted as a health priorities from the 2011 CHA, many health resources have been developed in our community. Further, many health resources are still needed to address both substance abuse and injury prevention.

Available Health Resources				
Resource	Lead Agency	2014-15 Highlights		
Arthritis Foundation Exercise	Jackson County Department	1193 participants		
Program	on Aging			
Walk with Ease	Jackson County Department	423 participants		
	on Aging			
Tai Chi for Arthritis	Jackson County Department	525 participants		
	on Aging			
Senior Games	Jackson County Parks and	Large participation from		
	Recreation	older adults throughout the		
		community		
Safe Kids Jackson County	JCDPH	Coalition of active members		
		focused on injury prevention		
		of residents 0-19 years		
Project Alert	Mountain Projects, Inc.	Substance abuse prevention		
		curriculum for 7 th -8 th graders		
WNC Teen Institute	Mountain Projects, Inc.	High school student club		
		focused on empowering		
		students to make positive		
		decisions		
Prescription Drug Take Back	Healthy Carolinians of	2 events		
Events	Jackson County	7 . 11 . 12 . 2044		
Permanent Drop Box	Jackson County Sheriff's	Installed in 2011 and emptied		
5 5	Office	almost daily		
Prescription Drug Abuse	Healthy Carolinians of	1 lunch and learn held		
Lunch and Learn	Jackson County			
Smoky Mountain LME/MCO	Smoky Mountain LME/MCO	Support and services for		
		mental health, developmental		
Nalasana diatributian	Manustain Duais eta Tua	disabilities, and substance		
Naloxone distribution	Mountain Projects, Inc.	Free naloxone		

Needed Health Resources				
Resource	Potential Lead Agency(ies)			
Aging-in-place services	Department on Aging, JCDPH			
Fall prevention team	Department on Aging, JCDPH, EMS, Harris Regional Hospital			
Substance abuse prevention	Mountain Projects, Inc.			
programs for youth				
Increased naloxone	Mountain Projects, Inc.; JCDPH			
distribution				
More local in-patient	Hospital, Smoky Mountain LME/MCO			
treatment centers				
Increase community	Smoky Mountain LME/MCO; JCDPH			
awareness about available				
substance abuse/mental				
health resources				

PRIORITY ISSUE #3: CHRONIC DISEASE



Photo courtesy of Melissa McKnight

The 2011 CHA identified healthy eating, physical activity, and substance abuse prevention as health priorities for Jackson County. Today, these priorities are still relevant. However, data collected during the 2015 CHA process indicates that **chronic disease** is a notable health issue and should be treated as a priority. In fact, the prevalence of diabetes was selected as the health issue of highest priority during the community prioritization process. To be more inclusive, the CHA Work Team and Steering Committee decided to expand this priority issue from solely diabetes to **chronic disease**, to account for the variety of diseases

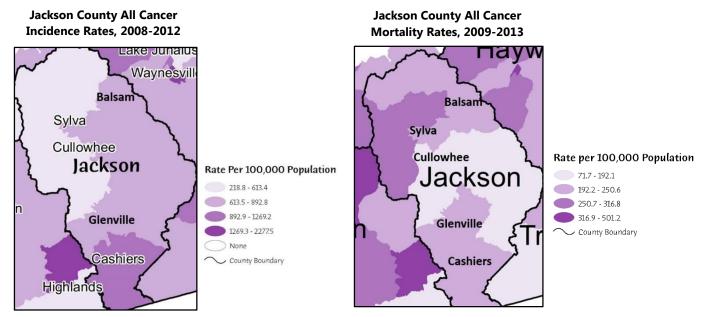
that lead to increased morbidity and mortality in Jackson County.

Data Highlights

Health Indicators

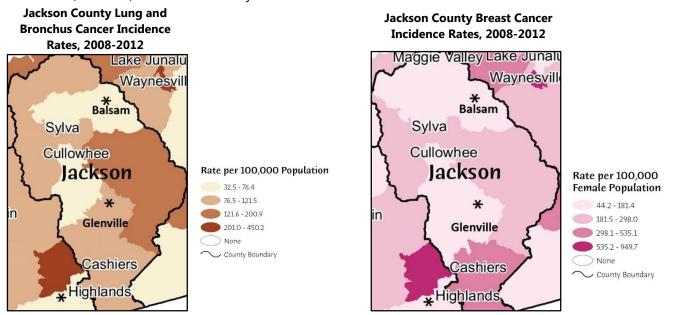
Chronic diseases are long-lasting conditions that can be controlled but not cured. These diseases are the leading cause of death and disability in the United States, accounting for 70% (1.7 million) of all deaths annually. Although costly and common, chronic diseases are among the most preventable and most can be effectively controlled. Examples of chronic disease include Alzheimer's disease, asthma, cancer, diabetes, heart disease, overweight/obesity, and more. (The Center for Managing Chronic Disease, 2011) In Jackson County, the three leading causes of death are cancer, diseases of the heart, and chronic lower respiratory disease—in line with both WNC and NC. (NC SCHS, 2013 North Carolina Vital Statistics, Volume 2: Leading Causes of Death, 2013) Another chronic disease of note due to its high prevalence and cost in our community is diabetes.

For almost all age groups (less 20-39), cancer is a leading cause of death. Lung, prostate, breast, and colorectal cancer all have increased in incidence from 1999-2003 to 2006-2012 while only lung cancer has increased in mortality from 2002-2006 to 2009-2013. (NC SCHS, 2013 North Carolina Vital Statistics, Volume 2: Leading Causes of Death, 2013).



NC State Center for Health Statistics

From the maps above, one can gather that while cancer incidence is higher in Cashiers, cancer mortality is higher in the Savannah/Whitter area of the county. When broken down by type of cancer (maps below), lung/bronchus cancer incidence rates are higher in the southeastern (Tuckaseigee and Sapphire) part of the county while breast cancer is more often diagnosed in the south (Cashiers) end of the county.



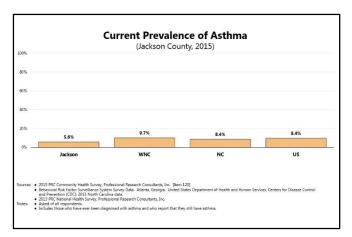
NC State Center for Health Statistics

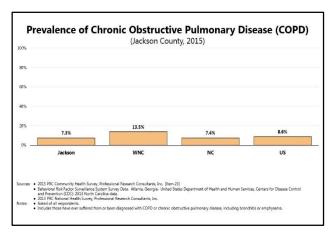
In Jackson County, 5.6% of residents state that they have been diagnosed with heart disease (to include heart attack, angina, or coronary heart disease). This prevalence is less than that of WNC and NC (6.5% and 6.1% respectively). (Professional Research Consultants, Inc, 2015) To dig

deeper into this issue, we surveyed residents about their prevalence of high blood pressure and high cholesterol as both can lead to heart disease if left untreated. Over 30% of Jackson County residents have been diagnosed with both high blood pressure and high cholesterol—greater than the Healthy People 2020 targets of 26.9% and 13.5% respectively. While the prevalence seems high, many residents are taking action (through change in diet, exercise, and/or medication) to control both diagnoses—89.2% are taking action to control hypertension while 82.8% are taking action to control high cholesterol. (Professional Research Consultants, Inc, 2015)

Chronic lower respiratory diseases (CLRD) are diseases that affect the lungs. These may include chronic obstructive pulmonary disease (COPD), emphysema, chronic bronchitis, and asthma. In Jackson County, both asthma and COPD rates are lower than that of WNC while similar to those of NC.

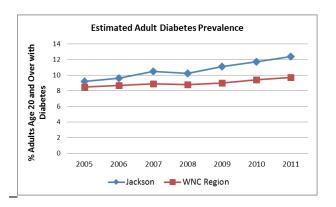
In 2012, the highest proportion of hospital discharges in Jackson County was for respiratory diseases (14%) to include pneumonia, influenza, COPD, and asthma. (NC SCHS, Inpatient Hospital Utilization and Charges by Principal Diagnosis, and County of Residence, North Carolina 2012 (Excluding Newborns & Discharges from Out of State Hospitals), 2014)

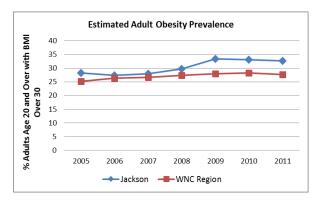




Source: Professional Research Consultants, Inc.

The eighth leading cause of death in Jackson County is diabetes mellitus. Though not listed in the top three causes of death, diabetes is of great concern due to increased prevalence of the disease and the financial burden the disease has on Jackson County residents. From 2005-2011, the average self-reported prevalence of Jackson County adults with diabetes was 10.7%, higher than the WNC average of 9%. The prevalence of diabetes has been rising (which may be correlated with the high prevalence of adult obesity) over time in both Jackson County and WNC. (CDC, County Level Estimates of Diagnosed Diabetes- of Adults in NC, 2005 [and other years as noted], 2005)





Source: Centers for Disease Control and Prevention, via BRFSS

Only two-thirds of residents surveyed indicate that they were tested for diabetes within the past year. An additional 10% of Jackson County residents indicate that they have been diagnosed with borderline or pre-diabetes, a condition that will develop into diabetes if not treated with lifestyle changes. And, of those diagnosed with the pre- or diabetes, 13.7% are still not taking action to control it. (Professional Research Consultants, Inc, 2015)

Understanding the Issue

Nationwide, 162 million Americans are affected by chronic disease with half suffering from two or more chronic conditions. Chronic disease is costly—Americans pay more than \$1 trillion annually due to chronic conditions, accounting for 75% of total healthcare expenditures. Working to both prevent and manage chronic disease through disease management programs can prove cost-effective, many programs of which show a 60% reduction in ED visits and acute readmissions with a 22% reduction in overall annual medical costs. (Freeman, Lybecker, & Taylor, 2011)

Taking action to control chronic disease will require a multi-faceted approach. We cannot expect individuals to control chronic disease on their own if environmental, social, and

community supports are not in place to assist them. The Circles of Influence in Self-Management of Chronic Disease clearly explains each level of support for those dealing with chronic disease:

- Self-management by the person
- Family involvement
- Clinical expertise and systems
- Work/school support
- Community awareness and action
- Environmental measures
- Policy



Source: The Center for Managing Chronic Disease

The first step to controlling chronic disease is having a patient put themselves at the center of disease control solutions. From there, health care teams can design patient education, service delivery, and payment systems that all focus on supporting that patients' efforts while building

the capacity of the individuals and their families to manage their disease effectively. Working in concert, disease control increases, healthcare costs go down, and well-being improves. (The Center for Managing Chronic Disease, 2011)

Specific Populations At-Risk

While all residents in Jackson County can benefit from strategies that focus on chronic disease prevention, the lives of at-risk populations may be improved even greater. There are many health risk behaviors, however, that put one at greater risk for developing a chronic condition—lack of exercise or physical activity, poor nutrition, tobacco use, and drinking too much alcohol. These health risk behaviors are directly linked to much of the illness, suffering, and early death related to chronic diseases and conditions. Additional vulnerable populations, such as low-income, the un- or under-insured, and those of low socioeconomic status, are all at greater risk of not only developing a chronic condition but also of not receiving adequate care once diagnosed. Poverty and chronic disease are interconnected in a vicious cycle. Often, the poorest people are at most risk for developing a chronic condition and die prematurely from said condition. These people are at-risk for several reasons:

- Chronic disease burden in concentrated among the poor.
- Poor people have increased exposure to risk and decreased access to health services.
- Chronic disease can cause poverty in individuals and families as they seek treatment, continuing the downward spiral. (WHO, 2015)

These reasons explain why investment in chronic disease management programs are vital among low income populations.

Health Resources available/needed

Many resources to address chronic disease are already in place in our community. Yet there are opportunities to increase these resources to meet the needs of the population.

Available Health Resources					
Resource	Lead Agency	2014-15 Highlights			
Diabetes Self-Management	JCDPH, Harris Regional	Multiple participants;			
Program (DSME)	Hospital	Hospital recently acquired			
		ADA recognition			
Medical Nutrition Therapy	JCDPH, Harris Regional	Participants seen at no cost			
(MNT)	Hospital	at JCDPH			
Eat Smart, Move More, Weigh	JCDPH	21 participants			
Less					
Diabetes Prevention Program	JCDPH	Pilot program of 8			
(DPP)		participants; Working			
		towards CDC recognition			
Living Healthy: Chronic	Area Agency on Aging	More trainers needed and in			
Disease Self-Management		the pipeline to be trained in			
		2016			
ODHDSP grant	MountainWise	Working on community-			
		clinical connections for			

		obesity, diabetes, heart disease, and stroke
Stroke risk screening	Healthy Carolinians of Jackson County, Harris Regional Hospital	~100 participants screened at no cost
Freshstart	JCDPH, Harris Regional Hospital	Free cessation classes offered every other month or upon request
Worksite Wellness Programs	Jackson County Government, Jackson County Public Schools, Harris Regional Hospitals, MountainWise	Working to create healthy, supportive work environments with our largest employers

Needed Health Resources				
Resource	Potential Lead Agency(ies)			
Expanded Diabetes	JCDPH, MountainWise			
Prevention Program				
Living Healthy: Chronic	Area Agency on Aging			
Disease Self-Management				
Strengthen community-	MountainWise			
clinical connections for bi-				
directional chronic disease				
management				
Additional Worksite Wellness	MountainWise, JCDPH, Harris Regional Hospital			
Programs (private sector)				
Breast, colorectal, & prostate	Harris Regional Hospital, JCDPH, Local providers			
cancer screening events				
Expanded tobacco cessation	JCDPH, Harris Regional Hospital			
programs				
Expanded tobacco control	MountainWise			
ordinances				
Weight loss/management	JCDPH, Cooperative Extension			
programs				

CHAPTER 9 - NEXT STEPS

Sharing Findings

The final Community Health Assessment will be shared specifically with the following stakeholders:

- CHA Steering Committee
- CHA Work Team
- Jackson County Board of Heath
- Jackson County Board of Commissioners
- Key Stakeholders

The Jackson County Department of Public Health will make the 2015 Community Health Assessment available online to the public via the Health Department's website at: http://health.jacksonnc.org/community-health-data-1. Further, hard copies will be placed at the following locations throughout the community:

- Jackson County Department of Public Health
- Jackson County Public Library

Additionally, data from the CHA will be shared throughout the community via presentations at the following meetings:

- Jackson County Board of Health meeting
- Healthy Carolinians Steering Committee meeting
- JCDPH staff meeting
- Jackson County School Health Advisory Committee (SHAC) meeting
- Other meetings as requested

Collaborative Action Planning

Collaborative action 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. During the six months following the completion of the CHA, the CHA Facilitator will convene community partners interested in each health priority. At these meetings, partners will brainstorm and develop a community health improvement plan (CHIP) that begins by looking outside of the performance of an individual organization serving a specific segment of the community to the way in which the activities of many organizations contribute to community health improvement. (NACCHO, 2010) The CHIP will detail an improvement plan to address each health priority, including partner responsibilities, evidence-based strategies, timelines, and more.

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APPENDICES

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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 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 Office of State Budget and Management; NC Department of Commerce; Employment Security Commission of NC; NC Department of Public Instruction; NC Department of Justice; NC Division of Medical Assistance; and the Cecil B. Sheps Center for Health Services Research. The WNC Healthy Impact 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 2015.

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; National Center for Health Statistics; NC DPH Nutrition Services Branch; UNC Highway Safety Research Center; and NC DETECT. 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.

Environmental data was gathered from sources including: US Environmental Protection Agency; US Department of Agriculture, and NC Radon Program.

<u>It is important to note</u> 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.

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 16 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.

Gaps in Available Information

As is the case in many data gathering processes, there seems to be a gap in available information as it pertains to youth (anyone under the age of 18). Finding ways to supplement this data gap could enhance the overall CHA process, helping to identify additional vulnerable populations to focus on.

WNC Healthy Impact Survey (Primary Data)

Survey Methodology

Survey Instrument

To supplement the secondary core dataset, meet additional stakeholder data needs, and hear from community members about their concerns and priorities, a community survey, 2015 WNC Healthy Impact Survey (a.k.a. 2015 PRC Community Health Survey), was developed and implemented in 16 counties across western North Carolina. The survey instrument was developed by WNC Healthy Impact's data workgroup, consulting team, and local partners, with assistance from Professional Research Consultants, Inc.



Professional Research Consultants, Inc.

(PRC). Many of the questions are derived from the Centers for Disease Control and Prevention (CDC) Behavioral Risk Factor Surveillance System (BRFSS), as well as other public health surveys; other questions were developed specifically for WNC Healthy Impact 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 of their county's residents.

The geographic area for the regional survey effort included 16 counties: Buncombe, Cherokee, Clay, Graham, Haywood, Henderson, Jackson, Macon, Madison, McDowell, Mitchell, Polk, Rutherford, Swain, Transylvania and Yancey counties.

Sample Approach & Design

To ensure the best representation of the population surveyed, a telephone interview methodology (one that incorporates both landline and cell phone interviews) was employed. The primary advantages of telephone interviewing are timeliness, efficiency and random-selection capabilities.

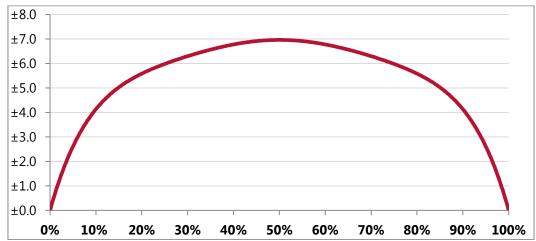
The sample design used for this regional effort consisted of a stratified random sample of 3,300 individuals age 18 and older in Western North Carolina, with 200 from our county. All administration of the surveys, data collection and data analysis was conducted by Professional

Research Consultants, Inc. (PRC). The interviews were conducted in either English or Spanish, as preferred by respondents.

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



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.

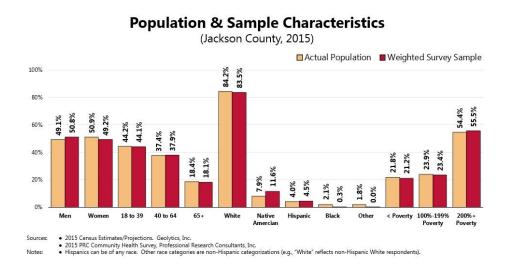
Examples:

- 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% ($10\% \pm 4.2\%$) 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% ($50\% \pm 6.9\%$) of the total population would respond "yes" if asked this question.

Sample Characteristics

To accurately represent the population studied, PRC worked to minimize bias through application of a proven telephone methodology and random-selection techniques. And, while this random sampling of the population produces a highly representative sample, it is a common and preferred practice to apply post-stratification weights to the raw data to improve this representativeness even further. Specifically, once the raw data are gathered, respondents are examined by key demographic characteristics (namely gender, age, race, ethnicity, and poverty status) and a statistical application package applies weighting variables that produce a sample which more closely matches the population for these characteristics. Thus, while the integrity of each individual's responses is maintained, one respondent's responses may contribute to the whole the same weight as, for example, 1.1 respondents. Another respondent, whose demographic characteristics may have been slightly oversampled, may contribute the same weight as 0.9 respondents. In order to determine WNC regional estimates, county responses were weighted in proportion to the actual population distribution so as to appropriately represent Western North Carolina as a whole.

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



Poverty descriptions and segmentation used in this report are based on administrative poverty thresholds determined by the US Department of Health & Human Services. These guidelines define poverty status by household income level and number of persons in the household (e.g., the 2015 guidelines place the poverty threshold for a family of four at \$23,050 annual household income or lower). In sample segmentation: "very low income" refers to community members living in a household with defined poverty status; "low income" refers to households with incomes just above the poverty level, earning up to twice the poverty threshold; and "mid/high income" refers to those households living on incomes which are twice or more the federal poverty level.

The sample design and the quality control procedures used in the data collection ensure that the sample is representative. Thus, the findings may be generalized to the total population of community members in the defined area with a high degree of confidence.

Benchmark Data

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 2013 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 provides 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.

Survey Administration

With more than 700 full- and part-time interviewers who work exclusively with healthcare and health assessment projects, PRC uses a state-of-the-art, automated CATI interviewing system that assures consistency in the research process. Furthermore, PRC maintains the resources to conduct all aspects of this project in-house from its headquarters in Omaha, Nebraska, assuring the highest level of quality control.

Interviewing Protocols and Quality Assurance

PRC's methods and survey administration comply with current research methods and industry standards. To maximize the reliability of research results and to minimize bias, PRC follows a number of clearly defined quality control protocols. PRC uses a telephone methodology for its community interviews, in which the respondent completes the questionnaire with a trained interviewer, not through an automated touch-tone process.

Before going into the field in the latter half of February, PRC piloted 30 interviews across the region with the finalized survey instrument. After this phase, PRC corrected any process errors that were found, and discussed with the consulting team any substantive issues that needed to be resolved before full implementation.

PRC employs the latest CATI (computer-aided telephone interviewing) system technology in its interviewing facilities. The CATI system automatically generates the daily sample for data collection, retaining each telephone number until the Rules of Replacement are met. Replacement means that no further attempts are made to connect to a particular number, and

that a replacement number is drawn from the sample. To retain the randomness of the sample, telephone numbers drawn for the sample are not discarded and replaced except under very specific conditions.

Interviewing for this study took place primarily during evening and weekend hours (Eastern Time: Monday-Friday 5pm-9pm; Saturday 10am-4pm; Sunday 2pm-9pm). Some daytime weekday attempts were also made to accommodate those for whom these times might be more convenient. Up to five call attempts were made on different days and at different times to reach telephone numbers for which there is no answer. Systematic, unobtrusive electronic monitoring is conducted regularly by supervisors throughout the data collection phase of the project.

Cell Phones

Cell phone numbers were integrated into the sampling frame developed for the interviewing system for this project. Special protocols were followed if a cell phone number was drawn for the sample to ensure that the respondent lives in the area targeted and that (s)he is in a safe place to talk (e.g., not while driving). Using this dual-mode approach yielded a sample comprised of 6% cell phone numbers and 94% landline numbers. While this proportion is lower than actual cell phone penetration, it is sufficient in supplementing demographic segments that might otherwise be undersampled in a landline-only model, without greatly increasing the cost of administration.

Minimizing Potential Error

In any survey, there exists some degree of potential error. This may be characterized as sampling error (because the survey results are not based on a complete census of all potential respondents within the population) or non-sampling error (e.g., question wording, question sequencing, or through errors in data processing). Throughout the research effort, Professional Research Consultants makes every effort to minimize both sampling and non-sampling errors in order to assure the accuracy and generalizability of the results reported.

Noncoverage Error. One way to minimize any effects of underrepresentation of persons without telephones is through poststratification. In poststratification, the survey findings are weighted to key demographic characteristics, including gender, age, race/ethnicity and income (see above for more detailed description).

Sampling Error. Sampling error occurs because estimates are based on only a sample of the population rather than on the entire population. Generating a random sample that is representative and of adequate size can help minimize sampling error. Sampling error, in this instance, is further minimized through the strict application of administration protocols. Poststratification, as mentioned above, is another means of minimizing sampling error.

Measurement Error. Measurement error occurs when responses to questions are unduly influenced by one or more factors. These may include question wording or order, or the interviewer's tone of voice or objectivity. Using a tested survey instrument minimizes errors associated with the questionnaire. Thorough and specific interviews also reduce possible errors.

The automated CATI system is designed to lessen the risk of human error in the coding and data entry of responses.

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.

Key Stakeholder Interviews (Primary Data)

The CHA Work Team implemented 13 key stakeholder interviews with the following community leaders:

Key Stakeholder	Title	Agency	Interviewed by:
		Represented	
Doug Keskula	Dean, Health and	Western Carolina	Matthew Impagliatelli
	Human Sciences	University	
Amy Grimes	Executive Director	The Community	Preston Jackson
		Table	
Paige Dowling	Town Manager	Town of Sylva	Melissa McKnight
Brian McMahan	Chairman	Board of	Melissa McKnight
		Commissioners	
Debbi Madill	Teacher	Jackson County	Melissa McKnight
		Public Schools	
Bob Cochran	Director	Department of Social	Melissa McKnight
		Services	
Eddie Wells	Director	Department on Aging	Liz Cochran
Robert Hawk	Extension Director	Cooperative	Katie Peterson
		Extension	
Paula Carden	Director	Jackson County	Melissa McKnight
		Department of Public	
		Health	

Steve Heatherly	CEO	Harris Regional	Melissa McKnight	
		Hospital		
Rebecca Mathis	Executive Director	The Good Samaritan	Melissa McKnight	
Gerald Green	Planning Director	Jackson County	Zara Sadler	
Alice	Community Member		Melissa McKnight	

All stakeholders were interviewed in person by a member of the CHA Work Team using an identical list of questions developed as team. Responses were compiled anonymously and used as supplementary data during the Community Prioritization Meeting. Further, quotes gathered during these interviews have been used to enhance the CHA product.

Listening Sessions (Primary Data)

The CHA Work Team implemented five listening sessions with the following community groups:

Location	Group	Number in Attendance	Led by:		
Jackson County Early College	9-10 th graders	10	Anna Lippard		
Cashiers Senior Center	Older adults	12	Liz Cochran		
Good Samaritan Clinic	Uninsured adults	4	Melissa McKnight		
WCU Nutrition Club	Juniors and seniors at WCU	3	Preston Jackson and Matthew Impagliatelli		
WCU On-campus students	Freshmen at WCU	5	Katie Peterson		

All listening sessions were implemented using the following documents:

- Scripted prompt
- Seven Dimensions of Health handout
- Do More, Do Less handout

During the sessions, participants were led through a series of questions where, after brainstorming, they identified one thing that needed to be done to improve the health of Jackson County. The group could refer to the Seven Dimensions of Health handout to assist them in the brainstorming process. From there, participants discussed what could be done to solve this problem, how others in the community would react to this problem, and more. Finally, the group was led through an anonymous activity called "Do More, Do Less."

All data collected was analyzed by the CHA Work Team, looking for common themes. Responses were compiled anonymously and used as supplementary data during the Community Prioritization Meeting. Further, quotes gathered during these interviews have been used to enhance the CHA product.

Appendix B: Secondary Data Profile Secondary Data Profile

2015 Jackson County Community Health Assessment

Summary of Secondary Data

August 25, 2015

Purpose of the Community Health Assessment

- Describe the health status of the community.
- Create a report that will serve as a resource for the Jackson County Health Department, local hospitals, and other community organizations.
- Provide direction for the planning of disease prevention and health promotion services and activities.

Contributing Viewpoints

Secondary Data	Citizen and Stakeholder Opinion
-Demographic -Socioeconomic -Health -Environmental	-Community health survey

We Take Special Notice When...

- Jackson County statistics deviate from North Carolina or regional statistics, or some other "norm".
- Trend data show significant changes over time.
- There are significant age, gender, or racial disparities.

Definitions and Symbols

Arrows

- Arrow up (▲) indicates an increase.
- Arrow down (▼) indicates a decrease.

Color

- Red indicates a "worse than" or negative difference
- Green indicates a "better than" or positive difference
- Blue indicates a likely unstable rate or difference based on a small number of events; figures in blue should be used with great caution.

• **Bold** Type

 Indicates the higher value of a pair, or the highest value among several.

Data Caveats

- Data citations presented among these slides are basic and rudimentary. Complete citations are available in the associated WNC Healthy Impact Data Workbook from which this data was derived.
- Most secondary data in this presentation originated from authoritative sources in the public domain (e.g., US Census Bureau, US EPA, NC State Center for Health Statistics).
- All secondary data was mined at a point in time in the recent past, and may not represent present conditions.
 Numbers, entity names, program titles, etc. that appear in the data may no longer be current.

Demographic Data

General Population Characteristics

- The Jackson County population has a slightly higher proportion of females than males.
- The median age of the Jackson County population (36.3 years) is 8.4 years "younger" than WNC regional average and 1.1 years "younger" than the NC average.
- Nevertheless, Jackson County has lower proportions of "younger persons" and higher proportions of "older persons" than NC as a whole.

General Population Characteristics 2010 US Census

County	Total Population (2010)	% Males	% Females	Median Age*	% Under 5 Years Old	% 5-19 Years Old	% 20 - 64 Years Old	% 65 Years and Older	
Jackson	40,271	49.8	50.2	36.3	5.1	19.2	60.6	15.1	
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	

Source: US Census Bureau

Minority Populations

 Jackson County has a significantly higher proportion of American Indians and significantly lower proportions of African Americans and other minority groups, including Hispanics, than the WNC region and NC as a whole.

Population Distribution by Race/Ethnicity 2010 US Census

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)
		%	%	%	%	%	%	%	%
Jackson	40,271	83.2	1.8	9.4	0.9	0.0	2.7	1.9	5.1
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

Source: US Census Bureau

Population Growth

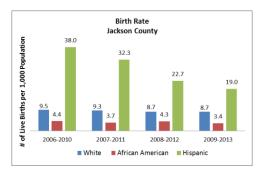
 The double-digit rate of growth in Jackson County in the period 2000-2010 is expected to slow dramatically over the next two decades, to a rate lowest among comparators.

Percent Population Growth									
Decade	Jackson County	WNC Region	State of NC						
2000-2010	17.8	13.0	15.6						
2010-2020	3.6	6.7	10.7						
2020-2030	3.2	6.1	9.5						

Sources: US Census Bureau and NC Office of State Budget and Management

Birth Rate

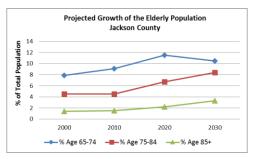
The birth rate among Hispanics in Jackson County
has been significantly higher than the comparable
rate among other racial groups, but birth rates in all
population groups in the county appear to be falling.



Source: NC State Center for Health Statistics

Growth of the Elderly Population

- The population in each major age group age 65 and older in Jackson County will increase between 2010 and 2030.
- The proportion of the population age 85 and older will more than double in that period; the population age 75-84 will increase by 87%.
- By 2030 projections estimate there will be more than 9,500 persons age 65+ in Jackson County.



Sources: US Census Bureau and NC State Office of Budget and Management

Family Composition

- In the 5-year period from 2009-2013, an estimated 272 Jackson County grandparents living with their minor-aged grandchildren also were financially responsible for them.
- Over the same period there were an estimated 15,609 households in Jackson County, 3,518 of them with children under 18 years of age.
- Among the households with minor-age children, 61% were headed by a married couple. An additional 28% were headed by a female single parent, and 11% were headed by a male single parent.

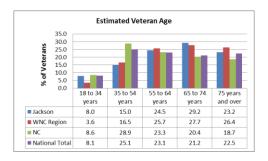
Minor-Age Children Living with Grandparents and in Single-Parent Households, 2009-2013

County	# Grandparents Living with Own	Grand Respons Grandc (under 1	sible for hildren	# Total Households	Family Household Headed by Married Couple (with children s under 18 years)		Headed by children	ousehold Male (with under 18 ars)	Family Household Headed by Female (with children under 18 years)	
	Grandchildren (<18 Years)	Est.#	%		Est.#	%**	Est.#	%**	Est.#	%**
Jackson	500	272	54.4	15.609	2.134	13.7	378	2.4	1.006	6.4
WNC (Regional) Total	15,007			316,799	, .				,	5.6
State Total	206,632	100,422	48.6	3,715,565	706,106	19.0	84,199	2.3	293,665	7.9

Source: US Census Bureau

Military Veterans

 Jackson County has a higher proportion of veterans in the 65-74 age group, and a lower proportion of veterans in the 35-54 age group than the regional, state or national averages.



Sources: US Census Bureau

Foreign-Born Population

- Of the estimated 2,134 foreign-born residents of Jackson County in the 2009-2013 period, the largest proportion (45.5%) entered the US between 2000 and 2009.
- Of the 970 foreign-born residents settling in Jackson County in that decade, 896 (92%) were not US citizens when they arrived.
- Of the estimated 15,609 households in Jackson County in the 2009-2013 period, 253 (2%) were categorized as having limited skill in speaking English.

Sources: US Census Bureau

Urban/Rural Population

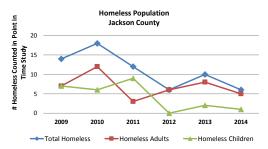
 The proportion of the Jackson County population categorized as "rural" decreased by 7% between 2000 and 2010. More of Jackson County is "rural" than is WNC or NC as a whole.

Country	2000 (Census	2010 Census			
County	% Urban	% Rural	% Urban	% Rural		
Jackson County	21.7	78.3	26.9	73.1		
WNC Region	41.6	58.4	46.8	53.2		
NC	46.7	53.3	66.1	33.9		

Sources: US Census Bureau

Homeless Population

- According to an annual point-in-time census of the homeless population in Jackson County, the total number of homeless persons peaked in 2010 and fell over the following three years. Most of the county's homeless (62%) were adults; 38% were children.
- From 2009 through 2014, approximately 3% of the total homeless population in Jackson County were deemed "chronically homeless".
- From 2010 through 2014, 6% of all homeless adults in Jackson County were military veterans.



Sources: NC Coalition to End Homelessness

Educational Achievement

- Compared to the WNC Region average, Jackson County has:
 - 13% *lower* percentage of persons in the population over age 25 having only a high school diploma or equivalent (2009-2013 Estimate)
 - 32% higher percentage of persons in the population over age 25 having a Bachelor's degree or higher (2009-2013 Estimate)
 - 5% higher overall HS graduation rate (for 4-year cohort of 9th graders entering school in SY 2010-2011 and graduating in SY2013-2014 or earlier)

Sources: US Census Bureau and Public Schools of North Carolina

Socioeconomic Data

Income

In Jackson County:

- 2009-2013 Median Household Income = \$36,951
 - ▼ \$239 since 2006-2010
 - \$1,936 below WNC average
 - \$9,383 below NC average
- 2009-2013 Median Family Income = \$48,568
 - ▼ \$932 since 2006-2010
 - \$17 above WNC average
 - \$8,360 below NC average

Household: all people in a housing unit sharing living arrangements; may or may not be related

Family: householder and people living in household related by birth, marriage or adoption.

All families are also households; not all households are families.

Source: US Census Bureau

Employment

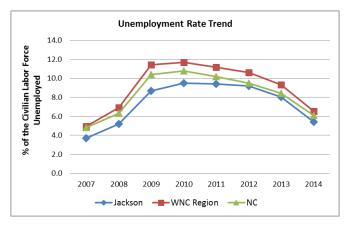
- As of 2013, the three employment sectors in Jackson County with the largest proportions of workers (and average weekly wages) were:
 - Educational Services: 22.43% of workforce (\$790)
 - Accommodation and Food Service: 16.10% of workforce (\$271)
 - Health Care and Social Assistance: 14.86 of workforce (\$711).

Region-wide in 2013 the largest employment sector was Health Care and Social Assistance (18.37%) at an average weekly wage of \$655 per employee. Statewide the largest employment sector also was Health Care and Social Assistance (14.48%) at an average weekly wage of \$859.

Source: NC Employment Security Commission

Annual Unemployment Rate

 Throughout the period cited the unemployment rate in Jackson County was lower than the comparable rates for WNC and NC.



Source: NC Department of Commerce

Poverty

- In WNC and NC the total poverty rate increased in each period cited. The rate in Jackson County was more variable.
- The total poverty rate in Jackson County was higher than the regional and NC rates in each period cited.

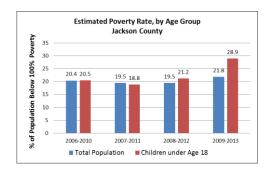
Estimated Poverty Rate

Same	Percent Total Population Below 100% Poverty Level							
County	2006-2010	2007-2011	2008-2012	2009-2013				
Jackson County	20.4	19.5	19.5	21.8				
WNC Region	15.7	16.1	16.9	18.0				
State of NC	15.5	16.1	16.8	17.5				

Source: US Census Bureau

Poverty and Age

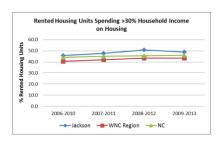
- In much of NC, children suffer disproportionately from poverty. This disparity is less obvious in Jackson County.
- In Jackson County the estimated poverty rate among children under age 18 was similar to the overall poverty rate in every period cited except 2009-2013, when the rate for children exceeded the overall rate by 33%.



Source: US Census Bureau

Housing Costs

- One measure of economic burden in a community is the percent of housing units spending more than 30% of household income on housing.
- In Jackson County larger proportions of both renters and mortgage holders spend >30% of household income on housing than the WNC or NC average.



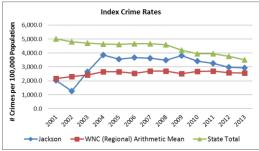


Source: US Census Bureau

Crime and Safety Index Crime

Index crime is the sum of all violent and property crime.
The index crime rate in Jackson County was lower than
the comparable NC average but higher than the WNC
average in every year cited except 2001-2002 when the
local rate was lowest among comparators.

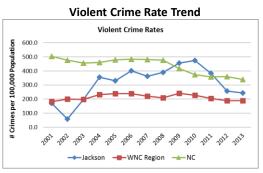




Source: NC Department of Justice

Crime and Safety Violent Crime

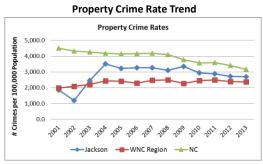
 Violent crime includes murder, forcible rape, robbery, and aggravated assault. The violent crime rate in Jackson County was higher than the WNC average in every year cited except 2001-2003. The local rate exceeded even the state rate in 2009-2011.



Source: NC Department of Justice

Crime and Safety Property Crime

 Property crime includes burglary, arson, and motor vehicle theft. The property crime rate in Jackson County was lower than the comparable NC average but higher than the WNC average in every year cited except 2001 and 2002, when the local rate was lowest among comparators.



Source: NC Department of Justice

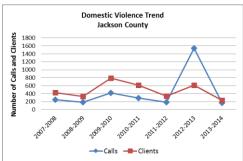
Crime and Safety Sexual Assault

- In FY2013-2014, 54 persons in Jackson County were identified as victims of sexual assault.
- The single most frequently reported specific type of sexual assault in Jackson County during the period was adult rape (22%). Regionally, the most frequently reported type was adult survivor of child sexual assault (23%); statewide the most frequently reported type was child sexual offense (26%).
- State-wide and region-wide the most commonly reported offender was a relative. In Jackson County the most common offender was a boy- or girl-friend.

Source: NC Department of Administration, Council for Women

Crime and Safety Domestic Violence

- The number of calls in Jackson County dealing with domestic violence increased from a low of 183 in 2008-2009 to a high of 1,545 in 2012-2013. The number of clients reporting domestic violence peaked at 789 in 2009-2010.
- The domestic violence shelter serving Jackson County was full on 329 days in FY2013-2014.



Source: NC Department of Administration, Council for Women

Crime and Safety Child Abuse

- Substantiated reports of child abuse in Jackson County varied considerably between 2006 and 2010, but averaged 188 per year over that period.
- Between 2006 and 2010 there were no child abuse homicides in the county.

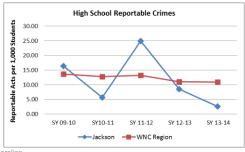
Substantiated Child Abuse Reports and Child Abuse Homicides

County	Reports Substantiated**				Child Abuse Homicides***							
	2006	2007	2008	2009	2010	2006	2007	2008	2009	2010	2011	2012
Jackson	86	117	166	142	79	0	0	0	0	0	0	0
WNC (Regional) Total	2,273	1,958	1,754	1,449	1,512	4	1	2	1	0	4	2
State Total	20,340	14,966	12,429	11,252	11,300	34	25	33	17	19	24	28

Source: Annie E. Casey Foundation KIDS COUNT Data Center

Juvenile Crime High School Reportable Crime

 While the regional high school crime rate appeared relatively stable over the period cited, the rate of reportable crimes in Jackson County Schools was erratic, due likely to relatively small numbers of events.



Source: Public Schools of North Carolina

Health Resources

Health Insurance

- The percent uninsured adults age 18-64 in Jackson County, WNC and NC increased between 2009 and 2010 but have decreased since.
- Jackson County had the highest percent uninsured among comparators in both age groups in every year cited.

Percent of Population Without Health Insurance, by Age Group

County	2009		20	2010		2011		2012		13
County	0-18	18-64	0-18	18-64	0-18	18-64	0-18	18-64	0-18	18-64
Jackson County	11.7	25.2	10.2	31.4	11.7	30.7	12.1	30.1	10.0	29.0
WNC Region	9.9	24.2	9.7	26.0	9.1	25.2	9.3	25.4	8.6	25.0
State of NC	8.7	21.9	8.3	23.5	7.9	23.0	7.9	23.4	6.9	22.5

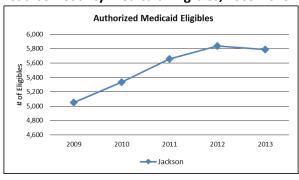
• The age group 0-18 has a significantly lower percentage of uninsured than the adult age group, due at least partly to their inclusion in NC Health Choice.

Source: US Census Bureau

Medicaid Eligibility

 The total number of people in Jackson County eligible for Medicaid increased between 2009 and 2011 before decreasing slightly.

Jackson County Medicaid-Eligibles, 2009-2013



Source: NC Division of Medical Assistance

Health Care Practitioners

- In 2012 Jackson County had a higher ratio of active health professionals than the WNC region in all provider categories except pharmacists.
- The ratio of primary care physicians in Jackson County was higher than the WNC or NC average.
- The WNC region had the lowest ratio among all jurisdictions in all provider categories except pharmacists.

Number of Active Health Professionals per 10,000 Population

	2012							
County	Physicians	Primary Care Physicians*	Dentists	Registered Nurses	Pharmacists			
Jackson	19.37	7.85	3.92	88.51	7.36			
WNC (Regional) Arithmetic Mean	14.29	6.84	3.61	76.94	7.97			
State Total	22.31	7.58	4.51	99.56	10.06			
National Ratio (date)	23.0 (2011)	8.1 (2011)	5.3 (2012)	91.6 (2012)	9.1 (2012)			

Sources: Cecil G. Sheps Center for Health Services Research, US Census Bureau, and US Bureau of Labor Statistics

Health Statistics

Health Rankings

- According to America's Health Rankings (2013)
 - NC ranked 35th overall out of 50 (where 1 is "best")
- According to County Health Rankings (2014) for NC, Jackson County was ranked 22nd overall among the 100 NC counties.
 - Jackson County *health outcomes* rankings out of 100 (where 1 is best):
 - 26th in length of life
 - · 24th for quality of life
 - Jackson County *health factors* rankings out of 100 (where 1 is best):
 - 32nd for health behaviors
 - 61th for clinical care
 - 46th for social and economic factors
 - 78th for physical environment

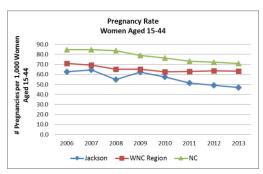
Sources: America's Health Rankings and County Health Rankings and Roadmaps websites

Maternal and Infant Health

Pregnancy Rate

Pregnancies per 1,000 Women Age 15-44

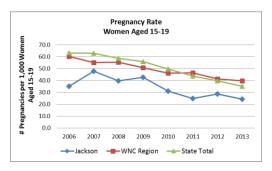
 The total pregnancy rates in Jackson County, WNC and NC have fallen overall since 2006, but appear to have stabilized recently.



Pregnancy Rate

Pregnancies per 1,000 women Age 15-19 (Teens)

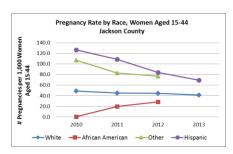
 The teen pregnancy rates in Jackson County, WNC and NC have fallen significantly since 2007, and appear to be falling still in Jackson County and the state as a whole.

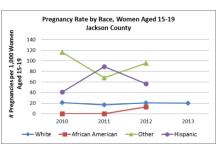


Source: NC State Center for Health Statistics

Pregnancy Rate By Race/Ethnicity

 Among Jackson County women age 15-44 the highest pregnancy rates appear to occur among Hispanics; among teens age 15-19 the highest pregnancy rates in the county appear to occur most frequently among Hispanics or the group identified "Other", which up until recently would have included Native Americans. (Note that pregnancies among American Indians were reported for the first time in 2013, and do not appear on the graphs below.)





Pregnancy Risk FactorsSmoking During Pregnancy

 The percentage of Jackson County women who smoked during pregnancy increased significantly overall between 2008 and 2013, while comparable percentages for the region and the state did not change significantly over the same period.

Country	Percent of Births to Mothers Who Smoked While Pregnant							
County	2008	2009	2010	2011	2012	2013		
Jackson County	18.8	17.4	n/a	22.3	21.0	24.0		
WNC Region	20.3	19.1	n/a	20.1	19.2	19.4		
State of NC	10.4	11.0	n/a	10.9	10.6	10.3		

Source: NC State Center for Health Statistics, Vital Statistics Volume I

Pregnancy Risk Factors Prenatal Care

- The percentage of women in all three jurisdictions who received early prenatal care decreased significantly between after 2010.
- Jackson County had higher percentages of early prenatal care than its comparators in every period cited.

Country	Percent of Pregnancies Receiving Prenatal Care in 1st Trimester						
County	2008	2009	2010	2011	2012	2013	
Jackson County	93.2	91.1	n/a	75.9	78.2	76.0	
WNC Region	84.5	84.0	n/a	75.6	76.5	75.5	
State of NC	82.0	83.3	n/a	71.2	71.3	70.3	

Source: NC State Center for Health Statistics, Baby Book

Pregnancy Outcomes Low Birth Weight Births

- The highest percentages of low birth weight (<5.5 lb.) and very low birth weight (<3.3 lb.) births among the comparators occur at the state level.
- Percentages of low birth weight births appear relatively stable in all jurisdictions. Very low birth weight births in Jackson County appear variable.
- Racially stratified birth weight birth percentages for Jackson County are unstable for all groups except whites.

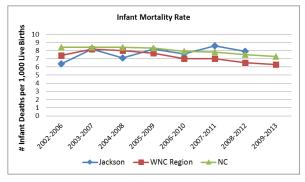




Source: NC State Center for Health Statistics

Pregnancy Outcomes Infant Mortality

 The infant mortality rate in Jackson County appears to be rather variable. Until recently, infant mortality was lower in Jackson County than in NC as a whole. Note however that all overall infant mortality rates for the county are unstable or suppressed, as are all racially stratified rates.



Abortion

Women Age 15-44

 The percentage of pregnancies per 1,000 Jackson County women in this age group that ended in abortion fell overall from 9.5 in 2006 to 5.9 in 2013.

Women Age 15-19 (Teens)

 The percentage of pregnancies per 1,000 Jackson County women in this age group that ended in abortion fell overall from 7.0 in 2006 to 5.5 in 2012, after which year the abortion rate in this age group was suppressed due to a belowthreshold number of events.

Source: NC State Center for Health Statistics

Mortality

Life Expectancy

 For persons born in 2011-2013, life expectancy among comparator jurisdictions is longest overall and among men and white persons in Jackson County.

Life Expectancy at Birth for Persons Born in in 2011-2013

		Sex		Race		
County	Overall Male		Female	White	African- American	
Jackson	78.6	76.7	80.6	78.9	n/a	
WNC (Regional) Arithmetic Mean	77.7	75.3	80.2	77.9	75.2	
State Total	78.2	75.7	80.6	78.8	75.9	

Source: NC State Center for Health Statistics

Leading Causes of Death: Overall

	Age-Adjusted Rates (2009-2013)	Jackson No. of Deaths	Jackson Mortality Rate	Rate Difference from NC
1.	Total Cancer	420	177.8	+2.6%
2.	Diseases of the Heart	362	163.0	-4.1%
3.	Chronic Lower Respiratory Disease	107	47.9	+3.9%
4.	All Other Unintentional Injuries	82	41.2	+40.6%
5.	Alzheimer's Disease	62	29.9	+3.8%
6.	Cerebrovascular Disease	66	29.8	-31.8%
7.	Pneumonia and Influenza	41	19.2	+7.3%
8.	Diabetes Mellitus	42	17.0	-21.7%
9.	Nephritis, Nephrotic Syndrome, Nephrosis	34	16.0	-9.1%
10.	Suicide	31	16.0	+31.1%
11.	Septicemia	24	10.8	-21.7%
12.	Chronic Liver Disease and Cirrhosis	23	10.4	+9.5%
13.	Unintentional Motor Vehicle Injuries	20	9.5	-30.7%
14.	Homicide	4	1.5	-74.1%
15.	AIDS	1	0.6	-79.3%

Leading Causes of Death: Gender Comparison

Rank by	Jackson County Descending Overall Age-Adjusted Rate (2009-2013)	Rate Among Males	Rate Among Females	% Male Rate Difference from Females
1. Total	Cancer	219.2	146.6	+49.5%
2. Disea	ases of the Heart	196.9	130.8	+50.5%
3. Chro	nic Lower Respiratory Disease	60.0	40.5	+48.1%
4. All O	ther Unintentional Injuries	58.7	25.3	1.3X
5. Alzhe	eimer's Disease	25.7	32.3	-20.4%
6. Cere	brovascular Disease	27.8	30.6	-9.2%
7. Pneu	monia and Influenza	n/a	18.2	n/a
8. Diabe	etes Mellitus	19.5	15.1	+29.1%
9. Neph	ritis, Nephrotic Syndrome, Nephrosis	n/a	n/a	n/a
10. Suici	de	28.5	n/a	n/a
11. Septi	cemia	n/a	n/a	n/a
12. Chro	nic Liver Disease and Cirrhosis	n/a	n/a	n/a
13. Unin	tentional Motor Vehicle Injuries	n/a	n/a	n/a
14. Hom	icide	5.4	n/a	n/a
15. AIDS		n/a	n/a	n/a

Source: NC State Center for Health Statistics

Leading Causes of Death: Race Comparison

Jackson County Rank by Descending Overall Age-Adjusted Rate (2009-2013)	Rate Among non- Hispanic Whites	Rate Among non- Hispanic Am. Indians	% Am. Indian Rate Difference from Whites
1. Total Cancer	180.7	139.3	-22.9%
2. Diseases of the Heart	162.2	187.5	+15.6%
3. Chronic Lower Respiratory Disease	49.6	n/a	n/a
4. All Other Unintentional Injuries	44.2	n/a	n/a
5. Alzheimer's Disease	31.1	n/a	n/a
6. Cerebrovascular Disease	30.4	n/a	n/a
7. Pneumonia and Influenza	19.1	n/a	n/a
8. Diabetes Mellitus	11.8	n/a	n/a
9. Nephritis, Nephrotic Syndrome, Nephrosis	15.6	n/a	n/a
10. Suicide	16.4	n/a	n/a
11. Septicemia	9.7	n/a	n/a
12. Chronic Liver Disease and Cirrhosis	n/a	n/a	n/a
13. Unintentional Motor Vehicle Injuries	n/a	n/a	n/a
14. Homicide	n/a	n/a	n/a
15. AIDS	n/a	n/a	n/a

Leading Causes of Death: Time Comparison

Ra	Jackson County ank by Descending Overall Age-Adjusted Rate (2009-2013)	Rank 2006-2010	Rank Change 2006-2010 to 2009-2013	% Rate Change 2006-2010 to 2009-2013
1.	Total Cancer	2	+1	-2.0%
2.	Diseases of the Heart	1	-1	-12.6%
3.	Chronic Lower Respiratory Disease	3	n/c	+2.6%
4.	All Other Unintentional Injuries	4	n/c	-8.6%
5.	Alzheimer's Disease	5	n/c	-6.6%
6.	Cerebrovascular Disease	6	n/c	-4.2%
7.	Pneumonia and Influenza	7	n/c	-18.6%
8.	Diabetes Mellitus	9	+1	-11.5%
9.	Nephritis, Nephrotic Syndrome, Nephrosis	8	-1	-17.1%
10.	Suicide	11	+1	-13.5%
11.	Septicemia	10	-1	-42.9%
12.	Chronic Liver Disease and Cirrhosis	13	+1	-12.6%
13.	Unintentional Motor Vehicle Injuries	12	-1	-25.8%
14.	Homicide	14	n/c	n/a
15.	AIDS	15	n/c	n/a

Source: Sheila Pfaender, Public Health Consultant; based on data from NC State Center for Health Statistics

Leading Causes of Death - By Age

Age Group	Rank	Cause of Death in Jackson County (2009-2013)
00-19	1	Conditions originating in the perinatal period
	2	Motor vehicle injuries
	3	Cancer (all sites)
20-39	1	All other unintentional injuries
	2	Suicide
	3	Diseases of the heart
40-64	1	Cancer (all sites)
	2	Diseases of the heart
	3	All other unintentional injuries
65-84	1	Cancer (all sites)
	2	Diseases of the heart
	3	Chronic lower respiratory disease
85+	1	Diseases of the heart
	2	Cancer (all sites)
	3	Alzheimer's disease

Mortality Trends, 2002-2006 to 2009-2013

	Leading Cause of Death in Jackson County	Overall Trend Direction
1.	Total Cancer	n/c
2.	Diseases of the Heart	▼
3.	Chronic Lower Respiratory Disease	▼
4.	All Other Unintentional Injuries	A
5.	Alzheimer's Disease	▼
6.	Cerebrovascular Disease	▼
7.	Pneumonia and Influenza	▼
8.	Diabetes Mellitus	▼
9.	Nephritis, Nephrotic Syndrome, Nephrosis	A
10.	Suicide	▼
11.	Septicemia	▼
12.	Chronic Liver Disease and Cirrhosis	▼
13.	Unintentional Motor Vehicle Injuries	▼▼
14.	Homicide	▼▼
15.	AIDS	▼

Source: Sheila Pfaender, Public Health Consultant; based on data from NC State Center for Health Statistics

Site-Specific Cancer Trends Jackson County

Incidence: 1999-2003 to 2008-2012 *Mortality:* 2002-2006 to 2009-2013

Cancer Site	Parameter	Overall Trend Direction
Lung Cancer	Incidence Mortality	A
Prostate Cancer	Incidence Mortality	*
Breast Cancer	Incidence Mortality	A
Colorectal Cancer	Incidence Mortality	•

Source: Sheila Pfaender, Public Health Consultant; based on data from NC State Center for Health Statistics

Injury Mortality Unintentional Falls

- From 2011 through 2013, 13 Jackson County residents died as a result of an unintentional fall.
- Of the 13 fall-related deaths, 7 (54%) occurred in the population age 65 and older.
- Of the 13 fall-related deaths, 4 (31%) occurred in the population age 85 and older.

Source: NC State Center for Health Statistics

Injury MortalityUnintentional Poisoning

- In the period 2009-2013, 34 Jackson County residents died as a result of unintentional poisoning, with a corresponding ageadjusted mortality rate of 17.1 deaths per 100,000 population, higher than the WNC or NC averages.
- Of the 34 unintentional poisoning deaths in the county in that period, 26 (76%) were due to medication or drug overdoses, with a corresponding mortality rate of 13.1, significantly higher than the average NC rate but lower than the WNC rate.

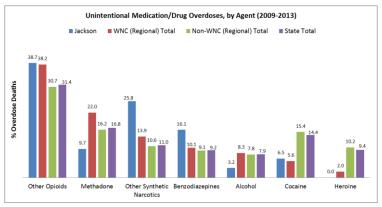
		oning Deaths for Se edication/Drug Over	Rate of Unintentional Medication/Drug Overdose Deaths (2009-2013)**		
County	#	Rate per 100,000 NC Residents	% that are Medication/Drug Overdoses	#	Rate per 100,000 NC Residents
Jackson	34	17.1	76.5	26	13.1
WNC (Regional) Total	560	14.8	90.0	506	13.3
Non-WNC (Regional) Total	4,749	10.7	91.0	4,320	9.7
State Total	5,309	11.0	90.9	4,826	10.0

 ^{*} Codes Used: cdeath1 = X40-X49
 ** Codes Used: cdeath1 = X40-X44

Sources: NC State Center for Health Statistics and NC DPH, Chronic Disease and Injury Section, Injury and Violence Prevention Branch

Injury Mortality Unintentional Medication/Drug Overdoses

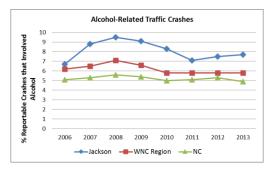
• "Other Opioids" caused the highest proportion of drug overdose deaths (38.7%) in Jackson County in the period 2009-2013.



Source: NC DPH, Chronic Disease and Injury Section, Injury and Violence Prevention Branch

Vehicular Injury Alcohol-Related Motor Vehicle Crashes

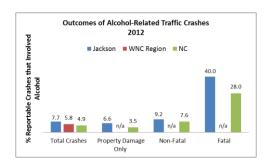
 Over the period 2006 through 2013 an annual average of 8.1% of all traffic crashes in Jackson County were alcoholrelated, the highest average proportion among comparator jurisdictions (WNC = 6.2%; NC = 5.2%).



Source: NC Highway Safety Research Center

Vehicular Injury Mortality Alcohol-Related Motor Vehicle Crashes

• In 2012 40.0% of all *fatal* traffic crashes in Jackson County were alcohol-related.

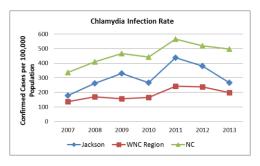


Source: NC Highway Safety Research Center

Morbidity

Sexually Transmitted Infections Chlamydia

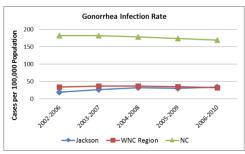
 The chlamydia infection rate in Jackson County, was higher than the regional rate but lower than the NC rate throughout the period cited. The county rate has fallen recently.



Source: NC DPH, Communicable Disease Branch, Epidemiology Section

Sexually Transmitted Infections Gonorrhea

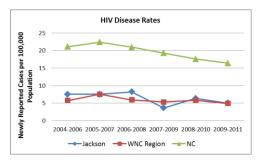
 The gonorrhea infection rate in Jackson County, closely mirrored the WNC rate but was significantly lower than the NC rate throughout the period cited. (All stratified rates for minorities were unstable.)



Source: NC DPH, Communicable Disease Branch, Epidemiology Section

Sexually Transmitted Infections HIV

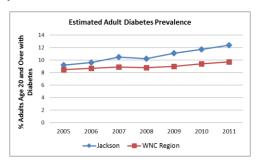
 The HIV incidence rate has been decreasing statewide and in Jackson County since 2006-2008. Note that all the Jackson County rates were unstable. The rate in the WNC region usually was the lowest among comparators, and changed little over the period cited.



Source: NC DPH, Communicable Disease Branch, Epidemiology Section

Adult Diabetes

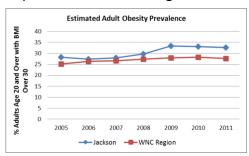
- The average self-reported prevalence of Jackson County adults with diabetes was 10.7% in the period from 2005 2011.
- Over the same period the WNC average was 9.0%.
- Prevalence of self-reported adult diabetes has been rising over time in both jurisdictions.



Source: Centers for Disease Control and Prevention, via BRFSS

Adult Obesity

- The average self-reported prevalence of Jackson County adults considered "obese" on the basis of height and weight (BMI > 30) was 30.3% in the period from 2005 - 2011.
- The Jackson County rate exceeded the WNC rate throughout the period cited.
- Over the same period the WNC average was 27.1%.



Source: Centers for Disease Control and Prevention, via BRFSS

Child Obesity

- There is very limited data on the prevalence of childhood obesity in Jackson County.
- The NC-NPASS data presented below covers only children seen in health department WIC and child health clinics and certain other facilities and programs.
- According to NC-NPASS data for 2010, 16.3% of the participating children in Jackson County age 2-4 were deemed "overweight", and an additional 17.1% were deemed "obese".
- Too few children in other age groups (5-11 and 12-18) participated to yield stable percentages.

Prevalence of Underweight, Healthy Weight, Overweight and Obese Children Ages 2-1, 2010

	Tatal	Underweight		Healthy Weight		Overweight		Obese				
County	Total	<5th Percentile		<5th Percentile		Total <5th Percentile >5th to <85th Percentile		n Percentile	≥85th to <95th Percentile		≥95th Percentile	
	#	# % # %		#	%	#	%					
Jackson	362	15	4.1	226	62.4	59	16.3	62	17.1			
WNC (Regional) Total	6,814	316	-	4,410	-	1,139	-	949	-			
WNC (Regional) Arithmetic Mean	426	20	4.8	276	64.5	71	17.2	59	13.6			
State Total	105,410	4,935	4.7	66,975	63.5	17,022	16.1	16,478	15.6			

Source: NC NPASS

Mental Health

- Between 2006 and 2013, the number of Jackson County residents served by the Area Mental **Health Program** decreased overall from 1,629 to **1,410** (**▼ 13%**).
- Over the same 8-year period the number of Jackson County residents served in State **Psychiatric Hospitals** decreased from 24 to 2 (▼ 92%).
- During the same 8-year period, a total of 152 Jackson County residents were served in **NC State** Alcohol and Drug Abuse Treatment Centers (ADATCs), with the number varying considerably but averaging **19** persons annually.

Source: NC Office of State Budget and Management, State Data Center, Log Into North Carolina (LINC)

Inpatient Hospital Utilization

- In 2012 the highest proportions of hospital discharges in Jackson County were for:
 - Cardiovascular and circulatory diseases: 14%
 - Heart disease: 10%
 - Cerebrovascular disease: 2%
 - Respiratory diseases: 14%
 - Pneumonia and influenza: 4%

 - COPD (excluding asthma): 2%
 - Asthma: 0.4%
 - Pregnancy and childbirth: 11%
 - Digestive system diseases: 10%
 - Chronic liver disease and cirrhosis: 0.5%
 - Injuries and poisonings: 9%

Source: NC State Center for Health Statistics

Ambulatory Care Sensitive Hospital Discharge Rates, 2013 (AHRQ PQI Definitions; Discharges per 100,000 Population)

Diagnosis	Jackson	NC
All specified PQI (Prevention Quality Indicator) conditions	938.6	1,438.5
All chronic conditions	541.8	906.0
Diabetes: short-term complications	68.1	94.4
Diabetes: long-term complications	47.4	113.0
Diabetes: uncontrolled	8.9	13.7
Diabetes: amputations	3.0	19.1
COPD/Asthma: ages 40+	217.5	413.5
Asthma: ages 18-39	6.9	40.1
Hypertension	17.8	54.9
Heart failure	272.4	339.6
Angina	0.0	9.7
Pneumonia	204.3	267.5
Urinary tract infection	91.8	155.0
Dehydration	100.7	109.9
Appendix perforation/abscess	500.0	433.2
Acute care discharges	396.8	532.5

Source: NC State Center for Health Statistics (Special Report)

Environment

Air Quality

- Air Quality Index (AQI) Summary, Jackson County, 2014
 - AQI Measurements (80 days)
 - 71 days with "good" air quality
 - 9 days with "moderate" air quality
 - Small particulate matter (PM_{2.5}) was present at the level of "pollutant" on 80 of 80 monitored days.

Source: US Environmental Protection Agency Air Quality Index Reports

Air Quality

- Toxic Release Inventory (TRI), Jackson County, 2013
 - TRI Releases
 - Jackson County ranked 77th highest among the 86 NC counties reporting TRI releases.
 - 184 pounds of TRI releases were reported for Jackson County. (For comparison, New Hanover County had the highest level of releases in the state: 5.2 million pounds.)
 - One manufacturing facility (Jackson Paper Manufacturing in Sylva) was responsible for all of the TRI chemicals/chemical compounds released in Jackson County in 2013.
 - The TRI chemicals released by Jackson Paper Manufacturing include lead, dioxin and dioxin-like compounds, and nitrate compounds. In 2013 the reported releases were limited to lead.

Source: US Environmental Protection Agency TRI Explorer Release Reports

Air Quality

Radon

- Western North Carolina has the highest radon levels in the state.
- The arithmetic mean indoor radon level for the 16 counties of the WNC region is 4.1 pCi/L, 3.2 times the average national indoor radon level of 1.3 pCi/L.
- In Jackson County, the current average indoor radon level is 2.8 pCi/L, 32% lower than the regional mean, but 2.1 times the average national level.

Source: North Carolina Radon Information

Water Quality

Jackson County Drinking Water Systems February, 2014

- Community Water Systems

- Include municipalities, subdivisions and mobile home parks
- Community water systems in Jackson County serve an estimated 21,541 people, or 54% of the 2010 county population.
- The fraction of the Jackson County population served by a community water system is 2% lower than the average for the WNC region and NC as a whole.

Sources: US Census Bureau and US Environmental Protection Agency Safe Drinking Water Information System (SDWIS)

Water Quality

- National Pollutant Discharge Elimination System (NPDES) Permits in Jackson County (2015)
 - There are at present 15 permits issued in Jackson County that allow municipal, domestic, or commercial facilities to discharge products of water/wastewater treatment and manufacturing into waterways.
 - · 4 are municipal wastewater treatment facilities
 - 11 are domestic wastewater producers

Sources: NC DENR, Division of Water Resources

Solid Waste

- Solid Waste Disposal Rates
 - 2013-14 Per-Capita Disposal Rate
 - Jackson County = 0.80 tons (▲ 17% since 1991-1992)
 - NC = 0.93 tons (▼ 13% since 1991-1992)
- Landfill Capacity
 - Jackson County's municipal solid waste and construction and demolition waste is transported out of the county.

Source: NC DENR, Division of Waste Management, Solid Waste Management Annual Reports

Rabies

- The most common animal host for rabies in the WNC region and NC as a whole is raccoons.
- No cases of animal rabies were reported for Jackson County in the period 2010 through 2014.

Animal Rabies Cases, 2010 through 2014

County			Most Common Host					
County	2010	2011	2012	2013	2014	Total	Wost Common Host	
Jackson	0	0	0	0	0	0	n/a	
WNC (Regional) Total	14	20	19	17	8	78	Raccoon (40/78)	
State Total	397	429	431	380	352	1,989	Raccoon (1010/1989)	

Source: NC Division of Public Health, Epidemiology Section, Communicable Disease Branch, Rabies Facts and Figures

Appendix C: County Maps

Jackson County Maps

Community Health Assessment 2015

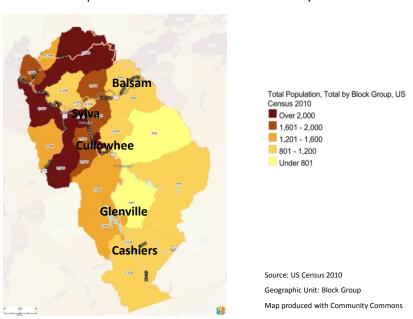
Why use maps?

- 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.

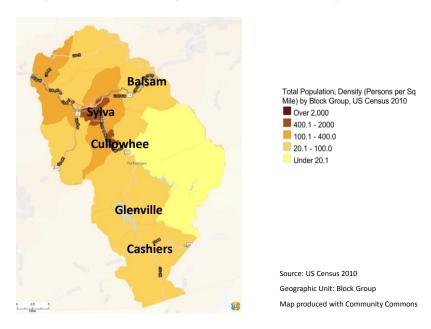
Maps are one piece of the data puzzle

- 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.

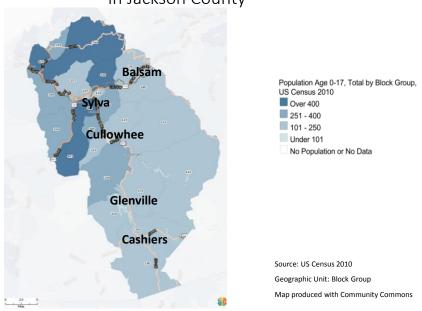
Total Population of Jackson County



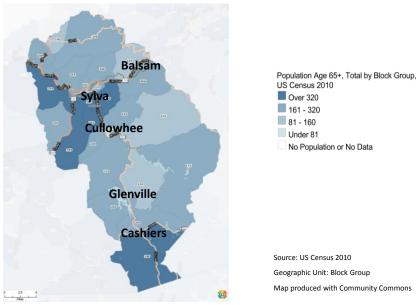
Population Density of Jackson County



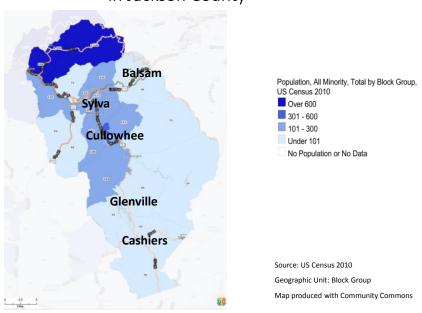
Population of Children (Age 0-17) in Jackson County



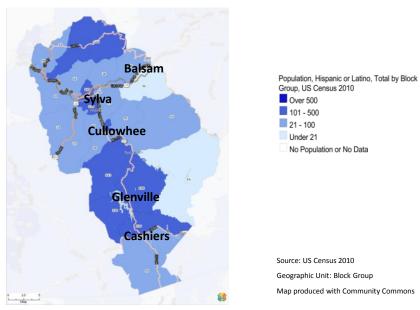




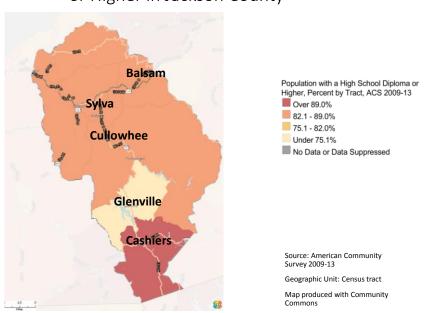
Population of Ethnic and Racial Minorities in Jackson County

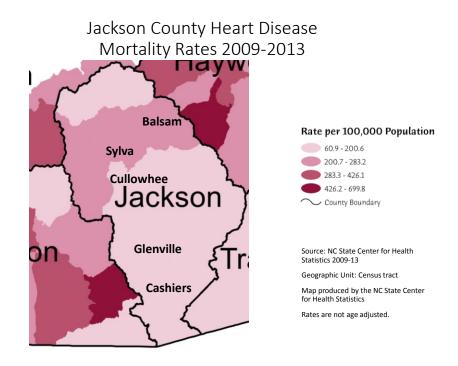




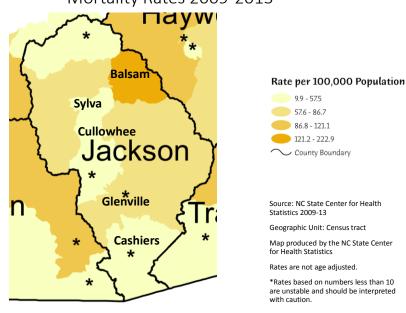


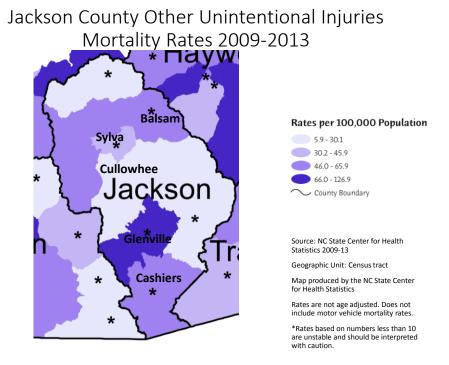
Percent of the Population (25+) with a High School Diploma or Higher in Jackson County

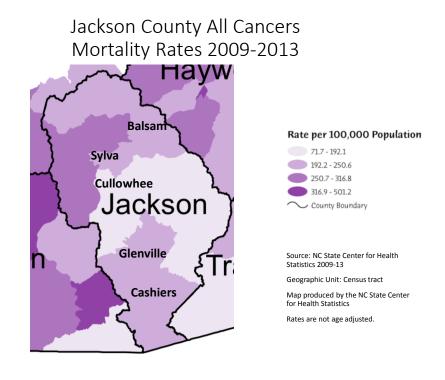




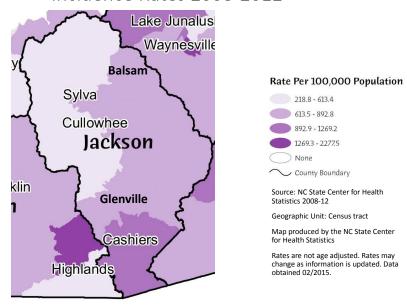
Jackson County Chronic Lower Respiratory Diseases Mortality Rates 2009-2013



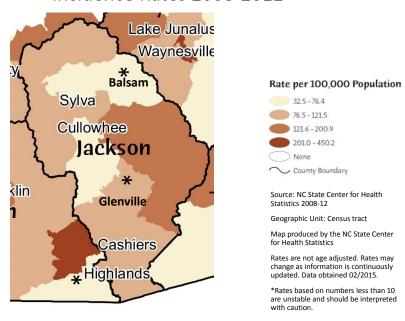




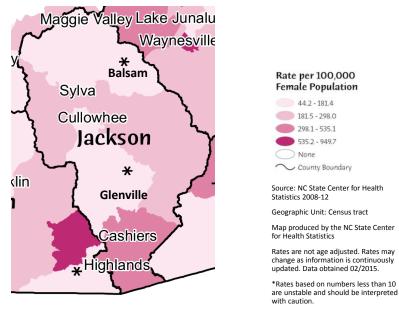
Jackson County All Cancer Incidence Rates 2008-2012



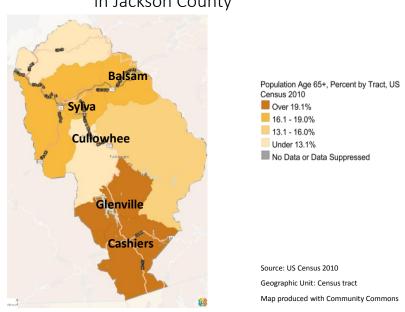
Jackson County Lung and Bronchus Cancer Incidence Rates 2008-2012



Jackson County Breast Cancer Incidence Rates 2008-2012



Percent of the Population of Older Adults (Age 65+) in Jackson County





Date:	
Interviewer:	
Interviewer ID:	
	2015-0080-02

Professional Research Consultants, Inc.

WESTERN NORTH CAROLINA HEALTHY IMPACT 2015 Community Health Needs Assessment Asheville, North Carolina

Hello, this is	_ with Professional Research Consultants. %hospname have
asked us to conduct a s	urvey to study ways to improve the health of your community.

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

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

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

NOTE: If Q2 is "All Others", THANK & TERMINATE.

3. Zip Code.

This survey may be recorded for quality assurance.

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

Male Female

5. 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]

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

	[Don't Know/Not Sure]
(SKIP to 7)	[Refused]
	[Nothing]
(SKIP to 7)	Animal Control
(SKIP to 7)	Availability of Employment
(SKIP to 7)	Better/More Health Food Choices
(SKIP to 7)	Child Care Options
(SKIP to 7)	Counseling/Mental Health/Support Groups
(SKIP to 7)	Culturally Appropriate Health/Support Groups
(SKIP to 7)	Elder Care Options
(SKIP to 7)	Healthy Family Activities
(SKIP to 7)	Higher Paying Employment
(SKIP to 7)	More Affordable Health Care
(SKIP to 7)	More Affordable/Better Housing
(SKIP to 7)	Number of Health Care Providers
(SKIP to 7)	Positive Teen Activities
(SKIP to 7)	Recreational Facilities (Parks, Trails, Community Ctrs)
(SKIP to 7)	Road Maintenance
(SKIP to 7)	Road Safety
(SKIP to 7)	Safe Places to Walk/Ride Bike for Commuting
(SKIP to 7)	Safe Places to Walk/Ride Bike for Recreation
(SKIP to 7)	Services for Disabled People
(SKIP to 7)	Transportation Options
(SKIP to 7)	Other (Specify)

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

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

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

Yes
(SKIP to NOTE before 10)

[Don't Know/Not Sure]

(SKIP to NOTE before 10)

[Refused]

[Terminate Interview]

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

NOTE: If Q2 is "Henderson County", ASK Q10.

If Q2 is "Polk County", SKIP to 11.

If Q2 is "Macon County", SKIP to 13.

All Others, SKIP to READ BOX before 14.

HENDERSON COUNTY

10. Was there a time in the past 12 months when you needed a prescription medicine, but did not get it because you could not afford it?

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

POLK COUNTY

11. Is there any health care service for which you feel the need to leave the local area to receive care?

Yes	
No	(SKIP to READ BOX before 14)
[Don't Know/Not Sure]	(SKIP to READ BOX before 14)
[Refused]	(SKIP to READ BOX before 14)
[Terminate Interview]	

POLK COUNTY

12. What would you say is the MAIN reason you feel the need to leave the local area for care?

[Don't Know/Not Sure]
[Refused]
[ZZ1]
Better Care Available Elsewhere
Convenience
Doctor's Recommendation
Long Wait for Appointments
Service Not Available in This Area
Other (Specify)

NOTE: SKIP to READ BOX before 14.

MACON COUNTY

13. IF there is any health care service for which you feel the need to leave Macon County, what would you say is the main reason you feel the need to leave the county to get care?

[Don't Know/Not Sure]
[Refused]
[No Need to Leave Macon County for Care]
Better Care Available Elsewhere
Convenience
Doctor's Recommendation
Long Wait for Appointments
Service Not Available in This Area
Other (Specify)

The next questions are about access to health care services.

NOTE: If Q2 is "Haywood County", ASK Q14.

All Others, SKIP to 16.

HAYWOOD COUNTY

14. Please tell me your level of agreement or disagreement with the following two statements. The first statement is:

Considering cost, quality, and availability of services, there is good access health care in my county. Do you:

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

HAYWOOD COUNTY

15. The next statement is:

I am usually able to get an appointment for the health care services I need when I need them. Do you:

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

16. Is there a particular place that you usually go to if you are sick or need advice about your health?

Yes
(SKIP to NOTE before 18)
(SKIP to NOTE before 18)
(SKIP to NOTE before 18)
[Don't Know/Not Sure]
(SKIP to NOTE before 18)
[Refused]
[Terminate Interview]

17. What kind of place is it:

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

IVAR17A. What kind of place do you go to?

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

NOTE: If Q2 is "Swain County", ASK Q18.

All Others, SKIP to 19.

SWAIN COUNTY

18. In the past 12 months, have you or someone in your household used the Swain County Health Department for any type of service?

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

19. 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]

20. When was the last time you had an eye exam in which the pupils were dilated? This would have made you temporarily sensitive to bright light.

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

21. 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]
(SKIP to 23)
[SKIP to 23)
[Refused]
[Terminate Interview]

NOTE: If Q2 is "Transylvania County", ASK Q22.

All Others, SKIP to 23.

TRANSYLVANIA COUNTY

22. What is the MAIN reason you have NOT visited a dentist or dental clinic in the past year?

[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 a Wait For an Appointment
Too Long a Wait in Waiting Room
Other (Specify)

23. 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: [+*so+](Insert Qs in BOLD)[+*se+]?

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

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

[Terminate Interview]

25. A Stroke

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

(End of Rotate)

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

Yes
(SKIP to 28)
No
(SKIP to 28)
[Don't Know/Not Sure]
(SKIP to 28)
[Refused]
[Terminate Interview]

27. Do you still have asthma?

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

28. Have you ever been told by a doctor that you have diabetes?

Yes
(SKIP to 29)
(SKIP to 29)
[Yes, but Female Told Only During Pregnancy]
(SKIP to 29)
[Pre-Diabetes or Borderline Diabetes]
(SKIP to 29)
[Don't Know/Not Sure]
(SKIP to 29)
[Refused]
[Terminate Interview]

29. Have you had a test for high blood sugar or diabetes within the past three years?

Yes
(SKIP to 31)
No
(SKIP to 31)
[Don't Know/Not Sure]
(SKIP to 31)
[Refused]
[Terminate Interview]

NOTE: If Q28 is "[Pre-Diabetes or Borderline Diabetes]", Force Q30 to "Yes"/"Sí" and SKIP to 31.

All Others, CONTINUE.

SCRIPTING NOTE: If Q28 is "[Yes, But Female Told Only During Pregnancy]", Insert "Other than during pregnancy, have"/"Sin contar el embarazo, ¿le ha dicho" as '+temp20+'. All Others, Insert "Have"/"¿Le ha dicho".

30. '+temp20+' you ever been told by a doctor or other health professional that you have prediabetes or borderline diabetes?

Yes
(SKIP to 32)
No
(SKIP to 32)
[Don't Know/Not Sure]
(SKIP to 32)
[Refused]
[Terminate Interview]

31. Are you currently taking action to help lower or control your high blood sugar, such as taking natural or conventional medicines or supplements, changing your diet, or exercising?

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

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

Yes
(SKIP to 34)
No
(SKIP to 34)
[Don't Know/Not Sure]
(SKIP to 34)
[Refused]
[Terminate Interview]

33. 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]

34. About how long has it been since you last had your blood pressure taken by a doctor, nurse or other health professional?

Within the Past 2 Years (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]

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

Yes
(SKIP to 37)
No
(SKIP to 37)
[Don't Know/Not Sure]
(SKIP to 37)
[Refused]
[Terminate Interview]

36. 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]

37. About how long has it been since you last had your blood cholesterol checked?

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

NOTE: If Q2 is "Cherokee County", "Clay County", "Graham County", or "Swain County", ASK Q38.

All Others, SKIP to NOTE before 39.

CHEROKEE, CLAY, GRAHAM, AND SWAIN COUNTIES

38. 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: If All Qs: Q23, Q24, Q25, Q26, Q28, Q30, Q32, AND Q35 are ALL "No", "Don't Know/Not Sure", or "Refused", SKIP to 40.

All Others, CONTINUE with SCRIPTING NOTE before 39.

39. Previously you had mentioned that you have suffered from or been diagnosed with (the following medical condition(s)):

```
\label{eq:continuous} $$'+temp23+''+temp24+''+temp25+''+temp26+''+temp28+''+temp30+''+temp32+''+temp35+'.
```

Has any health provider ever helped you connect to a community resource such as classes or coaching to help you learn more about or manage (this/these) conditions?

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

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

NOTE: If Q4 is "Male", SKIP to NOTE before 42.

If Q4 is "Female", CONTINUE.

41. 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]

NOTE: If Q2 is "Madison County" AND Q40 is 50 Years of Age or Older, ASK Q42. If Q2 is "Madison County" AND Q40 is 49 Years of Age or Younger, "Don't Know/Not Sure", or "Refused", SKIP to 45.

If Q2 is "Henderson County", SKIP to 44.

All Others, SKIP to 45.

MADISON COUNTY

42. Sigmoidoscopy and colonoscopy are exams in which a tube is inserted in the rectum to view the colon for signs of cancer or other health problems. How long has it been since your last sigmoidoscopy or colonoscopy?

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)
Within the Past 10 Years (5 Years But Less Than 10 Years Ago)
10 or More Years Ago
[Never]
[Don't Know/Not Sure]
[Refused]
[Terminate Interview]

MADISON COUNTY

43. A blood stool test is a test that may use a special kit at home to determine whether the stool contains blood. How long has it been since you had your last blood stool test?

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]

NOTE: SKIP to 45.

HENDERSON COUNTY

44. The next question is about violence in relationships with an intimate partner. By an intimate partner, I mean any current or former spouse, boyfriend, or girlfriend. Someone you were dating, or romantically or sexually intimate with, would also be considered an intimate partner. This information will help us to better understand the problem of violence in relationships. This is a sensitive topic. Remember, you do not have to answer any question you do not want to.

Has an intimate partner hit, slapped, pushed, kicked, or hurt you in any way within the PAST 12 MONTHS?

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

45. 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]

46. Do you currently use chewing tobacco, 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]

47. The next question is about electronic cigarettes, also known as e-cigarettes. These are battery-operated devices that simulate 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.

Do you NOW smoke 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]

NOTE: If Q2 is "McDowell County" or "Rutherford County", ASK Q48.

All Others, SKIP to SCRIPTING NOTE before 49.

MCDOWELL AND RUTHERFORD COUNTIES

48. Please tell me if you believe the following statement is true or false: Most electronic cigarettes contain nicotine. Do you feel this statement is:

True or False
[Don't Know/Not Sure]
[Refused]
[Terminate Interview]

49. 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]

50. Please tell me your level of agreement or disagreement with the '+temp50+' I am going to read about smoking.

The '+temp50a+' is: I believe it is important for PARKS and PUBLIC WALKING and BIKING TRAILS in my 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]

NOTE: If Q2 is "McDowell County" or "Rutherford County", ASK Q51.

If Q2 is "Madison County", SKIP to 52.

If Q2 is "Henderson County", SKIP to 53.

If Q2 is "Cherokee County", "Graham County", or "Macon County", SKIP to 54.

All Others, SKIP to 55.

MCDOWELL AND RUTHERFORD COUNTIES

51. The next statement is: I believe there should be a local law in my county that prohibits the use of tobacco in all indoor public places. 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 55.

MADISON COUNTY

52. The next statement is: I believe it is important for GOVERNMENT BUILDINGS AND GROUNDS 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]

NOTE: SKIP to 55.

HENDERSON COUNTY

53. The next statement is: I believe it is important for GOVERNMENT BUILDINGS AND GROUNDS in Henderson County to be 100% SMOKE free. 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 55.

CHEROKEE, GRAHAM, AND MACON COUNTIES

The next statement is: I believe it is important for ALL PUBLIC PLACES to be 100% 54. 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]

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 (SKIP to 58) (SKIP to 58) [Don't Know/Not Sure] (SKIP to 58) [Refused]

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]

(If Respondent is MALE, Read:) Considering all types of alcoholic beverages, how many 57. TIMES during the past 30 days did you have 5 or more drinks on an occasion?

(If Respondent is FEMALE, Read:) Considering all types of alcoholic beverages, how many TIMES during the past 30 days did you have 4 or more drinks on an occasion?

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

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58. 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]

59. Have you ever given your prescription medication to anyone else to use?

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

NOTE: If Q2 is "McDowell County", "Mitchell County", or "Yancey County", ASK Q60.

If Q2 is "Jackson County", SKIP to 61.

If Q2 is "Swain County", SKIP to 62.

All Others, SKIP to 63.

MCDOWELL, MITCHELL, AND YANCEY COUNTIES

60. 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]

NOTE: SKIP to 63.

JACKSON COUNTY

61. If you or someone you knew needed substance abuse counseling, would you know where to refer them?

Yes No [Don't Know/Not Sure] [Refused] [Terminate Interview] NOTE: SKIP to 63.

SWAIN COUNTY

62. 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]

63. 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]

64. 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]

NOTE: If Q2 is "Jackson County", ASK Q65.

All Others, SKIP to 66.

JACKSON COUNTY

65. Packaged foods have labels with nutritional facts, providing consumers with information about calories, serving size, and nutritional content. In general, how would you rate your understanding of the nutrition information on food labels? Would you say:

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

How difficult is it for you to buy fresh produce like fruits and vegetables at a price you 66. can afford? Would you say:

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

> > 21

NOTE: If Q2 is "Rutherford County", ASK Q67.

If Q2 is "Mitchell County" or "Yancey County", SKIP to 68.

If Q2 is "Jackson County", SKIP to 69.

If Q2 is "Transylvania County", SKIP to 70.

If Q2 is "Buncombe County", SKIP to 71.

All Others, SKIP to READ BOX before 73.

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RUTHERFORD COUNTY

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

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

NOTE: SKIP to READ BOX before 73.

MITCHELL AND YANCEY COUNTIES

68. 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]

JACKSON, MITCHELL AND YANCEY COUNTIES

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

The 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]

22

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NOTE: SKIP to READ BOX before 73.

TRANSYLVANIA COUNTY

70. How reliable is your access to clean drinking water? Would you say:

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

NOTE: SKIP to 72.

BUNCOMBE COUNTY

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

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

BUNCOMBE AND TRANSYLVANIA COUNTIES

72. How often do you have trouble finding transportation to places you would like to go? Would you say:

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

The next questions are about physical activity.

73. During the past month, other than your regular job, did you participate in any physical activities or exercises, such as running, calisthenics, golf, gardening, or walking for exercise?

> Yes (SKIP to 77) No (SKIP to 77) [Don't Know/Not Sure] (SKIP to 77) [Refused] [Terminate Interview]

74. The next questions ask about vigorous and moderate physical activity. Vigorous activities cause large increases in breathing or heart rate, while moderate activities cause small increases in breathing or heart rate.

Now, thinking about when you are not working, how many days per week or per month do you do VIGOROUS activities for at least 20 minutes at a time, such as running, aerobics, heavy yard work, or anything else that causes large increases in breathing and heart rate?

> DAYS PER WEEK DAYS PER MONTH (SKIP to **75**) [No Vigorous Activity] (SKIP to 75) [Unable To Do Vigorous Activity] (SKIP to 75) [Don't Know/Not Sure] (SKIP to 75) [Refused] [Terminate Interview]

And on how many days per week or per month do you do MODERATE activities for at 75. least 30 minutes at a time, such as brisk walking, bicycling, vacuuming, gardening, or anything else that causes some increase in breathing or heart rate?

DAYS PER WEEK	
DAYS PER MONTH	
[No Moderate Activity]	(SKIP to 76)
[Unable to Do Moderate Activity]	(SKIP to 76)
[Don't Know/Not Sure]	(SKIP to 76)
[Refused]	(SKIP to 76)
[Terminate Interview]	

24

76. On how many days per week or per month do 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.

> DAYS PER MONTH (SKIP to 77) [No Strengthening Activity] (SKIP to 77) [Unable to Do Strengthening Activity] (SKIP to 77) [Don't Know/Not Sure] (SKIP to 77) [Refused] [Terminate Interview]

> > 1 to 31 [Don't Know/Not Sure] [Refused]

DAYS PER WEEK

77. In some communities, organizations make their indoor and outdoor physical activity spaces like gyms, tracks, and pools available for the public to use during off times.

How important do you feel it is for organizations in the community to explore ways to increase the public's access to these types of facilities during off times? Would you say:

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

> > 25

NOTE: If Q2 is "Cherokee County" or "Graham County", ASK Q78.

If Q2 is "Clay County" or "Haywood County", SKIP to 79.

All Others, SKIP to 81.

CHEROKEE AND GRAHAM COUNTIES

78. 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 8	1
INCLE.	$\Omega IZ\Pi$	wo	1.

CLAY AND HAYWOOD COUNTIES

79. Please tell me your level of agreement or disagreement with the following statement: I believe my county provides the facilities and programs needed for 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: If Q2 is "Haywood County", SKIP to 81.

CLAY COUNTY

80. 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]

81. 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]

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82. 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]

83. Now thinking about your MENTAL health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health NOT good?

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

84. 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
(SKIP to 86)
No
(SKIP to 86)
[Don't Know/Not Sure]
(SKIP to 86)
[Refused]
[Terminate Interview]

85. What was the MAIN reason you did not get mental health care or counseling?

[Don't Know/Not Sure] [Refused] Apprehension/Fear/Nervousness/Embarrassment Condition Not Serious Enough Didn't Accept Medicaid/Insurance Didn't Know Where To Go Difficulty Getting Appointment Don't Have Insurance/Could Not Afford It Don't Like/Trust/Believe in Counselors Health of Another Family Member **Inconvenient Hours** Lack of Transportation Never Got Around to Going No Counselor Available No Place I Feel Welcome Speak a Different Language Wait Too Long In Clinic/Office Other (Specify)

86. 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 NOTE before 88)

(SKIP to NOTE before 88)

(SKIP to NOTE before 88)

[Refused]

[Terminate Interview]

87. 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]

NOTE: If Q40 is 45 Years of Age or Older, ASK Q88.

All Others, SKIP to 89.

88. Now I would like to ask you about recent falls. By a fall, I mean when a person unintentionally comes to rest on the ground or another lower level.

In the past 12 months, how many times have you fallen?

0 to 100 [Don't Know/Not Sure] [Refused] 89. People may provide regular care or assistance to a friend or family member who has a health problem, long-term illness, or disability.

During the past 30 days, did you provide any such care or assistance to a friend or family member?

(INTERVIEWER: If Necessary, READ: This question includes any care or assistance, not limited to someone living in the household.)

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

> [Don't Know/Not Sure]

90. Now I would like to ask, where do you get MOST of your health care information?

> [Refused] [Don't Receive Any] Books/Magazines Child's School Church **Family Doctor** Friends/Relatives Health Department Help Lines Hospital **Hospital Publications** Insurance Internet Library Newspaper Pharmacist Other (Specify)

> > 30

NOTE: If Q2 is "Macon County", ASK Q91.

If Q2 is "Polk County", SKIP to 92.

All Others, SKIP to READ BOX before CELLQ.

MACON COUNTY

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91. 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]

NOTE: SKIP to READ BOX before CELLQ.

POLK COUNTY

92. Where do you get most of your local news?

(INTERVIEWER: If Respondent Answers "Newspaper," "Radio," "TV Station," or "Internet," PROBE for Specific Paper, Station or Website.)

```
[Refused]
                  (Newspaper) Asheville Citizen-Times [Asheville]
              (Newspaper) Black Mountain News [Black Mountain]
                         (Newspaper) Digital Courier [ForestCity]
                            (Newspaper) Franklin Press [Franklin]
                      (Newspaper) Macon County News [Franklin]
                           (Newspaper) McDowell News [Marion]
                         (Newspaper) Mountain Xpress [Asheville]
                         (Newspaper) News-Journal [Spruce Pine]
                (Newspaper) Smoky Mountain News [Waynesville]
         (Newspaper) Spartanburg Herald Journal [Spartanburg, SC]
                       (Newspaper) The Cherokee Scout [Murphy]
                      (Newspaper) The Mountaineer [Waynesville]
                        (Newspaper) Times News [Hendersonville]
                        (Newspaper) Tryon Daily Bulletin [Tryon]
            (Newspaper) Western North Carolina Times [Asheville]
          (Radio) 1290 WHKY Radio (FOX News/ESPN) [Hickory]
                          (Radio) WLFJ 89.3 FM [Greenville, SC]
                        (Radio) WMYI 102.5 FM [Greenville, SC]
                              (Radio) WNCW 88.7 FM [Spindale]
                                (Radio) WNCW 92.9 FM [Boone]
                       (Radio) WNCW 99.1, 100.3 FM [Charlotte]
                             (Radio) WSIF 90.9 FM [Wilkesboro]
                         (Radio) WSSL 100.5 FM [Greenville, SC]
                        (TV Station) WBTV Ch. 3 CBS [Charlotte]
                        (TV Station) WCNC Ch. 22/36 [Charlotte]
               (TV Station) WHKY Ch. 14 (Independent) [Hickory]
                      (TV Station) WLOS Ch. 13 ABC [Asheville]
                 (TV Station) WSPA Ch. 7 CBS [Spartanburg, SC]
                (TV Station) WYCW Ch. 62 CW [Spartanburg, SC]
                  (TV Station) WYFF Ch. 4 NBC [Greenville, SC]
(Website) BlueRidgeNow.com [Hendersonville] (Times News online)
       (Website) goupstate.com (Spartanburg Herald Journal online)
      (Website) tryondailybulletin.com (Tryon Daily Bulletin online)
    (Website) wnctimes.com (Western North Carolina Times online)
                                       (Website) www.wbtv.com
                                       (Website) www.wcnc.com
                                       (Website) www.whky.com
                                      (Website) www.wncw.com
                                       (Website) www.wspa.com
                                      (Website) www.wyff4.com
                                                 Other (Specify)
```

[Don't Know/Not Sure]

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My last questions are for classifying purposes only and are strictly confidential.

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

One Two Three Four Five or More [None] [Refused]

[Terminate Interview]

94. 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]

95. What is your race? Would you say:

(Do Not Read the Latino/Hispanic Code.)

(SKIP to 97)	[Don't Know/Not Sure]
(SKIP to 97)	[Refused]
	American Indian, Alaska Native
(SKIP to 97)	Native Hawaiian, Pacific Islander
(SKIP to 97)	Asian
(SKIP to 97)	Black/African American
(SKIP to 97)	White
(SKIP to 97)	[Latino/Hispanic]
(SKIP to 97)	Other (Specify)

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

An Enrolled Member of the Eastern Band of Cherokee Indians, or EBCI, living ON the boundary;

An Enrolled Member of the Eastern Band of Cherokee Indians, or EBCI, living OFF the boundary,

or something else?

[Don't Know/Not Sure]
[Refused]
Enrolled EBCI on Boundary
Enrolled EBCI off Boundary
Other (Specify)

97. Are you:

Married
Divorced
Widowed
Separated
Never Been Married
In a Domestic Partnership or Civil Union
or A Member of an Unmarried Couple
[Don't Know/Not Sure]
[Refused]
[Terminate Interview]

98. 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]

99. 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]

100. 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]

101. 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]

102. Do you live in this area year-round (permanent address), or are you a seasonal (part-time) resident?

Permanent Resident Seasonal Resident [Don't Know/Not Sure] [Refused] [Terminate Interview]

103. 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 or Indian Health Services?

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

104. An Advance Directive is a set of directions you give about the medical health care you want if you ever lose the ability to make decisions for yourself. Formal Advance Directives include Living Wills and Health Care Powers of Attorney.

Do you have any completed Advance Directive documents?

Yes
(SKIP to 106)
No
(SKIP to 106)
[Don't Know/Not Sure]
(SKIP to 106)
[Refused]
[Terminate Interview]

105. Have you communicated these health care decisions to your family or your doctor?

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

106. Have you ever served on ACTIVE DUTY in the U.S. Armed Forces, either in the regular military or in a National Guard or Military Reserve Unit? Active Duty does NOT include training for the National Guard or the Reserves, but DOES include activation, for example, for the Persian Gulf War.

Yes, Was on Active Duty
No, Was Never on Active Duty
[Don't Know/Not Sure]
[Refused]
[Terminate Interview]

NOTE: If Q2 is "Buncombe County" AND Q101 is "Employed for Wages", ASK Q107.

All Others, SKIP to SCRIPTING NOTE before 108.

BUNCOMBE COUNTY

107. Which of the following BEST describes your income:

(INTERVIEWER: If More Than One Job, PROBE for Job Where Employee Has the Most Hours.)

I Am an Hourly Employee and Make Less Than \$11 per Hour
I Am an Hourly Employee and Make \$11 per Hour or More
I Am a Salaried Employee and Make Less Than \$22,880 per Year
or I Am a Salaried Employee and Make \$22,880 per Year or More
[Don't Know/Not Sure]
[Refused]
[Terminate Interview]

108. Total Family Household Income.

Under \$11,700 \$11,700 to \$15,699 \$15,700 to \$19,799 \$19,800 to \$23,599 \$23,600 to \$27,899 \$27,900 to \$31,799 \$31,800 to \$35,999 \$36,000 to \$39,899 \$39,900 to \$44,199 \$44,200 to \$47,999 \$48,000 to \$52,299 \$52,300 to \$56,099 \$56,100 to \$63,899 \$63,900 to \$72,099 \$72,100 to \$80,199 \$80,200 to \$88,299 \$88,300 to \$96,399 \$96,400 to \$104,499 \$104,500 to \$112,699 \$112,700/Over [Don't Know/Not Sure] [Refused] [Terminate Interview]

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.

CALCULATED VARIABLES

109. [Those With Diagnosed Depression] Seeking Help.

Yes

No

110. Heart Attack/Angina/Coronary Disease (Composite).

Yes

No

111. High Blood Pressure. HBP Diagnosis (Ever) No HBP Diagnosis (Tested in Past 5 Years) Not Tested in Past 5 Years 112. High Blood Cholesterol. HBC Diagnosis (Ever) No HBC Diagnosis (Tested in Past 5 Years) Not Tested in Past 5 Years 113. Cardiovascular Risk (Composite). 1+ Cardiovascular Risk Factors No Risk Factors 114. [Women 40+] Mammogram In The Past 2 Years. Yes No 115. [Women 50-74] Mammogram In The Past 2 Years. Yes No [Women 21-65] Pap Smear In The Past 3 Years. 116. Yes No 117. [Adults 50+] Sigmoidoscopy/Colonoscopy EVER. Yes No 118. [Adults 50+] Blood Stool Test In The Past 2 Years. Yes No 119. [Adults 50-75] Colorectal Cancer Screening (FOBT/Sigmoidoscopy/Colonoscopy). Yes No

120.	[Adult] Currently Has Asthma.	
		Yes No
121.	[Child] Currently Has Asthma.	
		Yes No
122.	Diabetes.	
		Yes Borderline/Pre-Diabetic No
123.	[Households With Children] Presence of Firearms.	
		Yes No
124.	[Homes With Firearms] With Unlocked & Loaded Weapon(s).	
		Yes No
125.	[Adults 50+] Arthritis/Rheumatism.	
		Yes No
126.	[Adults 50+] Osteoporosis.	
		Yes No
127.	[Adults 65+] Flu Shot In The Past Year.	
		Yes No
100		NO
128.	[High-Risk Adults 18-64] Flu Shot In The Past Year.	
		Yes No

129.	[Adults 65+] Pneumonia Vaccine EVER.
	Yes No
130.	[High-Risk Adults 18-64] Pneumonia Vaccine EVER.
	Yes
	No
131.	[Adults 18-44] HIV Testing In Past Year.
	Yes
	No
132.	5 or More Servings of Fruits/Vegetables Per Day.
	Yes
	No
133.	Meets HHS Physical Activity Guidelines.
	Yes
	No
134.	Moderate Physical Activity (30 or More Minutes/5 or More Times per Week).
	Yes
	No
135.	Vigorous Physical Activity (20 or More Minutes/3 or More Times per Week).
	Yes
	No
136.	Body Mass Index.
	0.0 to 99.9
107	W. 1. C.
137.	Weight Status.
	Underweight (BMI < 18.5)
	Healthy Weight (18.5 \leq BMI \leq 25.0)
	Overweight, Not Obese (25.0 \le BMI < 30.0)
	Obese (BMI \leq 30.0)

138.	[Overweights] Trying to Lose Weight With Both Diet/Exercise.
	Yes No
139.	[Overweights] Counseled About Weight.
	Yes No
140.	[Obese] Counseled About Weight.
	Yes No
141.	[Children 5-17] Weight Status.
	Underweight (Under 5th Percentile)
	Not Overweight (5th-84th Percentile)
	Overweight (85th-94th Percentile)
	Obese (95th Percentile)
142.	Smoking Status.
	Current Smoker – Regular (Every Day)
	Current Smoker – Occasional (Some Days)
	Former Smoker Never Smoked
	Nevel Smoked
143.	[Women 18-44] Current Smoker (Regular or Occasional).
	Yes No
	NO
144.	[Non-Smokers] Smoker In The Home.
	Yes No
145.	[Households With Children] Smoker In The Home.
	Yes
	No

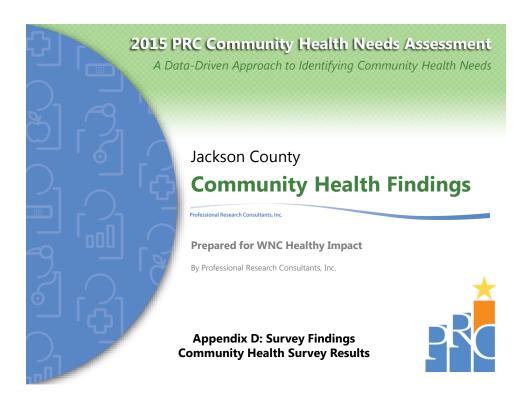
146.	Current Drinker (1 or More Drinks in Past Month).
	Yes No
147.	Heavy Drinker (60 or More Drinks/Month for Men; 30 or More Drinks/Month for Women).
	Yes No
148.	Binge Drinker (5 or More Drinks on an Occasion for Men; 4 or More Drinks on an Occasion for Women).
	Yes No
149.	[Men Age 18-39] Binge Drinking (5 or More Drinks on an Occasion).
	Yes No
150.	Excessive Drinking (Binge or Heavy Drinking).
	Yes No
151.	[Adults 18-64] Insured Status.
	Health Insurance, Through Employer or Union
	Health Insurance, Self-Purchased Medicare
	Medicaio
	VA or Military Benefits No Insurance/Self-Pay
	Insured, Unknown Type
	Other Government-Sponsored Program
	Medicare and Medicaio
152.	[Adults 18+] Specific Source of Ongoing Care.
	Yes No
153.	[Adults 18-64] Specific Source of Ongoing Care.
	Yes
	No

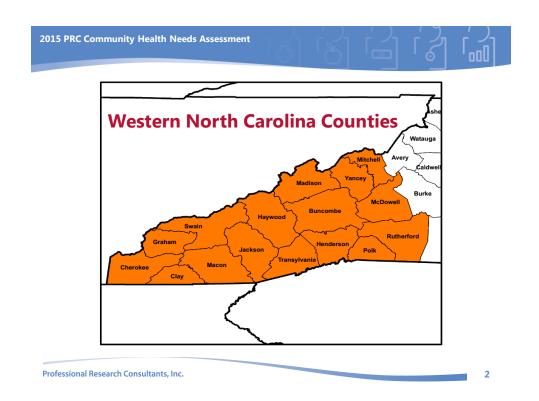
154.	[Adults 65+] Specific Source of Ongoing Care.
	Ye N
155.	Difficulties Accessing Healthcare in Past Year (Composite).
	Ye
	N
156.	Child's Age.
	0 to
	5 to 1
	13 to 1
157.	Gender of Respondent.
137.	
	Mal Femal
	r'emai
158.	Age Groupings. (3 Categories.)
	18 to 3
	40 to 6
	65/Ove
150	Aga Craunings (5 Catagories)
159.	Age Groupings. (5 Categories.)
	18 to 3
	35 to 4
	45 to 5 55 to 6
	65/Ove
160.	Combined Race/Ethnicity.
	Non-Hispanic Whit
	Non-Hispanic Blac
	Hispani
	Non-Hispanic Asia Non-Hispanic American Nativ
	Othe
161.	HHS Poverty Status (Two Categories).
	Below 200% of Povert
	200% of Poverty or Highe

162. HHS Poverty Status (Three Categories).

Below Poverty 100% to 199% of Poverty 200% of Poverty or Higher

44





Methodology

- · Telephone survey methodology
 - 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
 - Landline (94%) and cell phone (6%)
 - English and Spanish

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3

2015 PRC Community Health Needs Assessment

Methodology

- 3,300 telephone surveys throughout WNC
 - Adults 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

- Full WNC sample allows for drill-down by:
 - County
 - Age
 - Gender
 - Race/ ethnicity (White, Black, Hispanic, Native American)
 - Income (3 levels based on poverty status)
 - Other categories, based on question responses
- · Individual county samples allow for drill-down by
 - Gender
 - Income (2 levels based on poverty status
 - Other categories, based on question responses

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5

2015 PRC Community Health Needs Assessment

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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Minimizing bias

- · Potential bias
 - Noncoverage error Underrepresentation of people without phones
 - Sampling error Estimates based on only a sample
 - Measurement error Responses to questions may not be completely accurate due to question wording, interviewer's tone, etc.
- Strategies to minimize bias
 - Random selection
 - Strict adherence to administration protocols
 - Use of a tested survey instrument
 - Automated CATI system (lessens risk of human error in data entry)

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2015 PRC Community Health Needs Assessment

minumity Health Needs Assessment

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 $\pm 1.7\%$ at the 95% confidence level
 - Results for individual counties have maximum error rate of <u>+</u>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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3

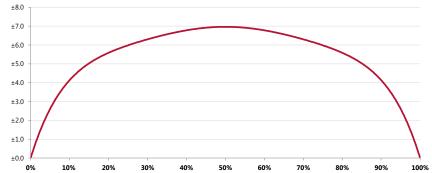


For more detailed information on methods, see:

- PRC's Primary Data Collection: Research Approach & Methods document (2015)
- **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



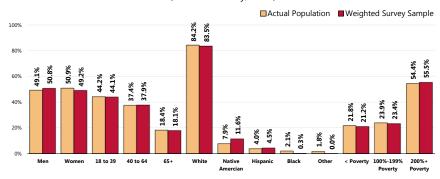
- Note:

 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. 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.

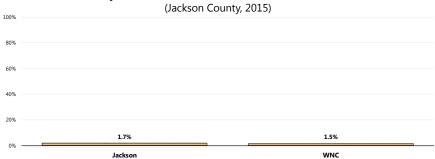
Population & Sample Characteristics

(Jackson County, 2015)



2015 Census Estimates/Projections. Geolytics, Inc.
 2015 PRC Community Health Survey, Professional Research Consultants, Inc.
 Hispanics can be of any race. Other race categories are non-Hispanic Categorizations (e.g., "White" reflects non-Hispanic White respondents).

Sample of Seasonal (Part-Time) Residents

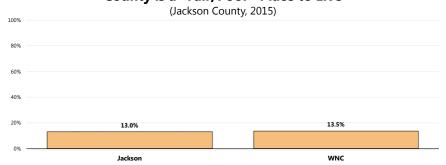


Sources: • 2015 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 102]





County is a "Fair/Poor" Place to Live



Sources: • 2015 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 5] Notes: • Asked of all respondents.

Top Three County Issues Perceived as in Most Need of Improvement

(Jackson County, 2015)

	Jackson	WNC
Economy/Unemployment	V	1
Nothing	1	1
Road Maintenance/Safety	V	✓

Sources: • 2015 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 6] Notes: • Asked of all respondents.

2015 PRC Community Health Needs Assessment

SELF-REPORTED HEALTH STATUS



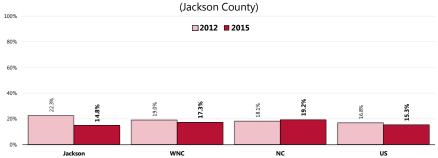
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16

Overall Health

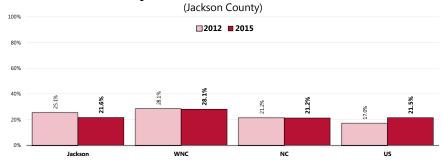


Experience "Fair" or "Poor" Overall Health



- Sources: PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 7]
 Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC). North Carolina data.
 PRC National Health Surveys, Professional Research Consultants, Inc.
 Notes: Asked of all respondents.

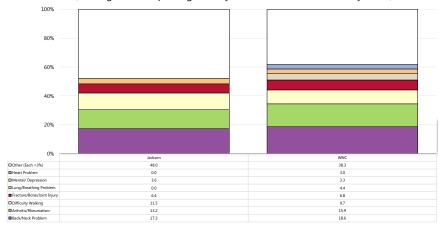
Limited in Activities in Some Way Due to a Physical, Mental, or Emotional Problem



PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 86]
 Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (ICIC): North Carolina data.
 PRC National Health Surveys, Professional Research Consultants, Inc.
 Asked of all Repondents.

Type of Problem That Limits Activities

(Among Those Reporting Activity Limitations; Jackson County, 2015)



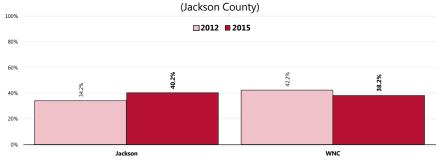
Sources: • 2015 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 87]
• Asked of those respondents reporting activity limitations.



Caregiving



Provide Regular Care or Assistance to a Friend/Family Member Who Has a Health Problem or Disability



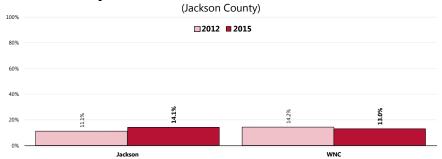
Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 89]
Notes: • Asked of all respondents.



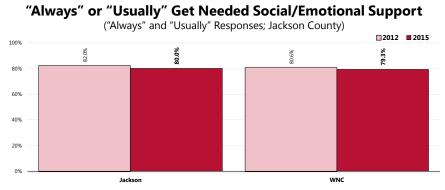
Mental Health & Mental Disorders



>7 Days of Poor Mental Health in the Past Month

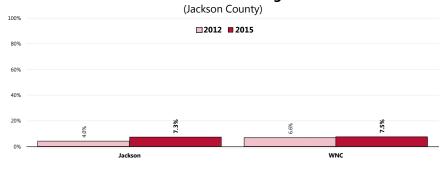


Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 83]
Notes: • Asked of all respondents.



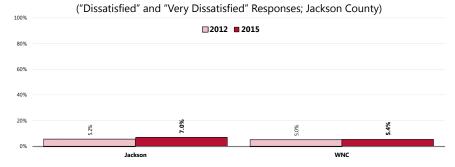
Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 82] Notes: • Asked of all respondents.

Unable to Get Needed Mental Health Care or Counseling in the Past Year

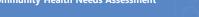


Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 84] Notes: • Asked of all respondents.

Dissatisfied with Life



2015 PRC Community Health Needs Assessment







CHRONIC CONDITIONS & INJURY



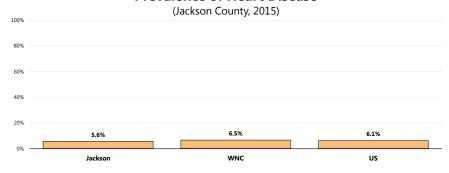
Professional Research Consultants, Inc.

2015 PRC Community Health Needs Assessment

Cardiovascular Risk



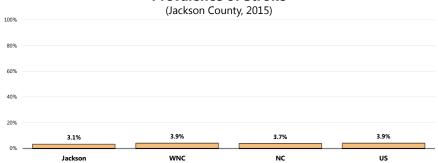
Prevalence of Heart Disease



Sources • 2015 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 24] • 2013 PRC National Health Survey, Professional Research Consultants, Inc.

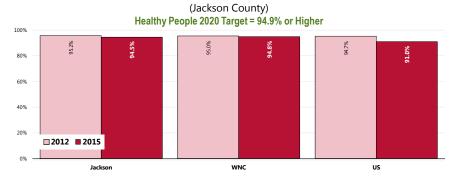
Notes: • Asked of all respondents.
• Includes diagnoses of heart attack, angina or coronary heart disease.

Prevalence of Stroke



Sources: • 2015 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 25]
• Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC). 2013 North Carolina data.
• 2013 PRC National Health Survey, Professional Research Consultants, Inc.
Notes:
• Includes diagnoses of heart attack, angina or coronary heart disease.

Have Had Blood Pressure Checked in the Past Two Years



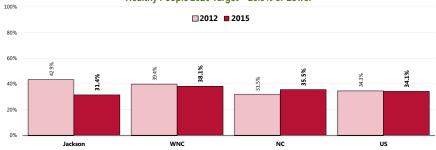
Sources • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 34]
• PRC National Health Surveys, Professional Research Consultants, Inc.
• US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective HDS-4]

Notes: • Asked of all respondents.

Prevalence of High Blood Pressure

(Jackson County)

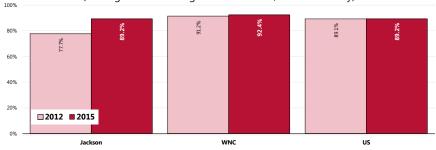




Sources • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 111] • Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC). North Carolina data.
• PRC National Health Surveys, Professional Research Consultants, Inc.
• US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective HDS-5.1]
• Asked of all respondents.

Taking Action to Control Hypertension

(Among Adults with High Blood Pressure; Jackson County)



Sources:

• PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 33]

• PRC National Health Surveys, Professional Research Consultants, Inc.

Notes:

• Research Consultants, Inc.

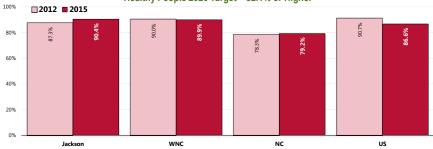
• Research Consultants, Inc.

• In this case, the term "action" refers to medication, change in diet, and/or exercise.

Have Had Blood Cholesterol Levels Checked in the Past Five Years

(Jackson County)



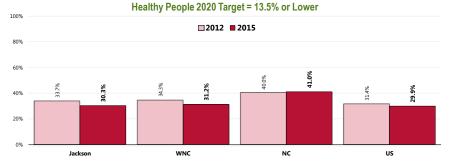


Sources • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 37]
• Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC). North Carolina data.
• PRC National Health Surveys, Professional Research Consultants, Inc.
• US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective HDS-6]

Notes:
• Asked of all respondents.

Prevalence of High Blood Cholesterol

(Jackson County)



Sources

PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 112]

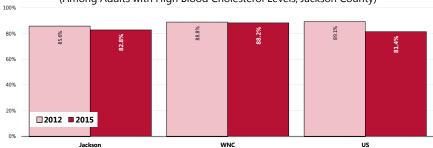
Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC). North Carolina data.

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 HDS-7]

Asked of all respondents.

Taking Action to Control High Blood Cholesterol (Among Adults with High Blood Cholesterol Levels; Jackson County)



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 36]
• PRC National Health Surveys, Professional Research Consultants, Inc.
Notes: • Asked of respondents who have been diagnosed with high blood pressure.
• In this case, the term "action" refers to medication, change in diet, and/or exercise.

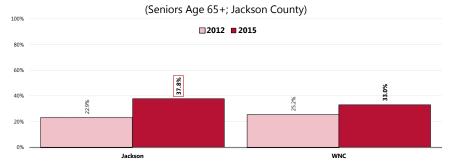
2015 PRC Community Health Needs Assessment





Professional Research Consultants, Inc.

Have Fallen in the Past Year



Sources:

• PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 88]

• Asked of those respondents age 65+.

• Percentages outlined in red reflect sample sizes deemed unreliable (n<50).

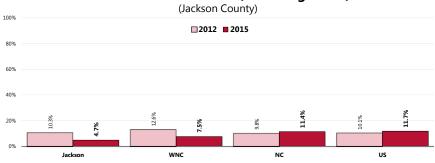
2015 PRC Community Health Needs Assessment

Diabetes



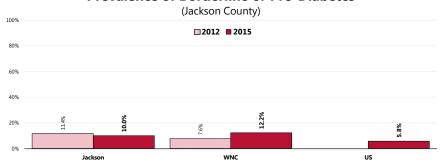
Professional Research Consultants, Inc.

Prevalence of Diabetes (Ever Diagnosed)



PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 28]
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): North Carolina data.
Asked of all respondents.
Excludes gestational diabetes (occurring only during pregnancy).

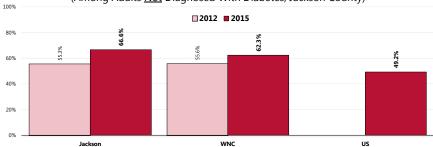
Prevalence of Borderline or Pre-Diabetes



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 28]
• PRC National Health Survey, Professional Research Consultants, Inc.
Notes: • Asked of all respondents.
• Excludes gestational diabetes (occurring only during pregnancy).

Tested for Diabetes in the Past Three Years

(Among Adults Not Diagnosed With Diabetes; Jackson County)

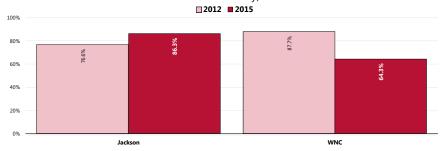


Sources • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 29] • 2013 PRC National Health Survey, Professional Research Consultants, Inc.

Notes: • Asked of responders with have never been diagnosed with diabetes; also includes women who have <u>only</u> been diagnosed when pregnant.

Taking Action to Control Diabetes or Pre-diabetes

(Among Adults Diagnosed With Diabetes or Prediabetes/Borderline Diabetes Jackson County)



Sources:

• 2015 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 31]
Notes:

• Asked of respondents who have been diagnosed with diabetes or pre-diabetes/borderline diabetes.

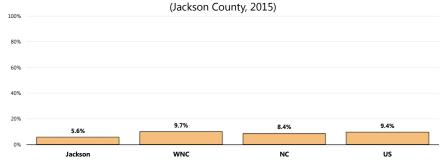
• In this case, the term "action" refers to taking natural or conventional medicines or supplements, diet modification, or exercising.

2015 PRC Community Health Needs Assessment

Respiratory Conditions



Current Prevalence of Asthma



- Sources:

 2015 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 120]

 Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2013 North Carolina data.

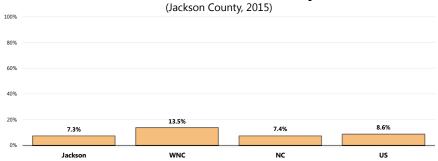
 2013 PRC National Health Survey, Professional Research Consultants, Inc.

 Notes:

 National Health Survey, Professional Research Consultants, Inc.

 Includes those who have ever been diagnosed with asthma and who report that they still have asthma.





Sources:

• 2015 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 23]

• Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC). 2013 Nort Canolina data.

• 2013 PRC National Health Survey, Professional Research Consultants, Inc.

• Notes:

• Asked of all respondents.

• Includes those have ever suffered from or been diagnosed with COPD or chronic obstructive pulmonary disease, including bronchitis or emphysema.

2015 PRC Community Health Needs Assessment



MODIFIABLE HEALTH RISKS



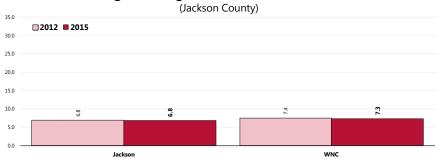
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2015 PRC Community Health Needs Assessment

Nutrition



Average Servings of Fruits in the Past Week

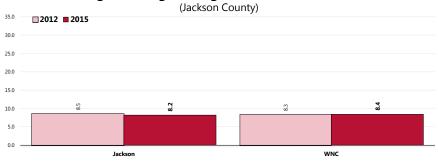


Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 63]

Notes: • Asked of all respondents.

• Or this issue, respondents were asked to recall their food intake during the previous week. Reflects 1-cup servings of fruits in the past week.

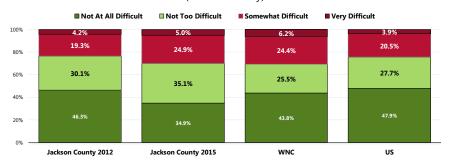
Average Servings of Vegetables in the Past Week



Sources: • 2015 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 64]
• Asked of all respondents.
• Por this issue, respondents were asked to recall their food intake during the previous week. Reflects 1-cup servings of vegetables in the past week, excluding lettuce salad and potatoes.

Level of Difficulty Accessing Fresh Produce at an Affordable Price

(Jackson County)



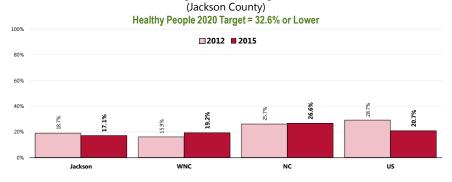
Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 66] Notes: • Asked of all respondents.

2015 PRC Community Health Needs Assessment

Physical Activity & Fitness



No Leisure-Time Physical Activity in the Past Month



- Sources

 PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 73]

 Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC). North Carolina data.

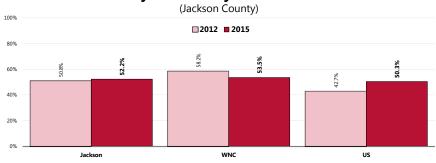
 PRC National Health Surveys, Professional Research Consultants, Inc.

 US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective PA-1]

 Notes:

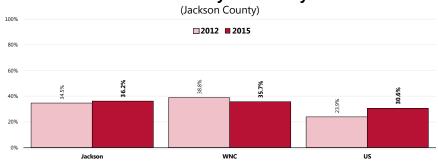
 Asked of all respondents.

Meets Physical Activity Recommendations

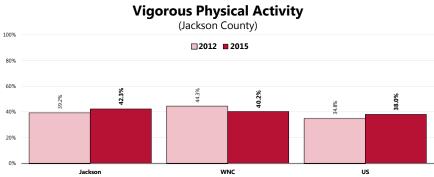


PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 133]
PRC National Health Surveys, Professional Research Consultants, Inc.
Asked of all respondents.
In this case the term "meets physical activity recommendations" refers to participation in moderate physical activity (exercise that produces only light sweating or a slight to moderate increase in breathing or heart rate) at least 5 times a week for 30 minutes at a time, and/or vigorous physical activity (activities that cause heavy sweating or large increases in breathing or heart rate) at least 3 times a week for 20 minutes at a time.

Moderate Physical Activity

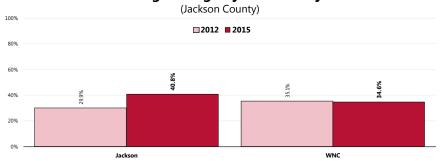


PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 134]
PRC National Health Surveys, Professional Research Consultants, Inc.
Asked of all respondents.
Moderate Physical Activity. Takes part in exercise that produces only light sweating or a slight to moderate increase in breathing or heart rate at least 5 times per week for at least 30 minutes per time.



PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 135]
PRC National Health Surveys, Professional Research Consultants, Inc.
Asked of all respondents.
Vigorous Physical Activity. Takes part in activities that cause heavy sweating or large increases in breathing or heart rate at least 3 times per week for at least 20 minutes per time.

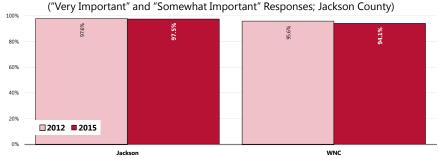
Strengthening Physical Activity



Sources: Notes:

PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 164]
 Asked of all respondents.
 Strengthening Physical Activity. Takes part in physical activities or exercises that strengthen muscles at least 2 times per week.

Believe It Is Important That Community Organizations Make Physical Activity Spaces Available for Public Use After Hours ("Very Important" and "Somewhat Important" Responses; Jackson County)



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 77]
• Asked of all respondents.

2015 PRC Community Health Needs Assessment

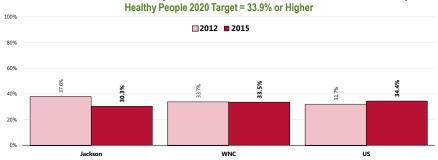
Body Weight



Professional Research Consultants, Inc.

Healthy Weight

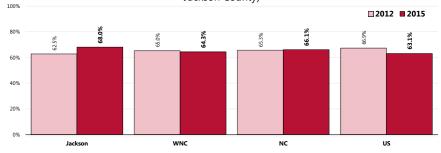
(Percent of Adults With a Body Mass Index Between 18.5 and 24.9; Jackson County)



PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 137] PRC National Health Surveys, Professional Research Consultants, Inc. Based on reported heights and weights, asked of all respondents. US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective NWS-8] The definition of healthy weight is having a body mass index (BMI), a ratio of weight to height (Bilograms divided by meters squared), between 18.5 and 24.9.

Prevalence of Total Overweight (Overweight or Obese)

(Percent of Overweight or/Obese Adults; Body Mass Index of 25.0 or Higher Jackson County)



Sources:

• PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 137]

• PRC National Health Surveys, 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): North Carolina data.

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.

Prevalence of Obesity

(Percent of Obese Adults; Body Mass Index of 30.0 or Higher; Jackson County)



Sources PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 137]
PRC National Health Surveys, Professional Research Consultants, Inc.
US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective NWS-9]
Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC). North Carolina data.

Notes:

Based on reported heights and weights, asked of all respondents.

Healthy Community Communit

2015 PRC Community Health Needs Assessment

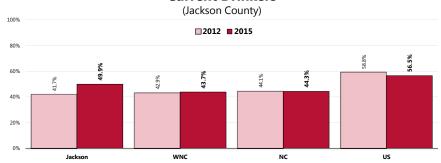


Substance Abuse



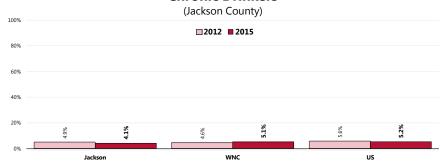
Professional Research Consultants, Inc.

Current Drinkers



Sources • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 146] • Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC). North Carolina data.
• PRC National Health Surveys, Professional Research Consultants, Inc.
Notes:
• Current drinkers had at least one alcoholic drink in the past month.

Chronic Drinkers



Sources:

• PRC Community Health Survey, Professional Research Consultants, Inc. [Item 147]

• PRC National Health Surveys, Professional Research Consultants, Inc.

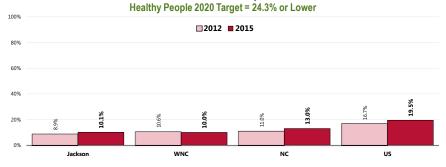
Notes:

• Recked of all respondents.

• Chronic drinkers are defined as having 60+ alcoholic drinks in the past month.

Binge Drinkers

(Jackson County)



Sources:

PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 148]

Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (DCD; North Carolina data.

PRC National Health Surveys, Professional Research Consultants, Inc.

US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective SA-14.3]

Notes:

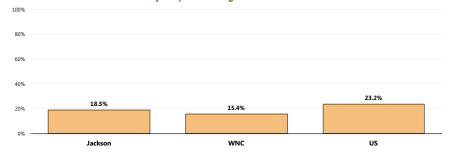
Asked of all respondents.

Bing drinkers are defined as those consuming 5+ alcoholic drinks on any one occasion in the past 30 days; * note that state and national data reflect different thresholds for men (5+ drinks) and women (4+ drinks).

Excessive Drinkers

(Jackson County, 2015)

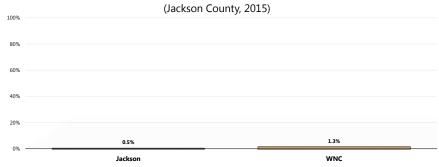
Healthy People 2020 Target = 25.4% or Lower



Sources: • 2015 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 150]
• 2013 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) days.

Have Taken a Prescription Drug in the Past Month That Was Not Prescribed



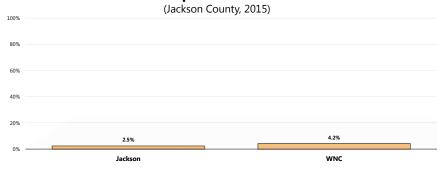
Sources:

• 2015 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 58]

• Asked of all respondents.

• Includes reported use of a prescription drug not prescribed to the respondent.

Have Ever Shared a Prescription Medication With Someone Else



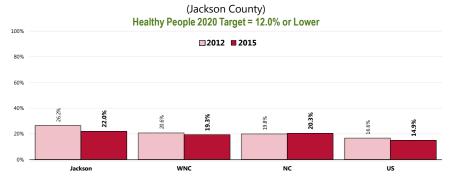
Sources: • 2015 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 59] Notes: • Asked of all respondents.

2015 PRC Community Health Needs Assessment

Tobacco Use



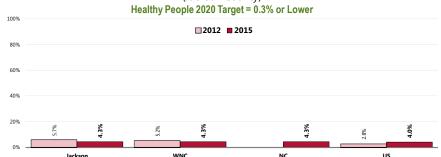
Current Smokers



- Sources: PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 45]
 PRC National Health Surveys, 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): 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).

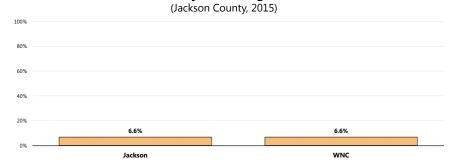
Currently Use Smokeless Tobacco Products

(Jackson County)



- 2015 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 46]
 2013 PRC National Health Survey, Professional Research Consultants, Inc.
 Behavioral Risk Factor Surveillance System Survey Data. Allanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2013 North Carolina data.
 US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective TU-1.2]
 Asked of all respondents.
 Includes regular and occasional users (everyday and some days).

Currently Use E-Cigarettes



- Sources:

 2015 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 47]

 Asked of all respondents.

 Electronic cigarettes (or e-cigarettes) are battery-operated devices that simulate 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.

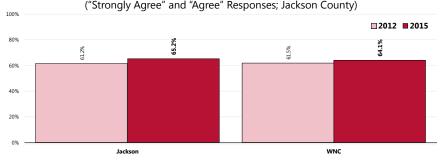
 Includes regular and occasional use (everyday and some days).

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

(Among Employed Respondents; Jackson County) 100% □2012 ■2015 40% 25.5% 20% WNC Jackson

Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 49] Notes: • Asked of employed respondents.

Believe It Is Important That Public Walking/Biking Trails Are 100% Tobacco-Free ("Strongly Agree" and "Agree" Responses; Jackson County)



Sources: • 2015 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 50]
• Asked of all respondents.
• Includes "vey important" and "somewhat important" responses.

2015 PRC Community Health Needs Assessment

ACCESS TO HEALTHCARE SERVICES

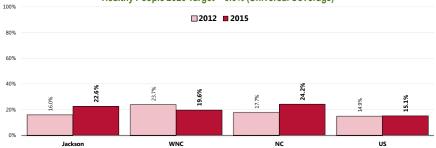


Health Insurance Coverage



Lack of Healthcare Insurance Coverage

(Among Adults Age 18-64; Jackson County) Healthy People 2020 Target = 0.0% (Universal Coverage)



Sources PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 165]

• Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC). North Carolina data.

• PRC National Health Surveys, Professional Research Consultants, Inc.

• US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective AHS-1]

Notes:

• Reflects adults 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.).

2015 PRC Community Health Needs Assessment

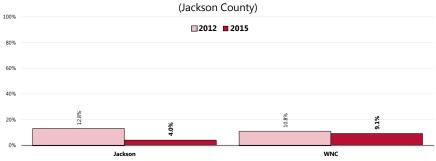


Difficulties Accessing Healthcare Services



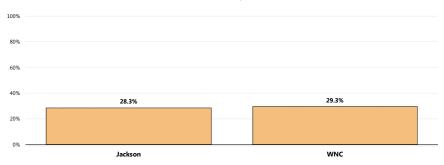
Professional Research Consultants, Inc.

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



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 8] Notes: • Asked of all respondents.

Healthcare Provider Has Helped to Connect With a Community Resource (Classes, Coaching) to Educate About Condition (Jackson County, 2015)



Sources: • 2015 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 39]

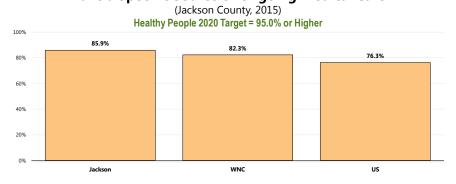
Notes: • Asked of those respondents who have been diagnosed with COPD, heart disease, stroke, asthma, diabetes/pre-diabetes, hypertension, and/or high blood cholesterol.

2015 PRC Community Health Needs Assessment



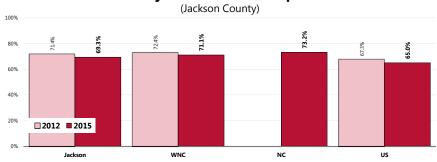


Have a Specific Source of Ongoing Medical Care



Sources • 2015 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 152]
• PRC National Health Surveys, 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.

Have Visited a Physician for a Checkup in the Past Year



PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 19]
 Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (ICD): North Carolina data.
 PRC National Health Surveys, Professional Research Consultants, Inc.
 Asked of all respondents.

2015 PRC Community Health Needs Assessment



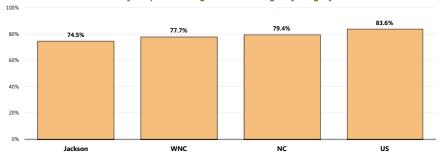
Preventive Screenings



Professional Research Consultants, Inc.

Have Had a Mammogram in the Past Two Years

(Among Women Age 50-74; Jackson County, 2015) Healthy People 2020 Target = 81.1% or Higher [All Ages]



- 2015 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 115]
 2013 PRC National Health Survey, Professional Research Consultants, Inc.
 Behavioral Risk Factor Surveillance System Survey Data. Allanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2013 North Carolina data.
 US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective C-17]
 Reflects fernale respondents 50-74.
 *Note that state data reflects all women 50 and older (vs. women 50-74 in local, US, and Healthy People data).

2015 PRC Community Health Needs Assessment



Oral Health



Professional Research Consultants, Inc.

Have Visited a Dentist or Dental Clinic Within the Past Year

(Jackson County)

Healthy People 2020 Target = 49.0% or Higher



Sources • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 21]
• PRC National Health Surveys, Professional Research Consultants, Inc.
• US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective OH-7]
• Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): North Carolina data.

Notes:
• Asked of all respondents.

2015 PRC Community Health Needs Assessment



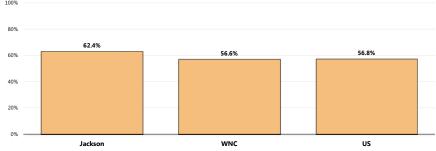
Vision Care



Professional Research Consultants, Inc.

Had an Eye Exam in the Past Two Years During Which the Pupils Were Dilated

(Jackson County, 2015)



Sources: • 2015 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 20]

2013 PRC National Health Survey, Professional Research Consultants, Inc.

tes: • Asked of all respondents

2015 PRC Community Health Needs Assessment



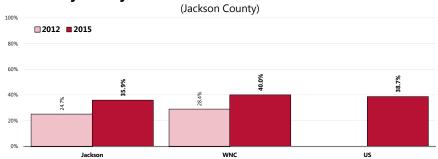
Health Education & Outreach



Professional Research Consultants, Inc.

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Rely on Physicians for Most Healthcare Information

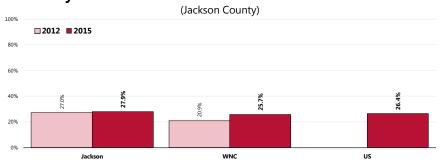


Sources:

PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 90]
2013 PRC National Health Survey, Professional Research Consultants, Inc.
Notes:

Asked of all respondents.

Rely on the Internet for Most Healthcare Information



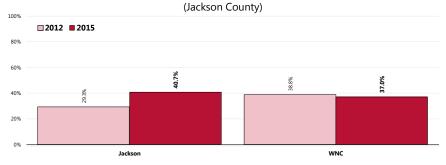
Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 90]
• 2013 PRC National Health Survey, Professional Research Consultants, Inc.
Notes: • Asked of all respondents.



Advanced Directives

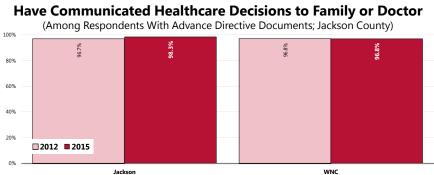


Have Completed Advance Directive Documents



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 104] Notes: • Asked of all respondents.

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2015 PRC Community Health Needs Assessment



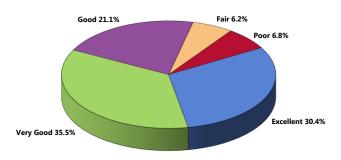
COUNTY-SPECIFIC QUESTIONS



Professional Research Consultants, Inc.

Evaluation of Own Understanding of the Nutrition Information Presented on Food Labels

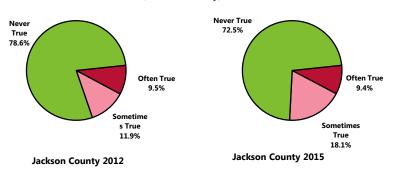
(Jackson County, 2015)



Sources: • 2015 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 65] Notes: • Asked of all respondents.

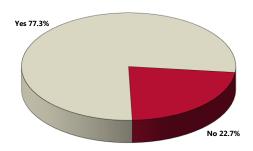
Have Worried in the Past Year About Food Running Out Before Having Money to Buy More

(Jackson County)



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 69]
• Asked of all respondents.

Would Know Where to Refer Someone in Need of Substance Abuse Counseling (Jackson County, 2015)



Sources: • 2015 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 61] Notes: • Asked of all respondents.

Thank you for taking the time to answer several questions about life in Jackson County. I am working with the Community Health Assessment Work Team and am collecting information about our county. I'm very interested in hearing what you have to say about our county and about living in our county. Do you have any questions before we begin?

(Wait for questions)

This interview will come in two parts—the first part is about your specific organization, if applicable. The second part is about health needs in Jackson County. The survey in its entirety should take no more than 20 minutes.

Part 1- Community Resources/Services

(Ask these questions of an individual who is affiliated with an organization or agency. You may know some of these answers before the interview starts. Fill in the answers you may already know. If the individual is not affiliated with an organization or agency, skip these questions.)

- 1. What is your name?
- 2. What is your position within your agency?
- 3. What service does your agency or organization provide for the county residents?
- 4. What is the demographic (e.g. race, ethnicity, age, sex) composition of individuals that are most likely to use your services?
- 5. How do county residents learn about your services?
- 6. What are some barriers to accessing these services?
- 7. What are the main health needs of individuals that are most likely to use your services?

Thank you for participating in the first part of our survey. The second part of our survey will ask about life in Jackson County in general. Identifiable information will be removed so you can speak freely.

Part 2- Health Needs

- 1. What problems has our county encountered over the past three years?
- 2. What has the county done to overcome these problems?
- 3. What do you see as major health-related problems in the county now?

4.	How would you try to reduce these health-related problems?
5.	What are some needs of county residents that are not being addressed? In your opinion, why are they not being addressed?
6.	What health services are needed for those living in Jackson County? Think about the needs of different ethnicities, those in different stages in life, etc. (Skip this question if the interviewee addressed health service needs in Question 5)
7.	What are some of the strengths of our county? Some of the weaknesses?
8.	What community organizations are active in our county?
9.	What other information would you like to share about the health of our community?
10.	What do you like most about living here?
compli	you for taking the time to share your information and opinions with us. Your answers will be ed with other key stakeholder interviews and used to set priorities for the Community Health ment. The final 50-page document will be made available to the community on 12/7/15.

Thank you for taking the time to answer several questions about life in Jackson County. I am working with the Community Health Assessment Work Team and am collecting information about our county. I'm very interested in hearing what you have to say about our county and about living in our county. Do you have any questions before we begin?

(Wait for questions)

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(Ask these questions of an individual who is affiliated with an organization or agency. You may know some of these answers before the interview starts. Fill in the answers you may already know. If the individual is not affiliated with an organization or agency, skip these questions.)

Reponses to Part 1 Questions omitted to maintain anonymity of key stakeholders.

- 1. What is your name?
- 2. What is your position within your agency?
- 3. What service does your agency or organization provide for the county residents?
- 4. What is the demographic (e.g. race, ethnicity, age, sex) composition of individuals that are most likely to use your services?
- 5. How do county residents learn about your services?
- 6. What are some barriers to accessing these services?
- 7. What are the main health needs of individuals that are most likely to use your services?

Thank you for participating in the first part of our survey. The second part of our survey will ask about life in Jackson County in general. Identifiable information will be removed so you can speak freely.

Part 2- Health Needs

- 1. What problems has our county encountered over the past three years?
 - Lack of connectivity
 - Lack of transportation options
 - Development without appropriate infrastructure
 - What has the county done to overcome these problems?
 - Draft new ordinances by the Jackson County Board of Commissioners
 - Working with NC DOT to increase transportation options
 - Developed the county's first greenway
 - Diabetes
 - Cancer
 - Heart disease

- Mental health
- Access to healthcare
- Lack of insurance coverage
- Unemployment
- Greenways and sidewalks
- Water and sewage issues
- Affordable housing
- Jobs
- Economic issues
- Access to health care
- Substance abuse
- Mental health
- Obesity
- Drugs
- Meth
- Alcohol

- Poor choices by teens
- Lack of economic opportunities
- Education system
- Accessible low income senior housing
- Homeless shelter
- Lack of opportunity
- Readily accessible recreation
- Good jobs
- Not teaching people to use the most of what we have, i.e. outdoor recreation

- Economic downturn
- Transportation, especially public transportation
- Lack of walkable trails
- County leaders focused on economics and not necessarily health
- Access to primary care
- Evolving state of health care
- Stagnant economy
- Poverty
- Homelessness
- 2. What has the county done to overcome these problems?
 - County is working on an economic incentive plan
 - Focusing on obesity with a variety of health education programs
 - Support groups, lunch and learns
 - Many physical activity resources
 - Hired an economic development director
 - Working on making our community more attractive and desirable with greenways and sidewalks
 - Working to develop a homeless shelter with Neighbors in Need
 - Building greenways
 - Put a senior center in Cashiers
 - County beginning to build greenways
 - Completed Health Impact Assessment
 - County and agency support
 - Invest in nonprofits
- 3. What do you see as major health-related problems in the county now?
 - Heart
 - Diabetes
 - Obesity
 - Teen pregnancy
 - Drop outs
 - Obesity
 - Diabetes
 - Diabetes
 - Obesity
 - Cardiac issues
 - COPD
 - Knee replacements
 - Obesity
 - Health education
 - Substance abuse
 - Smoking
 - Diabetes

- Culture that doesn't promote healthy lifestyles
- Cancer
- Eating right
- Moving more
- Access to a primary care provider
- Obesity
- Obesity
- Depression
- Substance abuse
- Obesity
- Cancer
- Teen pregnancy
- Chronic disease
- Obesity
- Obesity
- Food deserts

- Diabetes
 Access to dental care
- 4. How would you try to reduce these health-related problems?
 - Eat well, diet and exercise
 - Increase access to healthcare and education
 - Health education
 - Healthier foods in the system for low income people
 - Quality healthcare
 - Promote exercise
 - Education
 - Provide funds for education
 - Be a spokesperson and advocate for programs
 - Expand the farmers market
 - Promote the farmers market more and make it accessible to all residents
 - Cooking classes
 - Connect high school students with vocational aptitude tests
 - Create a greater culture of being outdoors—walking, biking—it should be okay to be sweaty when you come to work
 - Exercise more and eat right
 - Education
 - Making resources readily available
 - Give people hope
 - More and better education, especially with young people
 - More community awareness
 - Access to primary care
 - Medicaid expansion
 - Create additional partnership
 - Incentivized health education
 - Universal health care
- 5. What are some needs of county residents that are not being addressed? In your opinion, why are they not being addressed?
 - More options for healthy foods—lack of grocery outlets in the community
 - Opportunities for exercise—scattered nature of developing recreation options
 - Access to resources and having community members aware of resources available
 - More access to healthy foods and health care
 - Poverty is overlooked
 - Landlords that don't keep up rental properties
 - Lack of protection for renters
 - Lack of awareness about available programs
 - Housing
 - More resources for the north end of the county
 - Mental health
 - Affordable housing
 - Access to primary care
 - Access to subsequent care
 - More greenways

- More healthy food options
- More quality and affordable childcare
- 6. What health services are needed for those living in Jackson County? Think about the needs of different ethnicities, those in different stages in life, etc. (Skip this question if the interviewee addressed health service needs in Question 5)
 - Dietetics—healthy eating and living habits; Holistic view on health
 - Health care providers that address rooted cause as prevention rather than symptom/disease specific
 - Provision of healthcare
 - Prevention
 - Mental health
 - Access to care
 - Functional medicine doctor

- Integrative medicine
- More comprehensive medicine
- Support groups
- Access to a primary care provider
- Expansion of Medicaid
- Health promotion
- Government channel—more media that is accessible to all residents
- Retirement planning
- Health needs
- 7. What are some of the strengths of our county? Some of the weaknesses?
 - Strengths: Natural resources, the people, the environment lending itself to outdoor recreation, dedication community members, providers, synergies between agencies, beautiful place, tourism, university and community college, great location, recreation opportunities, health services, employment opportunities, people, neighbors, geography, core population that cares, farmers market, community gardens, farm to school programs, peaceful culture, great potential for collaboration, self-reliance, rugged individualism, proactive approach to services offered to citizens, beautiful place, tourism, university and community college, geography, community, good schools, good leadership, educational systems, health system, generous community, young people
 - Weaknesses: Lack of accessibility to recreational facilities, challenge for walkers in transportation and/or recreation, access to care, lack of living wage jobs, too many jobs tied to tourism, housing shortage, culture and mindset, not liking change, corporations making choices for our families, too conservative, not focused on intentional growth, lack of trust in government, lack of housing, lack of opportunity and good paying jobs, lack of places to be physically active, spread out community, economic development, lack of financial resources, lack of professionalism
- 8. What community organizations are active in our county?
 - Rotary
 - CuRVe
 - Planning Councils
 - Volunteer Fire
 - Departments
 Churches
 - JCDPH
 - Healthy Carolinians

- Good
 - Samaritan
- Harris Regional
 - Hospital
- Sliver Rotary Club
- Casinos
- Community table

- Jackson
 Neighbors in
 Need
- Mountain Projects
- Jackson
- County Farmers Market
- Rotary
- Churches

- CuRVe
- Democratic and Republican organization

S

- Good Samaritan Clinic
- ARF
- Rotary
- Lions Club
- Farmers market
- SHAC
- Community gardens
- JCDPH
- SCC
- WCU
- Clean Slate
 Coalition
- Good
 Samaritan
 Clinic

- Planning Department
- Rotary Club
- Neighbors in Need
- Healthy Carolinians
- NAACP
- WATR
- Wilderness Society
- Farmers markets
- Community gardens
- Churches
- MANNA
- Boy scouts/Girl scouts
- 4-H
- Vecinos
- Rec Center
- Community Table

- Churches
- Senior Center
- JCDPH
- Hospital
- Hospital
- WCU
- Good Samaritan Clinic
- Great
 Smokies
 Health
 Foundation
- WCU
- Churches
- Community Table
- United Christian Ministries
- Rotary Club
- Library
- 9. What other information would you like to share about the health of our community?
 - With education and health habits we can overcome any obstacles or barriers to healthy living.
 - The strength of relationships and the efficacy of working together.
 - We need to help those who need food—19% increase for food services and 47% increase in food pantry recipients.
 - People's commitment to their family has changed—when possible, you should take care
 of your family.
 - Dread the day that fracking comes to this community which will cause health issues and dirty air.
 - There are a lot of opportunities—we need to do a better job of educating and getting the word out.
 - We are not different from other parts of rural America—you'll find the same problems here as you would there.
 - Geography can be a blessing and a detriment.
 - Education and prevention are key
- 10. What do you like most about living here?
 - Natural resources and the people
 - Beautiful environment and community members

- Opportunities available and challenges set forth determined to make an impact
- The people
- Small town feel

- The people
- The beauty
- The people
- My family holds me here
- Laid back
- Stunning views
- Community feel
- Eden-like
- The mountains
- Small town feel
- Diversity

- Recreation opportunities
- Climate
- Centrally located
- The people
- The culture
- Natural resources
- Diversity of people
- The mountains
- The university
- The people

Thank you for taking the time to share your information and opinions with us. Your answers will be complied with other key stakeholder interviews and used to set priorities for the Community Health Assessment. The final 50-page document will be made available to the community on 12/7/15.

Materials

- Large pad
- Ground Rules written out
- Markers
- Tape recorder w/tape & batteries
- Notebook
- Watch to keep time
- Name tags

- Manila envelope
- Pens/pencils
- Dot stickers
- Agenda
- Seven Dimensions of Health Handout
- Listening Session Questionnaire
- Do More, Do Less Handout

Welcome Participants (2 min)

(Pass out Agenda, Seven Dimensions of Health Handout, and Listening Session Questionnaire. Have nametags available on the table if participants wish to use them.)

Hello and welcome to our discussion. We appreciate your willingness to take the time to join our				
discussion today. I'm	and I will be your moderato	r. Assisting me is	_ who will take	
notes during the session. We a	re volunteers representing th	ne Jackson County Departm	nent of Public	
Health and the Community Hea	Ith Assessment Work Team.	We'd like to thank	for	
allowing us to hold this discussi	on today.			

(Provide any needed information; i.e. where the bathrooms are located, that participants can get up and move about when necessary; if food is available).

Provide Overview (5 min)

The Community Health Assessment Work Team is a group of individuals and organizations that has come together to see what might be done locally to improve health and health care access in Jackson County. In order to do this, we have to better understand community members' views about health and health care. We are interested in your views of all aspects of health including physical health, emotional health, spiritual health, economic health, environmental health, social health and intellectual health. Please see the **Seven Dimensions of Health Handout** to find out more about these different aspects of health.

Our purpose is to gain information from communities throughout Jackson County and to use that information to address the most important concerns.

You have been asked to participate because we think you can tell us what you and others in this group are experiencing related to health and health care. This will be the focus of our discussion today.

Review Ground Rules (8 min)

(Have large pad with the following written on it:

Ground Rules

- 1. Confidentiality
- 2. No right or wrong answers, only opinions
- 3. Offer opinions, even if they differ from what has been said.
- 4. Participate!
- 5. Speak one at a time.)

We will meet for about 1-1 ½ hours during which we will ask you several questions. Everything that is
said here is confidential and neither you nor we should repeat any personal information when outside
this room. We would like to, with your permission, tape record the session so when summarizing the
interview we can be sure we have your statements recorded as accurately as possible. No one will hear
the tape but and myself. We will erase the tape as soon as we've completed the written
summary of the listening session. If everyone is comfortable with our using the tape recorder, we'll turn
it on when we start asking questions.

(Watch for group agreement)

There are no right or wrong answers to the questions, only opinions. We encourage you to offer those opinions even if they differ from what someone else has said. We encourage everyone to participate. We ask that you speak one at a time so that we can be sure that your views are heard.

Does anyone have any ground rules that need to be added to our list?

(Wait for responses. Add to list if necessary)

Can we agree to this list of ground rules?

Any questions on the process before we continue?

Specifics about our discussion to help answering questions, if needed

Info gathered will be used to determine:

- Current community practices for maintaining health
- Kinds of health problems that you think occur most often in the community
- Barriers to good health
- Ideas for solutions to health problems
- Identification of underserved groups of people
- All info will be complied into a report called the Community Health Assessment (completion date 12/7/15)

Confidentiality (2 min)

As I said, your may be assured of complete confidentiality. Everything that we say is confidential and no one's name will be listed with any written summaries of the discussion. We will only report the issues cited for this group as a whole. We also need your agreement not to discuss any information shared by individuals in the group with anyone outside the group.

Will everyone indicate their agreement by nodding their head?

We've also given you a copy of the questions that we will be asking so that you can follow along during the session and for keeping your own notes, if you like. If you have any responses that you do not feel comfortable sharing with the group, write them on the **Listening Session Questionnaire** and place it in this manila envelope at the end of the interview. The questionnaire is anonymous. Do not write your name on it.

Does anyone have any questions on confidentiality?

If you want to know more about the listening sessions or about the final results, please call Melissa McKnight at 828-587-8288.

Questions/Prompts (30 min)

We are here today to talk about health and what it means to live in a healthy community. When we talk about community health that can involve many things. It is related to health care and fighting disease, and it is also related to things like safety, crime, employment, education, confidence in our future, and a general state of well-being among you and your neighbors. Here is an opener to our discussion.

1. Let's go around the room and have each of you tell us what you think is the best thing about living in this community.

Okay, for this next question, write the answer down on your handout.

2. If you could do one thing to improve the health of Jackson County, what would it be?

(Move "Ground Rules" off the large pad. Title the next page "Improving the Health of Jackson County." After a few moments, go around the room and give everyone an opportunity to tell what they wrote down. List these on the large pad. Follow up as needed to make sure that every idea is understood.)

You've raised a number of interesting ideas here. I want to talk about the ones this group thinks could be the most important to the future of Jackson County.

3. Everybody write down two from the list you think could be most important on the Listening Session Questionnaire. Take these dot stickers and vote by sticking the stickers next to the two ideas that you think are most important.

(Give everyone two dot stickers and allow them time to get up and vote.)

4. Let's talk about the idea that got the most votes. Why is this important to the community?

(Encourage conversation. Ask probing follow-up questions like... How would that change things for people living in Jackson County? How would your friends and neighbors react to that? Is this going on anywhere in the community already? How is it going? Does anyone have any different thoughts on this?)

- 5. How do you think others in the community would react to this idea?
- 6. What's one thing that makes it easy to do this?
- 7. What's one thing that makes it hard to do this?
- 8. What could be done to solve this problem?

(If time permits, release questions 4-8 with the runner-up idea. Take up the Listening Session Questionnaires and place in the manila envelope. Participants may keep the questionnaire if they wish.)

<u>Do More, Do Less Activity</u> (15 min) (Pass out the Do More, Do Less Activity)

As I said earlier, the health of the community can involve many things. For the next activity, we'd like to have you think about the elements of a healthy community. As you think about all the elements of a healthy community, refer to the **Do More, Do Less Handout** and do this: In the DO MORE column, write all the things you believe we (meaning everyone in the county) should be doing more of it we want to be a healthier Jackson County. Make your list as long as possible. In the DO LESS column, write all the things you believe we should be doing less of if we want to be a healthier Jackson County. Make your list as long as possible. After you've completed your list, circle one thing from either the DO MORE or DO LESS column that you feel most passionate about. Answer the questions on the back of the handout about the idea you circles.

(Take up the Do More, Do Less Activity handout and place in the manila envelope.)

Conclusion (2 min)

Is there anything else that we have not discussed today that you would like to recommend?

(Wait for answers)

Thank you for participating in our discussion today. Your responses will be summarized along with those of other community groups in our county that are hosting these sessions. The results will be shared with members of the Community Health Assessment Work Team to help determine the most important health issues in our county.

Thanks again to f	for hosti	ing this	session
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Appendix E: Key Stakeholder Interview & Listening Session Findings Seven Dimensions of Health Handout



Physical Health

The ability to maintain a healthy quality of life such that we can complete daily activities without excess fatigue and stress.

Emotional Health

The ability to understand ourselves and cope with the challenges life can bring.





Social Health

The ability to relate to and connect with other people in our world and our ability to establish and maintain positive relationships.

Economic Health

The ability to pursue a variety of occupational vocations and achieve personal fulfillment in our careers.





Environmental Health

The ability to recognize our own responsibility for the quality of the air, water, and land that surrounds us.

Intellectual Health

The ability to open our minds to new ideas and experiences, learn new concepts, improve skills and seek challenges.





Spiritual Health

The ability to establish peace and harmony in our lives, develop congruency between values and actions and realize a common purpose that binds humanity.

Appendix E: Key Stakeholder Interview & Listening Session Findings Do More, Do Less Handout

The health of a community can involve many things. For this activity, we'd like to have you think about the elements of a health community. As you think about all the elements of a healthy community, do this:

- In the DO MORE column, write all of the things you believe we (meaning everyone in the county) should be doing more of if we want a healthier Jackson County. Make your list as long as possible.
- In the DO LESS column, write all the things you think we should be doing less of if we want a healthier Jackson County. Make your list as long as possible.
- After you have completed your list, circle the one thing from either the DO MORE or DO LESS category that you feel the most passionate about.
- Answer the questions on the back of the handout using the idea that you've circled.

DO MORE	DO LESS			

Answer these questions about the idea you've circled.

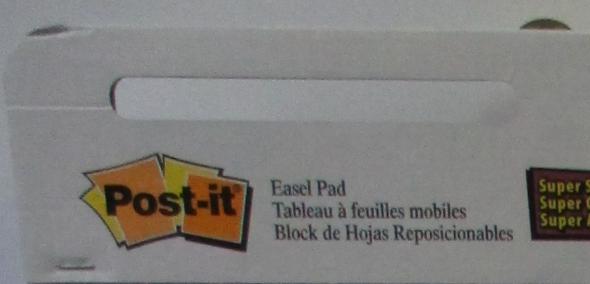
Appendix E: Key Stakeholder Interview & Listening Session Findings Do More, Do Less Handout

1.	What is the idea that you feel the most passionate about?
2.	What would the community have to do to accomplish this idea?
3.	How would the community know if we've accomplished this idea?
4.	Is this idea worth working hard to accomplish?
5.	When could we accomplish this idea?

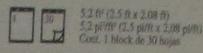
Improving the Health of Jackson County

- · Picking up trash
- · Ride bicycle for exercise, good for environment
- · Better access to healthy food options for low-income families.
- · Cutting down on tobacco use in Public places, inconvient designated

 o improving availability of quality of
 - financial aid sources







CASHIERS SENIOR CTR: 4/13/15 More services in community - south end of county

- bp & sugar check, ex

Pool (indoor at Rec (entur) in Cashiers 3 w/ programs - year round Help people when they need help Don't turn folks down regardless

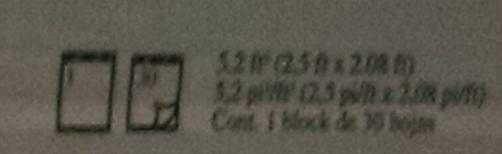
Open Cashers UCDPH 1x/WK or more 0 - promote in Cashiers Chronicle - Highlands radio station, school handarts

more services in schools w/ more parental involvement

Improving the health of Jackson · dental services - AFFORDABLE V · stidting scale medser vices V . more mantal health, accessible, m · bridge in (ullowher, - wasted I do the ends justify the expensive rec fees means? not enough rec dpts thru out country . too much electronics, esp w/ kids Gnollittle PA · more connection w/ where food comes from · use coop. ext services more . EDUCATION







Improving the health of Jackson County

- health education sessions across the lifespan
- Connecting WCU students w/ the local community

 possibly through incentive

 possibly through in the comming

 Looking at disparities in the comming



Improving the health of Jackson County:

DI Improved communications on community activities.

Improved communications, Specifically Via Social Media.

3 Financial classes - education on improving monagement.