



# 2019 HARRIS REGIONAL HOSPITAL

A Duke LifePoint Hospital

**Community Health Needs Assessment (CHNA)** 

**Board Approved: November 12<sup>th</sup>, 2019** 

Available: December 1st, 2019







This document is a hospital facility-specific Community Health Needs Assessment (CHNA) Executive Summary. For more process and data details on counties within our defined community, specific health data, and the collaborative community health assessments see:

- Jackson County Community Health Assessment
- Link: https://static1.squarespace.com/static/51826030e4b04f94760dc52d/t/5c7945ea24a6 9424aae0f978/1551451628980/2018+Jackson+County+Community+Health+Assessme nt.pdf

The Jackson County Health Department in collaboration with the Community Health Assessment (CHA) Action Team, Healthy Carolinians Steering Committee, WNC Healthy Impact, and Harris Regional Hospital produced and sponsored a community health needs assessment (CHNA) in 2018.

# **Community Health Assessment Process Leadership & Partnerships**

In Jackson County, leadership for the Community Health Assessment (CHA) process can be described as traditional, with the Jackson County Department of Public Health (JCDPH) as the responsible party. JCPDH collaborated closely with Harris Regional Hospital's Community Health Coordinator and Community Health Needs Assessment (CHNA) Facilitator.

## **Regional Services**

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

## Theoretical Framework/Model

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

Through WNC Healthy Impact, all hospitals and their public health partners can access tailored Results-Based Accountability training and coaching; scorecard licenses and development

## **Collaborative Process Summary**

Jackson County's collaborative process is supported by WNC Healthy Impact, which works at the regional level. Locally, our process is supported by the CHA Work Team, the Healthy Carolinians Steering Committee, and the local hospital CHNA Facilitator. Phase 1 of the collaborative process began in January 2018 with the collection of community health data. For more details on this process see Chapter 1 – Community Health Assessment Process.

# **Key Findings**

Primary data revealed less than 10% of residents in Jackson County consume five or more servings of fruits or vegetables daily, and less than a quarter of the population are meeting the physical activity recommendations of 150 active minutes per week (WNCHN – WNC Healthy Impact Community Health Survey, 2018). Furthermore, 77% of residents are overweight or obese, which is a slightly higher margin than the Western North Carolina (WNC), State, and US averages. Regarding substance abuse, the data set showed almost half of the population (47%) admitted their lives have been negatively affected by substance abuse; Currently, 22.3% of Jackson County residents are current smokers, and 10% are using vaping products, such as electronic cigarettes. Tobacco and vaping usage data is significantly higher in Jackson County in comparison to WNC and State averages (WNCHN – WNC Healthy Impact Community Health Survey, 2018).

Secondary data reported Jackson County's adult and childhood (age 2-18 years) obesity rates are higher than the WNC averages (Obesity in Children Ages 2 to 18 by County, 2017). Additionally, 11% of pregnant women have gestational diabetes, while 30% are obese with a BMI greater than 30 (Birth Indicator Tables by State and County, 2018). In relation to food insecurity, Jackson County's poverty rates continue to be higher than the WNC region and North Carolina in all categories – the total population, children under 18, and children under 5 (QuickFacts, 2019). Jackson County's percent of alcohol-related crashes remains high and is tied with Transylvania County at 5.8% for having the highest percentage of all 16 WNC counties (North Carolina Alcohol Facts, 2017). These and additional findings stood out to participants assisting with prioritization, and ultimately lead to the choosing of the current health priorities.

## **Health Priorities**

Through the Community Health Assessment process, the two priority areas chosen were Obesity/Physical Activity/Nutrition (with a special focus on food insecurity) and Substance Abuse Prevention.

## **Next Steps**

In early 2019, the CHA Work Team will work towards better understanding the story and root causes behind our priority issues, as well as engage with existing and new partners to help improve these issues. The CHA Work Team and Healthy Carolinians Steering Committee will 9 help identify evidence-based strategies and develop a Community Health Improvement Plan (CHIP). Action Teams will also be identified as a means to support improvement efforts.

## **Health Priorities**

The following are the finalized health priorities for Jackson County, selected by the community:

- Health Priority 1 Obesity/Physical Activity/Nutrition
- Health Priority 2 Substance Abuse Prevention

The CHNA report was developed by Harris Regional Hospital in partnership with the Jackson County Health Department as part of a local community health needs assessment process. For a more detailed acknowledgment of all of the partners involved in the creation of this assessment please see "Community Input and Engagement" on page 19.

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





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Jackson County Community Health Assessment

2-1-1 Resource List



Making a difference on population level health priorities requires an array of initiatives across the community, and involves the collective participation of the programs, agencies, and service systems striving to address these priority health issues. As part of a collaborative response to addressing health needs in our community, our hospital facility is an important contributor to meaningful progress on these health priorities.

The brief summary below provides an overview of the progress and impact of actions taken since our last CHNA that was conducted in 2016.

# **2015 Priority Area 1**: Physical Activity and Nutrition

# **Population Level Data:**

In 2015, over half of the population surveyed indicated they were meeting physical activity guidelines (52.2%), which was a positive increase from 2012. Unfortunately, we are seeing an upward trend among those who are not participating in leisure-time physical activity. In 2018, Jackson County reported 22.3% of respondents to the survey going without leisure-time physical activity. This is a 5% incline among those in the county not participating in physical activity; in 2015, only 17% of residents were not participating in leisure-time physical activity. In conjunction, we are also seeing a rise in activity limitations among residents in Jackson County – roughly 28% of respondents reported having activity limitations in 2018, which is an approximate 6% increase from 2015. In 2015, Jackson County reported the lowest percentage in WNC among those with activity limitations, reaching a regional low in almost a decade at 21.6%. As physical activity decreases, nutritional deficiency tends to increase as a parallel. Roughly 9% of individuals in the survey (2015) reported consuming five or more servings of fruits and/or vegetables per day, an increase from 2012, and one of the higher percentages in the far western counties of WNC. Only 7.3% participants in the survey in 2018 stated they consumed five or more servings of fruits and/or vegetables per day.

As physical activity and nutrition are directly related to obesity, it is pertinent to highlight the population level data on overweight and obese individuals in Jackson County. We are seeing a steady and dramatic increase in overweight and/or obese individual percentages; in 2012 the percentage of reported overweight or obese individuals was 62.5%, in 2015, the number increased to 68%, and now in 2018, the number has increased again to 77.2%. As we are seeing an increase among the overweight or obese population, we are seeing a steady decline in the reported healthy weight population; in 2012, the percentage reported healthy weight was 37.6%, in 2015, the number decreased to 30.3%, and in 2018, the number decreased again to 22.2%. Jackson County has one of the lowest percentages of healthy weight individuals within WNC.

# **Collaborative Efforts:**

Harris Regional Hospital was and is continuing to focus and promote preventive health care services by providing high quality primary care and specialty care. Harris Regional Hospital has employed a cardiologist and has expanded cardiovascular services including becoming an accredited chest pain canter through the Society of Cardiovascular Patient Care. The Health Management Department of the facility provided community programs 'Tuesdays to Thrive', 'WNC Get Fit Challenge', 'Blast Off', and '4 the Health of It' to address the chronic disease, physical activity and nutrition needs of the population. A comprehensive employer-based health and wellness program was/is offered to all area employers and includes focus on physical activity, nutrition and chronic disease prevention.

Implementation Strategy Update		
Hospital Strategy	Evaluation/Note (Prioritize "How Well & Better Off" Measures)	
Hospital strategy 1:	How much did we do?	
	Tuesdays to Thrive is a community program through the Ascent Partnership sponsored by Harris Regional Hospital and Swain Community Hospital with Western Carolina University. The Ascent Partnership was founded in 2015 to provide ample opportunities to the community. The program Tuesdays to Thrive was/is hosted once a month in relation to different healthy topics in various venues. The events were open and advertised to the public throughout WNC.	
	How well did we do it? Is anyone better off?	
Tuesdays to Thrive	Tuesdays to Thrive averaged a dozen people in attendance per event. The event provided health education available to all community members,	

informing residents of Jackson County for them to make healthier life decisions.



#### Hospital strategy 2:

## How much did we do?

The WNC Get Fit Challenge is a community program sponsored by Harris Regional Hospital with Swain Community Hospital and the Healthy Carolinians through the Jackson County Health Department. The program is physical activity based, challenging all participants throughout WNC to accumulate more steps or active minutes than those they are competing against. The challenge lasts for approximately 12 weeks in the Fall.

## WNC Get Fit Challenge

# How well did we do it? Is anyone better off?

WNC Get Fit Challenge had over 400 participants in one year, and actively strives to reach all entities and agencies in Jackson County. Employees from Harris Regional Hospital, Jackson County Health Department, Jackson County Department of Social Services, Western Carolina University, Jackson County Police Department, and various community members were all able to participant in the challenge. The challenge increased physical activity and promoted walking as a leisure time activity.

# Hospital strategy 3:

#### How much did we do?

Harris Regional Hospital hosted an annual free family wellness program known as 'Blast Off!' in partnership with the Jackson County Health Department and Western Carolina University. The program, coordinated by the hospital's health management department, was focused on

#### Blast Off!

providing families with tools to build nutrition and physical activity habits to stay healthy and prevent chronic health conditions. The four-week program featured activities such as building a healthy plate, a grocery store tour, cooking class, greenway walk, games at Cullowhee Recreation Park, an obstacle course at WCU's football stadium, and a pool party.

## How well did we do it? Is anyone better off?

Blast Off! Generated 30 to 40 participants in the first year. The program initiated an action to take control of personal health and implement positive healthy behavior change throughout life, even in childhood.

## Hospital Strategy 4:

#### How much did we do?

The Jackson County Public School System employee wellness program, '4 The Health of It,' was established after 2015 for the benefit of school employee health. The program included physical activity initiatives and challenges, nutritional education, as well as other various health education.

#### '4 the Health of It'

## How well did we do it? Is anyone better off?

'4 the Health of It' was able to provide health assessments to approximately a third of the



employee staff twice a year. Not only are participants able to receive free health assessments including glucose and cholesterol but they are also given the opportunity to learn

how to generate positive behavior change. Individual participants have lost up to 50 pounds during this program.

## **2015 Priority Area 2**: Injury and Substance Abuse Prevention

## **Population Level Data:**

For Jackson County residents in age groups 00-19, 20-39, and 40-64 years, injuries (whether motor vehicle or unintentional) are a leading cause of death (2016 North Carolina Vital Statistics, Volume 2: Leading Causes of Death, 2018). The main injuries that lead to death or debilitation in our community include falls, unintentional poisonings, and motor vehicle crashes.

Between 2006 and 2017, the number of Jackson County residents served by the Area Mental Health Program increased overall from 1,629 to 2,268. Over the same time period, persons served in NC State Psychiatric Hospitals decreased from 24 to 13, and the persons served in NC State Alcohol and Drug Treatment Centers increased from 17 to 36 (State Data Center, 2018). Additionally, when asked if they got needed social/emotional support, 74.4% of Jackson County residents indicated that they did, while almost 23% reported having more than 7 poor mental health days in the past month (WNCHN – WNC Healthy Impact Community Health Survey, 2018). The lack of mental health and substance abuse services present an ongoing need in our community. The increase in numbers of those served by Area Mental Health Programming and Alcohol and Drug Treatment Centers shows the importance of additional resources. From the key informant interviews and Healthy Carolinians meetings, the need for additional mental health and substance use resources has been reiterated time and time again.

## **Collaborative Efforts:**

Through the emergency services at Harris Regional Hospital a focus is placed on substance abuse including the use of Narcan and specialized training to our EMT staff.



Implementation Strategy Update			
Hospital Strategy	Evaluation/Note		
	How much did we do?		
	Specialized training to our EMT staff on narcan use and administration:		
	In 2016 we administered 22 narcan kits.		
	In 2017 we administered 54 narcan kits.		
	In 2018 we administered 37 narcan kits.		
Narcan Distribution			
	Is anyone better off?		
	Our EMS Manager stated, "We have brought several people back from an unresponsive state or even cardiac arrest by using this medication."		
	The narcan distribution and administration has saved lives in Jackson County – the people revived are certainly better off.		

## **2015 Priority Area 3**: Chronic Disease

#### **Population Level Data:**

The top three leading causes of death in relation to chronic disease are the following: cancer, heart disease, and chronic pulmonary disease.

Cancer is the leading cause of death in Jackson County. Unfortunately, we do not have any primary data related to cancer specifically from Jackson County residents, but we do have secondary data. The total cancer incidence trend from 2012-2016 was 1,032, which is a rate of 396.4, well below the WNC and State total. Unfortunately, the county sees a high incidence rate of lung cancer, with 113 cases from 2012-2016. We cannot say causation but we can indicate that smoking levels are increasing, potentially increasing the lung cancer incident rate.

Residents in Jackson County whom participated in the 2012 CHA were not asked about any diagnoses in relation to heart disease or Chronic Obstructive Pulmonary Disease (COPD), therefore, we can only assess the 2015 and 2018 data. In 2015, 5.6% respondents to the survey indicated they had been diagnosed with heart disease (heart attack, angina, coronary disease), which was below the WNC average (6.5%). That number has increased slightly, 7.7%, but the average is still below the WNC average.

COPD is the third leading cause of death in Jackson County. Approximately 15.9% of residents who responded to the survey indicated they were diagnosed with COPD in 2018, which is an 8% increase in three years. Only 7.3% residents indicated they had been diagnosed with COPD in 2015, which was the lowest percentage across WNC at the time.

# **Collaborative Efforts:**

The collaborative efforts will be the same as physical activity and nutrition. Please view those above.

Implementation Strategy Update			
Hospital Strategy	Evaluation/Note		
	How much did we do? Harris Regional Hospital with Swain Community Hospital, employed a cardiologist and expanded cardiovascular services including becoming an accredited chest pain center through the		
Chest Pain Accreditation	PROUD TO BE AN ACCREDITED CHEST PAIN CENTER		
	Society of Cardiovascular Patient Care.		
	How well did we do it?		
	We completed each task required through the Society of Cardiovascular Patient Care, including full engagement of our community.		
	Is anyone better off?		
	The percentage of action to control high blood pressure increased from 2012 to 2015 and remained steady into 2018.		
	How much did we do?		
	Harris Regional Hospital was able to open a Cardiology practice in 2017 to better care for patients in WNC.		
Opened Cardiology Practice	Is anyone better off?		
	More patients are able to be seen through the cardiology practice in Jackson County, hopefully contributing to blood pressure		

	checks as well as action to control blood pressure.
	How much did we do?
Emergency Department Renovation	We renovated our emergency department – brand new \$11-million-dollar facility opened onsite to help make our communities healthier.
A Harris Regional Hospital - Sylva, NC Grade A LeapFrog Hospital Safety Site	Is anyone better off?  Patients are being seen at a quicker and higher rate in our new emergency department facility, allowing ED doctors to identify underlying causes of ED visits.
	How much did we do?
Hospital Lunch and Learns	The opportunity for community members to attend a lunch and learn are typically offered every quarter. Lunch and learns include physicians speaking to community members on specific topic areas of choice or concern. In the previous three years several Lunch and Learns have been conducted – cardio health, physical therapy, pulmonary, and breast cancer.
	Is anyone better off?
	Although we cannot correlate these educational sessions in the community with viable data points, we can say that community members are more educated from attending these events, ultimately providing positive opportunities for health benefits.
	How much did we do?
	Steps were taken to receive accreditation for sleep labs at Harris Regional Hospital in order to hold our providers and services at a higher level for provision of care.

Earned Accreditation for Sleep Labs	
·	Harris Regional employed two midlevel for pulmonology services.
	Is anyone better off?
	Our patients are able to receive optimal care under accreditation laws.
	How much did we do?
	Community Wellness Outreach Coordinator and medical personnel provided patient education on COPD and Heart Disease in relation to appropriate diet as well as exercise.
Deployed Discharge Patient Education	Is anyone better off?
Campaign	Patients left the hospital with enriched knowledge about post care. Patients were educated and provided with a packet of information to take home giving them step-by-step guide on proper nutrients and activity. Individuals receiving discharge education are less likely to be readmitted.



## **PURPOSE**

Community Health Needs Assessment (CHNA) is a vital part of evaluating, promoting, and improving positive health outcomes within our community. The CHNA is a written report describing the current health status of the community, what has changed since the prior CHNA in 2015, and what indicators/health factors we need to impact to make our community healthier and happier.

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

In the **first phase** of the cycle, process leaders for the CHA collect and analyze community data – deciding what data they need and making sense of it. They then decide what is most

important to act on by clarifying the desired conditions of wellbeing for their population and by then determining local health priorities.

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

In the **third phase** of the cycle, process leaders for the CHA take action and evaluate health improvement efforts. They do this by planning how to achieve

Collect & Analyze **Community Data** Decide What is Most Important to Act On Continuous Continuous Phase 3 Phase 1 Oct. 2019 Jan. 2018 -Dec. 2020 Mar. 2019 Engage Ongoing Evaluation Take Action & **Evaluate Health** Community Health Strategic Planning Phase 2 Apr. 2019 Sep. 2019

customer results and putting the plan into action. Workgroups continue to meet, and monitor customer results and make changes to the plan as needed. This phase is vital to helping work groups understand the contribution their efforts are making toward their desired community results.

# **WNC Healthy Impact**

WNC Healthy Impact is a partnership and coordinated process between hospitals, public health agencies, and key regional partners in western North Carolina working towards a vision of improved community health.

We work together locally and regionally to assess health needs, develop collaborative plans, take action, and evaluate progress and impact.

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

- Standardizing and conducting data collection,
- Creating communication and report templates and tools,
- Encouraging collaboration,
- Providing training and technical assistance,
- Addressing regional priorities, and

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

# **Data Collection Process**

The set of data reviewed for our community health needs assessment process is comprehensive, though not all of it is presented in this document. Within this community health needs assessment, we share a general overview of health and influencing factors, then focus more on priority health issues identified through a collaborative process. Our needs 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 needs assessment came from the WNC Healthy Impact regional core set of data and additional local data compiled and reviewed by our local CHA team. WNC Healthy Impact's core regional dataset includes secondary (existing) and primary (newly collected) data compiled to reflect a comprehensive look at health. The following data set elements and collection are supported by WNC Healthy Impact data consulting team, a survey vendor, and partner data needs and input:

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

## **Health Resources Inventory**

We conducted an inventory of available resources of our community by reviewing a subset of existing resources currently listed in the 2-1-1 database for Jackson County as well as formalizing a committee with community partners to gather all available resources. Where gaps were identified, we partnered with 2-1-1 to fill in, and we will continue to update this information throughout committee meetings to be sure we are providing current information.

# **Community Input and Engagement**

Including input from the community is a critical element of the community health assessment process. Our county included community input and engagement in a number of ways:

- Recruitment of community members for the CHA Work Team
- Partnership on conducting the health assessment process with the CHA Work Team and Healthy Carolinians Steering Committee
- Through primary data collection efforts (surveys and key informant interviews)
- By reviewing and making sense of the data to better understand what the numbers mean
- In the identification and prioritization of health through a community meeting

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

## Timeline:

- January 24<sup>th</sup>, 2018: Healthy Carolinians Steering Committee meeting #1
- March 7<sup>th</sup>, 2018: CHA Work Team meeting #1
- March to June 2018 -- WNC Healthy Impact Community Health Survey (cell phone, landline, and internet-based survey) was conducted
  - o A random sample of 200 adults in Jackson County
- May 1<sup>st</sup>, 2018 WNC Healthy Impact Online Key Informant Survey began and left open for 3 weeks in 2018
  - 17 community stakeholders in Jackson County (please view the participation table below on page 17)
- April 4<sup>th</sup>, 2018: Healthy Carolinians Steering Committee meeting #2
- August 17<sup>th</sup>, 2018 data workbook released to health departments and hospitals across WNC
- August 29<sup>th</sup>, 2018: CHA Work Team meeting #2
- September 20<sup>th</sup>, 2018: Jackson Community Opioid Discussion
  - o 25 community members in attendance
  - Organizations represented:
    - Harris Regional Hospital
    - Rez Hope
    - Swain County Health Department
    - Mountain Projects Inc.
    - Western Carolina University
- September 26<sup>th</sup>, 2018: Healthy Carolinians Steering Committee meeting #3
- October 25<sup>th</sup>, 2018: Healthy Carolinians Steering Committee meeting #4/Priority voting meeting – priorities chosen
- February 28th, 2019 -- CHA Submitted

No written comments were received on the previous plan. There is an opportunity to provide comments on the 2018 CHA and implementation plan on the Harris Regional Hospital website.

## **Public Health Department**

North Carolina Health Departments are extremely robust and in many instances lead the CHA and Improvement process. Jackson County Department of Public Health were the conveners of the stakeholders, along with Harris Regional Hospital and WNC Healthy Impact, to gather the secondary community health information, and conducted the primary research. They also convened the Community Health meetings with Harris Regional Hospital to receive input on the health priorities.

In the collaborative assessment process for our community, the Jackson County Department of Public Health is a key partner. They provided coordination for the local process that we help support and partner to implement. We are close partners, working on the CHNA process together step-by-step.

## **Participation**

In all, 17 community stakeholders took part in the Online Key Informant Survey for our county, as outlined below:

Local Online Key Informant Survey Participation					
Key Informant Type Number Invited Number Participating					
Community Leader	21	7			
Other Health Provider	4	3			
Physician	5	0			
Public Health Representative	5	3			
Social Services Provider	6	4			

Table 1: Local Online Key Informant Survey Participation. WNCHN – WNC Healthy Impact Community Health Survey, 2018.

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

## **Survey Limitations**

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

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

sights into health issues from a group of individuals with a specific perspective.

# **Acknowledgements**

Throughout the collaborative health needs assessment process in our community, input was obtained in a number of ways. See below for a list of all of the organizations that provided input into this process, the period of time they were involved, how their input was obtained, and the nature and extent of their input

Name	Agency	Duration	Role/ Contribution	Agency Website
Alicia Parham	Jackson County Department of Public Health	2018	CHA Work Team	http://health.jac ksonnc.org/
Amber Frost	Swain County Health Department	2018	Community Opioid Discussion	http://www.swa incountync.gov/ health/health- home.html
Amy Krutsch	Jackson County Department of Public Health	2018	CHA Work Team	http://health.jac ksonnc.org/
Beth Young	Western Carolina University	2018	Community Opioid Discussion	https://www.wc u.edu/
Chelsea Burrell	Harris Regional Hospital	2018	CHNA Facilitator	https://www.my harrisregional.co m/
Dianne Cauley	Jackson County Department of Social Services	2018	CHA Steering Committee	http://www.jcds s.org/
Eddie Wells	Jackson County Department on Aging	2018	CHA Steering Committee	https://www.agi ng.jacksonnc.org /
Jackie Moore	Jackson County Department of Public Health	2018	CHA Work Team	http://health.jac ksonnc.org/
Jacob Mills	Harris Regional Hospital	2018	Community Opioid Discussion	https://www.my harrisregional.co m/
Janelle Messer	Jackson County Department of Public Health	2018	CHA Facilitator	http://health.jac ksonnc.org/
Jennifer Pressley	Jackson County Parks and Recreation Department	2018	CHA Steering Committee	https://www.rec .jacksonnc.org/
Jessica Philyaw	Jackson County Public Library	2018	CHA Work Team	http://fontanali b.org/sylva?sour ce_campaign=& utm_source=go ogle&gclid=Cj0K CQjw7sDIBRC9A

				RIsAD- pDFqIswLHGuq4 rcU2IDp1Np9FD cyM3j1mXYFsL1 T- 72hB3gGrRGkRQ u4aApt6EALw_w cB
Kallup McCoy	Rez Hope	2018	Community Opioid Discussion	
Kate Martinson	Community Member	2018	CHA Work Team	
Lara Cabe	Jackson County Public Schools	2018	CHA Steering Committee	https://www.jcp snc.org/
Marianna Martinez	Vecinos Farmworker Health Program	2018	CHA Steering Committee	http://www.veci nos.org/
Michele Carashi- Ellick	Great Smokies Health Foundation	2018	CHA Steering Committee	https://www.gre atsmokieshealth foundation.com /
Melissa McKnight	Jackson County Department of Public Health	2018	CHA Work Team	http://health.jac ksonnc.org/
Patti Tiberi	Mountain Projects, Inc.	2018	CHA Work Team	https://mountai nprojects.org/
Rebecca Mathis	Blue Ridge Health	2018	CHA Steering Committee	https://www.brc hs.com/blue- ridge-health- sylva
Rosalyn Robinson	Blue Ridge Health	2018	CHA Steering Committee	https://www.brc hs.com/blue- ridge-health- sylva
Sarajane Melton	Area Agency on Aging	2018	CHA Steering Committee	https://www.agi ng.jacksonnc.org /
Shelley Carraway	Jackson County Department of Public Health	2018	CHA Steering Committee	http://health.jac ksonnc.org/
Trevor Gates	Community Member	2018	CHA Work Team	

## Input of Medically Underserved, Low-Income, and Minority Populations

The previous identified each participant that was involved in the CHA, how long they provided their input and what groups they represented. Many of the organizations involved represent the medically underserved, low income, and minority populations.

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

Minority Populations Represented:	Medically Underserved Populations Represented:
African American	Adults
American Indian	Children
Asian	Dental Services
Children	Dental Services for Children
Disabled	Elderly
Hispanic/Latino	Hispanic/Latino
Low income	Immigrants
	Low income
	Mentally III
	Substance Abusers
	Unemployed
	Uninsured/Underinsured

# **At-Risk & Vulnerable Populations**

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

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

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

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

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

- Native American (9.6% in Jackson County)
- Below poverty level
  - 20.8% of White (83.5% identify as Caucasian/white)
  - o 61.4% of African American (3.1% identify as African American)
  - 23.2% of Natives (9% identify as Native American)
  - o 12.9% of Asians (1% identify as Asian)
  - o 56% of Hispanics (5.4% identify as Hispanic or Latino)
- Uninsured rate is below 15.7% of residents in the county, which has decreased by roughly 7% in three years.

Individuals in minority groups, the uninsured, or low-income may have unmet needs related to primary and chronic disease. In addition, those who do not have reliable transportation are at risk of poor health outcomes related to a lack of access to necessary health care, healthy food, facilities for physical activity and other resources.



# Location, Geography, and History of Jackson County

Surrounded by the Blue Ridge Parkway and Great Smoky Mountains National Park, Jackson County consists of 494 square miles of mountains, rolling hills, and fertile valleys; elevation ranges are from 2,000 to 6,000 feet above sea level. The county also boasts a vast amount of U.S. National Forest Land, notably the Nantahala National Forest (Geography, 2018). The pleasant climate and scenic beauty attracts both tourists and retirees to the area.

Jackson County is home to four main towns – Sylva (the county seat), is located in the northern portion of the county along with Dillsboro and Webster; Cashiers serves the southern end of the county and sits at an elevation of 3,484 feet (Home, 2019); There are

additional residential areas such as Cullowhee, Forest Hills, Tuckasegee, Whittier, and the Qualla Boundary, a tribal reservation for the Eastern



Figure 1: Jackson County, North Carolina. https://www.ncpedia.org/georgraphy/jackson

Band of Cherokee Indians. Notable geographic features of Jackson County include Richland Balsam, which is the Blue Ridge Parkway and county's tallest mountain peak at 6,410 feet, and Panthertown Valley, which has been described as the "Yosemite of the East." In addition, the Tuckasegee River flows 40 miles through the county and is a haven for trout fishing enthusiasts (Geography, 2018).

Interestingly, Jackson County is centrally located to three out-of-state metropolitan areas. It is 140 miles from Atlanta, Georgia; 111 miles from Knoxville, Tennessee; and 195 miles from Columbia, South Carolina. The North Carolina state capitol of Raleigh is 292 miles from Jackson County, deepening the feeling of isolation from state lawmakers and inaccessibility to resources. It is common to hear residents say that the rest of North Carolina believes the state ends in Asheville, meaning the western part of the state is forgotten about.

## History

Named for President Andrew Jackson, Jackson County was founded in 1851 from parts of Haywood and Macon Counties (Martin, 2019). Jackson County is shaped by the unique identities of its several towns and residential areas, each having its own rich history. Webster, created in the mid-1800s, was the original county seat and was incorporated in 1859. During the construction of the Western North Carolina 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, and was also a center of railway activity during the 1880s when the Western NC railroad was built. The current Great Smoky Mountain Railroad attracts a significant amount of visitors to the Dillsboro area. The county seat, Sylva, is the retail and professional center of Jackson County. Named for William D. Sylva, the town'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, 2019). That courthouse is now home to the Jackson County Public Library and is touted as the most photographed courthouse in the state.

# **Physical Environment**

## **Air & Water Quality**

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

In 2017, the Air Quality Index (AQI) measurement for Jackson County were as follows:

- 206/256 days with good air quality
- 50/256 days with moderate air quality
- Small particulate matter was present at the level of pollutant on 256 of 256 monitored days (Outdoor Air Quality Data, 2019)

Unfortunately, Jackson County encountered 197 days with O3 air pollutant, which is ground-level Ozone, harmful to individuals in the area. The United States Environmental Protection Agency developed an ambient air quality trend for particle pollution – Particulate matter (PM). The term PM2.5 refers to fine inhalable particles, with diameters typically less than 2.5

micrometers. The county experienced 59 days when the air pollutant was at a PM 2.5. 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. A screening level of 4 pCi/L is the Environmental Protection Agencies recommended action level for radon exposure. Radon is the number one cause of lung cancer. People who smoke have an even higher risk of lung cancer from radon exposure than people who don't smoke (General Radon Information, 2019). 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 (Facts about radon: Radon in Water; Radon and Geology, 2015).

Additionally, secondhand smoke, 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 (Health Risks of Secondhand Smoke, 2019). Over 25% of residents in Jackson County indicate that they have breathed someone else's cigarette smoke at work in the past week (WNCHN – WNC Healthy Impact Community Health Survey, 2018).

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, about 50% of the county's 2018 population was served by community water systems (Safe Drinking Water Search for the State of North Carolina, 2018). The remainder of the population access 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 of the fish in Lake Glenville. Based on a finding of high levels of mercury by the NC Department of Environment and Natural Resources (DENR), residents were advised not to eat walleye or largemouth bass fish. In 2016, this same advisory was extended to smallmouth bass. Toxicologists believe 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 for recreation are both indicators of health. Without access and the financial means to purchase healthy foods, residents do not have the environmental support to live a healthy lifestyle. In Jackson County, six grocery stores and four farmer's

markets exist to serve over 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 (Access and Proximity to Grocery Store, 2015, 2018). Surveyed residents were asked if they have worried in the past year about food running out before having money to buy more, and close to 19% reported that this was often or sometimes true for them.

Additionally, if residents do not have access to a safe place for recreational opportunities, whether a park, greenway, walking trail, playground, etc., they are less likely to live an active lifestyle. In Jackson County, there are four public recreation and fitness facilities available to residents (Health and Physical Activity, 2018).

## **Social and Economic Factors**

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

# Income & Poverty

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

As of November 2018, Jackson County moved from a Tier 1 to a Tier 2 designation from the NC Department of Commerce. The Tier 2 designation reflects a change in how the counties are ranked, now based only on average unemployment rate, median household income, percentage growth in population, and adjusted property tax base per capita (County Distress Rankings (Tiers), 2019). Noted in the chart below, for the 2012-2016-time period, Jackson County has a lower median household income, median family income, and per capita income than the state of North Carolina, though median household income and median family income are slightly higher than the WNC region.

Each category has increased in Jackson County since the 2011-2015-time period. Jackson County's median household income is \$7,978 lower than North Carolina's median household income (QuickFacts, 2019).

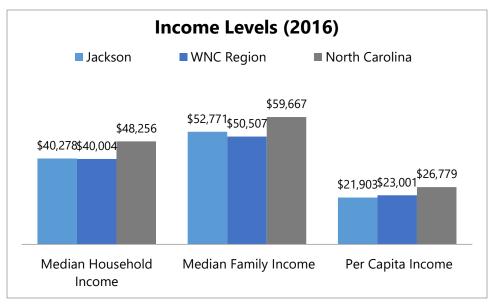


Figure 2: Income Levels. US Census Bureau, 2016.

#### Jackson

County's poverty rates continue to be higher than WNC and NC in all categories – the total population, children under 18, and

children under 5. The total population poverty rate trend in Jackson County was at 23.1% in 2016, compared to WNC (16.5%) and NC (16.8%). In Jackson County, WNC, and NC children suffer disproportionately from poverty. In Jackson County, 33.5% of children under age 18 and 36% of children under the age of 5 are living in poverty. Additionally, the Black/African American and Hispanic populations have significantly higher rates of poverty than other minority and white populations (QuickFacts, 2019).

During the 2016-2017 school year, 62.60% of Jackson County Public School students received free and reduced lunch, which is an increase from the past two school years (view table 1). All five Kindergarten-8th grade schools have greater than 50% of students receiving free and reduced lunch. Of those five schools, two of the schools have greater than 80% of their student population receiving free and reduced lunch (Data & Reports, 2019).

## Percentage of Students Receiving Free and Reduced Lunch

	2014-2015	2015-2016	2016-2017
Jackson County	59.85%	56.31%	62.6%
Western Region	58.2%	56.9%	62.3%
North Carolina	52.83%	52.48%	59.82%

Table 2: Percentage of Students Receiving Free and Reduced Lunch. Public Schools of North Carolina, 2017.

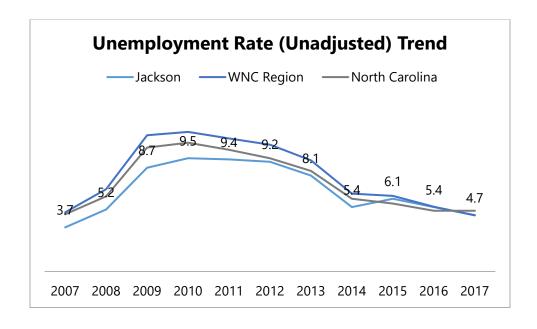
## **Employment**

"Employment provides income and, often benefits that can support healthy lifestyle choices. Unemployment and under employment limit these choices, and negatively affect both quality of life and health overall. The economic condition of a community and an individual's level of educational attainment both play important roles in shaping employment opportunities" (County Health Rankings, 2018). As of 2017, the three employment sectors in Jackson County with the largest proportions of workers (and average weekly wages) were:

- Educational Services: 21.03% of workforce (\$880.09)
- Accommodation and Food Services: 17.97% of workforce (\$328.13)
- Healthcare and Social Assistance: 13.94% of workforce (\$848.25)

Take note of the gap in average weekly wages between the Educational Services sector and the Accommodation and Food section (a difference of \$551.96 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 multiple jobs. This is a sector whose relative poverty leaves them vulnerable to emotional stress and poor health outcomes (Industries: Quarterly Employment & Wage (QCEW), 2019).

Throughout the period cited in the graph below (2007-2017), the unemployment rate in Jackson County was lower than comparable rates in the WNC region and the state until 2015. Currently, Jackson County's rate (4.7) is the same as the WNC region and slightly lower than NC (5.1; Local Area Unemployment Statistic, 2019).



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
- 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

"Better educated individuals live longer, healthier lives than those with less education, and their children are more likely to thrive. This is true even when factors like income are taken into account" (County Health Rankings, 2018). Jackson County has two opportunities for higher education within its community -- Western Carolina University and Southwestern Community College. Both colleges work closely with the community and encourage students to volunteer with events and projects.

Compared with the WNC region, Jackson County has:

- 3.8% lower percentage of persons in the population over age 25 having only a high school diploma or equivalent (2012-2016 estimate; Community Facts, 2019).
- 6.2% higher percentage of persons in the population over age 25 having a Bachelor's degree or higher (Community Facts, 2019).
- A lower overall high school drop-out rate for the 2016-2017 school year. The rate has decreased in Jackson County from 3.25 in the 2014-2015 year to 1.54 in the 2016-2017 school year (Annual Reports, 2019).

## **Community Safety**

"Injuries through accidents or violence are the third leading cause of death in the United States, and the leading cause for those between the ages of 1 and 44. Accidents and violence affect health and quality of life in the short and long-term, for those both directly and indirectly affected, and living in unsafe neighborhoods can impact health in a multitude of ways" (County Health Rankings, 2018). Community safety means not only violent acts in neighborhoods and homes but also unintended injuries such as, 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 Navigator, 2019).

The index crime (the sum of all violent and property crimes), 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 2001-2016 (NC Department of Justice, 2018).

## Housing

"The housing options and transit systems that shape our communities'-built environments affect where we live and how we get from place to place. The choices we make about housing and transportation, and the opportunities underlying these choices, also affect our health" (County Health Rankings, 2018). 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 WNC or NC (Financial Characteristics, 2019).

## Family & Social Support

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

One measure of family and social support is the percentage of children in family households, particularly those 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 average (Households & Families: 2010, 2019).

Data from the community-wide telephone survey conducted in Jackson County provides additional insight into the social/emotional support of county residents. When asked about social/emotional support, 74% of residents state they "always" or "usually" get the support they need. Unfortunately, this number has declined since 2015 (80%). A percentage that has increased, 11% of county residents stated they did not get the mental health care or counseling that was needed in the past year. Additionally, 15% stated they are "dissatisfied" or "very dissatisfied" with life, a number that has increased since 2015 (7%) (WNCHN – WNC Healthy Impact Community Health Survey, 2018).

"Adverse childhood experiences (ACEs) are a significant risk factor for substance use disorders and can impact prevention efforts. ACEs are stressful or traumatic events, including abuse and

neglect. They may also include household dysfunction such as witnessing domestic violence or growing up with family members who have substance use disorders. ACEs are strongly related to the development and prevalence of a wide range of health problems throughout a person's lifespan, including those associated with substance misuse" (Adverse Childhood Experiences, 2019). During the 2018 telephone survey in Jackson County, residents were asked a series of questions to determine their ACE score, where having 4 or more is considered high and to significantly increase your risk for poor health outcomes.

In Jackson County, 9.3% of residents have a high ACE score, which is lower than the WNC region (15.9%). Compared to the WNC region, Jackson County residents have higher percentages in the following categories: emotional abuse, intimate partner violence, incarcerated household member, and sexual abuse (WNCHN – WNC Healthy Impact Community Health Survey, 2018).



# **Population**

In 2017, 42,973 residents lived in Jackson County, which is a 6.7% increase from 2010. The majority of residents are Caucasian (85.2%) with minorities represented as follows: American Indian/Alaskan Native (8.2%), Hispanic/Latino (5.8%), African American (2.3%), and Asian (1.0%) (QuickFacts, Jackson County, North Carolina, 2018). Jackson County has a significantly larger proportion of American Indians and significantly lower proportion of African Americans and other minority groups than the WNC region and the state of NC. The median age of Jackson County residents is 37.1 years – 8.8 years younger than the WNC regional average and 1.2 years younger than the NC average. Jackson County has the same proportion of younger persons (19.7% ages 5-19 years) and higher proportion of older adults (17.5% ages 65+) when compared to NC. The majority of residents reside in the northern portion of the county, particularly in Cullowhee around Western Carolina University.

The birth rate in Jackson County seems to be falling in recent years (from 11.3 in 2006-2010 to 9.4 in 2012-2016), which is a trend seen in WNC and NC. Jackson County's birth rate is in line with WNC and lower than NC (Statistics and Reports, Vital Statistics, 2019). In Jackson County, there are 16,048 households. In households where children are 18 years or younger, 2,054 of the households are headed by a married couple, 1,121 are headed by a single female, and 438 are headed by a single male. Additionally, 621 grandparents live with their grandchildren under age 18, and 260 of those grandparents are also financially responsible for their grandchildren (Selected Social Characteristics in the United States (DP02): 2016 ACS 5-Year Estimates, 2018). In relation to children, Jackson County's high school dropout rate recently declined and is the lowest it has ever been (Educational Attainment: 2012-2016 American Community Survey 5-YearEstimates, 2018).

Alarmingly, the homeless population increased significantly in many WNC counties in 2017. In Jackson County, there were 38 homeless people in 2017 (an increase from 2 in 2015), which

sadly includes 20 homeless children (2017 Point-in-time Count: North Carolina Balance of State - by County, 2018). Currently, finding adequate housing for individuals and families especially during the harsh winter months has proven difficult. This has quickly become an issue in the county and local leaders and advocates are discussing ideas and solutions.

In Jackson County, the overall life expectancy for residents is 78.2 years. This is both higher than that of WNC (77.7 years) and NC (77.4 years).

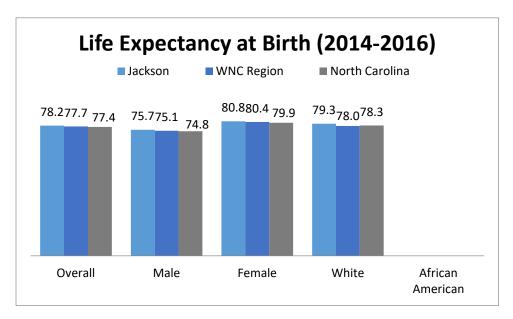


Figure 4: Life Expectancy at Birth (2014-2016). NC State Center for Health Statistics, 2016.

The leading causes of death in Jackson County mirror those of NC -- Total cancer, diseases of the heart, and chronic lower respiratory disease (CLRD) are the top three leading causes of death in our community (2016 North Carolina Vital Statistics, Volume 2: Leading Causes of Death, 2018).

			Jackson	
Rank	Cause of Death	#	Death	
		Deaths	Rate	
1	Cancer	414	161.0	
2	Diseases of Heart	363	151.7	
3	Chronic Lower Respiratory Diseases	125	49.7	
4	All Other Unintentional Injuries	91	47.0	
5	Cerebrovascular Disease	65	28.9	
6	Diabetes Mellitus	69	28.2	
7	Alzheimer's disease	63	27.8	
8	Chronic Liver Disease and Cirrhosis	40	18.1	
9	Suicide	39	17.5	
	Nephritis, Nephrotic Syndrome, and			
10	Nephrosis	36	16.0	
11	Pneumonia and Influenza	34	14.5	
12	Unintentional Motor Vehicle Injuries	19	9.4	
13	Septicemia	22	8.3	
14	Homicide	6	2.9	
15	Acquired Immune Deficiency Syndrome	2	0.9	
All Cau	ses (some not listed)	1,800	762.0	

Table 3: Cause of Death. NC Center for Health Statistics, 2018.

Roughly 10% of the sample in Jackson County identified as Native American. As a portion of the Cherokee Indian Reservation is housed in Jackson County, it is pertinent to include the Native American population in our community served. According to the Indian Health Services, American Indians and Alaskan Natives born today have a life expectancy that is on average 5.5 years less than all races in the U.S. (Indian Health Service, n.d.). American Indians and Alaskan Natives continue to die at a higher rate than other Americans due to chronic liver disease and cirrhosis, diabetes, unintentional injuries, assault/homicide, and chronic lower respiratory diseases (Indian Health Service, n.d.).

# **Community Served**

Harris Regional Hospital's health information provided the basis for the geographic focus on the CHNA. The map below shows where Harris Regional Hospital received patients; most of the hospital's inpatients came from Jackson County. Specifically, approximately 1,703 in-patient experiences were residents whom indicated they resided in Jackson County, which is roughly 42% of our patients at Harris Regional Hospital. It was reasonable to select the Harris Regional Hospital as a primary focus of the CHNA due to 42% of inpatient activity traffic to the hospital

being from Jackson County. With that being said, surrounding counties could benefit from efforts to improve health in the county.

The service area for Harris Regional Hospital includes medically underserved, low-income and minority populations who live in the geographic area from which the hospital draws its patients. All patients were used to determine the service area without regard to insurance coverage or eligibility for financial assistance under the hospitals financial assistance policy.

## Harris Regional Hospital Patients - 2018



Figure 5: 2018 Planning Service Area Definition. Casemix, 2018.

## **CHAPTER 5 -- HEALTH NEEDS IN OUR COMMUNITY**



### **Health Status**

Data on the health status of our community <u>Jackson County</u>, and health factors that influence health are included in the full community health assessments for Jackson County linked above.

The collaborative local assessments include a <u>basic review</u> of trends and progress and changes <u>in health status</u> for the broad community. These assessments also include <u>details on populations at risk or facing health disparities</u> in our community.

### **Health Status & Behaviors**

In 2016, Jackson County was ranked 63<sup>rd</sup> overall (out of 100) in county health rankings. The county was ranked 30<sup>th</sup> in health outcomes, including—length of life, quality of life, and overall health rank. Ranking of county health factors were as follows:

- Health Behaviors 60<sup>th</sup>
  - Includes adult smoking, adult obesity, physical inactivity, access to exercise opportunities, alcohol-impaired driving deaths, and more.
- Clinical Care 64<sup>th</sup>
  - o Includes uninsured, primary care physicians, dentists, mental health providers, mammography screenings, and more
- Social & Economic Factors 48<sup>th</sup>
  - Includes high school graduation, unemployment, children in poverty, social associations, violent crime, and more.
- Physical Environment 87<sup>th</sup>
  - o Includes air pollution-particulate matter, drinking water violations, severe housing problems, and more.

As the county is below the 50<sup>th</sup> quartile in terms of health factors, the health outcome rankings appear to be more positive. Although health factors appear to be negative, it does not seem to reflect in resident's perceptions of Jackson County as a place to live – respondents' negative perceptions of the county as a place to live decreased in the prior three years (WNCHN – Online Key Informant Survey, 2018). Further, only 11.7% surveyed indicated the county was a "fair/poor" place to live, which is on average with WNC responses. Approximately 15.6% of residents stated they experienced "fair" or "poor" overall health, which is lower than WNC, NC, and national averages, indicating that Jackson County is experiencing more overall positive

health outcomes when compared (view graph below; WNCHN – Online Key Informant Survey, 2018).

# Experience "Fair" or "Poor" Overall Health

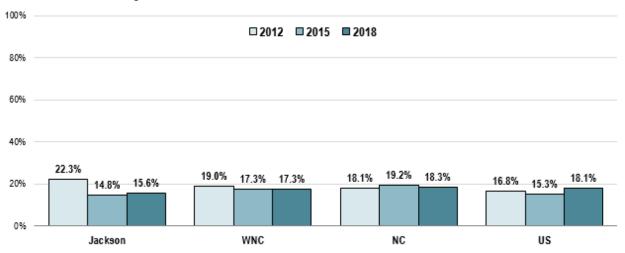


Figure 6: Experience "Fair" or "Poor" Overall Health. WNCHN – WNC Healthy Impact Community Health Survey, 2018.

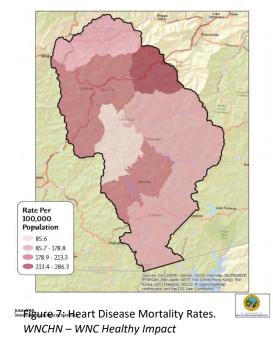
### **Chronic Disease and**

### Health

Chronic disease is a notable issue in Jackson County, particularly cancer, heart disease, chronic lower respiratory disease, and diabetes.

Cancer is the leading cause of death in Jackson County, with colorectal, prostate, lung, and breast, being dominant in this community. With that being said, Jackson County has seen a decrease in prostate, lung, and breast cancer over time, but we are not seeing a decrease in colorectal cancer. Further, incidence rates during the 2012 to 2015 period have also decreased for all of the dominant cancers listed above. Over ¾ of these specific cancer types are available for periodic community screening.

The second leading cause of death in Jackson County is cardiovascular disease, which includes heart attack, angina, or coronary heart disease. Roughly 7% of respondents to the survey indicated they had been diagnosed in 2018 with cardiovascular disease, which



Community Health Survey, 2018.

is less than the WNC average (8%; WNCHN – WNC Healthy Impact Community Health Survey, 2018). According to the maps developed by the NC State Center of Health Statistics, heart disease mortality is most prevalent in a distinct geographic pattern, with the Balsam area of Jackson County having the highest indicated rate (213.4-286.3; view figure 7 above). The Sylva/Dillsboro and Glenville areas experienced high rates as well, with a rate of 178.9-213.3.

Unfortunately, high blood pressure diagnoses continue to increase in the county – the data showed a 6% increase in three years after decreasing in 2015 (WNCHN – WNC Healthy Impact Community Health Survey, 2018). As we see blood pressure diagnoses increase, we are also seeing a maintenance of individuals in Jackson County taking action to control their high blood pressure. Roughly 89% of residents in the survey reported taking action in both 2015 and 2018, which is a little lower than the WNC average.

The third leading cause of death in Jackson County is Chronic Lower Respiratory Diseases. Residents who participated in the Community Health Survey in 2012 were not asked about a Chronic Obstructive Pulmonary Disease (COPD) diagnosis, therefore, we can only assess the previous three years of evidence. Approximately 15.9% of individuals surveyed in 2018 stated they had been diagnosed with COPD, which has doubled in three years (7.3%). Jackson County is above the WNC average (13.9%) in regards to COPD diagnoses.

Diabetes is also a prevalent topic within this county. In 2018, 12.1% of residents reported having diabetes, which has tripled since 2015 (4.7%). The population with Diabetes in Jackson County is below the WNC average, however, the generous jump in three years is extremely concerning.

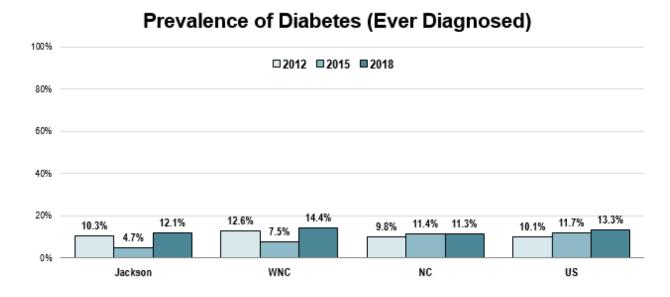


Figure 8: Prevalence of Diabetes. WNCHN – WNC Healthy Impact Community Health Survey, 2018.

### **Maternal & Infant Health**

The pregnancy rate in Jackson County for women aged 15-44 years appears to have decreased since 2007. Jackson County has experienced a slight decrease (current rate of 48.1 compared to 64.7 in 2007), while WNC (63.5) and NC (72.2) have remained stable since 2011. The teen pregnancy rates have fallen significantly since 2007, when Jackson County's rate was as high as 47.9 per 1,000 women ages 15-19. As of 2017, the teen pregnancy rate increased to 23.1, but this rate is still under the 2007 record high (2017 Reported Pregnancies, 2019). Among Jackson County women age 15-44 years, the highest pregnancy rates appear to occur among American Indian women with a rate of 91.5.

Further, among teens age 15-19 years, the pregnancy rates per race are unstable due to low numbers, however, the numbers of pregnancies are as follows: White/Non-Hispanic: 24; American Indian/Non-Hispanic: 14; Hispanic: 7; African-American/Non-Hispanic: 1; Other: 0 (2017 Reported Pregnancies, 2019.

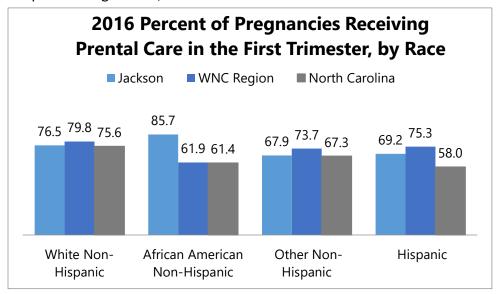


Figure 9: 2016 Percent of Pregnancies Receiving Prenatal Care in the First Trimester, by Race. *Birth Indicator Tables by State and County.* 

Jackson County has a history of

women receiving prenatal care in their first trimester – roughly 74% of women received care in 2016, which is above the state average. Please view the figure to the left for a breakdown of prenatal care by race.

One of the difficult issues we face in the WNC region is women smoking during pregnancy; WNC has nationally 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 exceed 20% (22% in 2017). Unfortunately, the rate for prenatal smoking continues to increase and indicate an upward trend regardless of prenatal care usage.

The infant mortality rate in Jackson County appears to vary from year to year. The overall infant mortality rates of the county are unstable or suppressed, as are all the racially stratified rates. During the 2012-2016-time period, there were 15 infant deaths in Jackson County, compared to an arithmetic mean of 15 in the WNC region (Infant Death Rates *Source: NC State Center for Health Statistics* per 1,000 Live Births, 2012-2016, 2018).

### **Injury & Violence**

Falls reported among those 65 years or older appears to be steadily climbing, however, no data was reported in 2018. Data in 2012 indicated that 22.9% reported falling and 2015 indicated that 37.8% reported falling, which is a significant increase in falls (WNCHN – WNC Healthy Impact Community Health Survey, 2018). Based on these statistics we could make an assumption that 2018 would have resulted in an incline matching that of the 2012-2015.

### **Substance Use**

In 2018, more rural community residents were reporting overwhelming concerns about opioid addiction. According to the North Carolina Opioid Dashboard, in the fourth quarter of 2017, 567,000 pills were dispensed in Jackson County, and by the end of the year 2,417,000 pills were dispensed. Harris Regional EMS saw a dramatic increase in narcan use from 2016 (22) to 2017 (54), indicating the rise of abuse/misuse of opioids. In a positive trend, the number of narcan use decreased from 2017 (54) to 2018 (37). It is important to note this is not including any administrations outside of Harris Regional Hospital Emergency Management Services. At the end of the third quarter in 2017, six individuals died from an unintentional opioid incident, further, data, showed that approximately 50% of drug related deaths involved fentanyl. Less than ten individuals were brought into the Harris Regional Hospital's Emergency Department for an overdose diagnosis. In 2016, the opioid prescription rate in Jackson County was one of the lowest in WNC (5.33%), and the prescription rate has dropped by roughly .68%, which is also one of the highest in WNC (North Carolina Department of Health and Human Services, 2017). The prescription rates in Jackson County indicate a support in lower prescribing, and these rates are continuing to be on the decline.

According to the primary survey conducted in 2018, individuals reported an 8% decrease in social and emotional support available in Jackson County over the past three years— in 2012 82% reported having positive social and emotional support available, 2015 80% reported having support available, and 2018 reported 74.4% support availability (WNCHN — Online Key Informant Survey, 2018). An 8% decrease is a tremendous divot in mental health support within Jackson County. Participants in the survey also indicated a significant increase in more than seven days of poor mental health; view the figure below. Further, individuals are indicating an upward trend in dissatisfaction with life — a 10% increase in six years and 5% higher than the WNC average.

# >7 Days of Poor Mental Health in the Past Month

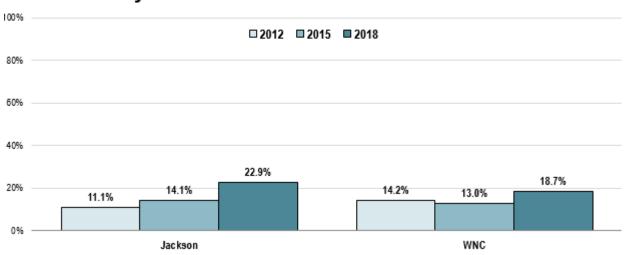


Figure 10: >7 Days of Poor Mental Health in the Past Month. WNCHN – WNC Healthy Impact Community Health Survey, 2018.

### **Yearly Wellness Exams**

We are seeing am upward trend among those seeking a yearly wellness exam; in 2018, 78% reported they had gone to a physician for a checkup in the prior year, which is 8% higher than 2015 (69.3%; WNCHN – WNC Healthy Impact Community Health Survey, 2018). In 2018, Jackson County had the highest rate in WNC for the percentage of individuals who received a routine checkup in the previous year. However, with that being said we are seeing confounding data, as we are also seeing a perceived decrease in medical access – roughly 9% of residents surveyed indicated they were unable to get needed medical care in the previous year. Jackson County also had the highest rate of people who visited a dentist or dental clinic within the previous year in 2018 (73% in comparison to WNC at 61.6%, NC at 63.6%, and US at 59.7%; WNCHN – WNC Healthy Impact Community Survey, 2018).

### **Clinical Care & Access**

The secondary data in 2017, communicated a high ratio of health professionals to the community served. The number of health professionals in 2017 in accordance with the number of active health professionals per 10,000 population ratio is as follows: 21.1 physicians, 7.2

primary care physicians, 3.5 dentists, 82.3 registered nurses, 3 physician assistants, and 9.5 nurse practitioners (North Carolina Health Professions Data System, 2017). The healthcare workforce in Jackson County is gaining in some areas but remaining average. Roughly 33.3% of the dentists are over the age of 65, with the physicians closely behind at 23.1% (North Carolina Health Professions Data System, 2017). It is important to note that these numbers were not updated in 2018, which would have reflected an increase in staffing at Harris Regional Hospital.

Roughly 78% of individuals surveyed denoted seeing a doctor in the prior year, which is the highest in WNC. 81.4% of Jackson County residents reported having a specific source of ongoing medical care, which is on average with the WNC average (80.9%), but higher than the national average (74.1%). 68.7% of women participating in the survey communicated that they had a mammogram in the past two years, which indicates a 6% decrease in three years, and is marginally lower than WNC, NC, and the national average (WNCHN – WNC Healthy Impact Community Health Survey, 2018).

Jackson County has an average percentage among those **without** health insurance in WNC from ages 18 to 64, meaning roughly 85% of the population in Jackson have health insurance. (WNCHN – WNC Healthy Impact Community Health Survey, 2018). Only 15.7% of respondents indicated they did not have health insurance, which is equivalent to the WNC average of 15.1%.

In 2017, there were 8,727 individuals eligible for Medicaid in Jackson County. Of those individuals authorized for Medicaid, the distribution is as follows: 2,922 Aid to Families with Dependent Children (AFDC), 1,455 infants and children, 1,084 disabled, 662 family planning, 569 aged, 23 foster care, 56 pregnant women, and 7 blind (Medicaid North Carolina, Annual Report, 2017).

The licensed facilities reported are limited in Jackson County. There are only two licensed adult care facilities – Morningstar Assisted Living and The Hermitage (North Carolina Department of Health and Human Services, 2018). The Morningstar Assisted Living has a max capacity of 55 residents, and The Hermitage has a max capacity of 90 residents. Tsali Care is located on EBCI Reservation and has a max capacity of 60 residents. Jackson County also has two nursing homes – Blue Ridge on the Mountain and Skyland Care Center. Blue Ridge on the Mountain has a max capacity of 106 residents, and Skyland Care Cetner has a max capacity of 94 residents. Further, the county houses three home health establishments that collaborate to provide the best care possible – Harris Home Health, Harris Palliative Care and Hospice, and Home Care Partners.

Jackson County has the rare privilege to house nine license mental health facilities, however, over a third of these establishments are day activity and/or treatment. Unfortunately, the total capacity across nine facilities is 23 residents or patients. The need for expansive mental health services is on the forefront in the county. Residents of Jackson County indicated that 74.4% of the population surveyed felt they "always" or "usually" get needed social/emotional support

when needed, which is a 6% decrease in three years (WNCHN – WNC Healthy Impact Community Health Survey, 2018).

### Medically underserved, low-income, and minority populations

Jackson County residents who completed the survey indicated that roughly 15.6% are in "fair/poor" overall health, indicating health disparities. The county is predominantly comprised of Caucasian Americans, with well over half of the population identifying as "white" (83.5%). The next highest race and ethnicity identification within the county is Native American, and approximately 8.5% identify as Native American, which is 6,504 individuals. The highest level of poverty is seen among African American residents of the county, whom make up 3.1 % of the population.

The low-income and underserved individuals are of the highest percentage among African Americans, Hispanics, and Asian Americans, both making up less than 10% of the population in Jackson County.

- Native American (8.5%)
- Below poverty level
  - o 61.4% of Black
  - o 56% of Hispanics
  - o 50% of Asians
  - o 23.2% of Natives
  - o 23.1% of Caucasian

The percentage of people unable to get needed medical care in the previous year in Jackson County rose by roughly 5% in three years; in 2015, 4% surveyed indicated they were unable to receive medical care within that year, and in 2018 that number jumped to 8.6%. Although the population indicating a need for medical care increased, the lack of health insurance between the ages of 18 and 64 decreased. The community saw an approximate 7% decrease among those without health insurance, which is a great sign for the county.

### **Health Issues**

### **Process**

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

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

Participants used a modified Hanlon method to rate the priorities using the criteria listed above. Then dot voting and various techniques were used to narrow the top two priority health issues.

### **Identified Indicators**

During the above process, the CHA Action Team identified the following health indicators to present in the public meeting for a vote:

- **Obesity**: A weight that is higher than what is considered healthy for a specific height. 42.2% of the population in Jackson County reported being obese, which is a 6% increase in 3 years.
- Physical Activity: Movement that is produced by skeletal muscles requiring caloric expenditure. Approximately 22.3% surveyed reported participating in no physical activity.
- **Nutrition**: Obtaining the recommended amount of nutrients within a day yielding positive health results. Only 7.3% of people surveyed indicated that they got 5 or more servings of fruits and/or vegetables in a day, which was 2% decrease in three years.
- **Substance Abuse**: 17.5% of people surveyed reported using opiates/opioids in the past year with (or without) a prescription, and in conjunction, 47% reported their life being negatively affect by substance abuse.
- **General Mental Health**: Approximately 22.9% of respondents to the survey indicated more than 7 days of poor mental health in the prior month, which is an 8% increase in three years. Further, roughly 11% of survey participants reported not getting mental health care or counseling that was needed in the previous year, which is a 4% increase.
- **Food Insecurity**: Jackson County's percentage of food insecurity is lower than the WNC and national average, however, it is still of concern at 18.9%.
- Housing: Housing costs above 30% of household income is steadily increasing in Jackson County. Roughly 16.3% of households with an income less than \$20,000 are spending it on housing.

### **Identified Priorities**

During the public meeting, these indicators were presented via powerpoint to the attendees. The attendees were then provided a worksheet indicating the three criteria – feasibility, impact, and relevance to the community. Following the worksheet, attendees from the community

then voted using the dot vote method to narrow down the indicators to two priorities. The following priority health issues are the final community-wide priorities for our county that were selected through the process described above:

- 1. Obesity/Physical Activity/ Nutrition Healthy eating and physical activity originally emerged as health priorities during the 2011 Community Health Assessment. While much community effort has occurred to combat these issues, there is still much to be done. Jackson County has a wide margin of residents practicing unhealthy habits that promote an increase in overweight/obesity rates. During the prioritization process, many community members voted for the following identified health issues:
  - a. Obesity
  - b. Physical activity
  - c. Childhood obesity, ages 5-11

Additionally, food insecurity received many votes during the prioritization process. The CHA Steering Committee opted to combine this health issue with obesity/physical activity/nutrition due to the current work with the Jackson County Farmers Market, Cullowhee Community Garden, and other food relief partnerships.

- 2. Substance Abuse Prevention Substance abuse originally emerged as a health priority during the 2011 CHA process as well. Topics identified during the prioritization process were:
  - a. Prescription drug misuse
  - b. Deaths with heroin/fentanyl
  - c. Youth tobacco use (e-cigarette emphasis)

In terms of feasibility, the increase of youth tobacco use with the popularity of e-cigarette products has become a main concern of public school officials and families in Jackson County.



# **Priority Health Issues**

### Priority Indicator #1: Obesity/Physical Activity/Nutrition

Physical activity and nutrition have been identified as a priority in Jackson County for over six years. The priorities have been identified in a variety of formats but the main principle has continued to be weight, activity, and nutrition. Prior to 2015, there were two separate action teams for physical activity and nutrition, however, after the 2015 community health assessment, the two action teams merged to form the CHA Action Team. As the two groups

merged, specific areas of focus also came to fruition – the goals of the group were and are to increase the number of adults who participate in 150 minutes or more of physical activity per week, and increase the number of residents who consume 5 or more servings of fruits/vegetables per day. According to the primary data, the percentage of Jackson County residents whom meet the recommended 150 minutes of physical activity is 21.7% in 2018, however, this question was asked differently in 2012 and 2015, therefore, we cannot compare these data points. With that being said, we do know that there has been a significant decrease in the percentage of residents consuming the recommended amount of fruits/vegetables, from 9.2% in 2015 to 7.3% in 2018. These numbers are an indication that Jackson County needs to continue to work on fruit/vegetable consumption to aid in obesity prevention and healthy behaviors in our community. Harris Regional Hospital, the Jackson County Health Department, Jackson County Department on Aging, Jackson County Parks and Recreation Department, Jackson County Public Schools, Western Carolina University, Southwestern Community College, Jackson County Farmers Market, Great Smokies Health Foundation, and Jackson County Department of Social Services are a few of the agencies who have worked diligently to address these needs within the community, and will continue to do so moving forward.

The Obesity/Physical Activity priority will also include obesity prevention and food insecurity as a subset. Obesity fits well with fruit/vegetable consumption as well as physical activity. Food insecurity prevention fits well with the groups identified above. The CHA Work Team and CHA Steering Committee, with input from the community, decided that Obesity/Physical Activity/Nutrition was still a prominent health issue in Jackson County and deserves to be at the forefront of our efforts.

## **Data Highlights**

### **Health Indicators**

As poor nutrition and physical activity go hand-in-hand, the outcome of both can be overweight/obese. The Healthy People 2020 Target for healthy weight is 3.9% or higher, and in Jackson County, only 22.2% of residents self-reported a healthy weight (view figure 8 below). This is a significant decrease from 2012 (37.6%) and 2015 (30.3%). As the number of residents reporting a healthy weight is decreasing, the number of individuals reporting being overweight

or obese is simultaneously increasing – 77.2% of Jackson County residents are overweight or obese, a data point that has increased significantly from 62.5% in 2012. Further, the overweight or obese increase has also impacted our children ages 2 to 18. Approximately 30% of children are currently classified as overweight or obese, with Jackson County having a higher percentage of obese children compared to WNC and NC (Obesity in Children Ages 2 to 18 by County, 2017).

# **Healthy Weight**

(Body Mass Index Between 18.5 and 24.9) Healthy People 2020 Target = 33.9% or Higher



Figure 11: Healthy Weight. WNCHN – WNC Healthy Impact Community Health Survey, 2018.

Residents of Jackson County indicated they ate significantly less than the recommended fruit and vegetable serving (5 servings a day) within the past week. Although roughly 7.3% of residents are meeting the recommended amount of fruit/vegetable consumption per week, this percentage is ~1% higher than the WNC average in 2018. Jackson County has averaged a higher consumption rate of fruits/vegetables per day in comparison to WNC, however, the county average took a dip in 2018, from 9.2% in 2015 to 7.3% in 2018 (WNCHN – WNC Healthy Impact Community Health Survey, 2018).

# Consume Five or More Servings of Fruits/Vegetables Per Day

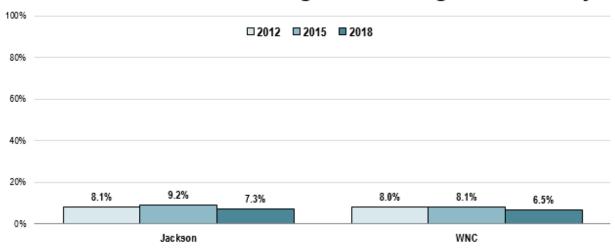


Figure 12: Consume Five or More Servings of Fruits/Vegetables Per Day. WNCHN – WNC Healthy Impact Community Health Survey, 2018.

In 2018, the primary data results showed a dramatic increase among adults who did not participate in leisure-time physical activity. Less than a quarter of Jackson County residents surveyed reported meeting physical activity recommendations of 150 minutes or more of physical activity per week (see figure 10 below). Approximately 28% of residents showed limitation in activity during the year of 2018, which is a 6% increase in three years (WNCHN— WNC Healthy Impact Community Health Survey, 2018). In 2012 and 2015, 97% of respondents to the survey suggested that easier access to activity space is important, however, this was question was not asked in 2018, therefore, we cannot review current data. Further, roughly 29% of the key informants indicated that recreational/outdoor activities are significant components of a healthy community. This data proves that activity spaces are important to Jackson County residents, and begs the question, if residents had access to safer activity space, would it change the health of our community? Jackson County does offer safe places to participate in physical activity, but some residents must travel 30 minutes or more to reach a park or safe walking space. The mountain terrain provides an excellent back drop as well as recreational activity, however, it makes it improbable to walk as transportation without sidewalks, which presents a seemingly insurmountable challenge for a large portion of our community.

## No Leisure-Time Physical Activity in the Past Month

Healthy People 2020 Target = 32.6% or Lower

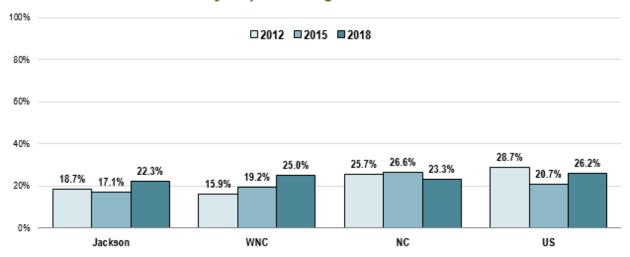


Figure 13: No Leisure-Time Physical Activity in the Past Month. WNCHN – WNC Healthy Impact Community Health Survey, 2018.

As a part of the obesity/physical activity/nutrition priority, food insecurity was targeted as subset to work on in Jackson County. During the year of 2018, almost 19% of Jackson County reported worrying about running out of food before having money to buy more (view figure 11 below). Our food insecurity percentage is estimated to be lower than the WNC and national average, and although this is a phenomenal statistic we should be proud of, there is still work to be done. Essentially, 20% of our population is food insecure, which is 1/5 of our population, and we ultimately want that number to be 0.

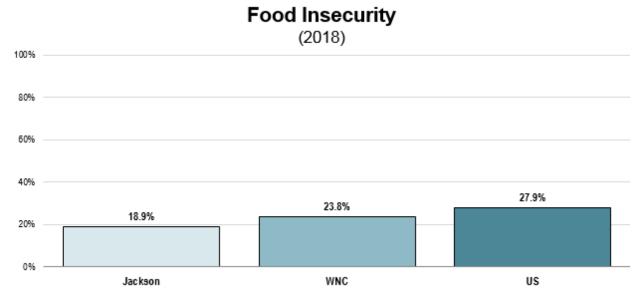


Figure 14: Food Insecurity. WNCHN – WNC Healthy Impact Community Health Survey, 2018.

### **Understanding the Issue**

Key informants were given a list of chronic disease and known factors that contribute to those diseases, then asked to select up to three health concerns that are the most critical to address in Jackson County. Residents indicated that obesity/nutrition/physical activity were the top priority in the community, followed by diabetes and heart disease (view table 4). Further, during the key informant surveys, recreational/outdoor activities were ranked #2 as most important characteristic of a healthy community, followed by healthy lifestyles as #3.

Rank	Health Issue	ldentified as Critical to Address
1	Obesity/Nutrition/Physical Activity	15
2	Diabetes	12
3	Heart Disease/Stroke	8
4	Chronic Pain	6
5	Cancer	4
6	Chronic Obstructive Pulmonary Disease (COPD)	1
7	Upper Respiratory Diseases (such as Asthma)	1
8	Arthritis/Osteoporosis	1
9	Chronic Kidney Disease	0

Table 4: Ranking of Chronic Disease Issues as Critical to Address. WNCHN – WNC Healthy Impact Community Health Survey, 2018.

Key informants were extremely complimentary on recreational/outdoor activities, indicating positive experiences with the walking trails, bike lanes, local parks, fitness centers, and nutrition education. One community leader said, "What works are current employer initiatives and work with Harris Regional to support people making exercise and nutrition choices. I am thinking of the WNC Get Fit Challenge." Another key informant participant stated, "Wellness programs for county employees, great extension office, farmers market." These positive experiences prove that we have initiatives and spaces that are allowing residents to participate in healthier life choices that influence obesity/nutrition/physical activity outcomes.

When asked what is getting in the way of progress, key informants reported impedances of progress on these health conditions — "The options are not reaching people in lower income brackets. People still don't have time and transportation options for taking advantage of regular fitness practices," "Awareness of classes likely low. Cultural and community routines and ritual include unhealthy diet and lifestyle choices. Limited availability of free walking paths and places for physical activity," "General lack of interest in making a positive sustained change," and "Time constraints for families can tend to lead to poor meal choices." (WNCHN — Online Key Informant Survey, 2018).

Fully evaluating this issue, we know it is difficult to adopt healthy behaviors if we do not live in a conducive environment to promote success. Proper nutrition, physical activity, and health are closely related to obesity and chronic disease. These topics could be considered social norms and traditions as well as geography and the economy. In rural counties, there are limited well-paying jobs, high cost of housing resulting in commute, less money for groceries and recreation, and limited access to stores that sell nutritious food.

In relation to food insecurity, Manna Food Bank, The Community Table, and assistance from faith groups were listed as contributing to progress on this issue in our community. A social services provider stated that, "Community gardens, access to SNAP, free/low cost meals at schools, meals available at community food banks and food programs" are making a difference for our residents (WNCHN-Online Key Informant Survey, 2018). Key informants stated that a lack of awareness on the issue and a better distribution system is needed to improve progress. Further, many food insecurity services are stocked with prepackaged, unhealthy foods. Encouraging donators to provide healthier options could help those accessing the services have more opportunity to partake in better nutrition (WNCHN-Online Key Informant Survey, 2018).

Although Jackson County has an outdoor friendly environment, a large percentage of the community does not have an active lifestyle. Hiking and bike riding are popular recreational activities, and draw visitors into the county, however, only a quarter of the community is participating in regular physical activity despite the environmental advantages the county has to offer.

Jackson County has a long standing history of self-sustenance in producing family gardens for fresh herbs and vegetables. The county offers four reported farmers' markets, which is one of the highest offered in WNC. Although the county has several farmers' markets, eating out is an instinctual habit for the working class families. The distinct "fast-food culture" developed as a result of long distances to and from work, lack of knowledge and education, and lack of income. Families stretching their grocery budget struggle with affording nutritious food, or may not be able to travel to stores that sell nutritious items. Items provided in local food pantries typically are limited to shelf-stability, resulting in less nutritional value.

In 2016 the CDC reported that individuals who eat a healthy diet and participate in regular physical activity live longer and have fewer chronic diseases, such as obesity, heart disease, and diabetes. The CDC is leading the fight against chronic disease by promoting good nutrition, regular physical activity, and a healthy weight in relation to where people are living, working, and playing (2016).

### **Specific Populations At-Risk**

All residents in Jackson County can benefit from strategies that focus on obesity, physical activity, and nutrition, the lives of at-risk populations may be greatly improved. According to the CDC, Hispanics (47%) had the highest age-adjusted prevalence of obesity, followed by Caucasians (37.9%), and non-Hispanic Asians (12.7%; Centers for Disease Control and Prevention, 2018). Unfortunately, the CDC did not include Native Americans within this data, which is an at-risk part of the population in Jackson County. In 2015, approximately 14% of children age 2 through 18 years were considered overweight, and 16.7% were considered obese (WNCHN – WNC Healthy Impact Community Health Survey, 2018).

Overall, men and women with college degrees resulted in lower obesity prevalence rates in comparison with those with less education (Centers for Disease Control and Prevention). Low income and food insecure residents within the county often do not have full access to grocery stores with nutritious options, are less likely to have their own mode of transportation, have greater availability to fast food restaurants, and live between deprivation and over-eating. Further, low income residents typically live in neighborhoods with limited physical activity resources, are less likely to participate in organized sports, and do not have equal opportunity in physical education in comparison to students of higher-income schools. Those with limited resources are unable to access many of the opportunities available within the county for physical activity or sources of nutritious.

## **Health Resources Available/Needed**

As obesity, physical activity, and nutrition have been noted as health priorities from the 2009 CHA, many health resources are available to the community, however, as funding continues to diminish, the resources are limited. There is still a vast list of resources needed to fully combat this health priority in Jackson County.

Available Health Resources				
Resource	Lead Agency	2018 Highlights		
Harris Regional Cardiology Practice	Harris Regional Hospital	Added a new Cardiologist – Dr. Dressler		
The catheterization lab	Harris Regional Hospital	Last year the hospital expanded diagnostic, treatment, and monitoring services, as well as echocardiography seven days a week.		

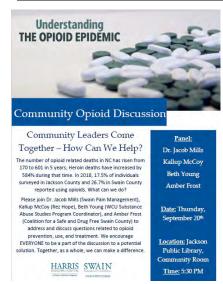
Chest Pain Accreditation	Harris Regional Hospital	Accreditation as a chest pain center signifies the hospital has met nationallydesignated standards to provide resources for early heart attack care.
Emergency Department	Harris Regional Hospital	Opened in 2017, quadrupling the size with 15 private treatment rooms.
Ascent Partnership – Tuesdays to Thrive	Harris Regional and Western Carolina University	The Ascent Partnership also features a community education component with a regular speakers series highlighting experts from the university and the local hospitals, and it will be the foundation for the hospitals' ongoing support of the university's Valley of the Lilies Half Marathon and 5K, the Catamount athletics programs, and arts functions occurring on campus through WCU's Friends of the Arts organization.
4 the Health of It	Harris Regional Hospital and Jackson County Public Schools	Over 100 participants and close to 200 lbs lost in 4 months.
Discharged Patient Education	Harris Regional Hospital	Hospital staff, including Community Wellness Outreach Coordinator, are providing patients with physical activity and nutrition information specific to a CVD or COPD diagnosis upon discharge.
Community Wellness Program	Harris Regional Hospital	Community Wellness Outreach Coordinator partners with local businesses and organizations to provide health education and/or wellness programs.

Diabetes Prevention Program	Jackson County Department of Public Health	Harris Regional Hospital providers and physicians refer to this program.
Worksite Wellness Programs	Jackson County Government, Jackson County Public Schools, Harris Regional Hospital, and MountainWise	Jackson County Government provides their own wellness program to employees.
Power of Produce	Healthy Carolinians of Jackson County, Jackson County Farmers Market, WCU Dietetic Internship Program, Great Smokies Health Foundation	
Annual Healthy Living Festival	Healthy Carolinians of Jackson County and Harris Regional Hospital	Over 40 health assessments conducted
Food relief agencies	The Community Table, United Christian Ministries, MANNA Food Bank	
Community gardens	Cullowhee Community Garden, Sylva Community Garden	
Healthy Snack Masters Competition	School Health Advisory Council	
Community Eligibility Program	Jackson County Public Schools	
Summer Feed Program	Jackson County Public Schools	
Home Delivered Meals	Jackson County Department on Aging	
WNC Get Fit Challenge	Healthy Carolinians of Jackson County and Harris Regional Hospital	
Senior Games	Jackson County Parks and Recreation Department	
Arthritis Foundation Exercise Program	Jackson County Department on Aging	

Healing Yoga	Jackson County Department on Aging and Harris Regional Hospital	
Tai Chi	Jackson County Department of Aging and Harris Regional Hospital	
At-school walking and biking programs	Active Routes to School, JCDPH	
Conning and food safety education	Cooperative Extension	

Needed Health Resources			
Resource	Potential Community Partner		
Additional greenways/sidewalks	Public Works, NC DOT, Commissioners, Greenways Committee, and Jackson County Parks & Recreation Department		
Additional recreation centers	Jackson County Parks & Recreation Department		
Nutritious food donations	Food relief agencies		
Healthy cooking classes	Jackson County Department of Public Health and Cooperative Extension		
Health education for youth	Jackson County Department of Public Health, Harris Regional Hospital, and Cooperative Extension		
Health education for parents	Jackson County Department of Public Health, Harris Regional Hospital, and Cooperative Extension		
Physical Activity Education	Jackson County Department of Public Health, Harris Regional Hospital, and Cooperative Extension		

### **Priority Indicator #2: Substance Abuse Prevention**



In the 2011 CHA cycle, the community first identified substance abuse prevention as a health priority in Jackson County. Following that Community Health Assessment process, an action team was developed to focus on reducing the percentage of 12-19 year olds who reported use of an illicit drug, alcohol, or tobacco within the prior 30 days. This action team adopted the Project Lazarus model for prescription drug use, working it into their action plan 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. The same action team decided to include unintentional injuries as a part of the focus during the 2015 Community Health Assessment as data showed

unintentional injuries as a leading cause of death in our community.

Prescription drug abuse and overdoes are large issues to tackle. The community has been diligent in working on this priority through messaging campaigns, providing lock boxes, community presentations, medication take back events, 3 medication drop boxes for the county, and much more. Harris Regional Hospital has deployed multiple continued medical education courses in hopes of reducing the prescription rate even more. In addition, the hospital has been a continued conduit for conversations in the community about substance abuse/misuse, specifically targeting information about community perceptions, wants, and needs.

In 2018, the School Health Advisory Council conducted a youth tobacco and other drug use survey in Jackson County Schools to shed light on use among youth. From the youth data as well as the primary and secondary data, substance abuse prevention is still a top priority in Jackson County. Moving forward, substance abuse prevention will remain at the forefront of community efforts, with a special focus on youth prevention.

### **Data Highlights**

### **Health Indicators**

Unintentional injury is included in all-cause mortality data, indicating that Jackson County reported 91 deaths in 2018 due to an unintentional injury, which is a rate of 47. Unintentional injuries are defined as harmful acts that occur without any true intention of causing damage to oneself or others (Cheprasov, n.d.).

Cause of Death	Jackson		Comparison to WNC Regional Average Rate		Comparison to NC Rate	
Cause of Death	# Deaths	Death Rate	Rate	% Difference	Rate	% Difference
Acquired Immune Deficiency Syndrome	2	0.9	0.9	5.9%	2.2	-59.1%
All Other Unintentional Injuries	91	47.0	45.8	2.6%	31.9	47.3%
Alzheimer's disease	63	27.8	31.7	-12.2%	31.9	-12.9%
Cancer	414	161.0	165.5	-2.7%	166.5	-3.3%
Cerebrovascular Disease	65	28.9	40.2	-28.1%	43.1	-32.9%
Chronic Liver Disease and Cirrhosis	40	18.1	13.6	33.0%	10.3	75.7%
Chronic Lower Respiratory Diseases	125	49.7	54.3	-8.4%	45.6	9.0%
Diabetes Mellitus	69	28.2	22.4	25.8%	23.0	22.6%
Diseases of Heart	363	151.7	164.4	-7.7%	161.3	-6.0%
Homicide	6	2.9	4.1	-29.1%	6.2	-53.2%
Nephritis, Nephrotic Syndrome, and Nephrosis	36	16.0	14.6	9.7%	16.4	-2.4%
Pneumonia and Influenza	34	14.5	17.4	-16.8%	17.8	-18.5%
Septicemia	22	8.3	9.0	-7.5%	13.1	-36.6%
Suicide	39	17.5	19.0	-7.7%	12.9	35.7%
Unintentional Motor Vehicle Injuries	19	9.4	15.5	-39.5%	14.1	-33.3%
All Causes (some not listed)	1,800	762.0	800.7	-4.8%	781.8	-2.5%

Table 5: Cause of Death in Jackson County Compared to the Regional and State. WNCHN – WNC Healthy Impact Community Health Survey (2018).

For people 65 years or older, unintentional falls are the number one cause of unintentional death, however, individuals in the age category of 25-64 are more likely to report unintentional poisoning with substances at home.

There is a 47.3% difference between Jackson County's death rate due to unintentional injuries and the State's death rate (WNCHN, 2018). It is important to note that the unintentional injury rate is much higher than the motor vehicle injuries statistics as well as the suicide rate.

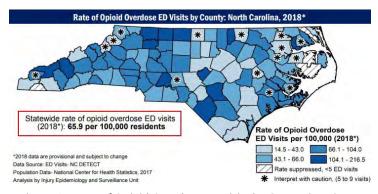


Figure 15: Rate of Opioid Overdose ED Visits by County in NC During 2018. NC Detect (2018).

In 2017, Jackson County had a high rate of opioid overdose ED visits 100,000 residents (view to the left; NC DETECT). According to the North Carolina State Center for Health Statistics, vital Statistics Death Certificate Data, Jackson County's unintentional medication and drug poisoning deaths have almost doubled in one year; in 2016 the unintentional opioid poisoning ED visit was 13 and 2017 it jumped to 24 (North Carolina State Center for

#### Health

Statistics, 2017). Further, the commonly prescribed opioid poisoning ED visit has decreased in that same year – there were 7 in 2016 and only 5 in 2017, which impresses the work being done by physicians and providers to reduce prescription rates (North Carolina State Center for Health Statistics, 2017).

The unintentional ED visits in Jackson County have dramatically increased from 2016-2017, indicated in the table below.

County	Unintentional Medication/Drug Poisoning ED Visits		Unintentional Opioid Poisoning ED Visits	
	2016 2017		2016	2017
Jackson	31 46		13	24

Table 6: Unintentional Poisoning ED Visits in 2016 and 2017. NC Opioid Dashboard (2017).

North Carolina State Center for Health Statistics indicates that unintentional poisoning ED visits in 2017 were caused by the following drugs:

- Psychostimulant (6)
  - o Adderall
  - o Ritalin
  - Mixed salts of a single-entity amphetamine product
- Benzodiazepine (2)
  - o Xanax
  - o Klonopin
  - o Valium
  - o Ativan
- Methadone (0)
- Cocaine (3)
- Heroin (1)

Unintentional opioid poisonings caused over half of the medication/drug ED visits in 2017. Opioids could include hydrocodone, oxycodone, morphine, codeine, and other related drugs. In Jackson County, 47% of those surveyed stated that their life had been negatively affected by substance abuse (either their own or someone else's). This is the same as the WNC region average, but higher than the state (37%). Additionally, 17.5% of Jackson County residents stated that they had used opioids/opiates in the past year with or without a prescription (WNCHN – WNC Healthy Impact Community Health Survey, 2018). This means a fairly substantial portion of our population is using prescription medications. Whether or not they are using them with a doctor's prescription, this still puts them at risk of misuse or a potential overdose.

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

(2018)

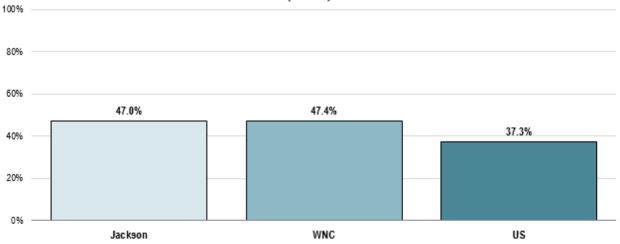


Figure 16: Life Has Been Negatively Affected by Substance Abuse (by Self or Someone Else). WNCHN – WNC Healthy Impact Community Health Survey (2018).

The top three leading causes of death in Jackson County could be related to tobacco products. According to the CDC, smoking can cause heart disease, stroke, cancer, lung diseases, diabetes, and chronic obstructive pulmonary disease (COPD; "Smoking & Tobacco Use"). The county has maintained a consistent average in the previous six years, which is a difficult task to maintain in the tar heel state – in 2012, 26.2% of respondents reported smoking and in 2018 that percentage decreased to 22.3% (WNCHN, 2018). Further, the use of smokeless tobacco was the lowest across WNC at 2.7% of residents using, which is beyond phenomenal.

Although the percentage of people smoking is stable and the use of smokeless tobacco is the lowest it has ever been, the use of e-cigarettes is the highest across WNC. The percentage of individuals using e-cigarettes is at an all-time high (10.3%), increasing by 4% in three years (WNCHN, 2018). The 2017 North Carolina Youth Tobacco Survey reported that 16.9% of high school students in North Carolina had used an e-cigarette in the previous 30 days.



Youth tobacco use rates had been steadily declining for years. Due to the popularity of electronic cigarettes, youth tobacco use rates have increased in the last few years. There is a common misconception that electronic cigarettes (also known as e-cigarettes or vaping) are a healthier alternative to traditional cigarettes, and that they can even help cigarette smokers quit. Research has shown neither to be true. In fact, most individuals who use electronic cigarette products become "dual users" meaning they also smoke cigarettes or use other tobacco products (Heart Attack Risk Doubles for Daily E-Cigarette Users, 2019).

Jackson County Public School students in grades 6th-12th were anonymously surveyed in March 2018 regarding their substance use, particularly alcohol, tobacco, and marijuana. When asked about their cigarette use in the past year, 15% of high school students and 4% of middle school students stated they had smoked all or part of a cigarette (Students, 2018). Additionally, across North Carolina in 2017, 12.1% of students have reported that they currently smoke cigarettes. These numbers may seem relatively low, but the Youth Risk Behavior Survey of North Carolina shows that more teens are getting engaging in tobacco use through electronic cigarettes. In fact, 44% of North Carolina youth in grades 9th-12th grade reported using electronic cigarettes. This means close to half of North Carolina high school students are trying tobacco in the form of the new electronic cigarettes (North Carolina 2017 Results, 2019). Unfortunately, this number has risen and is expected to keep rising. Electronic cigarettes have been heavily marketed towards youth through the fruity and child-friendly flavorings and the fact that the products can be very discreet. Some of the products resemble a flash drive and are easy to get past even the most diligent parents. In addition, the electronic cigarette products often provide very little smoke or vapor that comes from them, making them easy to use in school or at home without being noticed. As stated above, electronic cigarettes have also been marketed as a safe alternative. Parents and teens are both misled by marketing ploys into believing that electronic cigarettes are not addictive or unsafe. This is simply not true. In addition to the risks of tobacco and nicotine addiction and harmful chemicals, electronic cigarette products have been known to randomly combust causing painful and dangerous burns to the user (Burns resulting from spontaneous combustion of electronic cigarettes: a case series, 2019).

### **Understanding the Issue**

Substance abuse was identified by key informants as a the most critical condition to address in mental health (view table below). Reasons for identifying substance abuse as a problem include easy access to illegal substances, poverty, lack of treatment and support facilities, no mental health specialists in the area, minimal funding to combat the issue, not enough employment opportunities, "nothing to do" for youth, and lack of overall education. When asked to elaborate further, some were in agreement that recognition at the state and federal level that substance abuse is a mental health issue starting to trickle down into the local community (WNCHN – WNC Healthy Impact Online Key Informant Survey, 2018). In Jackson County there is still a strong stigma attached to substance abuse, indicated by harsh approaches towards those who are using. In opposition, we are also seeing professionals as well as community members taking the substance use issue very seriously.

Rank	Health Issue	Identified as Critical to Address
1	Substance Use	16
2	Depression/Anxiety/Stress	13
3	General Mental Health	11
4	Dementia/Alzheimer's Disease	5
5	Suicide	2

Table 7: Ranking of Mental Health Conditions as Critical to Address.

WNCHN - WNC Healthy Impact Key Informant Survey, 2018.

Key informants were asked to identify what is contributing towards progress on substance abuse prevention, and their responses were as follows: awareness and education on the issue and Harris Regional Hospital hosting the opioid forum in 2018. Substance abuse is being talked about at the state and national level which is helping our local community see the severity of the issue. Others stated work groups dedicated to this issue and services available through Meridian Behavioral Health as what is helping with prevention efforts (WNCHN – WNC Healthy Impact Online Key Informant Survey, 2018).

On the negative side, key informants also provided insight into perceived hindrances on progress with substance abuse prevention in Jackson County; many stated lack of sustainable funding as well as lack of resources, planning, and "physical infrastructure that can support long-term recovery" (WNCHN – WNC Healthy Impact Online Key Informant Survey, 2018). Several respondents indicated the need for more affordable rehabilitation centers as well as mental health services to help with every facet of addiction, which is something our region desperately needs. Further, the stigma of substance abuse lingers for those in treatment and/or recovery, making it harder for those to find jobs and housing.

Key informants also indicated that tobacco dependency is a major issue for a large portion of residents in the county, and vaping is increasing the issue exponentially. Tobacco use is contributing to chronic disease and low quality of life. Jackson County has a few resources to aid – the Quit Line NC, the Tobacco Treatment Specialist at the Health Department, and antismoking campaigns deployed by Harris Regional Hospital.

Cultural factors are becoming an increasing factor in regard to substance abuse. Consumption of alcohol, vaping/e-cigarettes, marijuana, pain killers, and anxiety medication are becoming more common and culturally acceptable. Jackson County houses several shops selling CBD and vape products, specifically The Pied Piper on Main Street, Sylva Vapor on Main Street, and the University Vapor Sylva on Main Street. The stores sell various CBD and vape products in the Jackson County area.

### **Specific Populations At-Risk**

Substance abuse affects all populations, but there are distinct differentiations between various groups in relation to substance misuse and abuse. Minorities, specifically Native Americans, and white males are at a higher risk of both substances abuse and overdose in Jackson County; Native American substance abuse disorder rates are double the average population (Centers for Disease Control and Prevention, 2018).

The American Indian and Alaskan Native people had the largest drug overdose death rate in 2015 (Centers for Disease Control and Prevention, 2018). The Bureau of Indian Affairs reported a 56% increase in heroin seizures and a 109% increase in meth seizures between 2015 and 2016 (Bureau of Indian Affairs, 2016). Native Americans saw dramatic increase in overdose deaths from 1999 to 2015; Dr. Michael Toedt, the Indian Health Services' chief medical officer, testified that the rise of overdoses represents the largest increase of any racial group during that period of time.

In 2018, the average demographics for overdose ED visits are as follows: 59% men, 75% white non-Hispanic, and 35% ages 25-34. The population at highest risk outside of Native Americans would be Caucasian men between the age of 25 and 34 (see below).

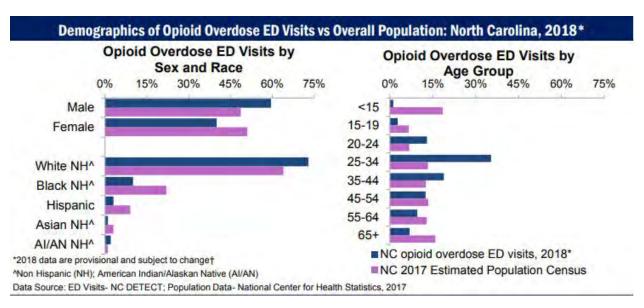


Figure 17: Demographics of Opioid Overdose ED Visits in North Carolina During 2018. NC Detect (2018).

Other risk factors to consider would include:

- Socioeconomic status
- Family history of addiction
- History of chronic pain
- Mental health disorder
- ACE score
- Exposure to drugs earlier in life
- Poor social skills
- Availability/access
- High stress environment

All low-income residents in Jackson County are also at a greater risk for unintentional injuries, including overdose. Another population to consider would be pregnant women who use illicit substances as well as the babies delivered from these women.

### **Health Resources Available/Needed**

Available Resources			
Resource	Lead Community Partner		
Emergency Department (4 rooms available for psychiatric illnesses awaiting transfer)	Harris Regional Hospital		
EMS Narcan Services	Harris Regional Hospital		
Substance Abuse/Misuse Continued Medical Education	Harris Regional Hospital and MAHEC		

Safe Kids Jackson County	Jackson County Department of Public Health
Medication Take Back Events	Healthy Carolinians of Jackson County
Permanent Drop Box	Jackson County Sheriff's Office in Sylva & Cashiers and Western Carolina University
Behavioral Health Services	Meridian Behavioral Health and Appalachian Community Services
Catch My Breath Program	Jackson County Public Schools
Tobacco Prevention Efforts	MountainWise
Substance Abuse Prevention Efforts	Mountain Projects
Free Tobacco Cessation	Quite Line NC and Jackson County Department of Public Health
Prevention Awareness and Education	Healthy Carolinians of Jackson County and School Health Advisory Council
Managed Care Organization	Vaya Health
Student Support Specialists	Jackson County Public Schools

Needed Health Resources			
Resource	Potential Community Partner		
Substance abuse prevention programs for youth	Jackson County Department of Public Health and Healthy Carolinians		
More local in-patient treatment centers and mental health services	Harris Regional Hospital and Vaya Health		
Increase community awareness about available substance abuse/mental health resources	Jackson County Department of Public Health and Vaya Health		
Increased naloxone distribution	Mountain Projects, Healthy Carolinians, and Jackson County Department of Public Health		
Needle exchange program	WNC Harm Reduction Alliance, County Commissioners, Healthy Carolinians, and Jackson County Department of Public Health		
Needle exchange boxes throughout county	WNC Harm Reduction Alliance, County Commissioners, Chamber of Commerce, Healthy Carolinians, and Jackson County Department of Public Health		
Support for parents and families of those suffering from addiction	Harris Regional Hospital, Healthy Carolinians, and Jackson County Department of Public Health		

For more information about the community health priorities selected for Jackson County, read the Priority Issue sections in <u>LINK TO CHA</u>. In our facility-specific Implementation Strategy, we will discuss what role our facility will have in leading, collaborating on, or supporting others in responding to these health issues. The Implementation Strategy will be complete by 09/01/2019 and available to the public in September on the Harris Regional Hospital website as well as the Jackson County Department of Public Health website.



### **Health Resources**

### **Process**

The CHA Facilitator reviewed health resources in the 2-1-1 datasets provided by WNC Healthy Impact. The community tool, 2-1-1, continues to serve as the updated resource list accessible via phone and web 24/7 for Jackson County and Western North Carolina residents. The resources listed with 2-1-1 are updated and are available in place of the CHA Work Team or others compiling a printed directory. The United Way of North Carolina has taken on the task of regularly updating the 2-1-1 resource per county. Local groups also annually review the resources listed and submit updates as needed. These resources available to our residents can be found by visiting www.nc211.org or by simply dialing 2-1-1 or calling 1-888-892-1162.

### **Findings**

In general, there are strong support services in the community for the aging population, even in the isolated Cashiers community, due to the Cashiers Senior Center. This is important, as Cashiers is known as a summer retreat for retirees. The Department on Aging works to identify needs of the older adult population and ensure they receive the support and guidance to assist them in accessing the resources. The Department on Aging is a crucial resource for the aging population. Additional local government resources available to the county include the Jackson County Department of Public Health, Animal Shelter, Department of Social Services, Emergency Management, Parks and Recreation Department, and more. Our community also provides quality resources for the uninsured and underinsured such as the Mountain Area Pro Bono PT Clinic, Blue Ridge Health FQHC, Nurse Family Partnership, and more.

Access to free, outdoor recreational opportunities was stated multiple times during the key informant interviews as a valuable resource in Jackson County. Even when residents do not have the funds to access a private gym, the Greenway Trail and other free outdoor recreational opportunities provide residents with the setting they need to be active (dependent upon weather).

### **Resource Gaps**

Based on a review of available resources and input from key stakeholders, resource gaps were identified that need to be filled in Jackson County. Below is a compiled list:

- **Affordable housing:** Few affordable housing options are available. Available housing is often unsafe, inadequate and still too expensive.
- **Communication:** Many agree that communication is key when helping others access resources. There may be resources available but communication between agencies is lacking.
- **Healthy foods:** Healthy food options are lacking in the form of grocery stores, farmers' markets, etc. Fast food is readily available and cheap.
- **Homeless shelter:** A long term plan for homeless shelter is a great need as the homeless population has increased significantly.
- **Internet access:** Limited internet access is a major problem for our area and leaves many rural residents out.
- **Mental health services:** Services such as housing and treatment facilities would help those suffering from mental health and substance use issues.
- **Spanish speaking providers:** Many providers use a language line which prohibits a positive medical experience.
- Access to health care (including subspecialty care): Residents have difficulty accessing
  healthcare due to a lack of providers, financial constraints, and more. Many residents
  travel out of county for subspecialty care such as neurology, endocrinology, urology, etc.
  Many residents do not have the means to travel and instead must go without getting
  the care they need.



## **Sharing Findings**

Our facility will post its CHNA report on the <u>Harris Regional Hospital</u> website. The paper copy of our CHNA will be made available, upon request, at our hospital free of charge. Comments and suggestions from the public are welcome, and may be submitted via contact information on this webpage: https://www.myharrisregional.com/for-patients-and-visitors/community-health-needs-assessment

### **Collaborative Planning**

Our hospital facility will participate in a collaborative planning process with our community partners which results in the creation of a community-wide plan at the county level. This plan outlines what strategies and related programs will be aligned, supported and/or implemented to address the priority health issues identified through this assessment process. Our hospital will then develop a facility-specific implementation strategy that speaks to our specific contributions to the identified priority health issues. We aim to leverage existing assets, avoid duplication, and implement evidence-based and innovative efforts, that contribute to the community-wide effort to build a healthy and thriving place to live, work and play.

Date authorized by Chelsea Burrell, Community Wellness Outreach Coordinator, body of Harris Regional Hospital facility.



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Page 54 – Substance Abuse Prevention Photo – Courtesy of <u>www.pexels.com</u>; accessed April 15, 2019

Page 57 – E-cigarette Photo – Courtesy of <a href="https://www.pexels.com">www.pexels.com</a>; accessed April 15, 2019

All other photos used are a curtesy of Harris Regional Hospital.



Appendix A – <u>Jackson County Community Health Assessment</u>

## Appendix B – 2-1-1 Resource Guide

## **Jackson County 2-1-1 Guide**

Agency Name	Description
Appalachian Mountain Community Health Centers	Primary care services for adults, 18 and older for acute and chronic care as well as preventive services such as health screenings and health education; behavioral health care including substance abuse services. Also provides enabling services such as outreach, and case management.
AWAKE Children's Advocacy Center	AWAKE coordinates a multidisciplinary team which reviews all abuse cases and through a collaborative effort, brings them to a resolution in the best interest of the child. Provides a child-friendly environment for children to be interviewed for suspected abuse by law enforcement or Social Service investigators.  AWAKE contracts with local counselors that have specific training in traumafocused counseling to provide counseling opportunities for children in a knowing and safe environment.
	AWAKE also provides education the community about child abuse and its prevention.
Barium Springs Home for Children	MHR provides outpatient and family services to youth and their families. They offer Support Groups, Enhanced Services, Diagnostic Assessment, Intensive In-Home, Community Support (Adult and Child), SAIOP Substance, Abuse Services, and DWI / DUI Services. Professional counselors, social workers, and certified/licensed specialists are on staff to provide assessments, individual therapy, group therapy, and family therapy.
Blue Ridge Free Dental Clinic	Community dental clinic offering routine cleanings and restorative care.
FCashiers Highlands Humane Society	Pet adoptions, also provides humane care and treatment for all dogs and cats needing temporary protection, promotes and subsidizes spay/neuter program. Hosts low-cost rabies vaccination clinics throughout the year.
Catch the Spirit of Appalachia	For children there are creativity workshops, and storytelling performance including creative writing and visual arts, within the public schools to provide self-esteem.  For adults there are classes in creative writing, improving personal appreciation, business workshops, opening doors to creativity and the festival of many colors.  There are also weekday-long summer camps available.
Communication Therapies Inc.	Diagnosis and collaborative intervention for children 0-5 years old with suspected Autism or related disorders.
Cooperative Extension Service	Cooperative Extension Service provides forestry management services and agricultural production information. Family education consists of parenting,

	nutrition and financial management. Youth Education Programs include 4-H
Council of	activities and clubs for children ages 9 - 19.
Council of Governments	The Family Caregiver Support Program provides information and referral, access to services, caregiver training and support groups, respite vouchers,
Southwestern	and supportive services for caregivers to assist them with providing the level of
Commission	support their loved one deserves.
Region A	
	Office a very poor information and referred to coming a veilely in Harrison
CRC of the Great	Offers awareness information and referral to services available in Haywood, Macon and Jackson counties; Assistance in making choices, and access to
Smokies	public and private aging and disability services.
Cullowhee United	Cullowhee United Methodist Church offers a Summer Day Camp experience
Methodist Church	for preschool and school aged children. Camp presents age appropriate
	opportunities and activities that enhance the child's spiritual, physical, social,
	intellectual, and emotional growth.
<b>Disability Partners</b>	People with disabilities are taught to be self-advocates who understand their
<ul><li>Sylva Office</li></ul>	rights under the Americans with Disabilities Act (ADA). DisAbility Partners
	advocates at local, state and federal levels for system changes to increase
Fontana Degianal	independent living services and equal access.  Children's story hours and summer reading clubs, displays of materials on
Fontana Regional	community interest topics, books and other materials in a variety of subject
Library	areas and formats, including large print and audio visual, covering such
	subjects as business, science fiction, biography, children's and women's
	studies.
SHabitat for	Two Resale stores for the general public looking for furniture, appliances,
Humanity	household items, and building supplies.
Macon/Jackson	Merchandise is sold at a reasonable price, and proceeds are used to build new
NC	Habitat houses and preserve existing homes.
Harris Regional	Harris Regional Hospital offers occupational health, home medical equipment,
Hospital	home infusion therapy, new direction weight loss and a cardiac program.
	Heart Phases Program serves western North Carolina.
	Mountain Tract Nursing Center has 100 beds.
	Mountain Regional Cancer Center is located at 200 Asheville Road.
Humane Society	Offers animal services for Jackson County including animal adoption, foster
of Jackson County	care for animals, and spay/neuter services.
Jackson County	Serves students with various disabilities in all grades, and between ages of 5 -
Board of	21.
Education	
Laucation	

r	
Jackson County	Provides local resource information, support and services to member
Chamber of	companies. Offers newcomer information to both businesses and residents.
Commerce	
	Also offers information about the area to tourists.
SJackson County	The Community Service Program provides community service placement for
1	court sentenced offenders. Intensive
Community	Probation is also in this location.
Service Work	riobation is also in this location.
Program NC	
Department of	
<b>Crime Control and</b>	
Public Safety	
SJackson County	Adult Wellness Screenings are available to anyone 18 years of age and older
Department of	who has an already established relationship with a physician. Test results from
Public Health	the screening will be sent to that physician.
Public Health	the servering will be serie to that physician.
	The Screening involves the following services: Blood pressure check, Height
	and weight check, Laboratory testing, Vision and hearing check, Cancer
	Screening
	Serverining
	A Cancer Screening is available to patients of the Jackson County Department
	of Public Health.
	The Screening involves the following: Skin, oral, and rectal exam, Breast exam,
	pelvic exam, and Pap test for Women, Prostate exam for Men.
	pervice and rap test for women, Prostate examinor wien.
	Other services offered are limited physicals, CDL physicals, BLET physicals, DOC
	physicals.
Jackson County	Allows eligible persons to remain safely at home instead of entering a nursing
Department of	home.
Social Services	
Social Services	There are three available types of CAP services:
	CAP/DA for adults with disabilities
	CAP/C for medically-fragile children under age 21
	CAP/IDD for children or adults with intellectual or developmental disabilities
Jackson County	The Day Care Program provides professional support and relief services to
Department of	older adults who are in need of daytime supervision and/or care. This support
	includes individualized and group supervised programs, outings, activities,
Aging	lunch and snacks; as well as counseling and referral services.
Jackson County	This agency's mission is to build stronger individuals, families, and
Family Resources	communities through advocacy, empowerment, education and a respect for
Center	self and others. We hope to: empower families by helping parents cope with
Center	the stresses of daily life and
	improving their skills and capacities to support, guide and nurture their
	children, promote voluntary parental participation and ownership in programs
	without categorical restrictions on eligibility so that families do not have to
	present themselves as
	present themselves as

	problematic or dysfunctional in order to receive services, provide a community-based, comprehensive, developmental approach to services that are culturally and socially relevant to the families we serve, link families with other formal and informal community services and support systems that can help meet their needs, ideally before the needs intensify and crisis occurs, and create a supportive network designed to enhance parents' child-rearing capabilities and to compensate for the isolation and vulnerability of many families by bringing them into contact with other parents in similar circumstance.
Jackson County Government	Responsible for disaster planning and response, as well as day to day development and review of emergency plans for the county. The emergency management staff is available to assist private businesses, industry, and government agencies in the development and implementation of their
	emergency plans. <u>CodeRED</u> is a type of reverse 9-1-1. This system allows Emergency Management the ability to deliver pre-recorded telephone notification/information messages to targeted areas, or the entire County concerning manmade, or natural emergencies.
Jackson County Soil and Water Conservation District	This agency provides landowners and land users assistance in erosion contril, implementation and maintenance of conservation practices.
Jackson County Transit	Jackson County Transit is a Public Transportation System which serves both Human Service Agencies as well as the General Public.
	Services offered include: Public Transportation, which includes an hourly shuttle service in the downtown area, Medicaid Trips in and out of Jackson County, Aging Transportaion, Child Daycare and Head Start services, Scheduled Transports to the Asheville Airport, and Veteran Medical Transportation.
Legal Aid of NC	Provides legal services for children in the public education system. Cases involve short and long-term suspension, expulsion, involuntary transfers to alternative schools, enrollment denials, mistreatment by school personnel, special education, bullying, and more.
Meridian Behavioral Health Services	Meridian is a non-profit Behavioral Health Services organization serving children, youth, and adults in the seven westernmost counties in NC.
	Programs available include an Assertive Community Treatment Team (ACTT) that ensures service availability 24 hours a day, seven days a week, Behavioral Therapy, Case Management, Community Support, CORE (Committed to Outreach, Recovery and Engagement), Long Term Care for adults with disabilities, Medical Benefits (for individuals and families with limited incomes who meet certain requirements), Outpatient Treatment for children and families in crisis, Outreach Programs, and Social Skills Education.

Morris Broadband	Offers internet, cable, and phone services.
Mountain Mediation Services	A voluntary alternative to court. Mediators act as neutral parties to help individuals listen to each other and clarify the issues involved. Mediation is used to resolve disputes through discussion in an attempt to reach an agreement which both parties feel is fair.
	<u>Mediation Programs include: </u> Community and District Court; Medicaid Appeals; Separation/Divorce; Youth Training and Restorative Justice; Group Facilitation.
NC Department of Juvenile Justice and Delinquency Prevention	Department of Juvenile Justice and Delinquency Prevention (DJJDP) juvenile court counselors supervise youth on probation.  The district court judge determines the length and terms of probation. Juvenile court counselors contact each youth on probation through telephone calls and letters monthly and visit every 30 days or less.
NC Department of Transportation – Division 14	The Right of Way Branch of the North Carolina Department of Transportation is responsible for the acquisition of all necessary lands and rights of way used for construction and improvements of all roads and highways which are part of the State Highway System. This includes roads on both the primary (Interstate, US, and NC routes) and secondary state road systems.
NC Works Career Center – Jackson County	Helps individuals find work, improve skills, and prepare for interviews. Services include career assessment, job listings and placement, resume preparation, practice interviews, computer and internet access, assistance with job searches, and more. Also offers special programs for veterans, former offenders, young adults (ages 16 - 24), and agricultural workers.
	Services include information on careers, help with developing a reemployment plan, referrals to workshops or training opportunities, and more. Can also provide additional information on how to file for unemployment insurance benefits.
North Carolina Assistive Technology Program	Provides assistive technology services to people of all ages and abilities. Make everyday activities easier and increase independence with assistive technology.
Region A Partnership for	Administers Smart Start funding and NC Pre-K funding in the seven western counties and the Cherokee Indian Reservation.
Children	Family Support Network of Region A provides support and resources to families of children with special needs such as parent-to-parent matching, referrals, and information. Hosts local support groups throughout Region A for parents or caregivers of children with special needs.

Southwestern	The College offers GED, vocational, technical, and continuing education
Community	training. Child care is offered for students, faculty and staff on campus.
College	
Speech and	The Western Carolina University Speech and Hearing Clinic provides
1 -	diagnostic, treatment, and consultative services to citizens with known or
Hearing Clinic	suspected speech, language, and/or hearing disorders in Western North
Western Carolina	Carolina.
University	Carollia.
	Also serves as a community resource for professionals and agencies requiring
	, , , , , , , , , , , , , , , , , , , ,
	information about human communication and related disorders.
	In addition to traditional speech/language/hearing services, the SHC offers:
	Newborn Hearing Screening, Otoacoustic Emission Diagnostic Testing,
	Augmentative Communication Evaluation, Interdisciplinary Evaluation,
	assistance with assistive technology, and training on various topics related to
	communication disorders. Services provided by WCU students under
	supervision.
	Supervision.
Success Oriented	SOAR features success-oriented, high adventure programs for youth ages 8-18
Achievement	diagnosed with a Learning Disability and/or ADHD. Emphasis is placed on
Realized	developing self-confidence, social skills, problem solving techniques, and
Realizeu	more. Activities include back packing, whitewater rafting, rock climbing, horse
	packing, llama trekking, fishing, kayaking, SCUBA, and more.
The Community	Provides a hot meal and a food pantry to Jackson County residents.
Table	,
	The Dishere Court Clinia was sides dishere advertise, and astronomy design and
The Diabetes Care	The Diabetes Care Clinic provides diabetes education, care and referral to low-
Clinic of Jackson	income individuals with diabetes who are uninsured.
County	The program provides diabetes self-management education and temporary
	care for diabetes until a medical home can be secured.
	The clinic will provide low-cost testing supplies, laboratory testing at no
	charge, visits with a medical provider at no charge, and education classes at no
The Coast	charge.
The Good	The Good Samaritan Clinic (GSC) of Jackson County is a volunteer-based free
Samaritan Clinic	clinic that serves adults, with limited income, who are ineligible for Medicaid,
of Jackson County	and have no health insurance.
	Provides primary care and medication assistance to patients from Jackson,
Town of Cod -	Swain, Macon, Graham, Clay, and Cherokee Counties.
Town of Sylva	The local agency that is responsible for enforcing all laws and ordinances;
	preventing crime; investigating criminal activity; apprehending, arresting and
	detaining suspects; presenting evidence; regulating traffic; investigating traffic
	accidents and engaging in other activities that protect lives and property and
	preserves peace in the community.
United Christian	Food pantry for the community.
	Mathematical State of the Control of
Ministries of	When available, also has household items, personal care items, cleaning
	When available, also has household items, personal care items, cleaning products, clothing and furniture.

Vehicle Registration NC Department of Transportation – Jackson County	Provides a variety of services that involve the shipments of mail and packages all over the world. Stamp centers, decorative packaging, and collectors' stamps are also available. <u>Additional Locations and their Phone Numbers: <u>Tuckasegee: 26 Canada Road, 28783 - 828-293-5074; Webster: 1345 Webster Road, 28788 - 828-586-5926; Whittier: 22 Main Street 28789 - 828-497-7627. There is no passport office in the county, the closest location would be downtown Asheville (828-271-6418) Auto licenses must be purchased within 30 days of relocating to the state. Title of car or name of lien holder, proof of insurance, and odometer reading are required. Automobile must be inspected within 10 days from the date vehicles are subject to registration. To get a Permanent and Temporary Handicap Placard: Step 1. Requirements and Documents: Request form must be signed by a physician. Identification will be required for all services that are processed in person. Step 2. Submit Application and Fee for Each Placard (Limit 2 Per Person). Payment for transactions at DMV Offices are limited to cash, money order or personal checks. No other forms of payment are accepted. To get a Handicap Driver Registration Plate: Step 1. Requirements and Documents: Completing forms and follow the directions. Identification will be required for all services that are processed in person. Certification by a physician required. Signature of an authorized representative of the Division of Services for the Blind is also acceptable. Step 2, Submit Application and Fee for Each Plate. Payment for transactions at DMV Offices are limited to cash, money order or personal checks.</u></u>
	For more information, visit http://www.ncdot.gov/dmv/vehicle/plates/handicapped/default.html
Vocational Rehabilitation – WNC Regional Offices	Provides opportunities to persons who have mental or physical disabilities which prevent them from getting and keeping a job.  Depending upon an individual's eligibility and financial need, services include diagnostic evaluations, counseling, rehabilitation engineering, physical/mental restoration, limited transportation on a case to case basis, job placement assistance, and modifications to the vehicle/job/worksite.
Webster Enterprises	Webster Enterprises provides vocational evaluation with situational assessment for employment. Services offered are Supported Employment and work adjustment job coaching.