

# 2012 PRC Community Health Needs Assessment Report

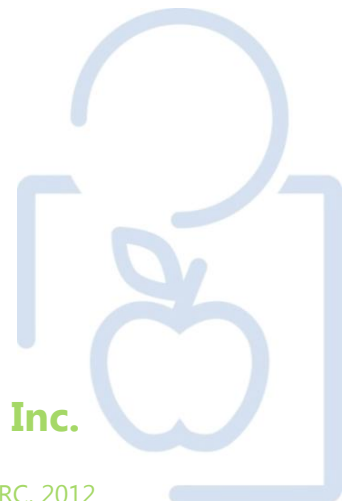
Western North Carolina

Sponsored by  
**WNC Health Network**



**Professional Research Consultants, Inc.**

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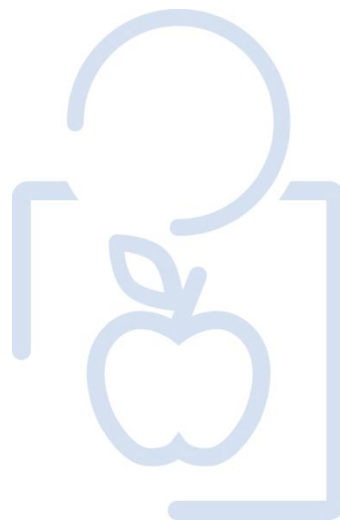


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# INTRODUCTION



# Project Overview

## Project Goals

This Community Health Needs Assessment is a systematic, data-driven approach to determining the health status, behaviors and needs of residents in Western North Carolina (WNC). Subsequently, this information may be used to inform decisions and guide efforts to improve community health and wellness.

A Community Health Needs Assessment provides information so that communities may identify issues of greatest concern and decide to commit resources to those areas, thereby making the greatest possible impact on community health status. This Community Health Needs Assessment will serve as a tool toward reaching three basic goals:

- **To improve residents' health status, increase their life spans, and elevate their overall quality of life.** A healthy community is not only one where its residents suffer little from physical and mental illness, but also one where its residents enjoy a high quality of life.
- **To reduce the health disparities among residents.** By gathering demographic information along with health status and behavior data, it will be possible to identify population segments that are most at-risk for various diseases and injuries. Intervention plans aimed at targeting these individuals may then be developed to combat some of the socio-economic factors which have historically had a negative impact on residents' health.
- **To increase accessibility to preventive services for all community residents.** More accessible preventive services will prove beneficial in accomplishing the first goal (improving health status, increasing life spans, and elevating the quality of life), as well as lowering the costs associated with caring for late-stage diseases resulting from a lack of preventive care.

This assessment was conducted on behalf of WNC Health Network by Professional Research Consultants, Inc. (PRC), and facilitated by Sparrow Research Group and Hkg Public Health Projects, LLC.

## Methodology

### PRC Community Health Survey

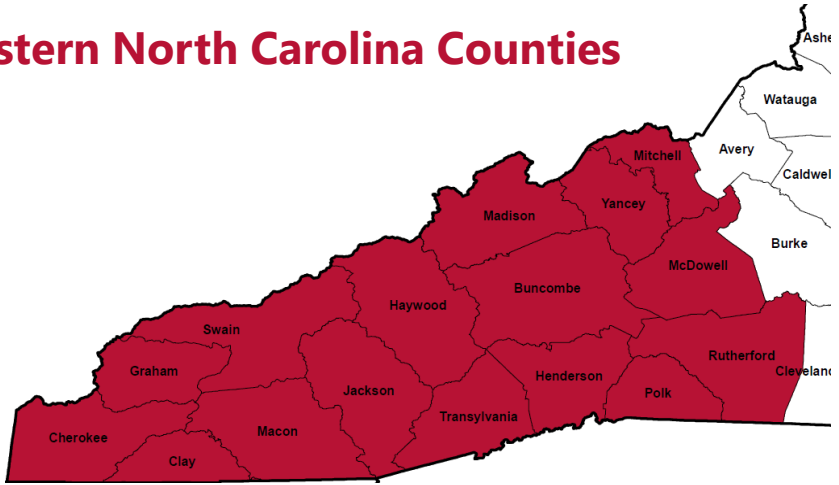
#### Survey Instrument

The survey instrument used for this study was developed by WNC Health Network with assistance from PRC. Many of the questions are derived from the Centers for Disease Control and Prevention (CDC) Behavioral Risk Factor Surveillance System (BRFSS), as well as other public health surveys; other questions were developed specifically for WNC Health Network to address particular issues of interest to communities in Western North Carolina.

## Community Defined for This Assessment

The study area for the survey effort (referred to as “Western North Carolina” in this report) includes these 16 counties: Buncombe, Cherokee, Clay, Graham, Haywood, Henderson, Jackson, Macon, Madison, McDowell, Mitchell, Polk, Rutherford, Swain, Transylvania and Yancey counties. A geographic description is illustrated in the following map.

### Western North Carolina Counties



## Sample Approach & Design

A precise and carefully executed methodology is critical in asserting the validity of the results gathered in the *PRC Community Health Survey*. Thus, to ensure the best representation of the population surveyed, a telephone interview methodology — one that incorporates both landline and cell phone interviews — was employed. The primary advantages of telephone interviewing are timeliness, efficiency and random-selection capabilities.

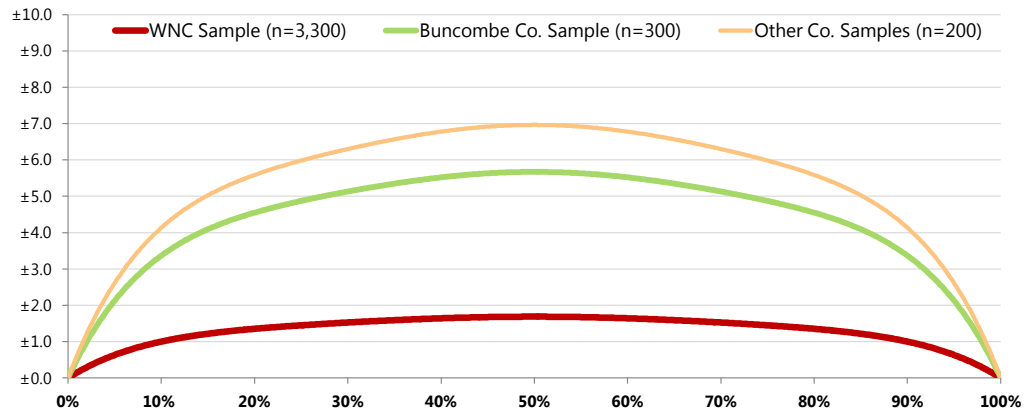
The sample design used for this effort consisted of a stratified random sample of 3,300 individuals age 18 and older in Western North Carolina, including 300 in Buncombe County and 200 in each of the remaining counties. Once the interviews were completed, these were weighted in proportion to the actual population distribution so as to appropriately represent Western North Carolina as a whole. All administration of the surveys, data collection and data analysis was conducted by Professional Research Consultants, Inc. (PRC).

## Sampling Error

For statistical purposes, the maximum rate of error associated with the WNC regional sample of 3,300 respondents is  $\pm 1.7\%$  at the 95 percent level of confidence.

For county-level findings, the maximum error rate is  $\pm 5.6\%$  (Buncombe County) or  $\pm 6.9\%$  (all other counties).

## Expected Error Ranges at the 95 Percent Level of Confidence



- Note:
- The "response rate" (the percentage of a population giving a particular response) determines the error rate associated with that response. A "95 percent level of confidence" indicates that responses would fall within the expected error range on 95 out of 100 trials.
- Examples:
- If 10% of the sample of 3,300 respondents answered a certain question with a "yes," it can be asserted that between 9.0% and 11.0% (10% ± 1.0%) of the total population would offer this response.
  - If 50% of respondents said "yes," one could be certain with a 95 percent level of confidence that between 48.3% and 51.7% (50% ± 1.7%) of the total population would respond "yes" if asked this question.

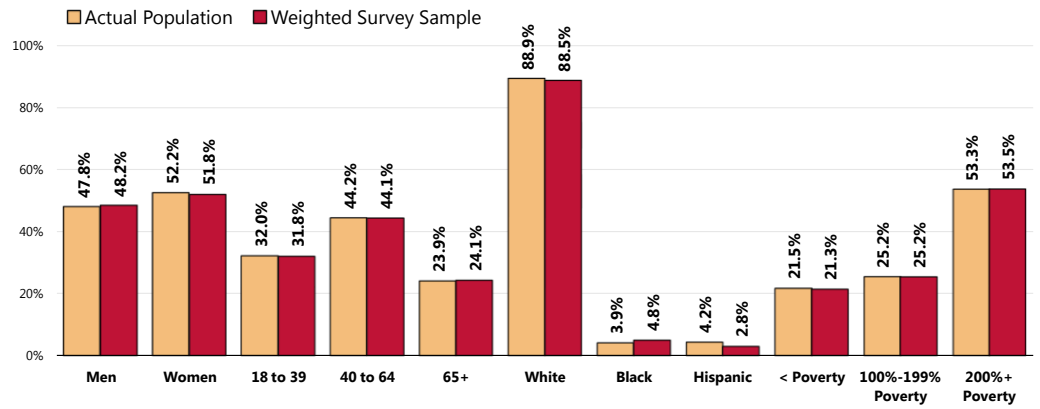
### Sample Characteristics

To accurately represent the population studied, PRC strives to minimize bias through application of a proven telephone methodology and random-selection techniques. And, while this random sampling of the population produces a highly representative sample, it is a common and preferred practice to "weight" the raw data to improve this representativeness even further. This is accomplished by adjusting the results of a random sample to match the geographic distribution and demographic characteristics of the population surveyed (poststratification), so as to eliminate any naturally occurring bias. Specifically, once the raw data are gathered, respondents are examined by key demographic characteristics (namely gender, age, race, ethnicity, and poverty status) and a statistical application package applies weighting variables that produce a sample which more closely matches the population for these characteristics. Thus, while the integrity of each individual's responses is maintained, one respondent's responses may contribute to the whole the same weight as, for example, 1.1 respondents. Another respondent, whose demographic characteristics may have been slightly oversampled, may contribute the same weight as 0.9 respondents.

The following chart outlines the characteristics of the Western North Carolina sample for key demographic variables, compared to actual population characteristics revealed in census data. [Note that the sample consisted solely of area residents age 18 and older; data on children were given by proxy by the person most responsible for that child's healthcare needs, and these children are not represented demographically in this chart.]

## Population & Sample Characteristics

(Western North Carolina, 2012)



Sources: 

- Census 2010, Summary File 3 (SF 3). U.S. Census Bureau.
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc.

Notes: 

- Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).

Further note that the poverty descriptions and segmentation used in this report are based on administrative poverty thresholds determined by the US Department of Health & Human Services. These guidelines define poverty status by household income level and number of persons in the household (e.g., the 2012 guidelines place the poverty threshold for a family of four at \$23,050 annual household income or lower). In sample segmentation: **"very low income"** refers to community members living in a household with defined poverty status; **"low income"** refers to households with incomes just above the poverty level, earning up to twice the poverty threshold; and **"mid/high income"** refers to those households living on incomes which are twice or more the federal poverty level.

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

### Benchmark Data

#### Trending

Because a similar survey was administered in Western North Carolina in 1995 by PRC, a limited number of questions allow for comparison to prior survey results. These are provided in an appendix at the end of this report. *Note, however, that the region definition differs slightly between the two studies; thus, these comparative data do not include Polk or Rutherford Counties.*

#### North Carolina Risk Factor Data

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



## Nationwide Risk Factor Data

Nationwide risk factor data, which are also provided in comparison charts where available, are taken from the *2011 PRC National Health Survey*; the methodological approach for the national study is identical to that employed in this assessment, and these data may be generalized to the US population with a high degree of confidence.

## Healthy People 2020



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

- Encourage collaborations across sectors.
- Guide individuals toward making informed health decisions.
- Measure the impact of prevention activities.

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

## Information Gaps

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

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

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

# Summary of Findings

## Summary Tables: Regional Comparisons With Benchmark Data








The following tables provide an overview of indicators in Western North Carolina, including any available benchmark comparisons. These data are grouped to correspond with the Focus Areas presented in Healthy People 2020.






### Reading the Summary Tables








- In the following charts, Western North Carolina results are shown in the larger, blue column.
- The columns to the right of the Western North Carolina column provide comparisons between Western North Carolina and any available state and national findings, and Healthy People 2020 targets. Symbols indicate whether Western North Carolina compares favorably (☀️), unfavorably (☹️), or comparably (☁️) to these external data.

















*Note that blank table cells signify that data are not available or are not reliable for that area and/or for that indicator.*




Perceptions of Quality of Life	Western North Carolina	WNC vs. Benchmarks		
		vs. NC	vs. US	vs. HP2020
% Agree County is a Good Place to Raise Children	89.2			
% Agree County is a Good Place to Grow Old	87.5			
% Agree There is Plenty of Help for Those in Need	59.7			
		☀️ better	☁️ similar	☹️ worse




Access to Health Services	Western North Carolina	WNC vs. Benchmarks		
		vs. NC	vs. US	vs. HP2020
% [Age 18-64] Lack Health Insurance	23.7	 17.7	 14.9	 0.0
% Was Unable to Get Needed Medical Care in the Past Year	10.8			
% Have a Personal Dr or Healthcare Provider	80.5			
% Have Had Routine Checkup in Past Year	72.4		 67.3	
% Have Completed Advance Directive Documents	38.8			
% Agree There is Good Healthcare in the County	66.2			
		 better	 similar	 worse

Diabetes	Western North Carolina	WNC vs. Benchmarks		
		vs. NC	vs. US	vs. HP2020
% Diabetes/High Blood Sugar	12.6	 9.8	 10.1	
% [Non-Diabetics] Tested for Diabetes in the Past 3 Years	55.6			
		 better	 similar	 worse













General Health Status	Western North Carolina	WNC vs. Benchmarks		
		vs. NC	vs. US	vs. HP2020
% "Fair/Poor" Physical Health	19.0	 18.1	 16.8	
% Activity Limitations	28.1	 21.2	 17.0	
% Serve as a Caregiver to a Friend/Family Member	42.2			
		 better	 similar	 worse









Heart Disease & Stroke	Western North Carolina	WNC vs. Benchmarks		
		vs. NC	vs. US	vs. HP2020
% Blood Pressure Checked in Past 2 Years	95.0		 94.7	 94.9
% Told Have High Blood Pressure (Ever)	39.4	 31.5	 34.3	 26.9
% [HBP] Taking Action to Control High Blood Pressure	91.2		 89.1	
% Cholesterol Checked in Past 5 Years	90.0	 78.3	 90.7	 82.1
% Told Have High Cholesterol (Ever)	34.3	 40.0	 31.4	 13.5
% [HBC] Taking Action to Control High Blood Cholesterol	88.8		 89.1	
		 better	 similar	 worse

Injury	Western North Carolina	WNC vs. Benchmarks		
		vs. NC	vs. US	vs. HP2020
% [Seniors 65+] Have Fallen in the Past Year	25.2			
		 better	 similar	 worse

Mental Health & Mental Disorders	Western North Carolina	WNC vs. Benchmarks		
		vs. NC	vs. US	vs. HP2020
% >7 Days of Poor Mental Health/Past Month	14.2			
% "Always/Usually" Get Needed Social/Emotional Support	80.6			
% Unable to Obtain Needed Mental Health Svcs in Past Yr	6.6			
		 better	 similar	 worse

Nutrition & Weight Status	Western North Carolina	WNC vs. Benchmarks		
		vs. NC	vs. US	vs. HP2020
Average Servings of Fruit in the Past Week	7.4			
Average Servings of Vegetables in the Past Week	8.3			
% Feel Easier Access to Fresh Produce Is Important	93.6			
% Healthy Weight (BMI 18.5-24.9)	33.7		31.7	33.9
% Overweight	65.0	65.3	66.9	
% Obese	29.2	28.6	28.5	30.6
		better	similar	worse
Oral Health	Western North Carolina	WNC vs. Benchmarks		
		vs. NC	vs. US	vs. HP2020
% [Age 18+] Dental Visit in Past Year	63.7	68.4	66.9	49.0
		better	similar	worse
Physical Activity	Western North Carolina	WNC vs. Benchmarks		
		vs. NC	vs. US	vs. HP2020
% No Leisure-Time Physical Activity	15.9	25.7	28.7	32.6
% Meeting Physical Activity Guidelines	58.2	46.4	42.7	
% Moderate Physical Activity	38.8		23.9	
% Vigorous Physical Activity	44.3	25.9	34.8	
% Feel Easier Access to Activity Spaces Is Important	95.6			
% Feel Improved Access to Greenspace/Trails Is Important	94.4			
		better	similar	worse

Substance Abuse	Western North Carolina	WNC vs. Benchmarks		
		vs. NC	vs. US	vs. HP2020
% Current Drinker	42.9	 44.1	 58.8	
% Chronic Drinker (Average 2+ Drinks/Day)	4.6	 3.5	 5.6	
% Binge Drinker (Single Occasion - 5+ Drinks Men, 4+ Women)	10.6	 11.0	 16.7	 24.3
% Illicit Drug Use in Past Month	1.8		 1.7	 7.1
		 better	 similar	 worse

Tobacco Use	Western North Carolina	WNC vs. Benchmarks		
		vs. NC	vs. US	vs. HP2020
% Current Smoker	20.6	 19.8	 16.6	 12.0
% [Employed] Breathed Smoke at Work in Past Week	14.2			
% Use Smokeless Tobacco	5.2		 2.8	 0.3
% Agree Universities/Colleges Should Be 100% Tobacco-Free	74.4			
% Agree Gov't Bldgs/Grounds Should Be 100% Tobacco-Free	77.8			
% Agree Parks and Trails Should Be 100% Tobacco-Free	61.5			
		 better	 similar	 worse

## Summary Tables: Comparisons Among WNC Counties

The tables on the following pages provide comparisons among the 16 counties, identifying differences for each as "better than" (☀️), "worse than" (🌧️), or "similar to" (☁️) the combined opposing counties.

Perceptions of Quality of Life	Buncombe	Cherokee	Clay	Graham	Haywood	Henderson	Jackson	Macon	Madison	McDowell	Mitchell	Polk	Rutherford	Swain	Transylvania	Yancey
% Agree County is a Good Place to Raise Children	87.9	91.4	94.3	93.1	91.5	90.3	92.4	91.0	86.5	87.3	83.3	93.5	88.1	89.7	87.4	86.8
% Agree County is a Good Place to Grow Old	84.2	84.7	87.9	88.2	89.5	94.8	83.3	89.8	81.9	82.8	81.4	94.9	88.8	89.0	93.6	85.4
% Agree There is Plenty of Help for Those in Need	55.2	55.6	64.7	61.4	54.6	69.7	61.9	60.1	50.6	59.1	53.5	66.1	61.4	60.5	68.8	57.0
Note: Each county is compared against all other counties combined.													better	similar	worse	

Access to Health Services	Buncombe	Cherokee	Clay	Graham	Haywood	Henderson	Jackson	Macon	Madison	McDowell	Mitchell	Polk	Rutherford	Swain	Transylvania	Yancey
% [Age 18-64] Lack Health Insurance	23.6	26.7	31.9	33.0	20.8	21.0	16.0	27.9	31.3	21.3	20.3	29.4	31.4	22.1	15.8	27.9
% Was Unable to Get Needed Medical Care in the Past Year	11.9	9.1	6.4	11.7	7.1	6.2	12.8	10.4	15.3	11.9	10.8	7.2	16.0	13.0	9.5	14.4
% Have a Personal Dr or Healthcare Provider	78.8	82.0	79.0	74.3	83.7	81.8	76.8	88.0	77.8	79.7	80.7	83.6	79.1	75.5	85.1	80.8
% Have Had Routine Checkup in Past Year	71.8	73.2	71.8	68.1	72.2	73.2	71.4	71.5	71.2	72.0	68.9	72.9	77.1	74.8	73.6	63.9
% Have Completed Advance Directive Documents	41.6	36.0	43.8	25.0	37.5	40.1	29.3	44.0	33.0	35.9	33.0	48.9	33.0	34.3	48.9	30.9
% Agree There is Good Healthcare in the County	71.8	43.6	51.5	43.0	65.4	77.5	64.7	71.8	46.9	55.1	59.4	69.4	58.1	57.8	75.2	45.3
Note: Each county is compared against all other counties combined.													better	similar	worse	

Diabetes	Buncombe	Cherokee	Clay	Graham	Haywood	Henderson	Jackson	Macon	Madison	McDowell	Mitchell	Polk	Rutherford	Swain	Transylvania	Yancey
% Diabetes/High Blood Sugar	11.8	17.4	13.8	14.9	10.5	13.2	10.3	12.4	14.9	9.7	15.4	11.3	15.1	19.0	11.8	11.8
% [Non-Diabetics] Tested for Diabetes in the Past 3 Years	56.0	52.6	51.4	52.1	62.2	54.3	55.3	61.8	52.6	49.1	54.3	57.1	51.6	58.6	61.1	51.7
Note: Each county is compared against all other counties combined.													better	similar	worse	



General Health Status	Buncombe	Cherokee	Clay	Graham	Haywood	Henderson	Jackson	Macon	Madison	McDowell	Mitchell	Polk	Rutherford	Swain	Transylvania	Yancey
% "Fair/Poor" Physical Health	15.8	22.4	19.1	23.0	18.5	14.3	22.3	19.8	19.5	28.5	24.8	23.2	22.2	20.6	18.6	28.4
% Activity Limitations	26.1	29.5	35.6	31.5	28.9	25.2	25.1	31.8	27.9	33.4	29.9	32.4	25.0	35.5	36.6	31.5
% Serve as a Caregiver to a Friend/Family Member	45.6	42.9	45.5	44.7	39.9	38.6	34.2	46.5	43.8	38.9	40.6	47.3	41.0	38.2	41.1	41.4
Note: Each county is compared against all other counties combined.													better	similar	worse	

Heart Disease & Stroke	Buncombe	Cherokee	Clay	Graham	Haywood	Henderson	Jackson	Macon	Madison	McDowell	Mitchell	Polk	Rutherford	Swain	Transylvania	Yancey
% Blood Pressure Checked in Past 2 Years	94.4	93.5	97.8	92.1	96.0	95.8	95.2	94.6	95.8	97.2	96.9	94.9	93.2	93.5	96.9	90.8
% Told Have High Blood Pressure (Ever)	36.7	48.6	42.9	44.7	35.5	35.1	42.9	49.1	35.6	37.1	41.4	37.3	45.7	43.5	42.8	45.4
% [HBP] Taking Action to Control High Blood Pressure	94.1	97.7	91.2	94.9	86.0	93.2	77.7	92.5	98.5	86.5	94.0	85.0	88.4	91.3	95.1	88.8
% Cholesterol Checked in Past 5 Years	91.8	89.2	90.0	83.4	88.2	89.6	87.3	89.3	89.3	91.8	88.2	91.1	88.6	91.1	91.8	81.4
% Told Have High Cholesterol (Ever)	27.2	38.1	39.0	38.9	38.0	39.3	33.7	41.4	30.1	36.8	38.1	35.4	38.9	28.2	37.7	38.1
% [HBC] Taking Action to Control High Blood Cholesterol	84.6	87.5	95.8	92.6	92.1	93.2	85.6	89.2	96.6	81.5	93.3	91.8	87.8	88.1	91.4	93.3
Note: Each county is compared against all other counties combined.													better	similar	worse	




































































Injury	Buncombe	Cherokee	Clay	Graham	Haywood	Henderson	Jackson	Macon	Madison	McDowell	Mitchell	Polk	Rutherford	Swain	Transylvania	Yancey
% [Seniors 65+] Have Fallen in the Past Year	22.3	31.9	40.5	26.6	16.4	21.3	22.9	29.9	24.7	16.6	27.8	17.6	27.7	23.9	31.9	31.9
Note: Each county is compared against all other counties combined.													better	similar	worse	




































































































Mental Health & Mental Disorders	Buncombe	Cherokee	Clay	Graham	Haywood	Henderson	Jackson	Macon	Madison	McDowell	Mitchell	Polk	Rutherford	Swain	Transylvania	Yancey
% >7 Days of Poor Mental Health/Past Month	14.2	14.6	10.3	10.7	13.8	12.2	11.1	14.6	16.6	18.4	13.0	10.6	17.7	20.3	12.2	17.5
% "Always/Usually" Get Needed Social/Emotional Support	82.8	81.4	84.2	73.9	82.6	79.8	82.0	81.8	75.5	77.6	80.1	84.8	75.6	84.3	81.0	70.2
% Unable to Obtain Needed Mental Health Svcs in Past Yr	6.6	3.7	10.2	6.5	6.0	5.0	4.0	10.5	4.5	9.9	5.7	6.3	7.1	6.7	6.1	11.4
Note: Each county is compared against all other counties combined.													better	similar	worse	

Nutrition & Weight Status	Buncombe	Cherokee	Clay	Graham	Haywood	Henderson	Jackson	Macon	Madison	McDowell	Mitchell	Polk	Rutherford	Swain	Transylvania	Yancey
Average Servings of Fruit in the Past Week	7.6	7.9	7.3	5.0	7.5	7.1	6.8	7.2	6.5	6.2	6.6	8.1	8.5	6.9	8.1	7.5
Average Servings of Vegetables in the Past Week	8.6	8.3	8.9	6.7	8.2	7.5	8.5	9.7	7.4	7.5	7.4	8.9	8.3	8.0	9.4	8.2
% Feel Easier Access to Fresh Produce Is Important	90.7	97.6	94.3	96.5	93.7	95.6	97.3	95.7	91.1	96.1	92.9	94.2	92.6	94.9	94.5	95.5
% Healthy Weight (BMI 18.5-24.9)	36.2	27.1	37.8	31.9	36.3	34.0	37.6	31.6	37.1	29.4	35.5	37.4	24.8	28.7	31.1	37.5
% Overweight	62.6	72.6	58.8	67.1	61.4	65.3	62.5	68.1	60.2	70.2	62.8	60.5	74.1	71.4	65.0	57.2
% Obese	27.5	31.7	27.0	36.1	27.5	26.1	33.2	35.3	29.8	34.1	22.3	27.6	35.2	37.7	23.9	24.0
Note: Each county is compared against all other counties combined.													better	similar	worse	

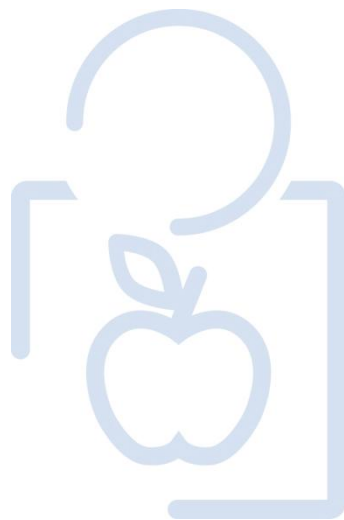
Oral Health	Buncombe	Cherokee	Clay	Graham	Haywood	Henderson	Jackson	Macon	Madison	McDowell	Mitchell	Polk	Rutherford	Swain	Transylvania	Yancey
% [Age 18+] Dental Visit in Past Year	63.5	53.8	61.3	53.6	74.8	70.0	56.5	66.3	55.9	59.4	60.5	66.1	57.6	57.6	71.4	58.2
Note: Each county is compared against all other counties combined.													better	similar	worse	

Physical Activity	Buncombe	Cherokee	Clay	Graham	Haywood	Henderson	Jackson	Macon	Madison	McDowell	Mitchell	Polk	Rutherford	Swain	Transylvania	Yancey
% No Leisure-Time Physical Activity	12.5	15.0	12.9	19.7	16.3	14.4	18.7	17.0	19.2	25.0	21.7	16.8	20.8	16.1	13.8	16.4
% Meeting Physical Activity Guidelines	62.1	57.8	62.1	60.2	59.6	60.0	50.8	53.4	61.0	52.7	49.5	45.7	53.1	61.0	61.0	59.0
% Moderate Physical Activity	38.3	39.3	42.9	38.1	41.5	40.1	34.5	37.6	38.6	33.5	33.6	31.6	39.2	39.6	47.2	46.2
% Vigorous Physical Activity	48.3	42.2	43.9	46.0	40.7	45.5	39.2	38.4	43.2	40.8	39.7	36.8	42.2	44.1	46.8	47.8
% Feel Easier Access to Activity Spaces Is Important	95.1	95.7	96.8	98.0	99.0	98.0	97.6	94.3	93.9	91.0	98.2	95.8	92.8	95.6	94.1	98.1
% Feel Improved Access to Greenspace/Trails Is Important	94.2	92.0	92.6	95.6	97.7	96.2	96.8	93.3	90.1	96.0	95.5	95.2	91.1	93.6	90.0	97.1
Note: Each county is compared against all other counties combined.													better	similar	worse	

Substance Abuse	Buncombe	Cherokee	Clay	Graham	Haywood	Henderson	Jackson	Macon	Madison	McDowell	Mitchell	Polk	Rutherford	Swain	Transylvania	Yancey
% Current Drinker	 47.3	 38.2	 41.3	 29.1	 46.8	 48.4	 41.7	 40.6	 42.2	 30.6	 29.4	 52.1	 32.6	 36.5	 42.2	 36.2
% Chronic Drinker (Average 2+ Drinks/Day)	 4.4	 6.3	 7.7	 6.8	 3.5	 4.9	 4.9	 4.2	 6.0	 3.5	 2.2	 5.4	 4.2	 3.2	 5.7	 7.4
% Binge Drinker (Single Occasion - 5+ Drinks Men, 4+ Women)	 13.8	 10.4	 11.7	 10.1	 8.7	 7.9	 8.9	 11.2	 9.7	 5.9	 9.0	 9.9	 12.1	 8.8	 9.0	 6.9
% Illicit Drug Use in Past Month	 3.1	 1.4	 1.8	 2.0	 1.5	 0.5	 1.1	 1.2	 1.6	 0.2	 0.7	 3.3	 1.7	 1.8	 0.0	 4.2
Note: Each county is compared against all other counties combined.																
														better	similar	worse

Tobacco Use	Buncombe	Cherokee	Clay	Graham	Haywood	Henderson	Jackson	Macon	Madison	McDowell	Mitchell	Polk	Rutherford	Swain	Transylvania	Yancey
% Current Smoker	 18.3	 19.9	 26.3	 27.5	 19.6	 19.2	 26.2	 15.9	 24.1	 21.6	 25.0	 21.4	 24.5	 29.0	 18.8	 21.9
% [Employed] Breathed Smoke at Work in Past Week	 7.6	 16.7	 21.2	 12.0	 16.2	 12.9	 18.9	 14.7	 17.2	 17.8	 11.1	 15.5	 19.6	 26.3	 22.7	 29.8
% Use Smokeless Tobacco	 3.6	 8.9	 7.7	 8.2	 4.6	 3.9	 5.7	 10.7	 11.3	 5.8	 11.9	 5.1	 4.6	 4.7	 5.2	 7.0
% Agree Universities/Colleges Should Be 100% Tobacco-Free	 75.7	 74.7	 69.9	 74.7	 71.2	 74.3	 74.6	 79.2	 62.9	 74.6	 69.5	 73.8	 75.6	 74.8	 76.4	 68.5
% Agree Gov't Bldgs/Grounds Should Be 100% Tobacco-Free	 76.4	 74.3	 73.0	 82.4	 76.3	 81.9	 79.6	 81.1	 64.2	 74.5	 70.0	 81.4	 82.1	 79.9	 79.7	 78.1
% Agree Parks and Trails Should Be 100% Tobacco-Free	 61.8	 61.6	 57.6	 63.3	 65.2	 66.2	 61.2	 60.7	 50.1	 59.2	 55.0	 61.3	 60.1	 58.7	 58.9	 54.2
Note: Each county is compared against all other counties combined.																
														better	similar	worse

# QUALITY OF LIFE



# Perceptions of Local Quality of Life

In order to evaluate community members' perceptions about the quality of life in Western North Carolina (WNC), survey respondents were given a series of three statements regarding life in their county and asked whether they "strongly agree," "agree," "neither agree nor disagree," "disagree" or "strongly disagree" with each statement.

## Raising Children

**With regard to the statement, "My county is a good place to raise children," 89.2% of survey respondents agree (including "strongly agree" and "agree" responses).**

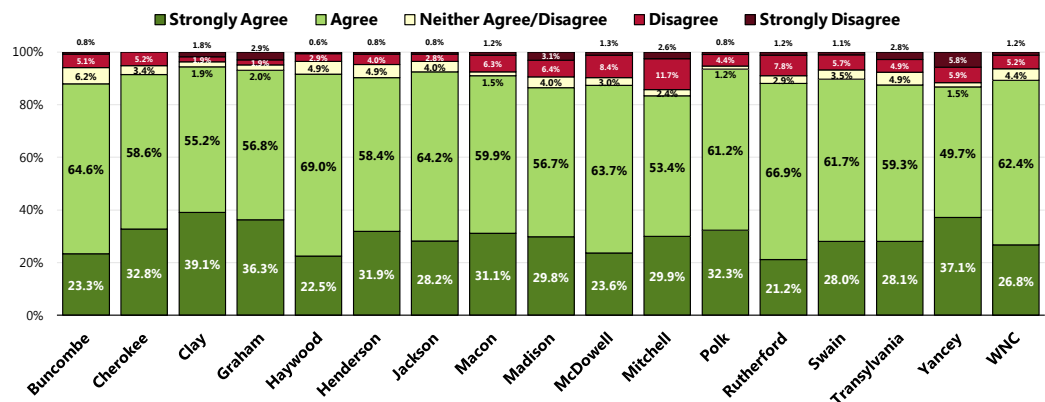
### NOTE:

- Differences noted in the text represent significant differences determined through statistical testing.
- Where sample sizes permit, county-level data are provided.

- Another 4.4% were neutral regarding the statement (neither agreeing nor disagreeing), while 6.4% of WNC community members do not agree that their county is a good place in which to raise children (including "disagree" and "strongly disagree" responses).
- Residents more likely to agree that their county is a good place in which to raise children include those in Clay, Graham, and Polk counties.
- Mitchell County residents are least likely to agree.

### "My county is a good place to raise children."

(By County, 2012)



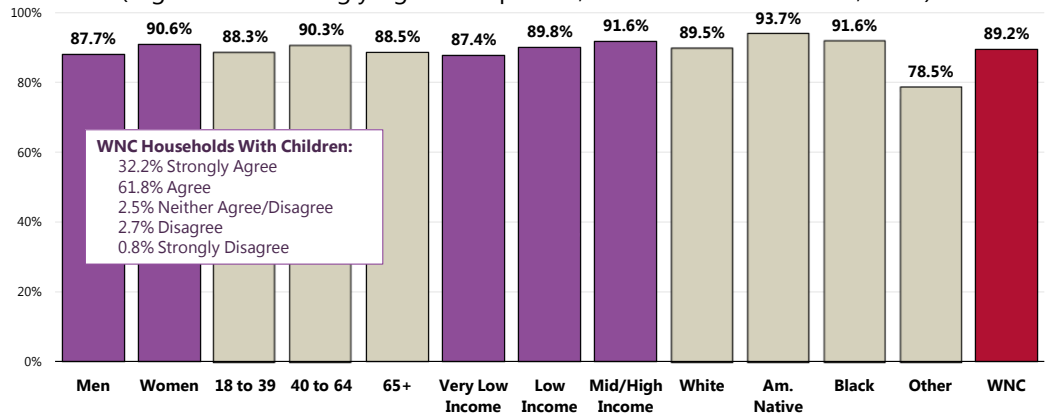
Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 5]  
 Notes: • Asked of all respondents.

The following chart segments Western North Carolina findings by key demographic segments. As shown, those less likely to feel that their county is a good place in which to raise children include:

- Men.
- Residents with "very low" incomes (i.e., living below the poverty level).
- Residents of "Other" races/ethnicity, including Hispanics, Asians, and persons of multiple races.
- Other differences within demographic groups, as illustrated in the following chart, are not statistically significant.

Charts throughout this report (such as that here) detail survey findings among key demographic groups – namely by gender, age groupings, income (based on poverty status), and race/ethnicity.

## Agree That County Is a Good Place to Raise Children ("Agree" and "Strongly Agree" Responses; Western North Carolina, 2012)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 5]  
 Notes: • Asked of all respondents.  
 • Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).  
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Very Low Income" includes households with incomes below 100% of the federal poverty level; "Low Income" includes households with incomes 100% to 199% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

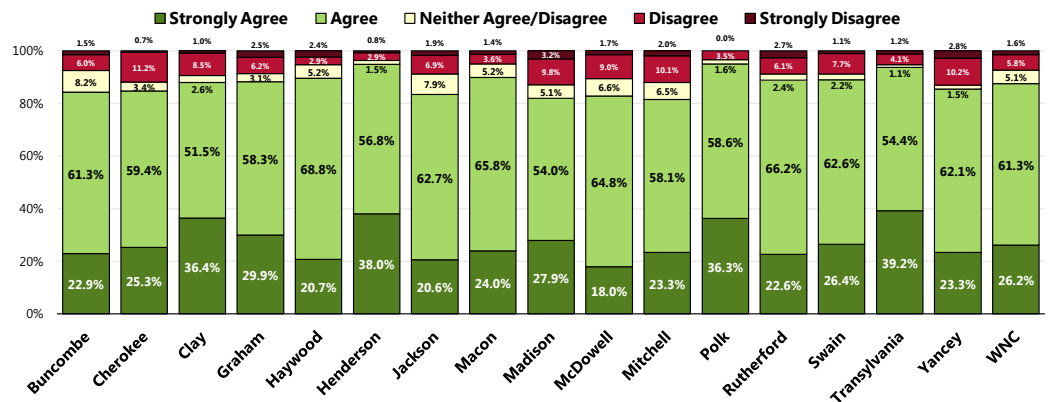
👪 Note that, among parents with children under 18 at home, the vast majority (94.0%) agree/strongly agree that the county is a good place in which to raise children.

## Growing Old

In response to the statement, "My county is a good place to grow old," 87.5% of survey respondents agree (including "strongly agree" and "agree" responses).



- Another 5.1% were neutral regarding the statement (neither agreeing nor disagreeing), while 7.4% of WNC community members either disagreed or strongly disagreed that their county is a good place in which to grow old.
- Residents statistically most likely to agree that their county is a good place in which to grow old include those in Henderson, Polk and Transylvania counties; in contrast, residents of Buncombe, Madison and Mitchell counties were statistically least likely to agree.

## "My county is a good place to grow old." (By County, 2012)

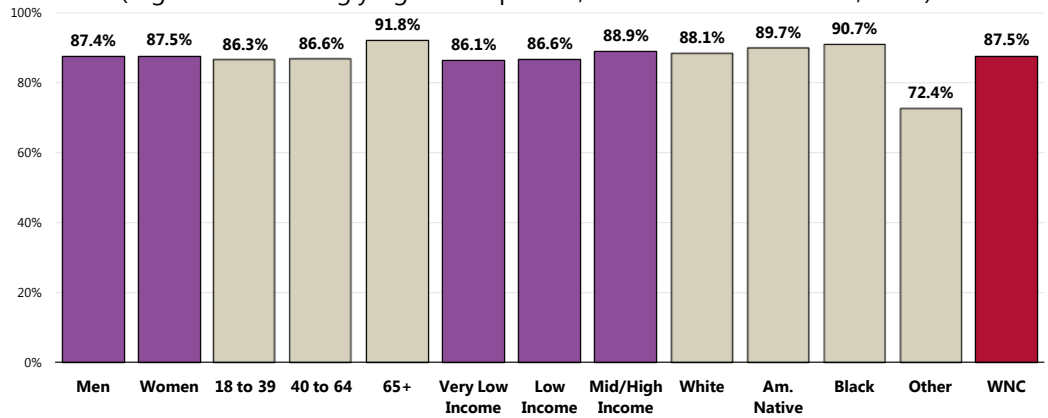


Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 6]  
 Notes: • Asked of all respondents.

Those less likely to feel that their county is a good place in which to grow old include:

-  Respondents under the age of 65.
-  Residents of "Other" races/ethnicity.

### Agree That County Is a Good Place to Grow Old ("Agree" and "Strongly Agree" Responses; Western North Carolina, 2012)



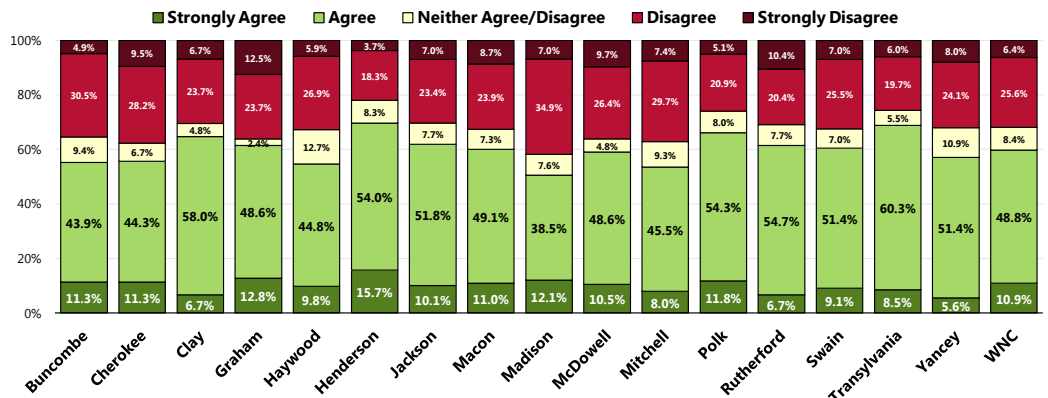
Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 6]  
 Notes: • Asked of all respondents.  
 • Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).  
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Very Low Income" includes households with incomes below 100% of the federal poverty level; "Low Income" includes households with incomes 100% to 199% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

## Social Support

With regard to the statement, "There is plenty of help for people during times of need in my county," 59.7% agree ("strongly agree" or "agree").

- Another 8.4% were neutral regarding this statement (neither agreeing nor disagreeing), while 32.0% of WNC community members disagreed ("disagree" or "strongly disagree").
- Residents most likely to agree that there is plenty of local help for people in need include those in Henderson and Transylvania counties.
- On the other hand, adults in Buncombe and Madison counties were least likely to agree that there is plenty of local help for people in need.

### "There is plenty of help for people during times of need in my county." (By County, 2012)



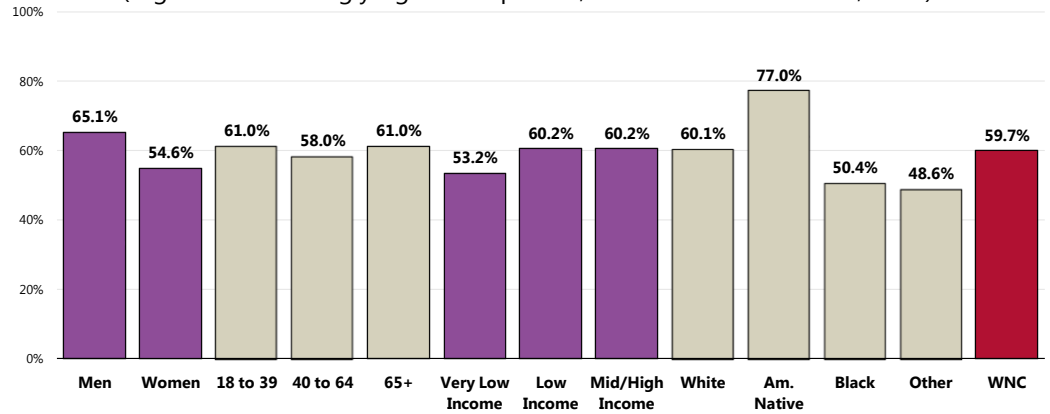
Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 8]  
 Notes: • Asked of all respondents.

Demographic segments less likely to feel that there is plenty of local help for people in need include:

- 👥 Women.
- 👥 Residents living in the lowest income segment.
- 👥 Non-Hispanic Blacks and "Other" races/ethnicity.

### Agree That County Residents Get Help in Times of Need

("Agree" and "Strongly Agree" Responses; Western North Carolina, 2012)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 8]  
Notes: • Asked of all respondents.  
• Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).  
• Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Very Low income" includes households with incomes below 100% of the federal poverty level; "Low Income" includes households with incomes 100% to 199% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.



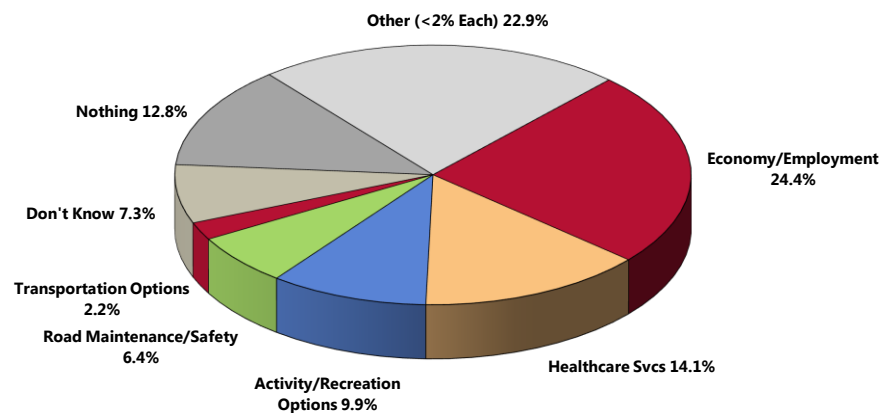
# Issues of Concern

## Issues in Need of Improvement

When asked about the one thing that needs the most improvement in respondents' neighborhoods or communities, the top three responses were: economy and employment (24.4%); various healthcare-related issues (14.1%); and "nothing" (12.8%).

- Other responses included **activity/recreational options** (9.9%); **road maintenance/safety** (6.4%) and **transportation options** (2.2%).
- A total of 7.3% were uncertain, and the remaining 22.9% identified a wide range of other issues (none individually garnering more than 2% of the total).

**Neighborhood/Community Issue Perceived as in Most Need of Improvement**  
(Western North Carolina, 2012)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 9]  
Notes: • Asked of all respondents.

The following chart illustrates a breakout of the top three issues noted among survey respondents, segmented by county of residence.

- Note that economy/unemployment was among the top responses in each of the counties.
- Activity/recreation options emerged as a top-three issue in Buncombe, Graham, Henderson, McDowell, Mitchell, Swain and Transylvania counties.

## Top Three Neighborhood/Community Issues Perceived as in Most Need of Improvement

(By County, 2012)

	Economy/ Unemployment	Healthcare Services	Activity/Recreation Options	Nothing
Buncombe	✓		✓	✓
Cherokee	✓	✓		✓
Clay	✓	✓		✓
Graham	✓	✓	✓	
Haywood	✓	✓		✓
Henderson	✓		✓	✓
Jackson	✓	✓		✓
Macon	✓	✓		✓
Madison	✓	✓		✓
McDowell	✓	✓	✓	
Mitchell	✓		✓	✓
Polk	✓	✓		✓
Rutherford	✓	✓		✓
Swain	✓	✓	✓	
Transylvania	✓		✓	✓
Yancey	✓	✓		✓
WNC	✓	✓		✓

Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 9]  
Notes: • Asked of all respondents.

## Negative Community Impact

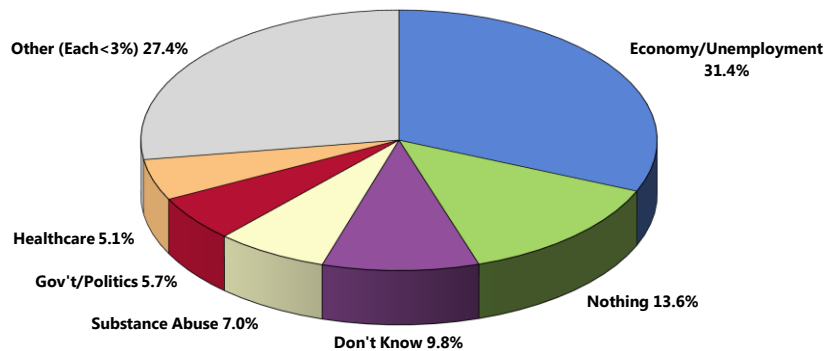
When asked about the one issue which has the most negative impact on the quality of life in their county, the top three responses were: economy/unemployment (31.4%); nothing (13.6%); and don't know (9.8%).

, followed by substance abuse (mentioned by 7.0%).

- Other responses included **substance abuse** (7.0%), **government/politics** (5.7%) and **healthcare-related issues** (5.1%).
- Note that 27.4% of survey respondents identified a wide array of other community issues, none of which individually garnered more than 3% of the total.

## County Issue Perceived as Having the Most Negative Impact on Quality of Life

(Western North Carolina, 2012)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 10]  
Notes: • Asked of all respondents.

The following chart illustrates a breakout of the top three issues with the most negative impact noted among survey respondents, segmented by county of residence.

- Again, economy/unemployment was a top-three concern in each of the counties.
- Note that substance abuse emerged as a top-three response in Cherokee, Clay, Graham, Jackson, Macon, McDowell, Mitchell, Swain, Transylvania and Yancey counties.
- Government/politics emerged as a top-three concern in Madison and Polk counties.
- Healthcare-related issues were a top-three concern in Haywood County.

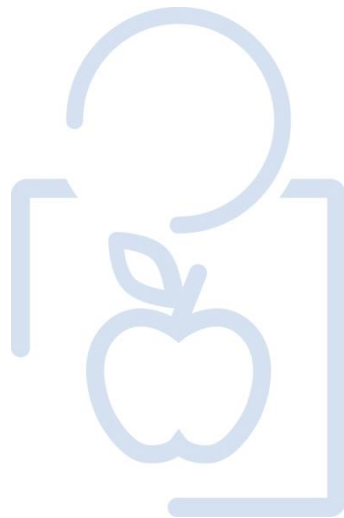
### Top Three County Issues Perceived as Having the Most Negative Impact on Quality of Life

(By County, 2012)

	Economy/ Unemployment	Nothing	Don't Know	Substance Abuse	Government/ Politics	Health Care
Buncombe	✓	✓	✓			
Cherokee	✓	✓		✓		
Clay	✓	✓		✓		
Graham	✓	✓		✓		
Haywood	✓		✓			✓
Henderson	✓	✓	✓			
Jackson	✓	✓		✓		
Macon	✓	✓		✓		
Madison	✓	✓			✓	
McDowell	✓		✓	✓		
Mitchell	✓	✓		✓		
Polk	✓	✓			✓	
Rutherford	✓	✓	✓			
Swain	✓	✓		✓		
Transylvania	✓	✓		✓		
Yancey	✓	✓		✓		
WNC	✓	✓	✓			

Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 10]  
 Notes: • Asked of all respondents.

# GENERAL HEALTH STATUS



# Overall Health Status

*"Would you say that in general your health is: excellent, very good, good, fair or poor?"*

## Self-Reported Health Status

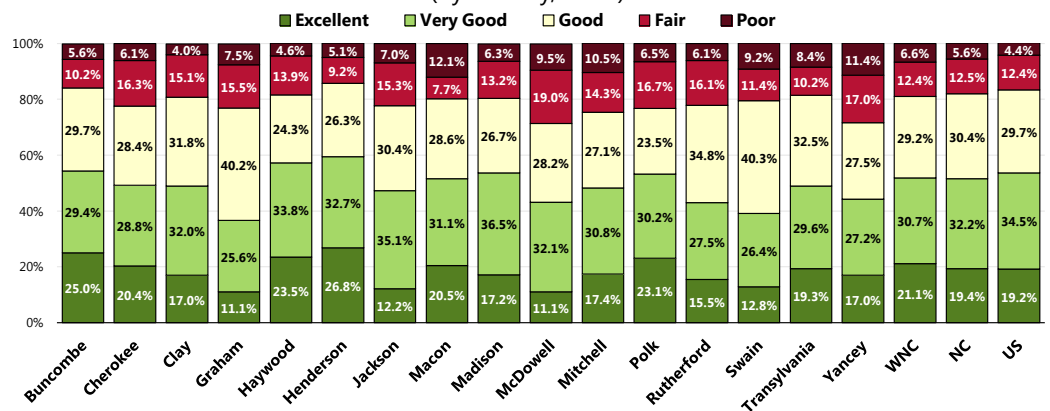
**Just over one-half (51.8%) of Western North Carolina adults rate their overall health as "excellent" or "very good."**

- Another 29.2% gave "good" ratings of their overall health.
- Ratings are statistically higher in Buncombe and Henderson counties.

**However, 19.0% of Western North Carolina adults believe that their overall health is "fair" or "poor."**

- Similar to statewide findings.
- Similar to the national percentage.
- Low ratings are more prevalent in McDowell and Yancey counties.

## Self-Reported Health Status (By County, 2012)

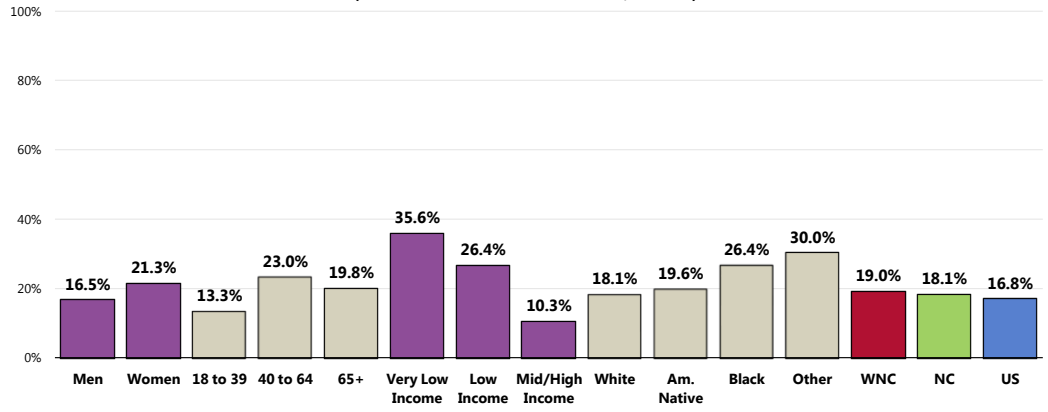


Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 12]  
 • Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2010 North Carolina data.  
 • 2011 PRC National Health Survey, Professional Research Consultants, Inc.  
 Notes: • Asked of all respondents.

Western North Carolina adults more likely to report experiencing "fair" or "poor" overall health include:

- 👥 Women.
- 👥 Adults age 40 and older.
- 👥 Residents with lower incomes.
- 👥 Non-Hispanic Blacks and adults of "Other" races/ethnicity.

## Experience "Fair" or "Poor" Overall Health (Western North Carolina, 2012)



- Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 12]
  - Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2010 North Carolina data.
  - 2011 PRC National Health Survey, Professional Research Consultants, Inc.
- Notes:
- Asked of all respondents.
  - Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).
  - Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Very Low Income" includes households with incomes below 100% of the federal poverty level, "Low Income" includes households with incomes 100% to 199% of the federal poverty level, "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

## Activity Limitations

An individual can get a disabling impairment or chronic condition at any point in life. Compared with people without disabilities, people with disabilities are more likely to:

- Experience difficulties or delays in getting the health care they need.
- Not have had an annual dental visit.
- Not have had a mammogram in past 2 years.
- Not have had a Pap test within the past 3 years.
- Not engage in fitness activities.
- Use tobacco.
- Be overweight or obese.
- Have high blood pressure.
- Experience symptoms of psychological distress.
- Receive less social-emotional support.
- Have lower employment rates.

There are many social and physical factors that influence the health of people with disabilities. The following three areas for public health action have been identified, using the International Classification of Functioning, Disability, and Health (ICF) and the three World Health Organization (WHO) principles of action for addressing health determinants.

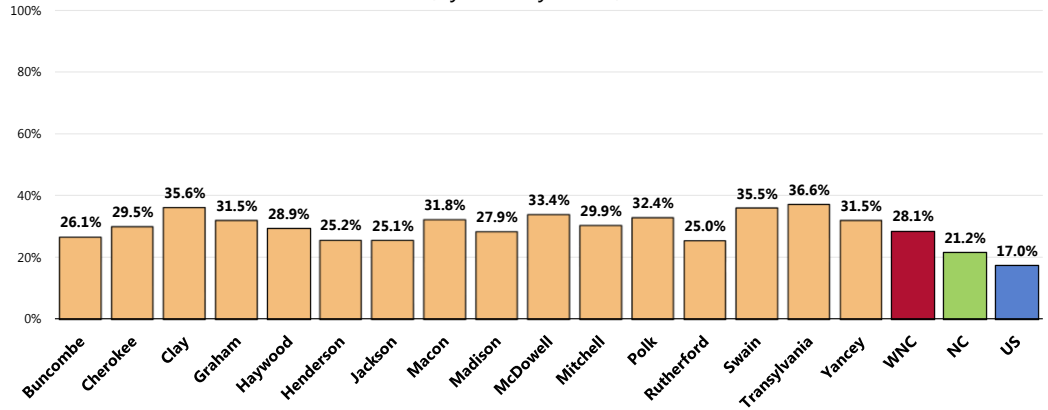
- **Improve the conditions of daily life** by: encouraging communities to be accessible so all can live in, move through, and interact with their environment; encouraging community living; and removing barriers in the environment using both physical universal design concepts and operational policy shifts.
- **Address the inequitable distribution of resources among people with disabilities and those without disabilities** by increasing: appropriate health care for people with disabilities; education and work opportunities; social participation; and access to needed technologies and assistive supports.
- **Expand the knowledge base and raise awareness about determinants of health for people with disabilities** by increasing: the inclusion of people with disabilities in public health data collection efforts across the lifespan; the inclusion of people with disabilities in health promotion activities; and the expansion of disability and health training opportunities for public health and health care professionals.

– Healthy People 2020 ([www.healthypeople.gov](http://www.healthypeople.gov))

### **A total of 28.1% of Western North Carolina adults are limited in some way in some activities due to a physical, mental or emotional problem.**

- Less favorable than the prevalence statewide.
- Less favorable than the national prevalence.
- The prevalence is highest in Clay, Swain and Transylvania counties.

## Limited in Activities in Some Way Due to a Physical, Mental or Emotional Problem (By County, 2012)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 67]  
 • Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2010 North Carolina data.  
 • 2011 PRC National Health Survey, Professional Research Consultants, Inc.

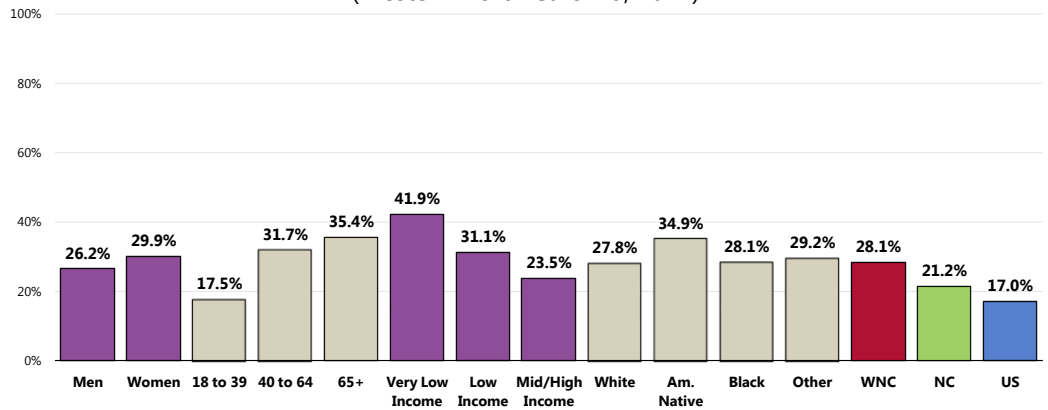
Notes: • Asked of all respondents.

RELATED ISSUE:  
 See also  
*Potentially Disabling  
 Conditions in the Death,  
 Disease & Chronic  
 Conditions* section of this  
 report.

In looking at responses by key demographic characteristics, note the following:

- 👥 WNC women are more likely than men to experience activity limitations.
- 👥 Adults age 40 and older are much more often limited in activities (note the positive correlation with age).
- 👥 Note also the negative correlation between activity limitations and income.
- 👥 American Natives are more likely than residents of other races to report activity limitations.

## Limited in Activities in Some Way Due to a Physical, Mental or Emotional Problem (Western North Carolina, 2012)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 67]  
 • Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2010 North Carolina data.  
 • 2011 PRC National Health Survey, Professional Research Consultants, Inc.

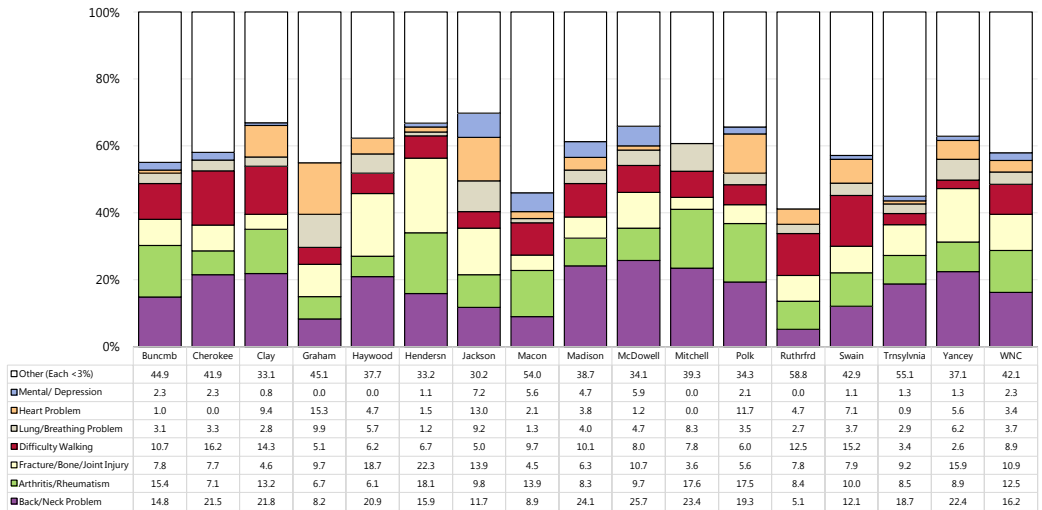
Notes: • Asked of all respondents.  
 • Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).  
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.



Among persons reporting activity limitations, these are most often attributed to musculoskeletal issues, such as back/neck problems, arthritis/rheumatism, fractures or bone/joint injuries, or difficulty walking.

- Other limitations mentioned included references to lung/breathing problems, heart conditions and mental health issues.

**Type of Problem That Limits Activities**  
(Among Those Reporting Activity Limitations; By County, 2012)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 68]  
Notes: • Asked of those respondents reporting activity limitations.

## Caregiving

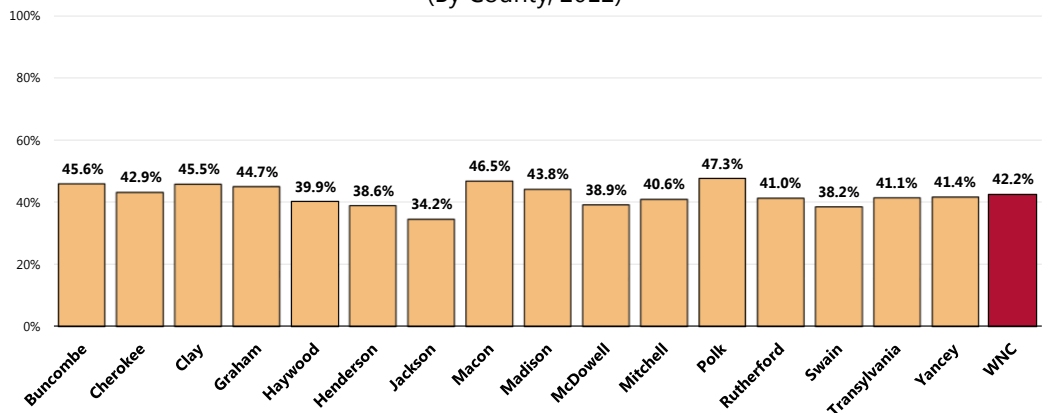
In the past month, 42.2% of Western North Carolina adults provided regular care or assistance to a friend or family member who has a health problem, long-term illness or disability.

- Lowest in Jackson County.

People may provide regular care or assistance to a friend or family member who has a health problem, long-term illness, or disability.

Respondents were asked, "During the past month, did you provide any such care or assistance to a friend or family member?"

**Provide Regular Care or Assistance to a Friend/Family Member Who Has a Health Problem or Disability**  
(By County, 2012)



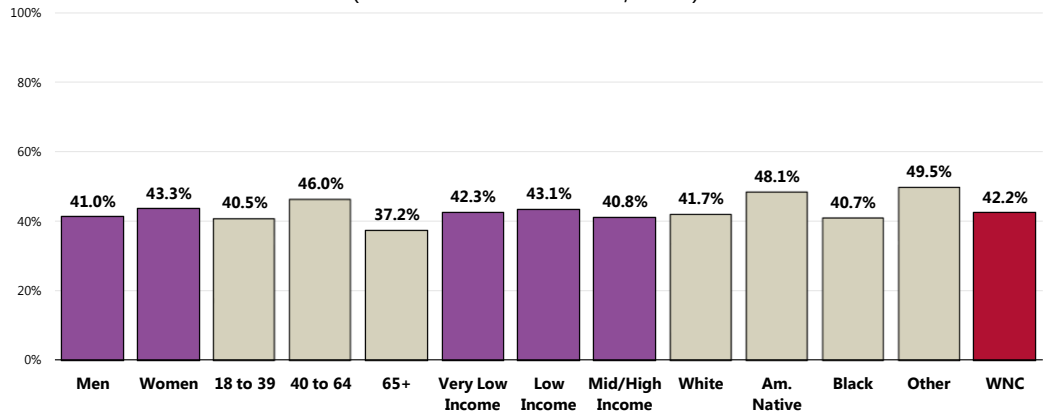
Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 69]  
Notes: • Asked of all respondents.

👥 Adults age 40 to 64 are statistically more likely to report providing regular care or assistance to a friend or family member in the past month.

👥 Other differences in the following chart are not statistically significant.

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

(Western North Carolina, 2012)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 69]

Notes: • Asked of all respondents.

• Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).

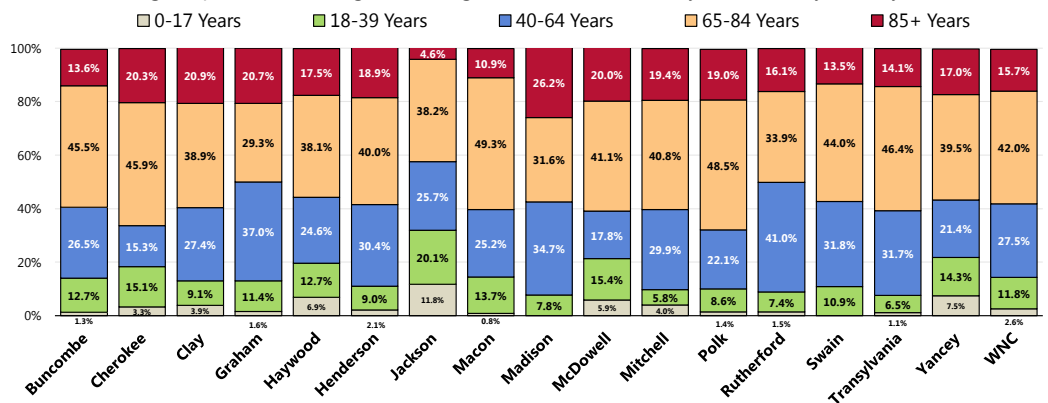
• Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

When asked about the age of the person receiving the care, a majority said they are age 65 or older (42.0% age 65-84, and 15.7% age 85+).

- 39.3% take care of a non-elderly adult (age 18 to 64), while 2.6% take care of a child with a health problem, long-term illness or disability.

## Age of Person for Whom Respondent Provides Care

(Among Respondents Acting as a Caregiver for a Friend/Family Member; By County, 2012)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 70]

Notes: • Asked of respondents acting as a caregiver for a friend or family member.

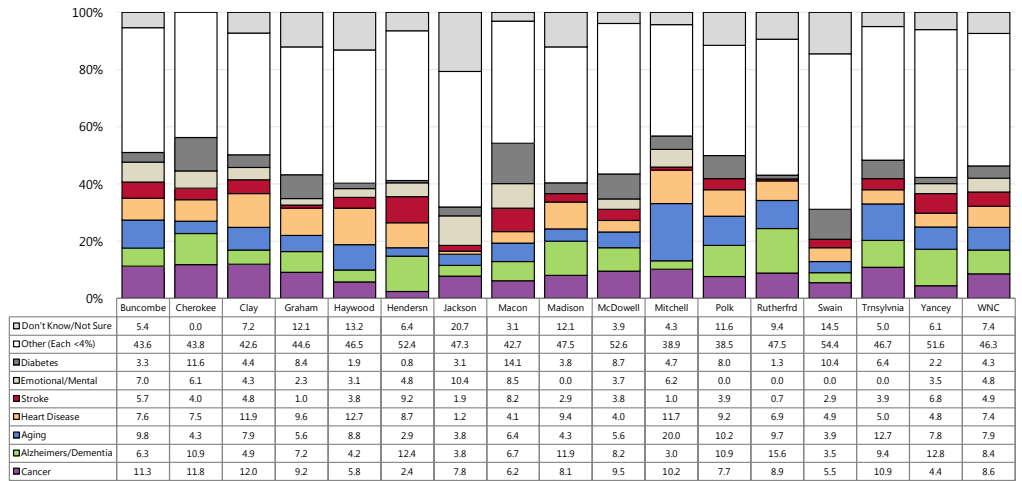
When asked about the nature of the health problem of the person receiving the care, responses varied considerably, with the largest share mentioning cancer (8.6%), followed by Alzheimer's disease (8.4%) and "aging" (7.9%).

- Other common responses included **heart disease** (7.4%), **stroke** (4.9%), **emotional or mental problems** (4.8%), and **diabetes** (4.3%).

- Note that 7.4% of these caregiving respondents could not specify the health problem; the remaining 46.3% is comprised of various other mentioned conditions (each less than 4% of the total).

## Primary Health Issue of Person for Whom Respondent Provides Care

(Among Respondents Acting as a Caregiver for a Friend/Family Member; By County, 2012)



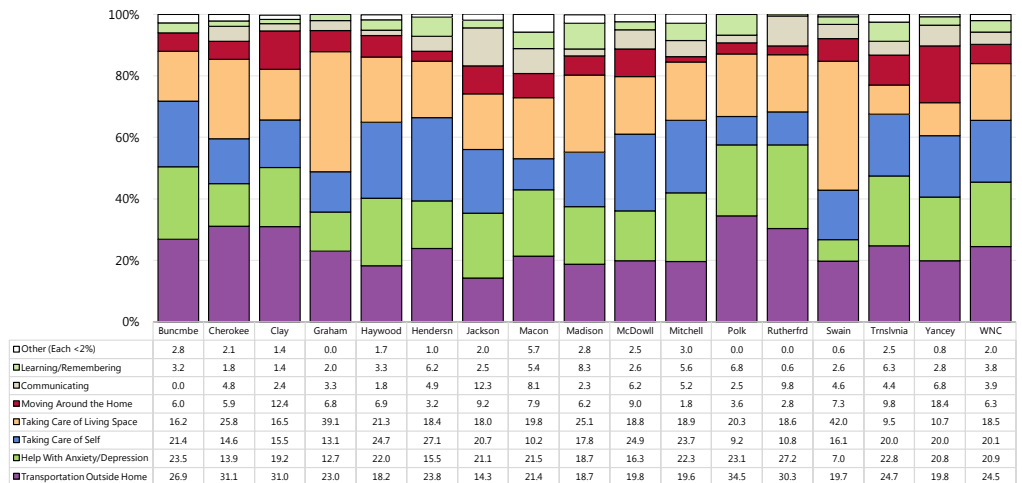
Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 71]  
 Notes: • Asked of respondents acting as a caregiver for a friend or family member.

When asked about the primary type of assistance needed by the person receiving the care, the largest share of responses were for help with transportation (24.5%), followed by help with issues of anxiety and/or depression (20.9%), help with self-care (20.1%), and help taking care of their living space (18.8%).

- Fewer say the care recipient primarily needs help **moving around the home (6.3%)**, **communicating (3.9%)** or **learning and remembering (3.8%)**.

## Primary Type of Assistance Needed by Person for Whom Respondent Provides Care

(Among Respondents Acting as a Caregiver for a Friend/Family Member; By County, 2012)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 72]  
 Notes: • Asked of respondents acting as a caregiver for a friend or family member.

# Mental Health & Mental Disorders

Mental health is a state of successful performance of mental function, resulting in productive activities, fulfilling relationships with other people, and the ability to adapt to change and to cope with challenges. Mental health is essential to personal well-being, family and interpersonal relationships, and the ability to contribute to community or society. Mental disorders are health conditions that are characterized by alterations in thinking, mood, and/or behavior that are associated with distress and/or impaired functioning. Mental disorders contribute to a host of problems that may include disability, pain, or death. Mental illness is the term that refers collectively to all diagnosable mental disorders.

Mental disorders are among the most common causes of disability. The resulting disease burden of mental illness is among the highest of all diseases. According to the national Institute of Mental Health (NIMH), in any given year, an estimated 13 million American adults (approximately 1 in 17) have a seriously debilitating mental illness. Mental health disorders are the leading cause of disability in the United States and Canada, accounting for 25% of all years of life lost to disability and premature mortality. Moreover, suicide is the 11<sup>th</sup> leading cause of death in the United States, accounting for the deaths of approximately 30,000 Americans each year.

Mental health and physical health are closely connected. Mental health plays a major role in people's ability to maintain good physical health. Mental illnesses, such as depression and anxiety, affect people's ability to participate in health-promoting behaviors. In turn, problems with physical health, such as chronic diseases, can have a serious impact on mental health and decrease a person's ability to participate in treatment and recovery.

The existing model for understanding mental health and mental disorders emphasizes the interaction of social, environmental, and genetic factors throughout the lifespan. In behavioral health, researchers identify: **risk factors**, which predispose individuals to mental illness; and **protective factors**, which protect them from developing mental disorders. Researchers now know that the prevention of mental, emotional, and behavioral (MEB) disorders is inherently interdisciplinary and draws on a variety of different strategies. Over the past 20 years, research on the prevention of mental disorders has progressed. The understanding of how the brain functions under normal conditions and in response to stressors, combined with knowledge of how the brain develops over time, has been essential to that progress. The major areas of progress include evidence that:

- MEB disorders are common and begin early in life.
- The greatest opportunity for prevention is among young people.
- There are multiyear effects of multiple preventive interventions on reducing substance abuse, conduct disorder, antisocial behavior, aggression, and child maltreatment.
- The incidence of depression among pregnant women and adolescents can be reduced.
- School-based violence prevention can reduce the base rate of aggressive problems in an average school by 25 to 33%.
- There are potential indicated preventive interventions for schizophrenia.
- Improving family functioning and positive parenting can have positive outcomes on mental health and can reduce poverty-related risk.
- School-based preventive interventions aimed at improving social and emotional outcomes can also improve academic outcomes.
- Interventions targeting families dealing with adversities, such as parental depression or divorce, can be effective in reducing risk for depression among children and increasing effective parenting.
- Some preventive interventions have benefits that exceed costs, with the available evidence strongest for early childhood interventions.
- Implementation is complex, and it is important that interventions be relevant to the target audiences.

In addition to advancements in the prevention of mental disorders, there continues to be steady progress in treating mental disorders as new drugs and stronger evidence-based outcomes become available.

– Healthy People 2020 ([www.healthypeople.gov](http://www.healthypeople.gov))

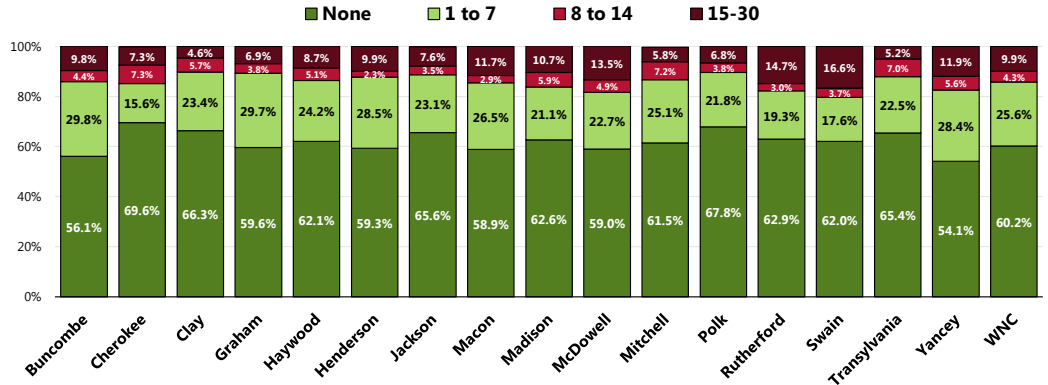
## Self-Reported Mental Health Status

*"Now thinking about your mental health, which includes stress, depression, and problems with emotions, for how many of the past 30 days was your mental health not good?"*

**While most (60.2%) survey respondents did not experience any days of poor mental health in the past month, a total of 25.6% report experiencing 1 to 7 days of poor mental health in the past month and 14.2% experienced more than one week of poor mental health in the past month.**

- Respondents in Swain County reported the highest prevalence (20.3%) of adults experiencing more than 7 days of poor mental health in the past month.

### Number of Days in the Past 30 Days on Which Mental Health Was Not Good (By County, 2012)

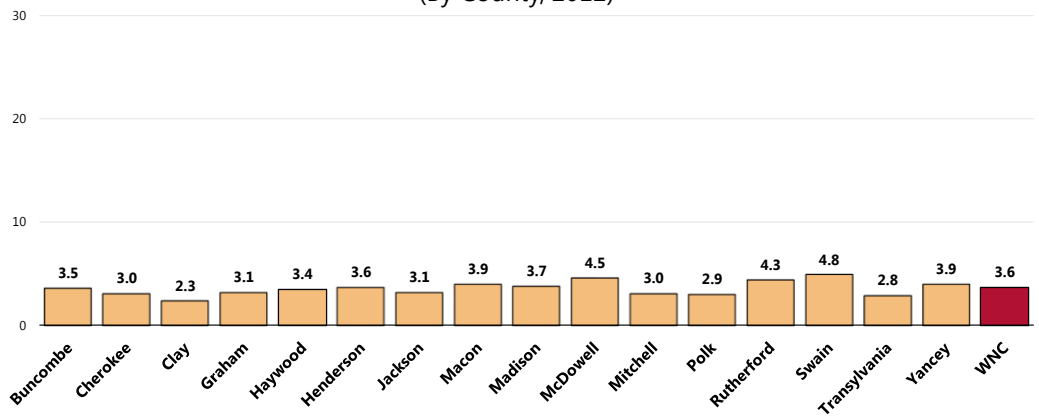


Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 64]  
Notes: • Asked of all respondents.

**On average, community members experienced 3.6 days of poor mental health in the past month.**

- By county, averages range from a low 2.3 in Clay County to a high 4.8 in Swain County.





### Average Number of the Past 30 Days on Which Mental Health Was Not Good (By County, 2012)



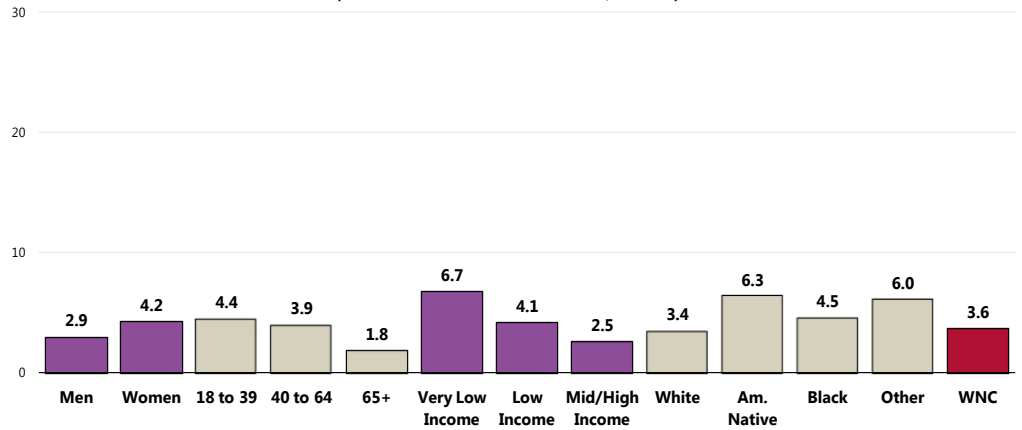
Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 64]  
Notes: • Asked of all respondents.

RELATED ISSUE:  
See also *Substance Abuse* in the **Modifiable Health Risks** section of this report.

Average days of poor mental health in the past month are notably higher among:

-  Women.
-  Adults under the age of 65.
-  Community members living at lower incomes (strongly correlated).
-  American Natives and "Other" races/ethnicity.

### Average Number of the Past 30 Days on Which Mental Health Was Not Good (Western North Carolina, 2012)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 64]  
 Notes: • Asked of all respondents.  
 • Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).  
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

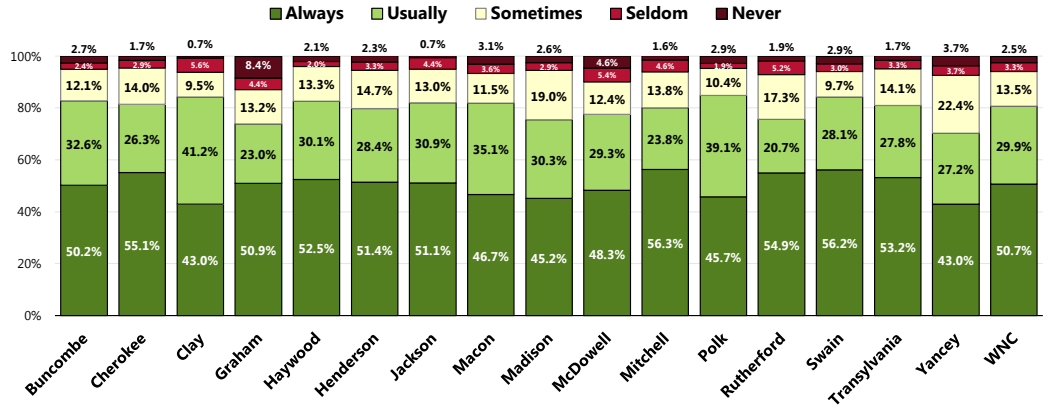
*"How often do you get the social and emotional support you need?"*

## Emotional Support

**Most (80.6%) survey respondents "always" or "usually" get the social and emotional support that they need.**

- Another 13.5% of survey respondents "sometimes" get the social and emotional support that they need.
- On the other hand, note that 5.8% "seldom" or "never" receive the social and emotional support that they need.
- The prevalence of adults who "usually/always" get the emotional or social support that they need is statistically low in Graham and Yancey counties.

## Frequency of Getting Needed Social/Emotional Support (By County, 2012)

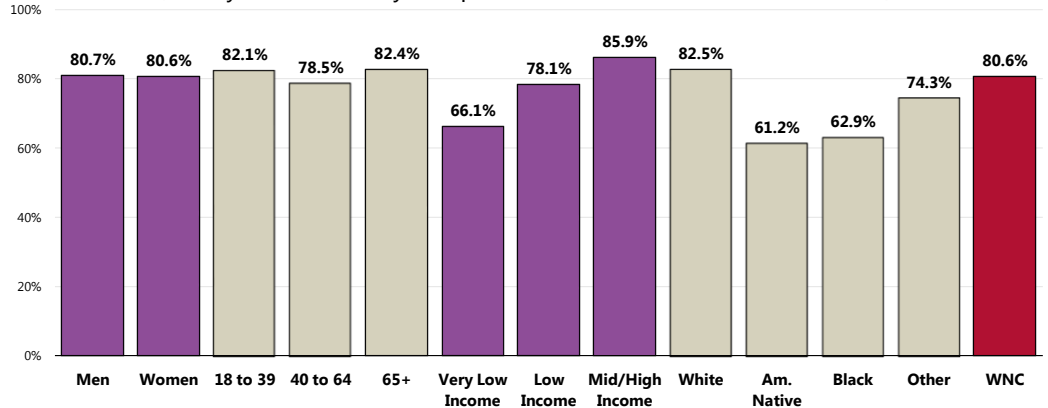


Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 63]  
Notes: • Asked of all respondents.

Adults more likely to be without adequate social and emotional support include:

- 👥 Adults age 40 to 64.
- 👥 Adults with lower incomes.
- 👥 Non-Hispanic American Natives and Blacks.

## “Always” or “Usually” Get Needed Social/Emotional Support (“Always” and “Usually” Responses; Western North Carolina, 2012)



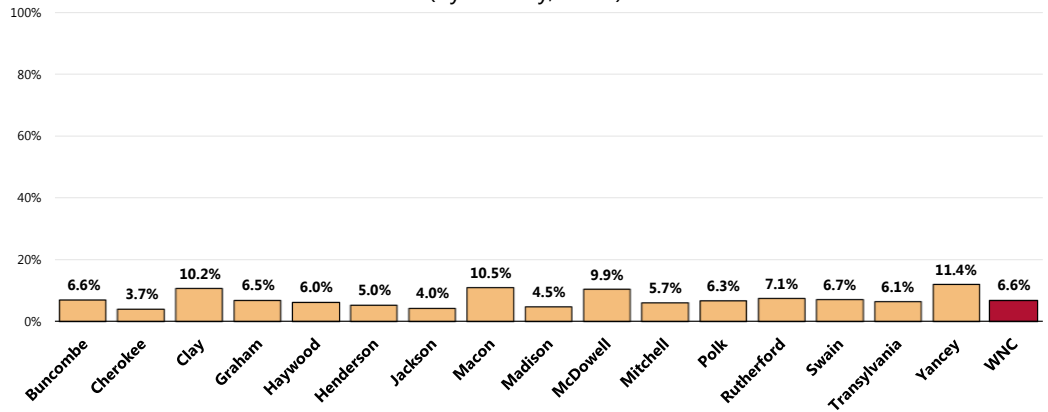
Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 63]  
Notes: • Asked of all respondents.  
• Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., “White” reflects non-Hispanic White respondents).  
• Income categories reflect respondent’s household income as a ratio to the federal poverty level (FPL) for their household size. “Very Low Income” includes households with incomes below 100% of the federal poverty level; “Low Income” includes households with incomes 100% to 199% of the federal poverty level; “Mid/High Income” includes households with incomes at 200% or more of the federal poverty level.

## Difficulty Obtaining Mental Health Treatment

Among Western North Carolina survey respondents, 6.6% acknowledge that there was a time in the past 12 months when they needed mental health care or counseling but did not get it at that time.

- The prevalence is unfavorably high among Yancey County respondents and lowest in Cherokee County.

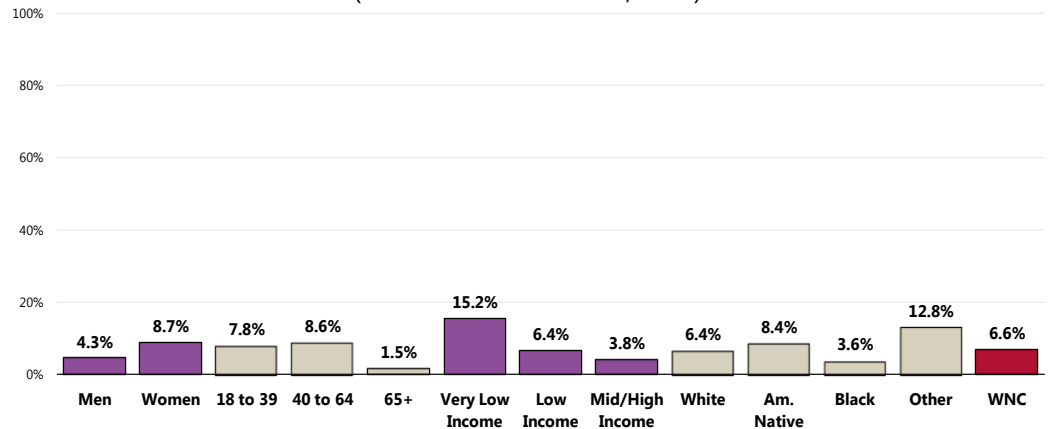
### Had a Time in the Past Year When Mental Health Care or Counseling Was Needed, But Was Unable to Get It (By County, 2012)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 65]  
Notes: • Asked of all respondents.

- Viewed by demographics: women, adults under 65 and those with very low incomes are more likely to report that there was a time in the past year when they needed mental health services but were unable to obtain them.

### Had a Time in the Past Year When Mental Health Care or Counseling Was Needed, But Was Unable to Get It (Western North Carolina, 2012)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 65]  
Notes: • Asked of all respondents.  
• Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).  
• Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

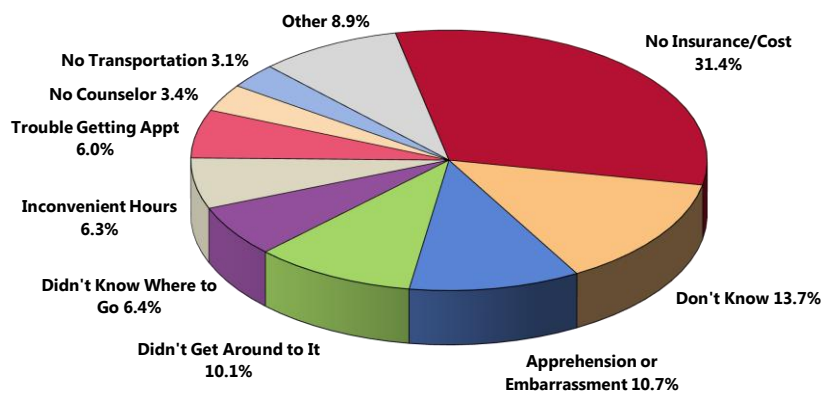


*"Now I would like to ask, in general, how satisfied are you with your life?"*

**Asked about the inability to receive the necessary mental health services, 31.4% of these adults mentioned cost or a lack of insurance coverage as their reason for not being able to obtain mental health services in the past year.**

- While 13.7% of these adults could not specify why they were unable to get the services they needed, another 10.7% mentioned that they were **embarrassed or apprehensive** and 10.1% reported that they **did not get around to** obtaining the services.
- Another 6.4% of these adults **weren't certain where** to seek care, while 6.3% mentioned **inconvenient office hours** as the barrier and 6.0% had **trouble getting an appointment**.
- Finally, 3.4% of these adults mentioned having **no counselor for care** and 3.1% had **no transportation**.

### Primary Reason for Inability to Access Mental Health Services (Adults Unable to Get Needed Mental Health Care in the Past Year; WNC, 2012)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 66]  
Notes: • Asked of those respondents who were unable to get needed mental health care in the past year.

### Life Satisfaction

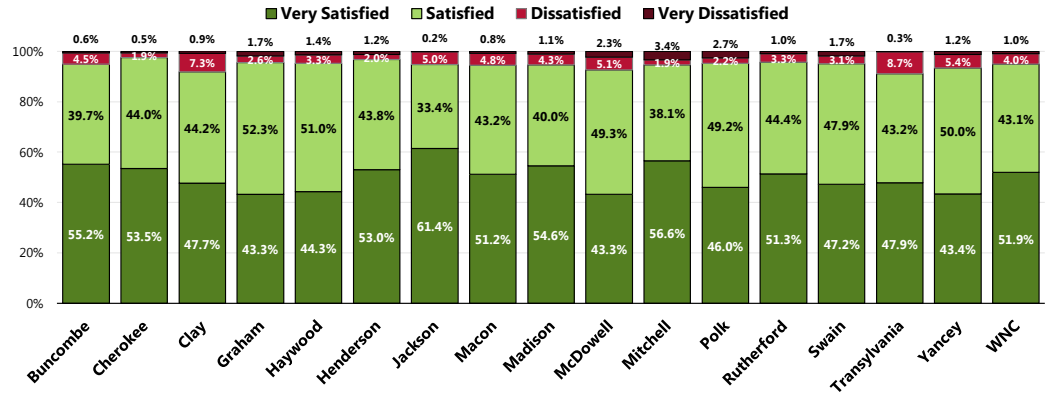
**Most Western North Carolina residents (95.0%) report being "satisfied" or "very satisfied" with their lives.**

**On the other hand, 5.0% of respondents are "dissatisfied/very dissatisfied" with their lives.**

- Dissatisfaction among respondents is highest in Clay, McDowell, Transylvania and Yancey counties.

## Satisfaction With Life

(By County, 2012)



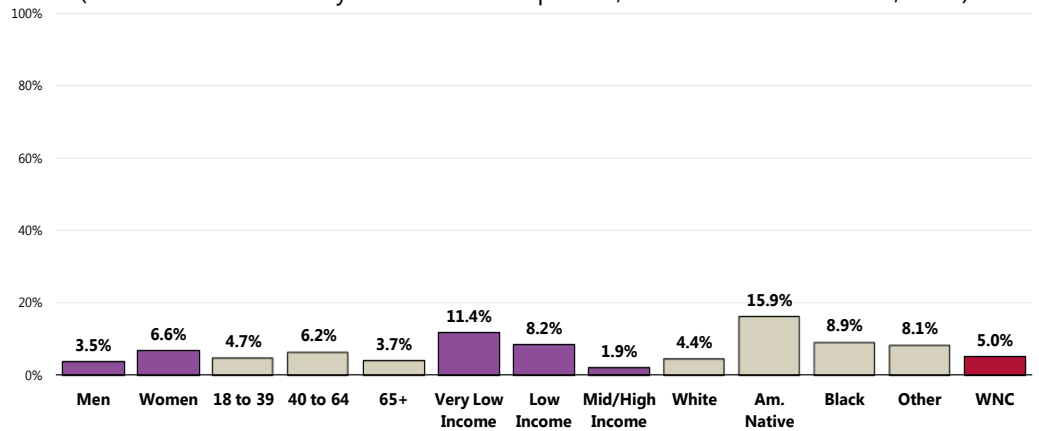
Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 62]  
 Notes: • Asked of all respondents.

Population segments more likely to be dissatisfied with their lives include the following:

- 👥 Women.
- 👥 Adults age 40 to 64.
- 👥 Those living in the lower income categories (strong correlation with income).
- 👥 Non-Hispanic American Natives.

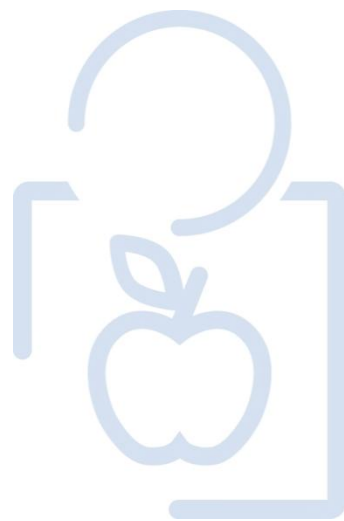
## Dissatisfied With Life

("Dissatisfied" and "Very Dissatisfied" Responses; Western North Carolina, 2012)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 62]  
 Notes: • Asked of all respondents.  
 • Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).  
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

# CHRONIC CONDITIONS & INJURY



# Cardiovascular Risk Factors

Heart disease is the leading cause of death in the United States, with stroke following as the third leading cause. Together, heart disease and stroke are among the most widespread and costly health problems facing the nation today, accounting for more than \$500 billion in healthcare expenditures and related expenses in 2010 alone. Fortunately, they are also among the most preventable.

The leading modifiable (controllable) risk factors for heart disease and stroke are:

- High blood pressure
- High cholesterol
- Cigarette smoking
- Diabetes
- Poor diet and physical inactivity
- Overweight and obesity

The risk of Americans developing and dying from cardiovascular disease would be substantially reduced if major improvements were made across the US population in diet and physical activity, control of high blood pressure and cholesterol, smoking cessation, and appropriate aspirin use.

The burden of cardiovascular disease is disproportionately distributed across the population. There are significant disparities in the following based on gender, age, race/ethnicity, geographic area, and socioeconomic status:

- Prevalence of risk factors
- Access to treatment
- Appropriate and timely treatment
- Treatment outcomes
- Mortality

Disease does not occur in isolation, and cardiovascular disease is no exception. Cardiovascular health is significantly influenced by the physical, social, and political environment, including: maternal and child health; access to educational opportunities; availability of healthy foods, physical education, and extracurricular activities in schools; opportunities for physical activity, including access to safe and walkable communities; access to healthy foods; quality of working conditions and worksite health; availability of community support and resources; and access to affordable, quality healthcare.

– Healthy People 2020 ([www.healthypeople.gov](http://www.healthypeople.gov))

## Hypertension (High Blood Pressure)

Controlling risk factors for heart disease and stroke remains a challenge. High blood pressure and cholesterol are still major contributors to the national epidemic of cardiovascular disease. High blood pressure affects approximately 1 in 3 adults in the United States, and more than half of Americans with high blood pressure do not have it under control. High sodium intake is a known risk factor for high blood pressure and heart disease, yet about 90% of American adults exceed their recommendation for sodium intake.

– Healthy People 2020 ([www.healthypeople.gov](http://www.healthypeople.gov))

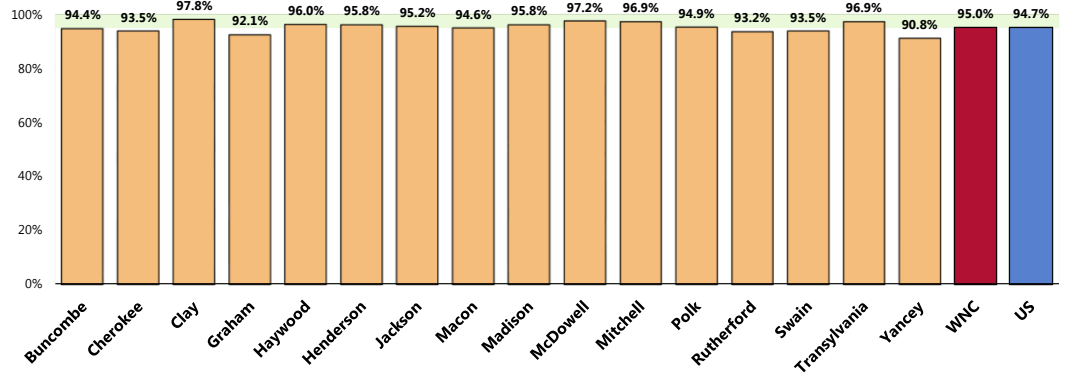
## High Blood Pressure Testing

**A total of 95.0% of Western North Carolina adults have had their blood pressure tested within the past two years.**

- Similar to national findings.
- Similar to the Healthy People 2020 target (94.9% or higher).
- Highest in Clay County, lowest in Yancey County.

### Have Had Blood Pressure Checked in the Past Two Years

Healthy People 2020 Target = 94.9% or Higher



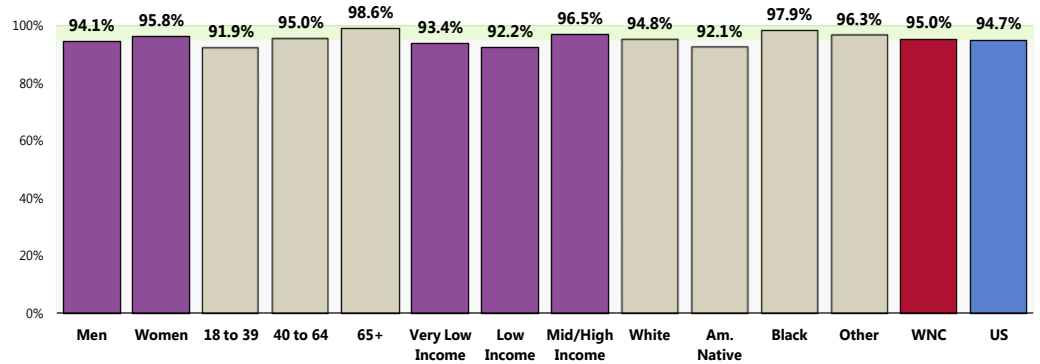
Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 24]  
 • 2011 PRC National Health Survey, Professional Research Consultants, Inc.  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective HDS-4]  
 Notes: • Asked of all respondents.

Testing is lowest (albeit still over 90%) among men, adults 18-39, and residents living in the lower income categories.

### Have Had Blood Pressure Checked in the Past Two Years

(Western North Carolina, 2012)

Healthy People 2020 Target = 94.9% or Higher



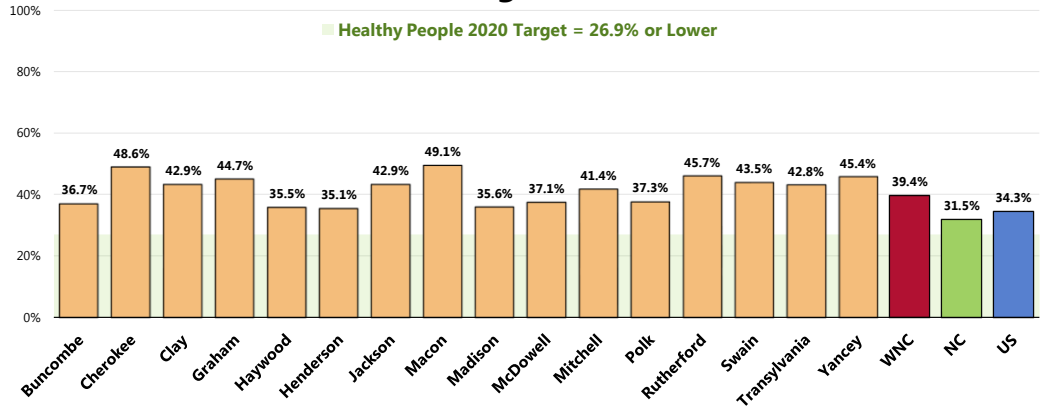
Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 24]  
 • 2011 PRC National Health Survey, Professional Research Consultants, Inc.  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective HDS-4]  
 Notes: • Asked of all respondents.  
 • Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).  
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

## Prevalence of Hypertension

**A total of 39.4% of adults have been told at some point that their blood pressure was high.**

- Worse than the North Carolina prevalence.
- Worse than the national prevalence.
- Fails to satisfy the Healthy People 2020 target (26.9% or lower).
- Statistically high among Cherokee County and Macon County respondents.

### Prevalence of High Blood Pressure



Sources:
 

- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 76]
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2009 North Carolina data.
- 2011 PRC National Health Survey, Professional Research Consultants, Inc.
- US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective HDS-5.1]

 Notes:
 

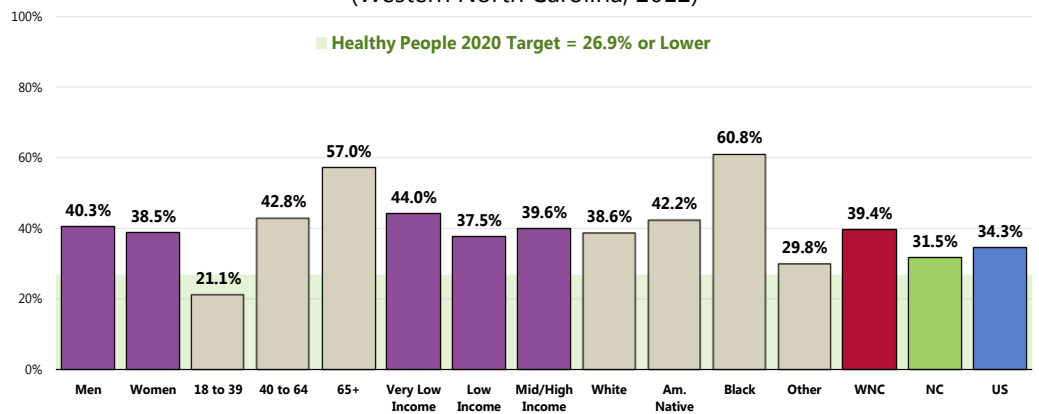
- Asked of all respondents.

Hypertension diagnoses are higher among:

- Adults age 40 and older, and especially those age 65+.
- Very low income residents.
- Non-Hispanic American Natives and Blacks.

### Prevalence of High Blood Pressure

(Western North Carolina, 2012)



Sources:
 

- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 76]
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2009 North Carolina data.
- 2011 PRC National Health Survey, Professional Research Consultants, Inc.
- US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective HDS-5.1]

 Notes:
 

- Asked of all respondents.
- Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).
- Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

## Hypertension Management

Respondents reporting high blood pressure were further asked:

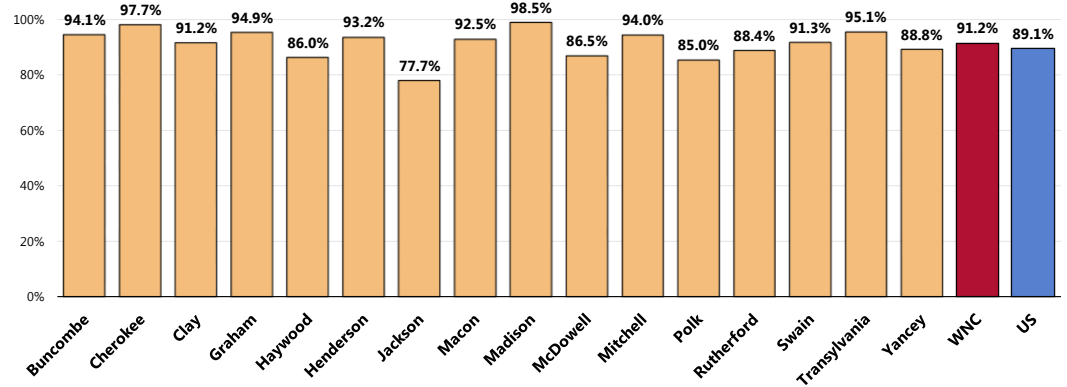
*"Are you currently taking any action to help control your high blood pressure, such as taking medication, changing your diet, or exercising?"*

**Among respondents who have been told that their blood pressure was high, 91.2% report that they are currently taking actions to control their condition.**

- Similar to national findings.
- Highest in Cherokee and Madison counties, lowest in Jackson County.

### Taking Action to Control Hypertension

(Among Adults With High Blood Pressure)



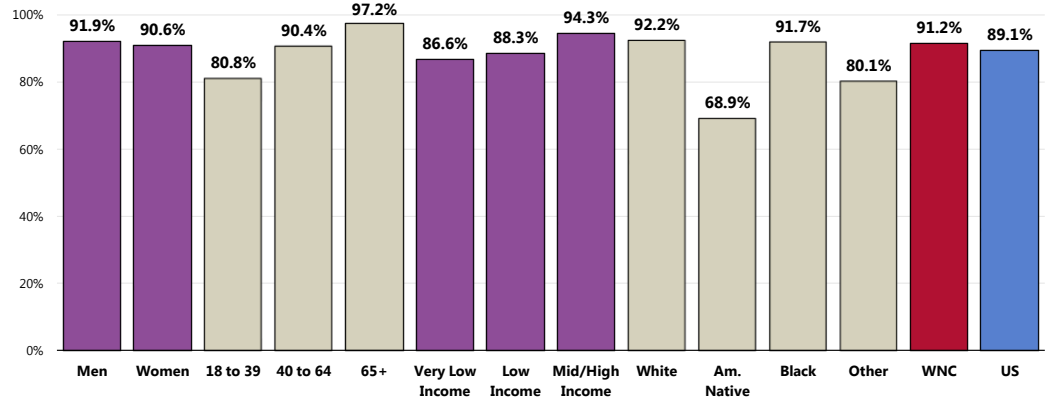
Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 23]  
 • 2011 PRC National Health Survey, Professional Research Consultants, Inc.  
 Notes: • Asked of respondents who have been diagnosed with high blood pressure.  
 • In this case, the term "action" refers to medication, change in diet, and/or exercise.

Hypertensive adults less likely to be taking action to control their high blood pressure include:

- Young adults.
- Low and very low income residents.
- American Natives and "Other" races/ethnicity.

### Taking Action to Control Hypertension

(Among Adults With High Blood Pressure; Western North Carolina, 2012)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 23]  
 • 2011 PRC National Health Survey, Professional Research Consultants, Inc.  
 Notes: • Asked of respondents who have been diagnosed with high blood pressure.  
 • In this case, the term "action" refers to medication, change in diet, and/or exercise.  
 • Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).  
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

## High Blood Cholesterol

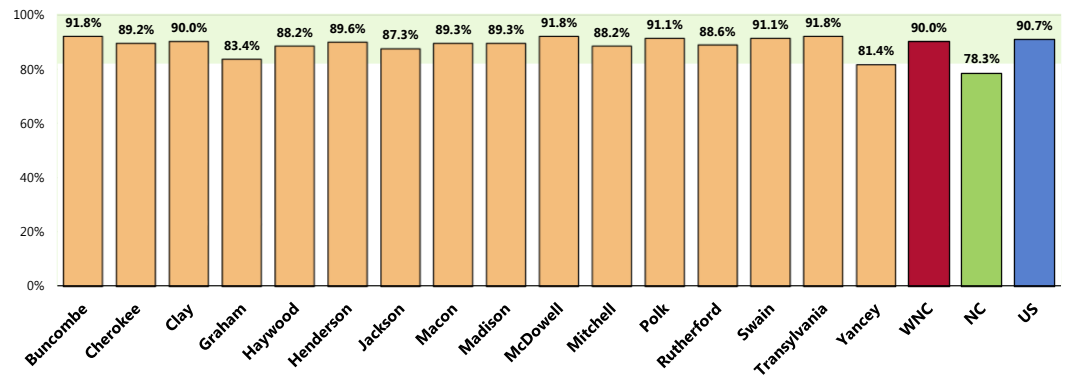
### Blood Cholesterol Testing

**A total of 90.0% of Western North Carolina adults have had their blood cholesterol checked within the past five years.**

- More favorable than North Carolina findings.
- Nearly identical to the national findings.
- Satisfies the Healthy People 2020 target (82.1% or higher).
- Unfavorably low among Graham County and Yancey County residents.

### Have Had Blood Cholesterol Levels Checked in the Past Five Years

Healthy People 2020 Target = 82.1% or Higher

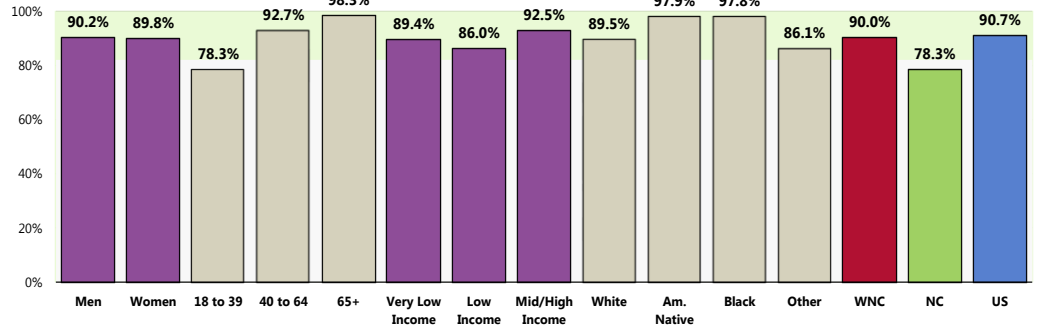


- Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 27]
  - Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2009 North Carolina data.
  - 2011 PRC National Health Survey, Professional Research Consultants, Inc.
  - US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective HDS-6]
- Notes:
- Asked of all respondents.

👤 Young adults, residents in the middle income category, and Non-Hispanic Whites report lower screening levels.

### Have Had Blood Cholesterol Levels Checked in the Past Five Years (Western North Carolina, 2012)

Healthy People 2020 Target = 82.1% or Higher



- Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 27]
  - Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2009 North Carolina data.
  - 2011 PRC National Health Survey, Professional Research Consultants, Inc.
  - US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective HDS-6]
- Notes:
- Asked of all respondents.
  - Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).
  - Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

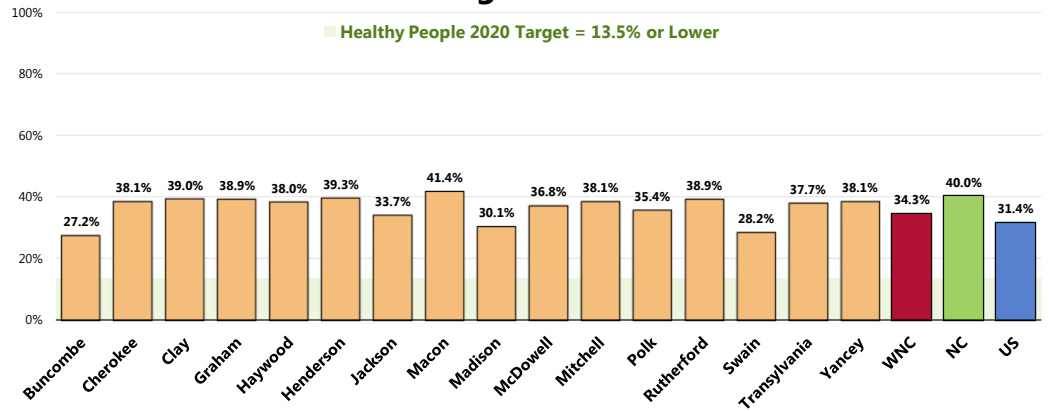


## Self-Reported High Blood Cholesterol

**A total of 34.3% of adults have been told by a health professional that their cholesterol level was high.**

- More favorable than the North Carolina findings.
- Similar to the national prevalence.
- Fails to satisfy the Healthy People 2020 target (13.5% or lower).
- Favorably low in Buncombe County, highest in Macon County.

### Prevalence of High Blood Cholesterol



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 77]  
• Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC). 2009 North Carolina data.  
• 2011 PRC National Health Survey, Professional Research Consultants, Inc.  
• US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective HDS-7]

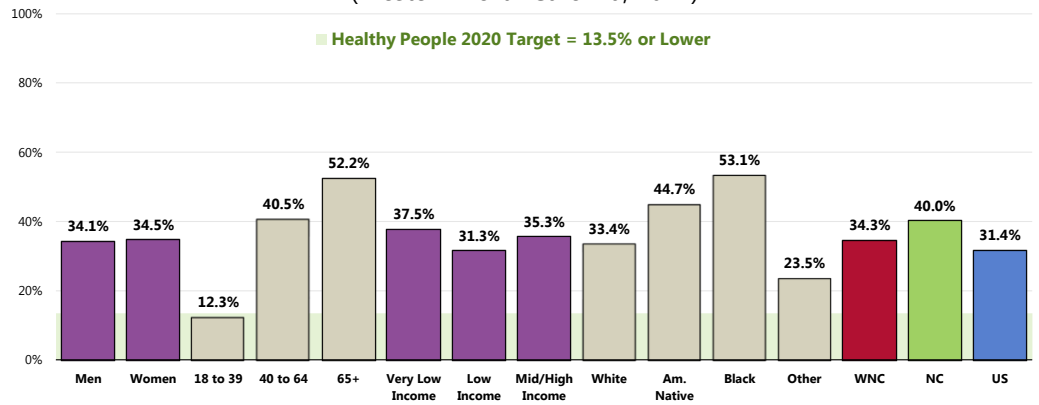
Notes: • Asked of all respondents.

Note that 13.4% of Western North Carolina adults report not having high blood cholesterol, but: 1) have never had their blood cholesterol levels tested; 2) have not been screened in the past 5 years; or 3) do not recall when their last screening was. For these individuals, current prevalence is unknown.

- 👤 Note the positive correlation between age and high blood cholesterol.
- 👤 Note the higher prevalence among very low income adults.
- 👤 Non-Hispanic American Natives and Blacks report higher percentages.
- 👤 Keep in mind that "unknowns" are relatively high in young adults and residents of "Other" races/ethnicity.

# Prevalence of High Blood Cholesterol

(Western North Carolina, 2012)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 77]  
 • Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2009 North Carolina data.  
 • 2011 PRC National Health Survey, Professional Research Consultants, Inc.  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective HDS-7]

Notes: • Asked of all respondents.  
 • Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).  
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

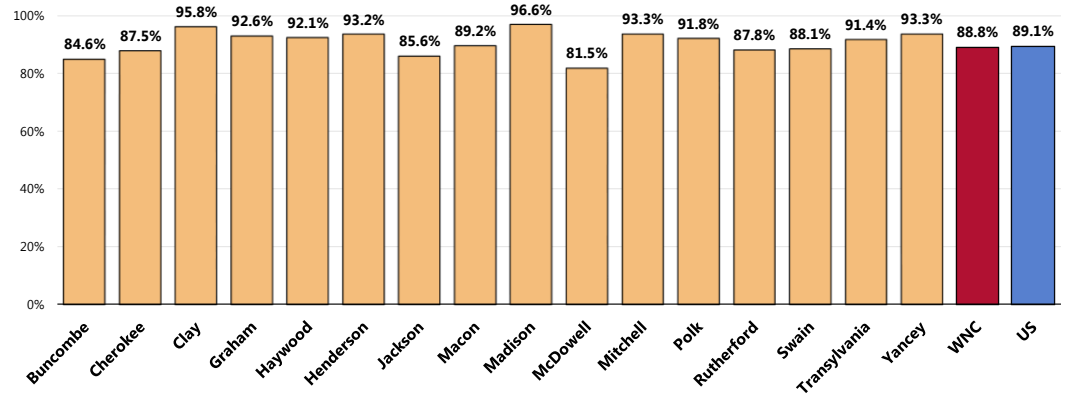
## High Cholesterol Management

**Among adults who have been told that their blood cholesterol was high, 88.8% report that they are currently taking actions to control their cholesterol levels.**

- Comparable to that found nationwide.
- Favorably high in Clay and Madison counties.

## Taking Action to Control High Blood Cholesterol

(Among Adults With High Blood Pressure)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 26]  
 • 2011 PRC National Health Survey, Professional Research Consultants, Inc.

Notes: • Asked of respondents who have been diagnosed with high blood cholesterol.  
 • In this case, the term "action" refers to medication, change in diet, and/or exercise.

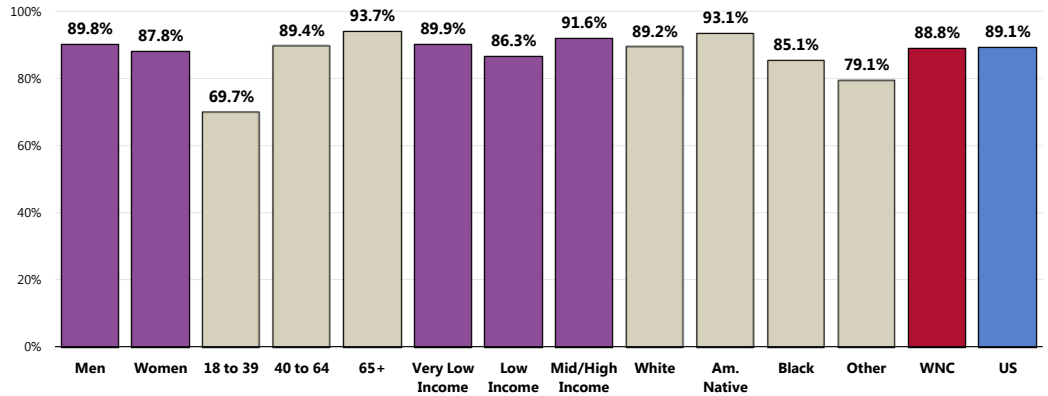
Respondents reporting high cholesterol were further asked:

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

The following adults (with high blood cholesterol) are less likely to report taking action to control their blood cholesterol levels:

- 👤 Young adults (note the positive correlation with age).
- 👤 Residents with low incomes.
- 👤 Non-Hispanic Blacks and "Other" residents.

**Taking Action to Control High Blood Cholesterol**  
(Among Adults With High Blood Cholesterol; Western North Carolina, 2012)



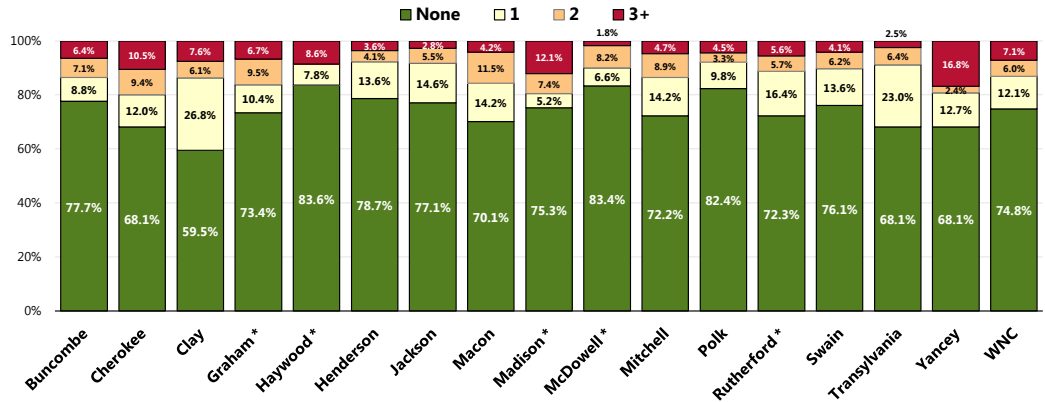
- Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 26]
  - 2011 PRC National Health Survey, Professional Research Consultants, Inc.
- Notes:
- Asked of respondents who have been diagnosed with high blood cholesterol.
  - In this case, the term "action" refers to medication, change in diet, and/or exercise.
  - Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).
  - Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

# Falls

Among seniors (65+) in Western North Carolina, 25.2% have fallen at least once in the past year.

- Specifically, 12.1% have fallen once, while 6.0% have fallen twice, and 7.1% have fallen three or more times in the past year.
- Seniors in Clay County reported the highest percentage of falls in the past year.

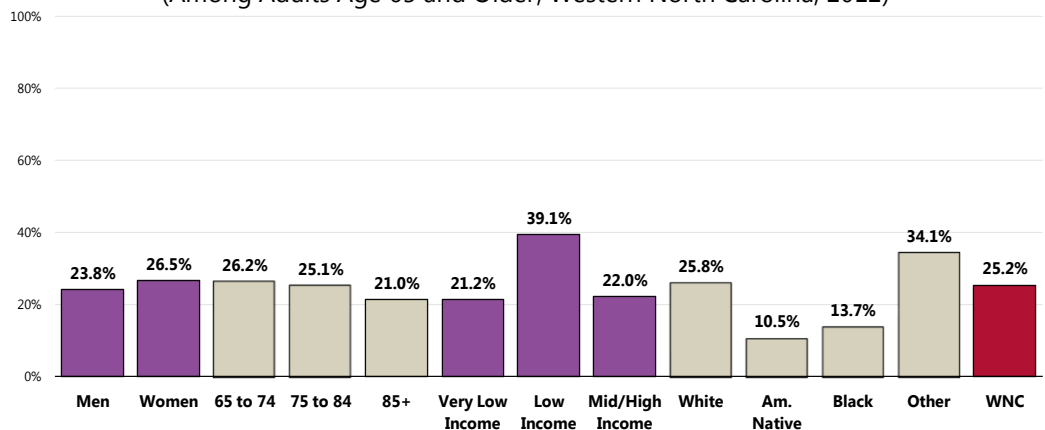
**Number of Falls in the Past Year**  
(Among Adults Age 65 and Older; By County, 2012)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 40]  
Notes: • Asked of respondents age 65 and older.  
\* These counties have sample sizes deemed unreliable (n<50).

- Adults more likely to have fallen in the past year include women, adults between 65 and 84, Non-Hispanic Whites and "Other" races/ethnicity.
- Note also that seniors in the "low" income breakout were notably more likely to have fallen in the past year.

**Have Fallen in the Past Year**  
(Among Adults Age 65 and Older; Western North Carolina, 2012)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 40]  
Notes: • Asked of respondents age 65 and older.  
• Includes one or more falls in the past year.  
• Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).  
• Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

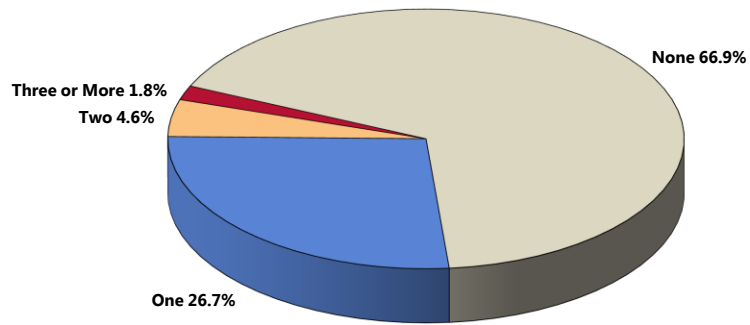
“Injuries” refers to those falls which resulted in the respondent limiting his or her regular activities for at least one day, or caused him/her to see a physician.

**Among seniors who fell at least once in the past year, 1 in 3 sustained an injury as a result of the fall.**


- Of the seniors who fell in the past year, 26.7% report that **one fall** resulted in an injury, while 4.6% of these senior citizens reported **two falls** which resulted in injuries and 1.8% had **three or more falls** resulting in injuries in the past year.

**Number of Falls in the Past Year That Caused an Injury**

(Among Adults 65+ Who Have Fallen in the Past Year; Western North Carolina, 2012)

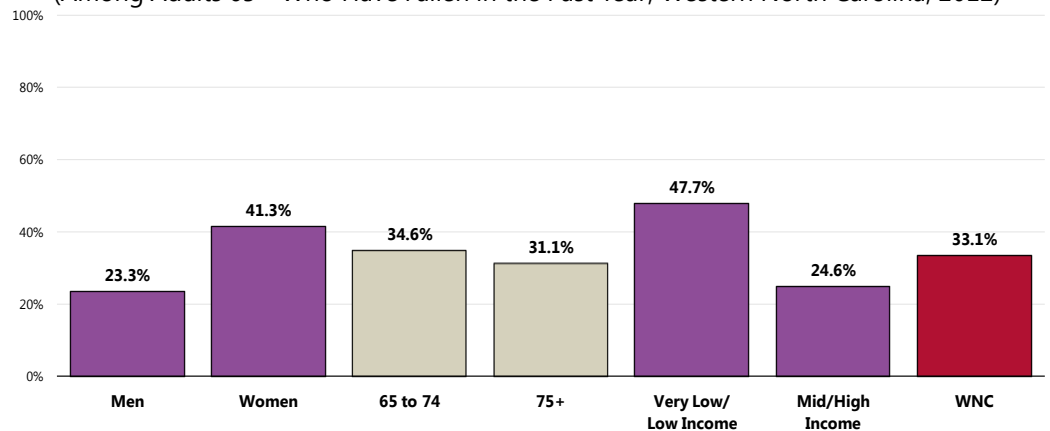


Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 41]  
 Notes: • Asked of respondents age 65 and older who have fallen in the past year.  
 • Includes falls that caused respondent to limit his/her regular activities for at least a day or caused him/her to go see a doctor.

 Women age 65+ and seniors living on lower incomes are more likely to have been injured as a result of a fall in the past year.

**Sustained a Fall-Related Injury in the Past Year**

(Among Adults 65+ Who Have Fallen in the Past Year; Western North Carolina, 2012)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 41]  
 Notes: • Asked of respondents age 65 and older who have fallen in the past year.  
 • Includes falls that caused respondent to limit his/her regular activities for at least a day or caused him/her to go see a doctor.  
 • Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., “White” reflects non-Hispanic White respondents).  
 • Income categories reflect respondent’s household income as a ratio to the federal poverty level (FPL) for their household size. “Low Income” includes households with incomes up to 200% of the federal poverty level; “Mid/High Income” includes households with incomes at 200% or more of the federal poverty level.

# Diabetes

Diabetes mellitus occurs when the body cannot produce or respond appropriately to insulin. Insulin is a hormone that the body needs to absorb and use glucose (sugar) as fuel for the body's cells. Without a properly functioning insulin signaling system, blood glucose levels become elevated and other metabolic abnormalities occur, leading to the development of serious, disabling complications. Many forms of diabetes exist; the three common types are Type 1, Type 2, and gestational diabetes.

Effective therapy can prevent or delay diabetic complications. However, almost 25% of Americans with diabetes mellitus are undiagnosed, and another 57 million Americans have blood glucose levels that greatly increase their risk of developing diabetes mellitus in the next several years. Few people receive effective preventative care, which makes diabetes mellitus an immense and complex public health challenge.

Diabetes mellitus affects an estimated 23.6 million people in the United States and is the 7th leading cause of death. Diabetes mellitus:

- Lowers life expectancy by up to 15 years.
- Increases the risk of heart disease by 2 to 4 times.
- Is the leading cause of kidney failure, lower limb amputations, and adult-onset blindness.

In addition to these human costs, the estimated total financial cost of diabetes mellitus in the US in 2007 was \$174 billion, which includes the costs of medical care, disability, and premature death.

The rate of diabetes mellitus continues to increase both in the United States and throughout the world. Due to the steady rise in the number of persons with diabetes mellitus, and possibly earlier onset of type 2 diabetes mellitus, there is growing concern about the possibility that the increase in the number of persons with diabetes mellitus and the complexity of their care might overwhelm existing healthcare systems.

People from minority populations are more frequently affected by type 2 diabetes. Minority groups constitute 25% of all adult patients with diabetes in the US and represent the majority of children and adolescents with type 2 diabetes.

Lifestyle change has been proven effective in preventing or delaying the onset of type 2 diabetes in high-risk individuals.

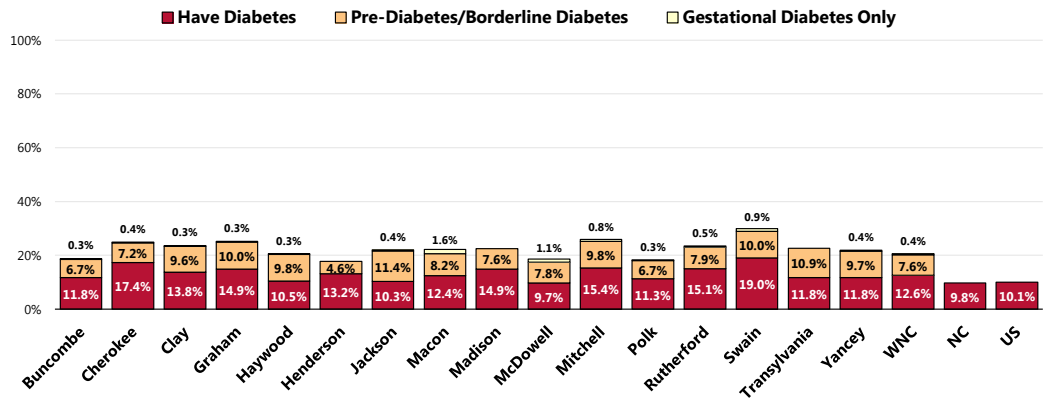
– Healthy People 2020 ([www.healthypeople.gov](http://www.healthypeople.gov))

## **A total of 12.6% of Western North Carolina adults report having been diagnosed with diabetes.**

- Higher than the proportion statewide.
- Higher than the national proportion.
- Unfavorably high among respondents from Swain County.

## **Another 7.6% of residents have been told they had prediabetes or borderline diabetes, and 0.4% experienced diabetes only during pregnancy.**

## Prevalence of Diabetes (Ever Diagnosed) (By County, 2012)

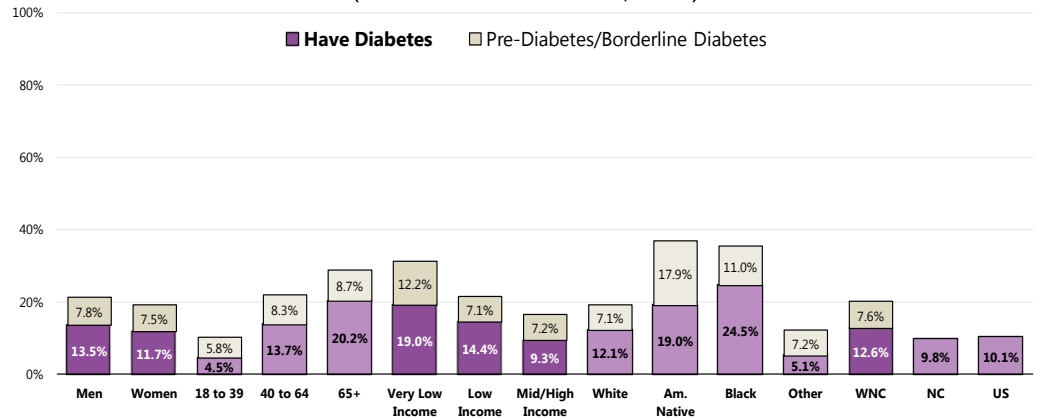


Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 78]  
 • 2011 PRC National Health Survey, Professional Research Consultants, Inc.  
 • Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2010 North Carolina data.

Notes: • Asked of all respondents.  
 • Local and national data exclude gestation diabetes (occurring only during pregnancy).

- 👥 Note also the positive correlation between diabetes and age (with 20.2% of seniors with diabetes).
- 👥 The WNC diabetes prevalence is higher among adults in the lower income breakouts, and is especially high among the Non-Hispanic American Native and Black populations.
- 👥 Note also the high prevalence of prediabetes/borderline diabetes diagnoses among Non-Hispanic American Natives and Blacks, and among residents with very low incomes.

## Prevalence of Diabetes (Western North Carolina, 2012)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 78]  
 • Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2010 North Carolina data.  
 • 2011 PRC National Health Survey, Professional Research Consultants, Inc.

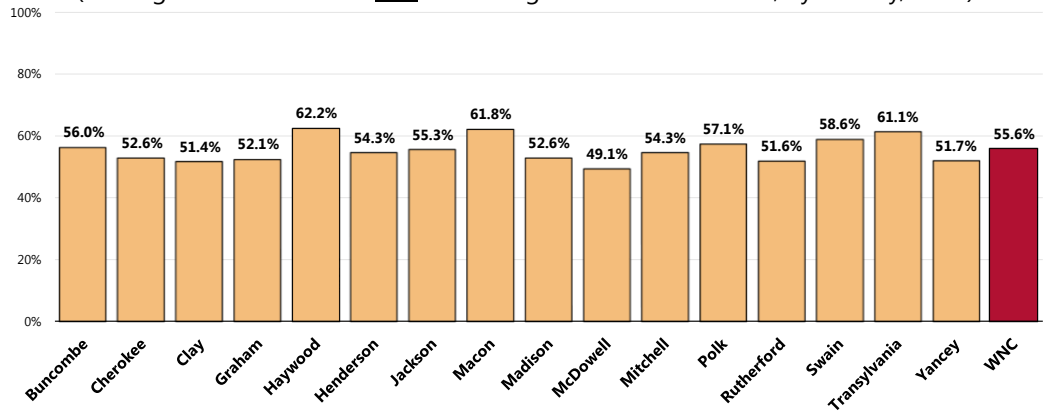
Notes: • Asked of all respondents.  
 • Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).  
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.  
 • Excludes gestation diabetes (occurring only during pregnancy).

Among adults not diagnosed with diabetes, 55.6% have been tested for diabetes in the past three years.

- No statistically significant differences when viewed by county.

### Tested for Diabetes in the Past Three Years

(Among Adults Who Have Not Been Diagnosed With Diabetes; By County, 2012)

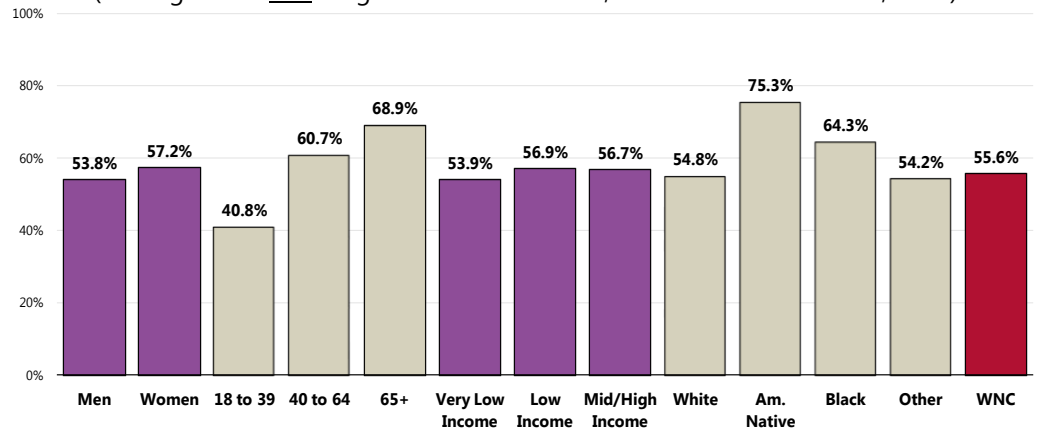


Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 19]  
 Notes: • Asked of respondents who have never been diagnosed with diabetes; also includes women who have only been diagnosed when pregnant.

- The prevalence of non-diabetics who have been tested for diabetes in the past three years is notably lower among young adults, Non-Hispanic Whites and "Other" races/ethnicity.

### Tested for Diabetes in the Past Three Years

(Among Adults Not Diagnosed With Diabetes; Western North Carolina, 2012)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 19]  
 Notes: • Asked of respondents who have never been diagnosed with diabetes; also includes women who have only been diagnosed when pregnant.  
 • Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).  
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.  
 • Excludes gestation diabetes (occurring only during pregnancy).

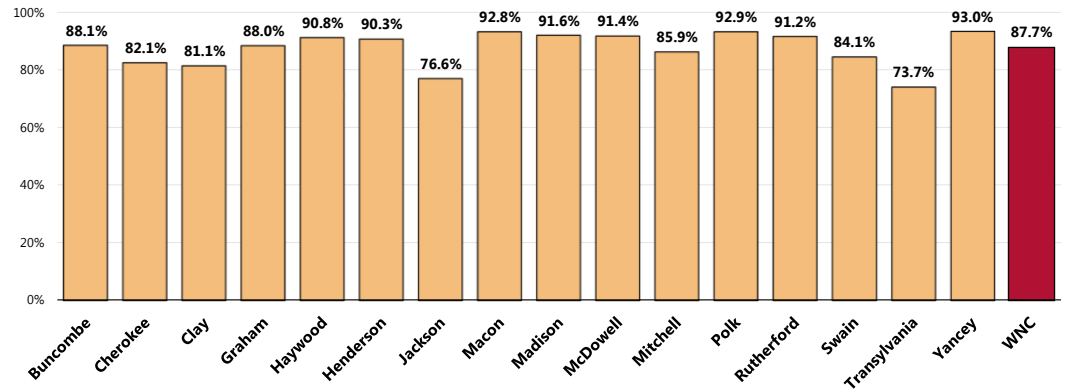


## Diabetes Treatment

Among adults with either diabetes or prediabetes/borderline diabetes, most (87.7%) are taking action to help lower or control their high blood sugar (such as taking natural or conventional medicines or supplements, changing diet, and/or exercising).

- Preventive measures range from 73.7% in Transylvania County to 93.0% in Yancey County.

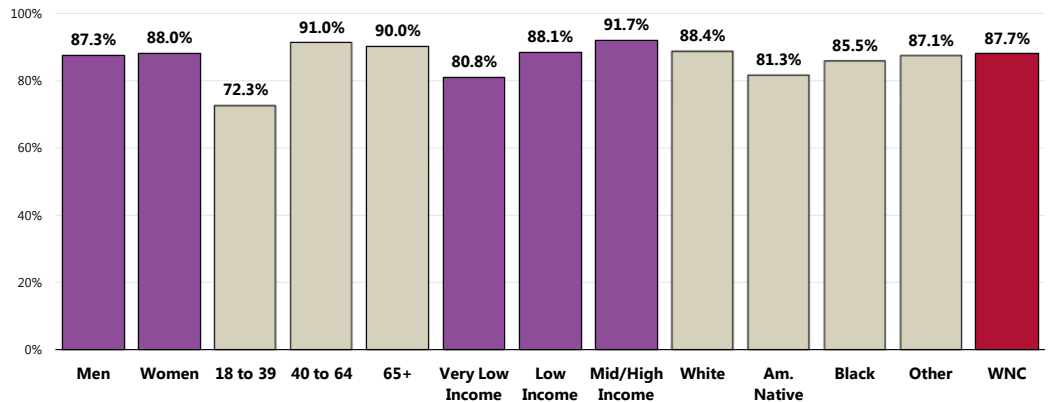
### Taking Action to Control Diabetes or Prediabetes (Among Adults Diagnosed With Diabetes or Prediabetes/Borderline Diabetes)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 21]  
Notes: • Asked of respondents who have been diagnosed with diabetes or prediabetes/borderline diabetes.  
• In this case, the term "action" refers to taking natural or conventional medicines or supplements, diet modification, or exercising.

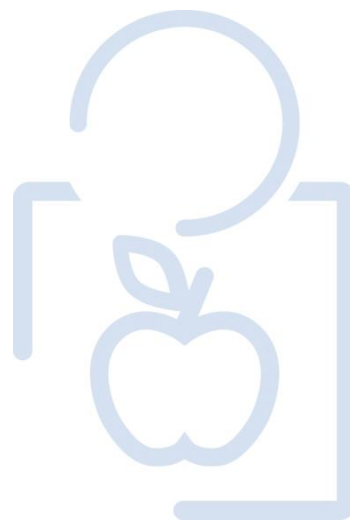
- Population segments less likely to be taking action to control or lower their high blood sugar include adults under age 40 and those with very low incomes.

### Taking Action to Control Diabetes or Prediabetes (Among Adults Diagnosed With Diabetes or Prediabetes/Borderline Diabetes)



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 21]  
Notes: • Asked of respondents who have been diagnosed with diabetes or prediabetes/borderline diabetes.  
• In this case, the term "action" refers to taking natural or conventional medicines or supplements, diet modification, or exercising.  
• Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).  
• Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

# MODIFIABLE HEALTH RISKS



# Actual Causes Of Death

A 1999 study (an update to a landmark 1993 study), estimated that as many as 40% of premature deaths in the United States are attributed to behavioral factors. This study found that behavior patterns represent the single-most prominent domain of influence over health prospects in the United States. The daily choices we make with respect to diet, physical activity, and sex; the substance abuse and addictions to which we fall prey; our approach to safety; and our coping strategies in confronting stress are all important determinants of health.

The most prominent contributors to mortality in the United States in 2000 were tobacco (an estimated 435,000 deaths), diet and activity patterns (400,000), alcohol (85,000), microbial agents (75,000), toxic agents (55,000), motor vehicles (43,000), firearms (29,000), sexual behavior (20,000), and illicit use of drugs (17,000). Socioeconomic status and access to medical care are also important contributors, but difficult to quantify independent of the other factors cited. Because the studies reviewed used different approaches to derive estimates, the stated numbers should be viewed as first approximations.

These analyses show that smoking remains the leading cause of mortality. However, poor diet and physical inactivity may soon overtake tobacco as the leading cause of death. These findings, along with escalating healthcare costs and aging population, argue persuasively that the need to establish a more preventive orientation in the US healthcare and public health systems has become more urgent.

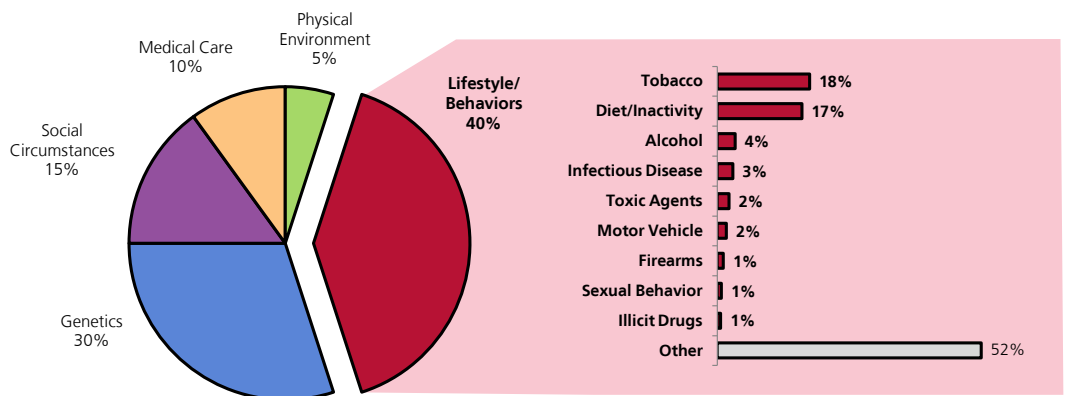
– Ali H. Mokdad, PhD; James S. Marks, MD, MPH; Donna F. Stroup, PhD, MSc; Julie L. Gerberding, MD, MPH. "Actual Causes of Death in the United States." JAMA, 291(2004):1238-1245.

While causes of death are typically described as the diseases or injuries immediately precipitating the end of life, a few important studies have shown that the actual causes of premature death (reflecting underlying risk factors) are often preventable.

Leading Causes of Death	Underlying Risk Factors (Actual Causes of Death)	
Cardiovascular disease	Tobacco use Elevated serum cholesterol High blood pressure	Obesity Diabetes Sedentary lifestyle
Cancer	Tobacco use Improper diet	Alcohol Occupational/environmental exposures
Cerebrovascular disease	High blood pressure Tobacco use	Elevated serum cholesterol
Accidental injuries	Safety belt noncompliance Alcohol/substance abuse Reckless driving	Occupational hazards Stress/fatigue
Chronic lung disease	Tobacco use	Occupational/environmental exposures

Source: National Center for Health Statistics/US Department of Health and Human Services, Health United States: 1987. DHHS Pub. No. (PHS) 88-1232.

## Factors Contributing to Premature Deaths in the United States



Sources: "The Case For More Active Policy Attention to Health Promotion"; (McGinnis, Williams-Russo, Knickman) Health Affairs, Vol. 21, No. 2, March/April 2002. "Actual Causes of Death in the United States"; (Ali H. Mokdad, PhD; James S. Marks, MD, MPH; Donna F. Stroup, PhD, MSc; Julie L. Gerberding, MD, MPH) JAMA, 291(2000):1238-1245.

# Nutrition

Strong science exists supporting the health benefits of eating a healthful diet and maintaining a healthy body weight. Efforts to change diet and weight should address individual behaviors, as well as the policies and environments that support these behaviors in settings such as schools, worksites, healthcare organizations, and communities.

The goal of promoting healthful diets and healthy weight encompasses increasing household food security and eliminating hunger.

Americans with a healthful diet:

- Consume a variety of nutrient-dense foods within and across the food groups, especially whole grains, fruits, vegetables, low-fat or fat-free milk or milk products, and lean meats and other protein sources.
- Limit the intake of saturated and trans fats, cholesterol, added sugars, sodium (salt), and alcohol.
- Limit caloric intake to meet caloric needs.

Diet and body weight are related to health status. Good nutrition is important to the growth and development of children. A healthful diet also helps Americans reduce their risks for many health conditions, including: overweight and obesity; malnutrition; iron-deficiency anemia; heart disease; high blood pressure; dyslipidemia (poor lipid profiles); type 2 diabetes; osteoporosis; oral disease; constipation; diverticular disease; and some cancers.

Diet reflects the variety of foods and beverages consumed over time and in settings such as worksites, schools, restaurants, and the home. Interventions to support a healthier diet can help ensure that:

- Individuals have the knowledge and skills to make healthier choices.
- Healthier options are available and affordable.

**Social Determinants of Diet.** Demographic characteristics of those with a more healthful diet vary with the nutrient or food studied. However, most Americans need to improve some aspect of their diet.

Social factors thought to influence diet include:

- Knowledge and attitudes
- Skills
- Social support
- Societal and cultural norms
- Food and agricultural policies
- Food assistance programs
- Economic price systems

**Physical Determinants of Diet.** Access to and availability of healthier foods can help people follow healthful diets. For example, better access to retail venues that sell healthier options may have a positive impact on a person's diet; these venues may be less available in low-income or rural neighborhoods.

The places where people eat appear to influence their diet. For example, foods eaten away from home often have more calories and are of lower nutritional quality than foods prepared at home.

Marketing also influences people's—particularly children's—food choices.

– Healthy People 2020 ([www.healthypeople.gov](http://www.healthypeople.gov))

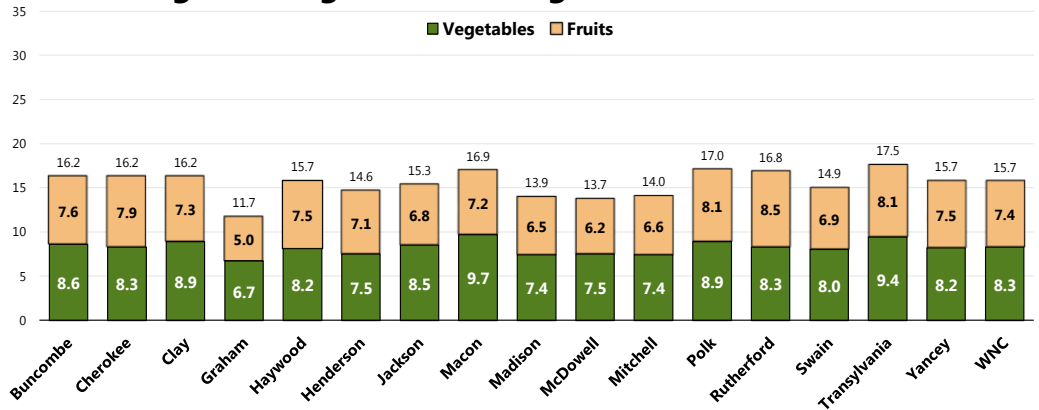
## Fruit/Vegetable Consumption

To measure fruit and vegetable consumption, survey respondents were asked how many one-cup servings of fruit and one-cup servings of vegetables (not counting lettuce salad or potatoes) they ate over the past week.

**Western North Carolina adults average 7.4 one-cup servings of fruits in the past week and 8.3 one-cup servings of vegetables (not including lettuce salad or potatoes).**

- This translates to a combined average of 15.7 servings of fruits/vegetables per week (or roughly 2.25 combined servings per day).
- Average fruit consumption is higher in Cherokee, Polk, Rutherford and Transylvania counties.
- Average vegetable consumption is higher in Clay, Macon and Polk counties.

### Average Servings of Fruits/Vegetables in the Past Week

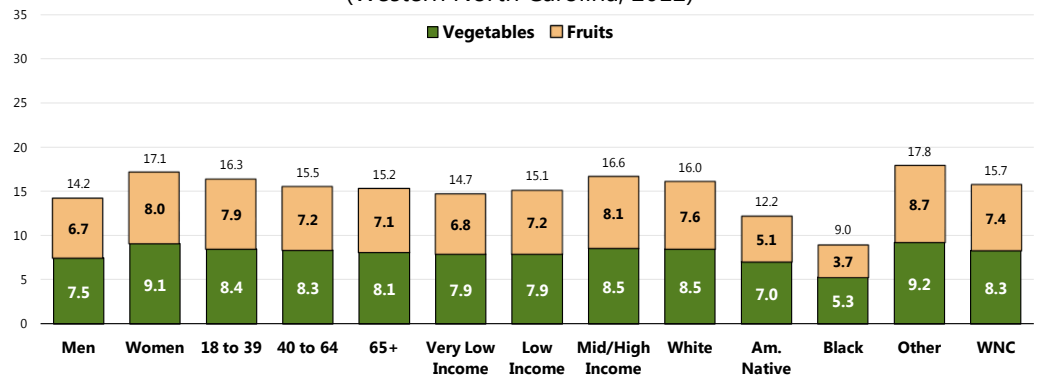


Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 53-54]  
 Notes: • Asked of all respondents.  
 • For this issue, respondents were asked to recall their food intake during the previous week. Reflects 35 or more 1-cup servings of fruits and/or vegetables in the past week, excluding lettuce salad and potatoes.

👥 Consumption of fruits is lowest among Non-Hispanic American Natives and Blacks; this is also the case for vegetable consumption.

### Average Servings of Fruits/Vegetables in the Past Week

(Western North Carolina, 2012)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 53-54]  
 Notes: • Asked of all respondents.  
 • Excludes lettuce salad and potatoes.  
 • Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).  
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.  
 • For this issue, respondents were asked to recall their food intake during the previous week. Reflects 35 or more 1-cup servings of fruits and/or vegetables in the past week, excluding lettuce salad and potatoes.

## Access to Farmer's Markets

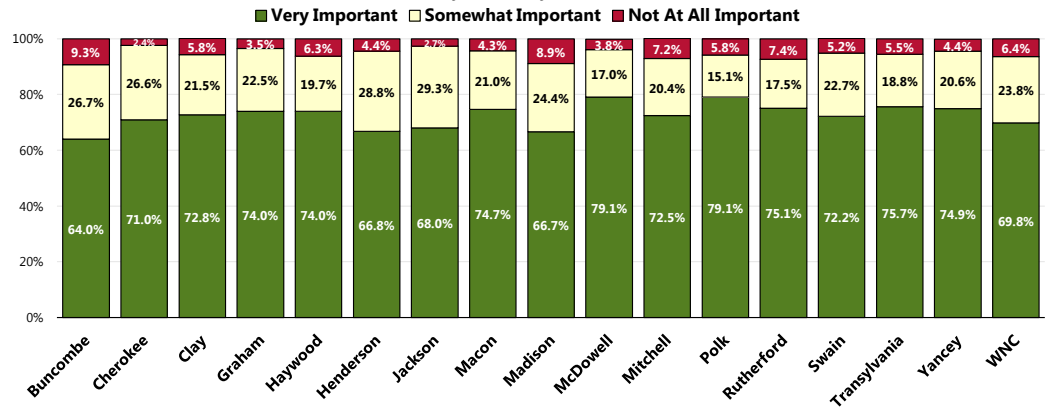
Some communities are looking at ways to make it easier for people to access farmer's markets and tailgate markets.

*"How important do you feel it is for your community to make it easier for people to access farmer's markets, including mobile farmer's markets and tailgate markets?"*

**More than 9 out of 10 WNC adults feel it is "very important" (69.8%) or "important" (23.8%) that their community makes it easier for residents to access farmer's markets (including mobile markets and tailgate markets).**

- The prevalence of "very/somewhat important" responses is highest in Cherokee, Graham and Jackson counties, but lowest in Buncombe County.

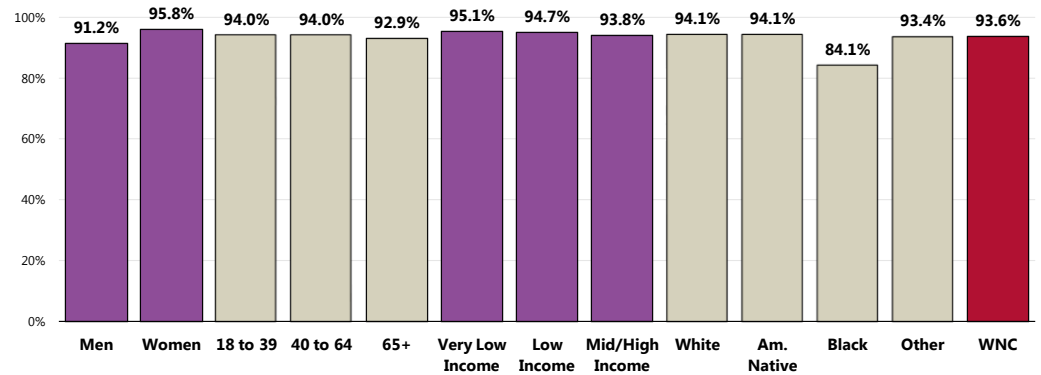
### Importance of Communities Making It Easier to Access Farmer's Markets, Including Mobile/Tailgate Markets (By County, 2012)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 55]  
Notes: • Asked of all respondents.

- Men and Non-Hispanic Black residents are less likely to give "very/somewhat important" responses.

### Believe It Is Important That Communities Make It Easier to Access Farmer's Markets, Including Mobile/Tailgate Markets ("Very Important" and "Somewhat Important" Responses; Western North Carolina, 2012)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 55]  
Notes: • Asked of all respondents.  
• Includes "very important" and "somewhat important" responses.

# Physical Activity

Regular physical activity can improve the health and quality of life of Americans of all ages, regardless of the presence of a chronic disease or disability. Among adults and older adults, physical activity can lower the risk of: early death; coronary heart disease; stroke; high blood pressure; type 2 diabetes; breast and colon cancer; falls; and depression. Among children and adolescents, physical activity can: improve bone health; improve cardiorespiratory and muscular fitness; decrease levels of body fat; and reduce symptoms of depression. For people who are inactive, even small increases in physical activity are associated with health benefits.

Personal, social, economic, and environmental factors all play a role in physical activity levels among youth, adults, and older adults. Understanding the barriers to and facilitators of physical activity is important to ensure the effectiveness of interventions and other actions to improve levels of physical activity.

Factors **positively** associated with adult physical activity include: postsecondary education; higher income; enjoyment of exercise; expectation of benefits; belief in ability to exercise (self-efficacy); history of activity in adulthood; social support from peers, family, or spouse; access to and satisfaction with facilities; enjoyable scenery; and safe neighborhoods.

Factors **negatively** associated with adult physical activity include: advancing age; low income; lack of time; low motivation; rural residency; perception of great effort needed for exercise; overweight or obesity; perception of poor health; and being disabled. Older adults may have additional factors that keep them from being physically active, including lack of social support, lack of transportation to facilities, fear of injury, and cost of programs.

Among children ages 4 to 12, the following factors have a positive association with physical activity:

- Gender (boys)
- Belief in ability to be active (self-efficacy)
- Parental support

Among adolescents ages 13 to 18, the following factors have a positive association with physical activity:

- Parental education
- Gender (boys)
- Personal goals
- Physical education/school sports
- Belief in ability to be active (self-efficacy)
- Support of friends and family

Environmental influences positively associated with physical activity among children and adolescents include:

- Presence of sidewalks
- Having a destination/walking to a particular place
- Access to public transportation
- Low traffic density
- Access to neighborhood or school play area and/or recreational equipment

People with disabilities may be less likely to participate in physical activity due to physical, emotional, and psychological barriers. Barriers may include the inaccessibility of facilities and the lack of staff trained in working with people with disabilities.

– Healthy People 2020 ([www.healthypeople.gov](http://www.healthypeople.gov))

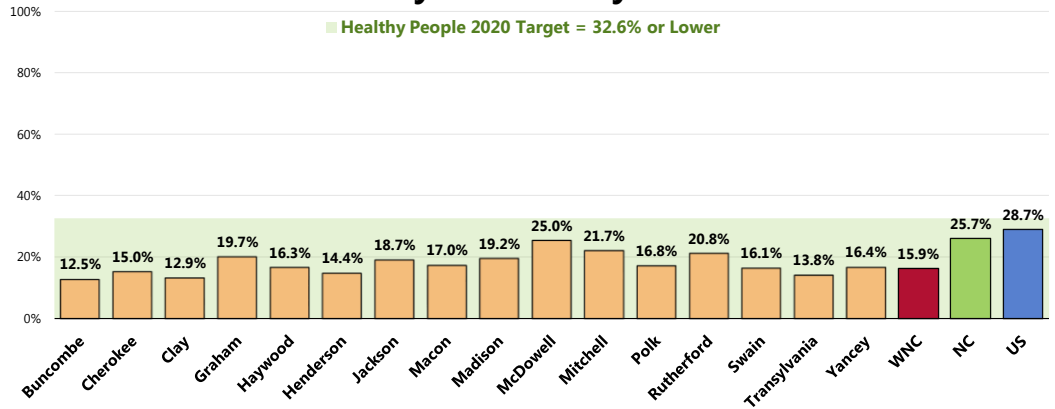
## Leisure-Time Physical Activity

Leisure-time physical activity includes any physical activities or exercises (such as running, calisthenics, golf, gardening, walking, etc.) which take place outside of one's line of work.

### A total of 15.9% of Western North Carolina adults report no leisure-time physical activity in the past month.

- More favorable than statewide findings.
- More favorable than national findings.
- Satisfies the Healthy People 2020 target (32.6% or lower).
- Highest in McDowell and Mitchell counties, lowest in Buncombe County.

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



Sources:
 

- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 56]
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2010 North Carolina data.
- 2011 PRC National Health Survey, Professional Research Consultants, Inc.
- US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective PA-1]

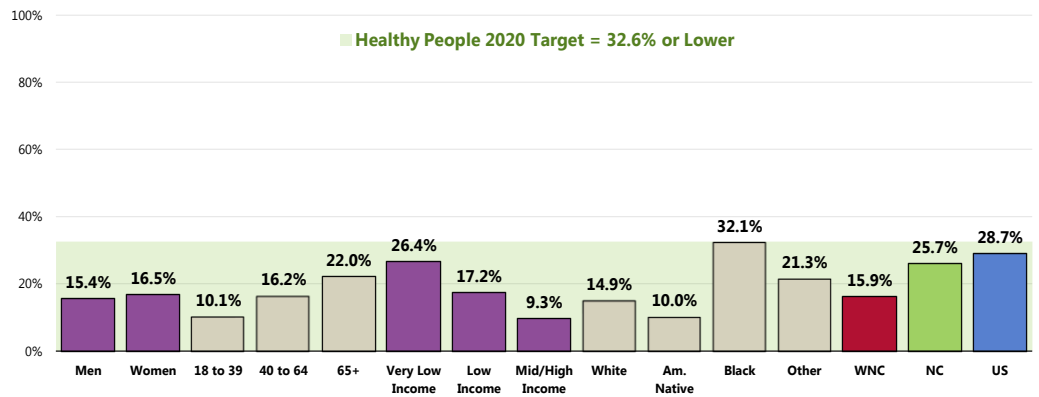
 Notes:
 

- Asked of all respondents.

Lack of leisure-time physical activity in the area is higher among:

- 👴 Seniors.
- 👴 Very low income residents (strong correlation with income).
- 👴 Non-Hispanic Black residents.

### No Leisure-Time Physical Activity in the Past Month (Western North Carolina, 2012)



Sources:
 

- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 56]
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2010 North Carolina data.
- 2011 PRC National Health Survey, Professional Research Consultants, Inc.
- US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective PA-1]

 Notes:
 

- Asked of all respondents.
- Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).
- Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.



## Activity Levels

Adults (age 18–64) should do 2 hours and 30 minutes a week of moderate-intensity, or 1 hour and 15 minutes (75 minutes) a week of vigorous-intensity aerobic physical activity, or an equivalent combination of moderate- and vigorous-intensity aerobic physical activity. Aerobic activity should be performed in episodes of at least 10 minutes, preferably spread throughout the week.

Additional health benefits are provided by increasing to 5 hours (300 minutes) a week of moderate-intensity aerobic physical activity, or 2 hours and 30 minutes a week of vigorous-intensity physical activity, or an equivalent combination of both.

Older adults (age 65 and older) should follow the adult guidelines. If this is not possible due to limiting chronic conditions, older adults should be as physically active as their abilities allow. They should avoid inactivity. Older adults should do exercises that maintain or improve balance if they are at risk of falling.

For all individuals, some activity is better than none. Physical activity is safe for almost everyone, and the health benefits of physical activity far outweigh the risks.

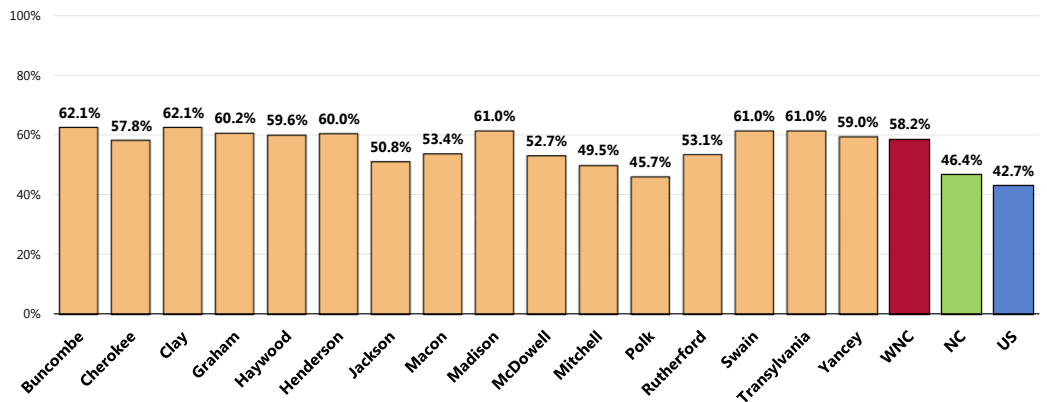
– 2008 Physical Activity Guidelines for Americans, U.S. Department of Health and Human Services. [www.health.gov/PAGuidelines](http://www.health.gov/PAGuidelines)

### Recommended Levels of Physical Activity

**A total of 58.2% of Western North Carolina adults participate in regular, sustained moderate or vigorous physical activity (meeting physical activity recommendations).**

- More favorable than statewide findings.
- More favorable than national findings.
- Particularly low in Jackson, Mitchell and Polk counties.

### Meets Physical Activity Recommendations

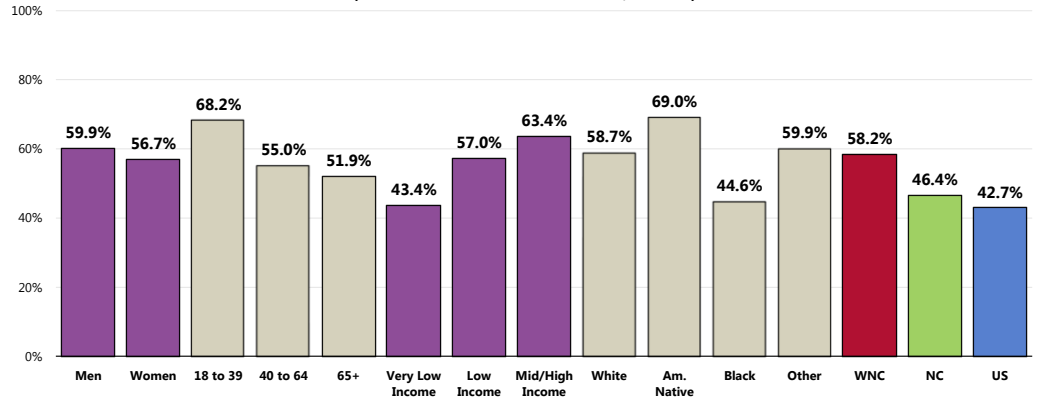


- Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 80]
  - Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2009 North Carolina data.
  - 2011 PRC National Health Survey, Professional Research Consultants, Inc.
- Notes:
- Asked of all respondents.
  - In this case the term "meets physical activity recommendations" refers to participation in moderate physical activity (exercise that produces only light sweating or a slight to moderate increase in breathing or heart rate) at least 5 times a week for 30 minutes at a time, and/or vigorous physical activity (activities that cause heavy sweating or large increases in breathing or heart rate) at least 3 times a week for 20 minutes at a time.

By demographics, community members less likely to meet physical activity requirements include:

- 👤 Adults age 40 and older.
- 👤 Residents living in the lower income categories.
- 👤 Non-Hispanic Blacks.

### Meets Physical Activity Recommendations (Western North Carolina, 2012)



- Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 80]
  - Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC), 2009 North Carolina data.
  - 2011 PRC National Health Survey, Professional Research Consultants, Inc.
- Notes:
- Asked of all respondents.
  - Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).
  - Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.
  - In this case the term "meets physical activity recommendations" refers to participation in moderate physical activity (exercise that produces only light sweating or a slight to moderate increase in breathing or heart rate) at least 5 times a week for 30 minutes at a time, and/or vigorous physical activity (activities that cause heavy sweating or large increases in breathing or heart rate) at least 3 times a week for 20 minutes at a time.

The individual indicators of moderate, vigorous and strengthening physical activity are shown here.

### Moderate, Vigorous & Strengthening Physical Activity

In the past month:

**A total of 38.8% of adults participated in moderate physical activity (5 times a week, 30 minutes at a time).**

- More favorable than the national level.

**A total of 44.3% participated in vigorous physical activity (3 times a week, 20 minutes at a time).**

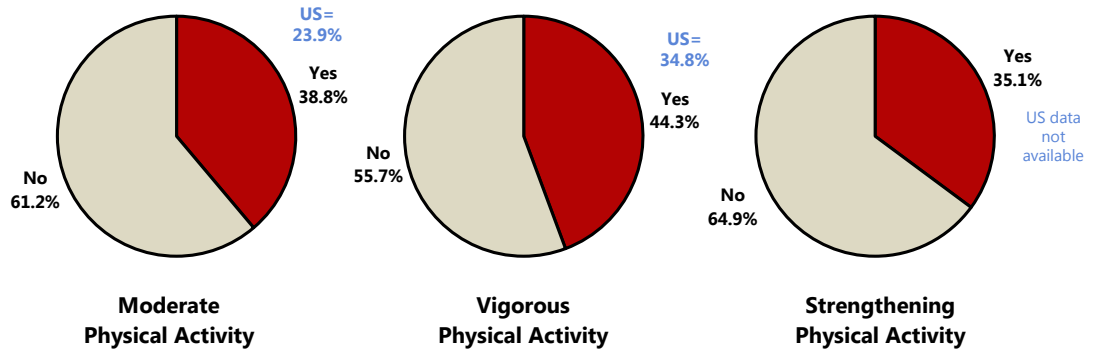
- More favorable than the statewide figure (not shown).
- More favorable than the nationwide figure.

**A total of 35.1% participated in strengthening physical activity (2 times per week).**

- State or national data not available.

## Take Part in Physical Activity

(Western North Carolina, 2012)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 81-83]  
 • 2011 PRC National Health Survey, Professional Research Consultants, Inc.

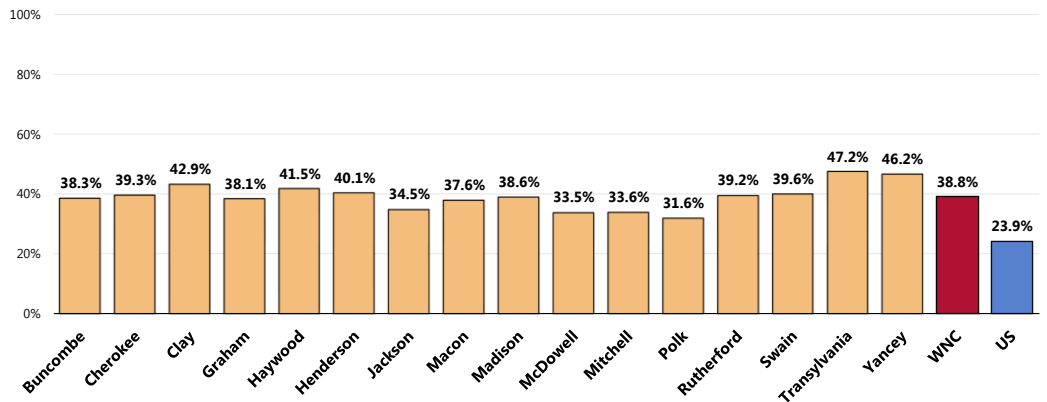
- Notes:
- Asked of all respondents.
  - Moderate Physical Activity: Takes part in exercise that produces only light sweating or a slight to moderate increase in breathing or heart rate at least 5 times per week for at least 30 minutes per time.
  - Vigorous Physical Activity: Takes part in activities that cause heavy sweating or large increases in breathing or heart rate at least 3 times per week for at least 20 minutes per time.
  - Strengthening Physical Activity: Takes part in physical activities or exercises that strengthen muscles at least 2 times per week.

### Moderate Physical Activity

**A total of 38.8% of Western North Carolina adults participate in moderate physical activity** (producing only light sweating or a slight to moderate increase in breathing or heart rate at least 5 times per week at 30 minutes each time).

- More favorable than national findings.
- Highest in Transylvania and Yancey counties, lowest in Polk County.

### Moderate Physical Activity



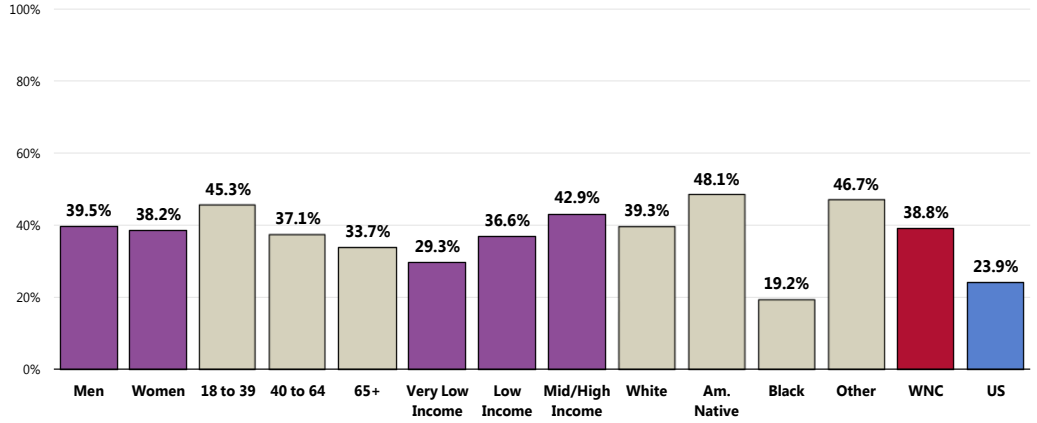
Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 81]  
 • 2011 PRC National Health Survey, Professional Research Consultants, Inc.

- Notes:
- Asked of all respondents.
  - Moderate Physical Activity: Takes part in exercise that produces only light sweating or a slight to moderate increase in breathing or heart rate at least 5 times per week for at least 30 minutes per time.

Residents less likely to participate in moderate physical activity include:

- 👥 Those aged 40 and older.
- 👥 Adults living on lower incomes.
- 👥 Non-Hispanic Whites and Non-Hispanic Blacks.

### Moderate Physical Activity (Western North Carolina, 2012)



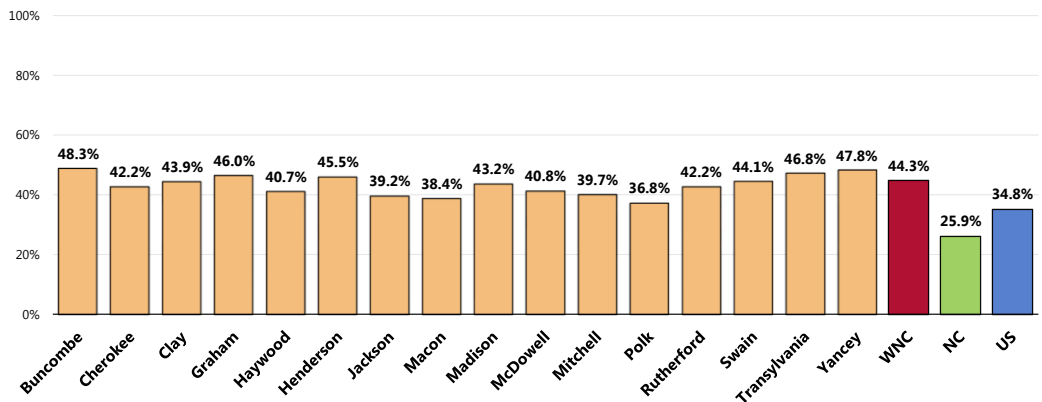
Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 81]  
 • 2011 PRC National Health Survey, Professional Research Consultants, Inc.  
 Notes: • Asked of all respondents.  
 • Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).  
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.  
 • Moderate Physical Activity: Takes part in exercise that produces only light sweating or a slight to moderate increase in breathing or heart rate at least 5 times per week for at least 30 minutes per time.

### Vigorous Physical Activity

**A total of 44.3% of Western North Carolina adults participate in vigorous physical activity** (activities which cause heavy sweating or large increases in breathing or heart rate at least 3 times per week for at least 20 minutes each time).

- More favorable than statewide findings.
- More favorable than national findings.
- Unfavorably low in Polk County; no other significant differences by county.

### Vigorous Physical Activity

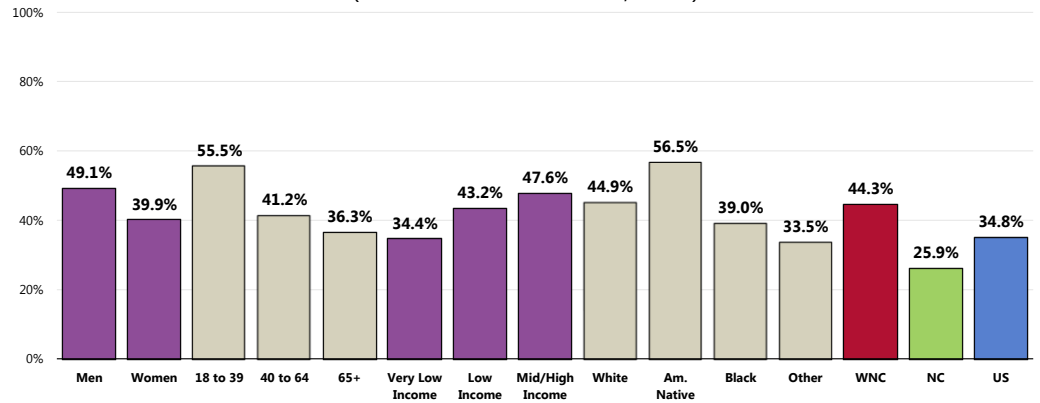


Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 82]  
 • 2011 PRC National Health Survey, Professional Research Consultants, Inc.  
 • Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2010 North Carolina data.  
 Notes: • Asked of all respondents.  
 • Vigorous Physical Activity: Takes part in activities that cause heavy sweating or large increases in breathing or heart rate at least 3 times per week for at least 20 minutes per time.

Those less likely to participate in vigorous physical activity include:

- 👥 Women.
- 👥 Residents 40+.
- 👥 Low and very low income residents.
- 👥 Non-Hispanic Blacks and "Other" races/ethnicity.

### Vigorous Physical Activity (Western North Carolina, 2012)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 82]  
 • Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2010 North Carolina data.  
 • 2011 PRC National Health Survey, Professional Research Consultants, Inc.

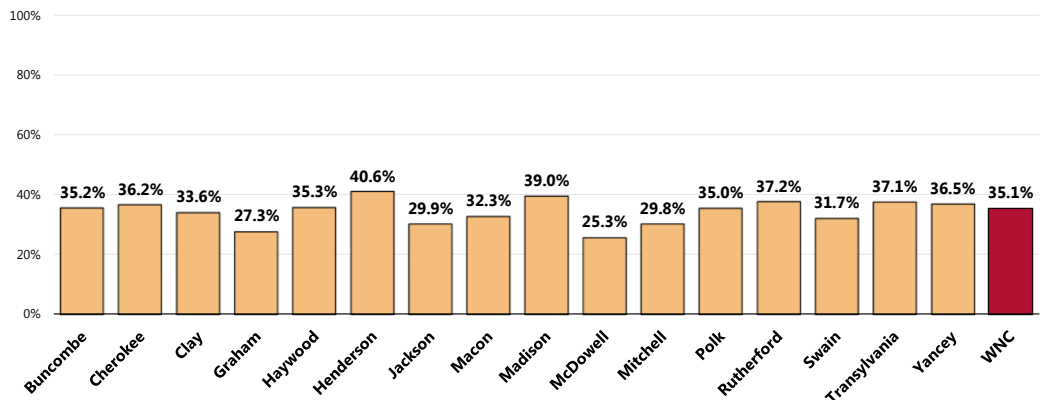
Notes: • Asked of all respondents.  
 • Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).  
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.  
 • Vigorous Physical Activity: Takes part in activities that cause heavy sweating or large increases in breathing or heart rate at least 3 times per week for at least 20 minutes per time.

### Strengthening Physical Activity

**A total of 35.1% of Western North Carolina adults participate in strengthening physical activity** (activities or exercises which strengthen muscles, at least twice per week).

- Ranging from 25.3% in McDowell County to 40.6% in Henderson County.

### Strengthening Physical Activity

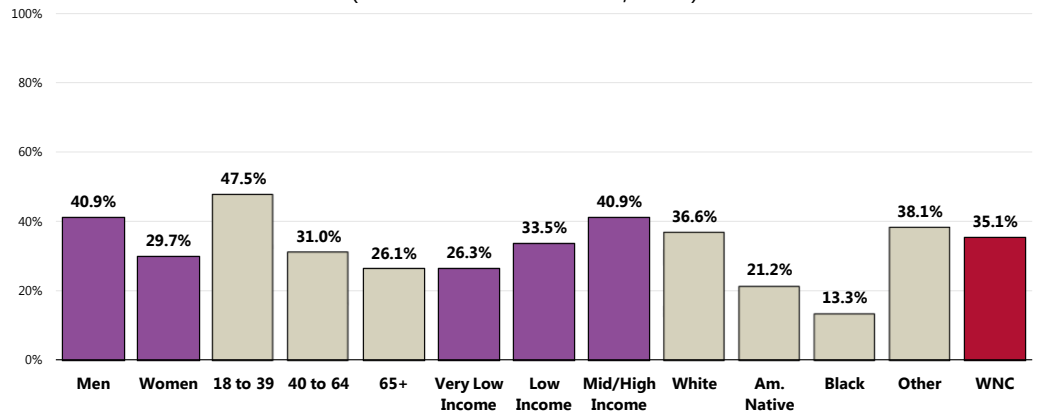


Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 83]  
 Notes: • Asked of all respondents.  
 • Strengthening Physical Activity: Takes part in physical activities or exercises that strengthen muscles at least 2 times per week.

Residents less likely to participate in strengthening physical activity include:

- 👥 Women.
- 👥 Residents aged 40 and older.
- 👥 Those living on lower incomes.
- 👥 Non-Hispanic American Natives and Blacks.

### Strengthening Physical Activity (Western North Carolina, 2012)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 83]  
 Notes: • Asked of all respondents.  
 • Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).  
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.  
 • Strengthening Physical Activity: Takes part in physical activities or exercises that strengthen muscles at least 2 times per week.

## Access to Physical Activity Options

### Physical Activity Spaces After-Hours

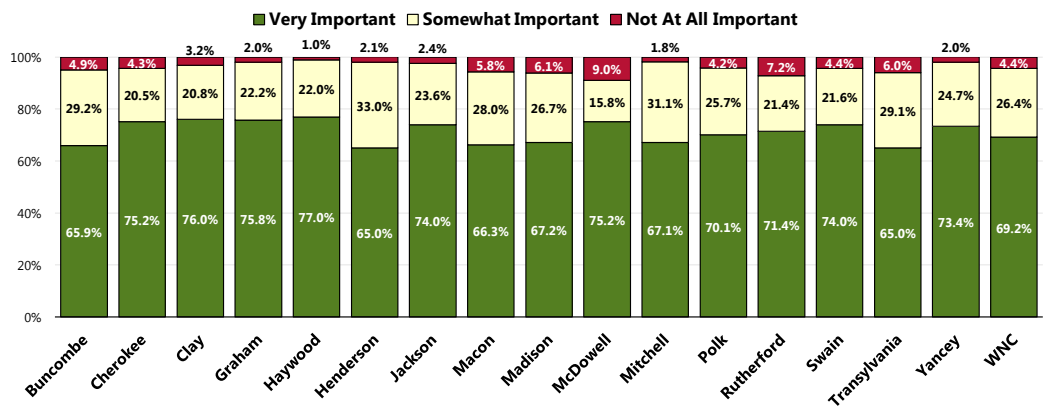
In some communities, organizations make their indoor and outdoor physical activity spaces (gyms, tracks and pools) available for the public to use during off-times.

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

**Most area adults (95.6%) consider it "very important" or "somewhat important" that organizations in their community make their indoor and outdoor physical activity spaces available for the public to use during off-times.**

- On the other hand, 4.4% do not feel it is important.
- The prevalence of "very/somewhat important" responses is highest in Graham, Haywood, Henderson, Mitchell and Yancey counties, but notably low in McDowell County.

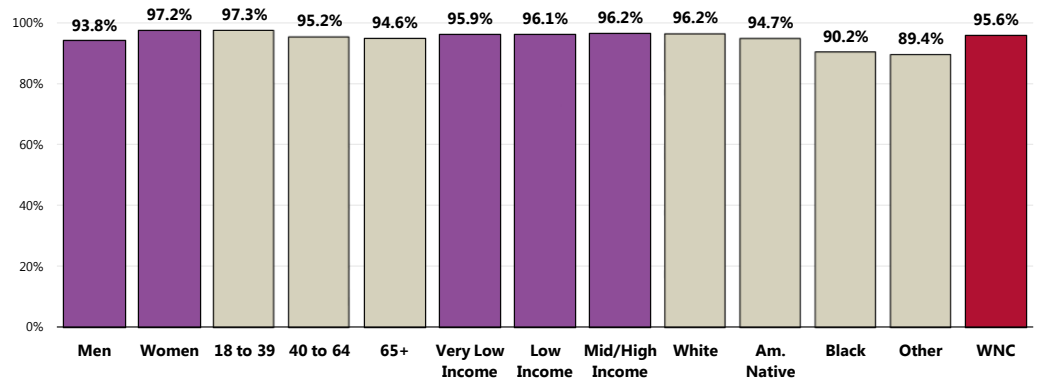
### Importance That Community Organizations Make Physical Activity Spaces Available for Public Use After Hours (By County, 2012)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 60]  
Notes: • Asked of all respondents.

Men, seniors, Non-Hispanic Blacks and "Other" residents are less likely to give "very/somewhat important" responses.

### Believe It Is Important That Community Organizations Make Physical Activity Spaces Available for Public Use After Hours ("Very Important" and "Somewhat Important" Responses; Western North Carolina, 2012)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 60]  
Notes: • Asked of all respondents.  
• Includes "very important" and "somewhat important" responses.

## Public Trails and Greenspace

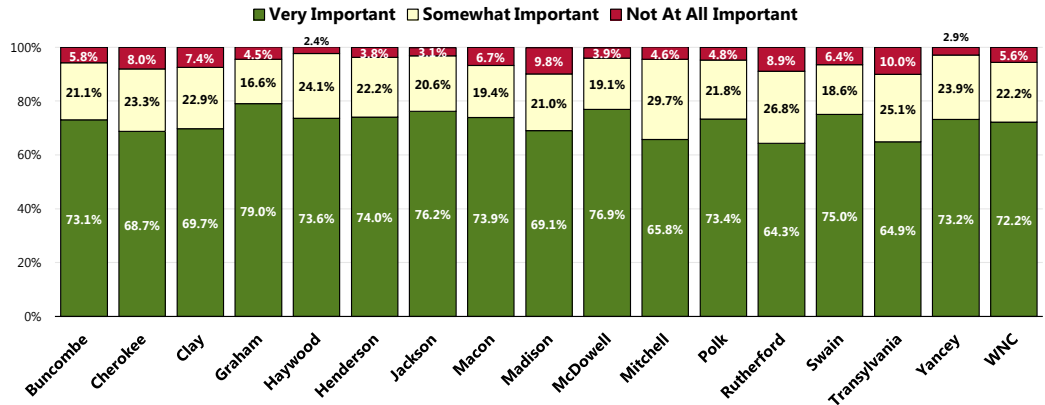
*"How important do you feel it is for your community to improve access to trails, parks and greenways?"*

The majority of WNC residents (94.4%) feel it is "very/somewhat important" that their community improves access to trails, parks and greenways.

- On the other hand, 5.6% do not consider it to be important.
- The prevalence of "very/somewhat important" responses is highest in Haywood and Yancey counties, lowest in Madison and Transylvania counties.

### Importance That Communities Improve Access to Trails, Parks and Greenways

(By County, 2012)

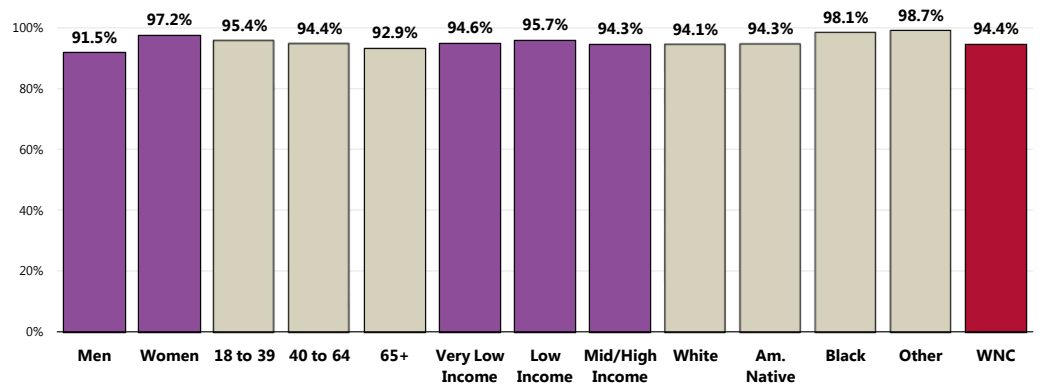


Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 61]  
Notes: • Asked of all respondents.

Men, Non-Hispanic Whites and American Natives are less likely to give "very" or "somewhat important" responses.

### Believe It Is Important That Communities Improve Access to Trails, Parks and Greenways

("Very Important" and "Somewhat Important" Responses; Western North Carolina, 2012)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 61]  
Notes: • Asked of all respondents.  
• Includes "very important" and "somewhat important" responses.



# Weight Status

Because weight is influenced by energy (calories) consumed and expended, interventions to improve weight can support changes in diet or physical activity. They can help change individuals' knowledge and skills, reduce exposure to foods low in nutritional value and high in calories, or increase opportunities for physical activity. Interventions can help prevent unhealthy weight gain or facilitate weight loss among obese people. They can be delivered in multiple settings, including healthcare settings, worksites, or schools.

The social and physical factors affecting diet and physical activity (see Physical Activity topic area) may also have an impact on weight. Obesity is a problem throughout the population. However, among adults, the prevalence is highest for middle-aged people and for non-Hispanic black and Mexican American women. Among children and adolescents, the prevalence of obesity is highest among older and Mexican American children and non-Hispanic black girls. The association of income with obesity varies by age, gender, and race/ethnicity.

– Healthy People 2020 ([www.healthypeople.gov](http://www.healthypeople.gov))

Body Mass Index (BMI), which describes relative weight for height, is significantly correlated with total body fat content. The BMI should be used to assess overweight and obesity and to monitor changes in body weight. In addition, measurements of body weight alone can be used to determine efficacy of weight loss therapy. BMI is calculated as weight (kg)/height squared ( $m^2$ ). To estimate BMI using pounds and inches, use:  $[\text{weight (pounds)}/\text{height squared (inches}^2)] \times 703$ .

In this report, overweight is defined as a BMI of 25.0 to 29.9  $kg/m^2$  and obesity as a BMI  $\geq 30 kg/m^2$ . The rationale behind these definitions is based on epidemiological data that show increases in mortality with BMIs above 25  $kg/m^2$ . The increase in mortality, however, tends to be modest until a BMI of 30  $kg/m^2$  is reached. For persons with a BMI  $\geq 30 kg/m^2$ , mortality rates from all causes, and especially from cardiovascular disease, are generally increased by 50 to 100 percent above that of persons with BMIs in the range of 20 to 25  $kg/m^2$ .

– Clinical Guidelines on the Identification, Evaluation, and Treatment of Overweight and Obesity in Adults: The Evidence Report. National Institutes of Health. National Heart, Lung, and Blood Institute in Cooperation With The National Institute of Diabetes and Digestive and Kidney Diseases. September 1998.

Classification of Overweight and Obesity by BMI	BMI ( $kg/m^2$ )
Underweight	<18.5
Normal	18.5 – 24.9
Overweight	25.0 – 29.9
Obese	$\geq 30.0$

Source: Clinical Guidelines on the Identification, Evaluation, and Treatment of Overweight and Obesity in Adults: The Evidence Report. National Institutes of Health. National Heart, Lung, and Blood Institute in Cooperation With The National Institute of Diabetes and Digestive and Kidney Diseases. September 1998.

## Healthy Weight

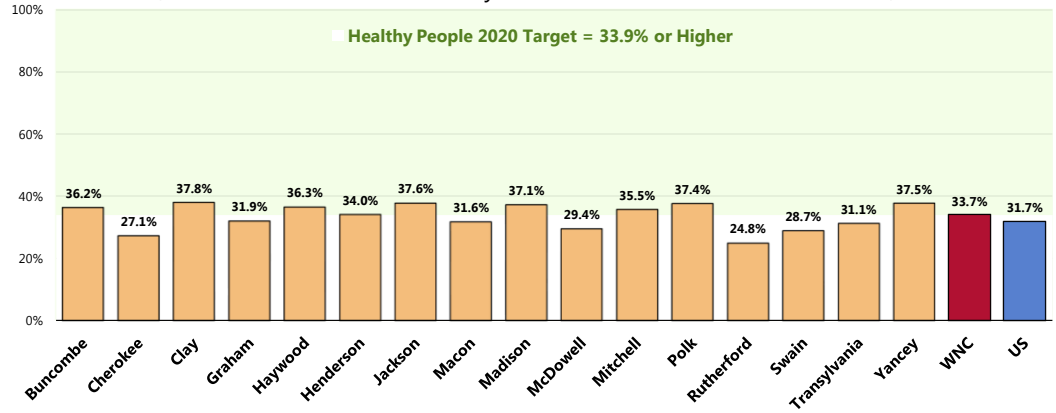
“Healthy weight” means neither underweight, nor overweight (BMI = 18.5-24.9).

### Based on self-reported heights and weights, 1 in 3 Western North Carolina adults (33.7%) is at a healthy weight.

- Similar to national findings.
- Nearly identical to the Healthy People 2020 target (33.9% or higher).
- Least favorable in Cherokee and Rutherford counties.

## Healthy Weight

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



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 85]  
 • 2011 PRC National Health Survey, Professional Research Consultants, Inc.  
 Notes: • Based on reported heights and weights, asked of all respondents.  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective NWS-8]  
 • The definition of healthy weight is having a body mass index (BMI), a ratio of weight to height (kilograms divided by meters squared), between 18.5 and 24.9.

## Overweight Status

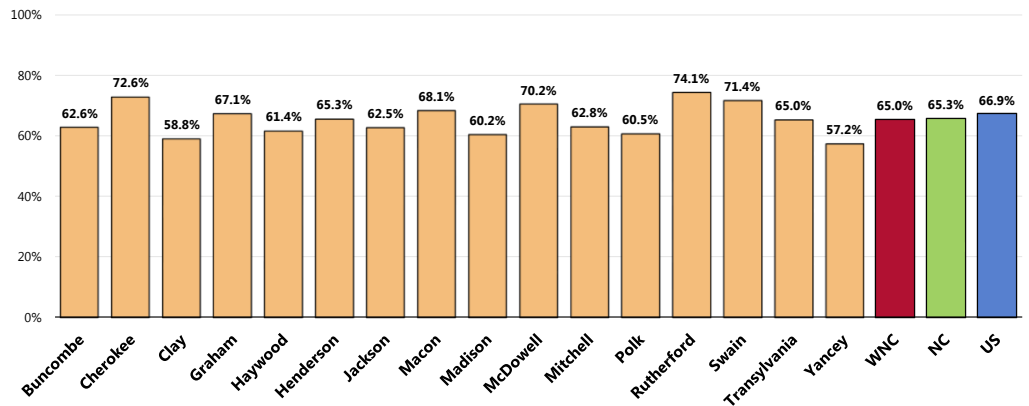
Here, "overweight" includes those respondents with a BMI value  $\geq 25$ .

**A total of 65.0% of Western North Carolina adults are overweight.**

- Comparable to the North Carolina prevalence.
- Comparable to the US overweight prevalence.
- Lowest in Yancey County, notably high in Cherokee, Rutherford and Swain counties.

## Prevalence of Total Overweight

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



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 85]  
 • 2011 PRC National Health Survey, Professional Research Consultants, Inc.  
 • Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC). 2010 North Carolina data.  
 Notes: • Based on reported heights and weights, asked of all respondents.  
 • The definition of overweight is having a body mass index (BMI), a ratio of weight to height (kilograms divided by meters squared), greater than or equal to 25.0, regardless of gender. The definition for obesity is a BMI greater than or equal to 30.0.

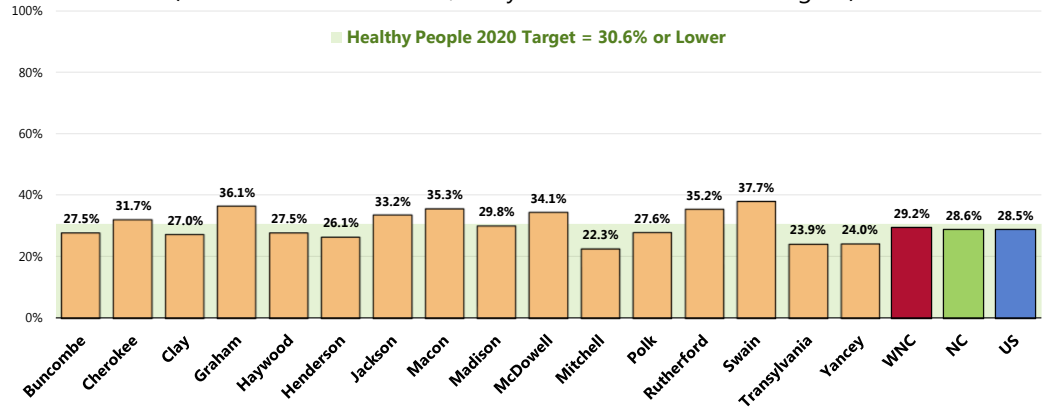
“Obese” (also included in overweight prevalence discussed previously) includes respondents with a BMI value  $\geq 30$ .

### Further, 29.2% of Western North Carolina adults are obese.

- Similar to North Carolina findings.
- Similar to US findings.
- Similar to the Healthy People 2020 target (30.6% or lower).
- Obesity is more prevalent in Graham and Swain counties, lowest in Mitchell County.

### Prevalence of Obesity

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



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 85]  
 • 2011 PRC National Health Survey, Professional Research Consultants, Inc.  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective NWS-9]  
 • Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC). 2010 North Carolina data.

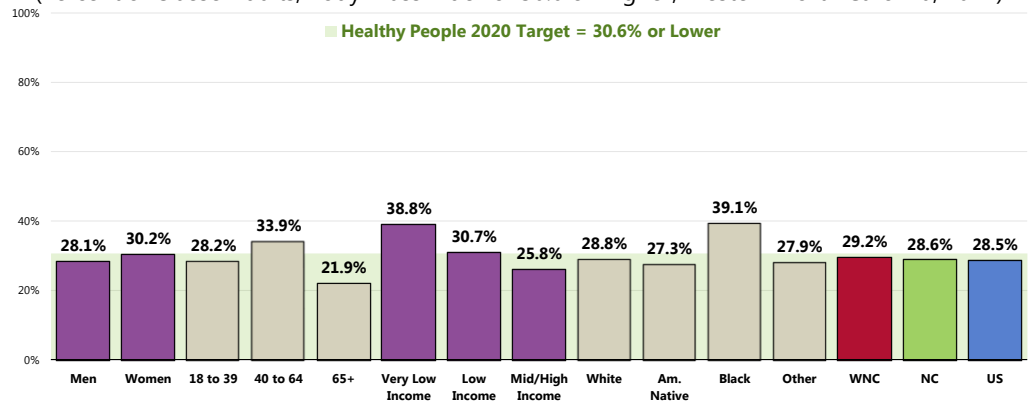
Notes: • Based on reported heights and weights, asked of all respondents.  
 • The definition of obesity is having a body mass index (BMI), a ratio of weight to height (kilograms divided by meters squared), greater than or equal to 30.0, regardless of gender.

Obesity is notably more prevalent among:

- Adults between the ages of 40 and 64.
- Lower income residents.
- Non-Hispanic Blacks.

### Prevalence of Obesity

(Percent of Obese Adults; Body Mass Index of 30.0 or Higher; Western North Carolina, 2012)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 85]  
 • Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC). 2010 North Carolina data.  
 • 2011 PRC National Health Survey, Professional Research Consultants, Inc.  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective NWS-9]

Notes: • Based on reported heights and weights, asked of all respondents.  
 • Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., “White” reflects non-Hispanic White respondents).  
 • Income categories reflect respondent’s household income as a ratio to the federal poverty level (FPL) for their household size. “Low Income” includes households with incomes up to 200% of the federal poverty level; “Mid/High Income” includes households with incomes at 200% or more of the federal poverty level.  
 • The definition of obesity is having a body mass index (BMI), a ratio of weight to height (kilograms divided by meters squared), greater than or equal to 30.0.

## Relationship of Overweight With Other Health Issues

The correlation between overweight and various health issues cannot be disputed.

### Overweight and obese adults are more likely to report a number of adverse health conditions.

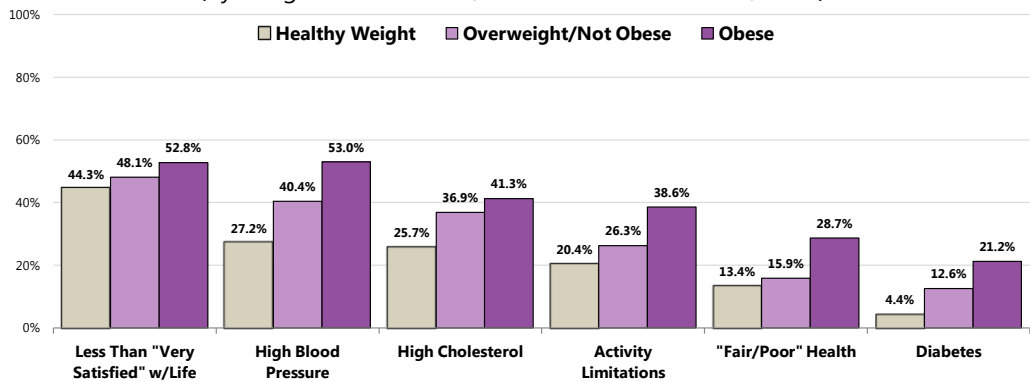
Among these are:

- Hypertension (high blood pressure).
- High cholesterol.
- Activity limitations.
- "Fair" or "poor" physical health.
- Diabetes.

There also appears to be a correlation with life satisfaction, with obese respondents less often "very satisfied" with their lives.

### Relationship of Overweight With Other Health Issues

(By Weight Classification; Western North Carolina, 2012)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 12, 62, 67, 76-78]  
Notes: • Based on reported heights and weights, asked of all respondents.

# Substance Abuse

In 2005, an estimated 22 million Americans struggled with a drug or alcohol problem. Almost 95% of people with substance use problems are considered unaware of their problem. Of those who recognize their problem, 273,000 have made an unsuccessful effort to obtain treatment. These estimates highlight the importance of increasing prevention efforts and improving access to treatment for substance abuse and co-occurring disorders.

Substance abuse has a major impact on individuals, families, and communities. The effects of substance abuse are cumulative, significantly contributing to costly social, physical, mental, and public health problems. These problems include:

- Teenage pregnancy
- Human immunodeficiency virus/acquired immunodeficiency syndrome (HIV/AIDS)
- Other sexually transmitted diseases (STDs)
- Domestic violence
- Child abuse
- Motor vehicle crashes
- Physical fights
- Crime
- Homicide
- Suicide

The field has made progress in addressing substance abuse, particularly among youth. According to data from the national Institute of Drug Abuse (NIDA) Monitoring the Future (MTF) survey, which is an ongoing study of the behaviors and values of America's youth between 2004 and 2009, a drop in drug use (including amphetamines, methamphetamine, cocaine, hallucinogens, and LSD) was reported among students in 8th, 10th, and 12th grades. Note that, despite a decreasing trend in marijuana use which began in the mid-1990s, the trend has stalled in recent years among these youth. Use of alcohol among students in these three grades also decreased during this time.

Substance abuse refers to a set of related conditions associated with the consumption of mind- and behavior-altering substances that have negative behavioral and health outcomes. Social attitudes and political and legal responses to the consumption of alcohol and illicit drugs make substance abuse one of the most complex public health issues. In addition to the considerable health implications, substance abuse has been a flash-point in the criminal justice system and a major focal point in discussions about social values: people argue over whether substance abuse is a disease with genetic and biological foundations or a matter of personal choice.

Advances in research have led to the development of evidence-based strategies to effectively address substance abuse. Improvements in brain-imaging technologies and the development of medications that assist in treatment have gradually shifted the research community's perspective on substance abuse. There is now a deeper understanding of substance abuse as a disorder that develops in adolescence and, for some individuals, will develop into a chronic illness that will require lifelong monitoring and care.

Improved evaluation of community-level prevention has enhanced researchers' understanding of environmental and social factors that contribute to the initiation and abuse of alcohol and illicit drugs, leading to a more sophisticated understanding of how to implement evidence-based strategies in specific social and cultural settings.

A stronger emphasis on evaluation has expanded evidence-based practices for drug and alcohol treatment. Improvements have focused on the development of better clinical interventions through research and increasing the skills and qualifications of treatment providers.

– Healthy People 2020 ([www.healthypeople.gov](http://www.healthypeople.gov))

## High-Risk Alcohol Use

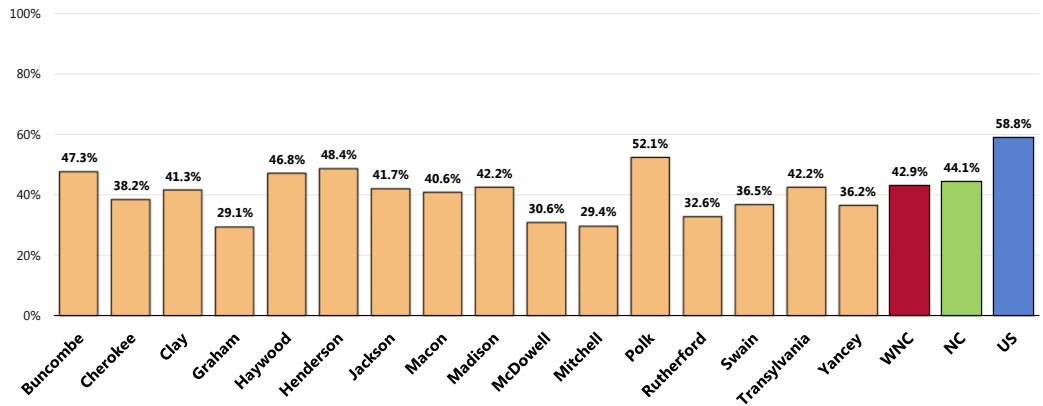
### Current Drinking

“Current drinkers” include survey respondents who had at least one drink of alcohol in the month preceding the interview. For the purposes of this study, a “drink” is considered one can or bottle of beer, one glass of wine, one can or bottle of wine cooler, one cocktail, or one shot of liquor.

**A total of 42.9% of area adults had at least one drink of alcohol in the past month (current drinkers).**

- Similar to the statewide proportion.
- Much lower than the national proportion.
- Statistically highest in Buncombe and Polk counties, favorably low in Graham, McDowell, Mitchell and Rutherford counties.

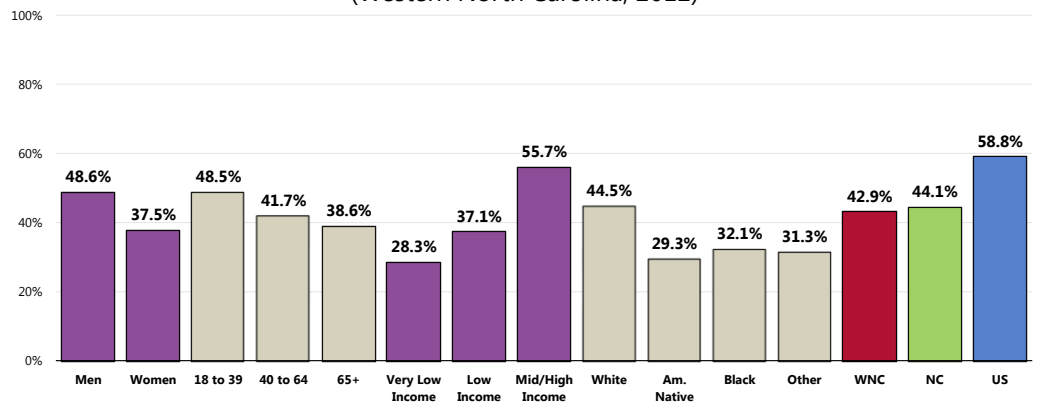
### Current Drinkers



- Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 88]
  - Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2010 North Carolina data.
  - 2011 PRC National Health Survey, Professional Research Consultants, Inc.
- Notes:
- Asked of all respondents.
  - Current drinkers had at least one alcoholic drink in the past month.

👤 Current drinking is more prevalent among men, young adults, upper income residents and Non-Hispanic Whites.

### Current Drinkers (Western North Carolina, 2012)



- Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 88]
  - Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2010 North Carolina data.
  - 2011 PRC National Health Survey, Professional Research Consultants, Inc.
- Notes:
- Asked of all respondents.
  - Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., “White” reflects non-Hispanic White respondents).
  - Income categories reflect respondent’s household income as a ratio to the federal poverty level (FPL) for their household size. “Low Income” includes households with incomes up to 200% of the federal poverty level; “Mid/High Income” includes households with incomes at 200% or more of the federal poverty level.
  - Current drinkers had at least one alcoholic drink in the past month.

## Chronic Drinking

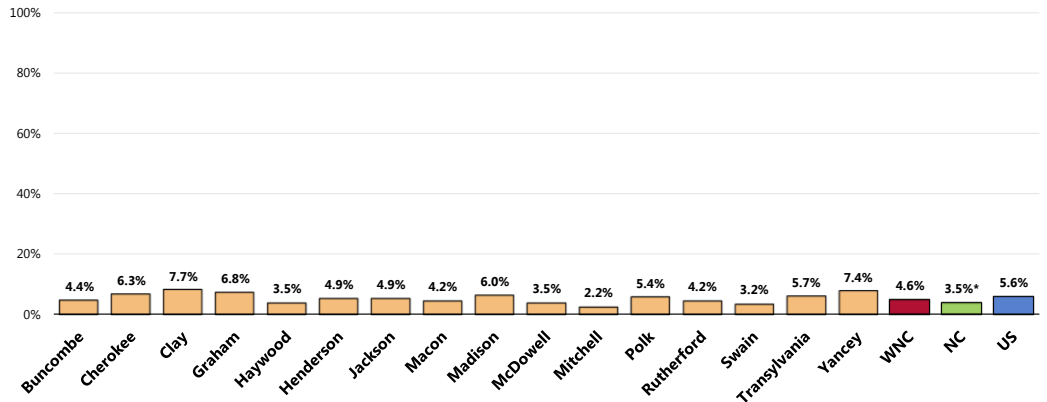
A total of 4.6% of area adults averaged two or more drinks of alcohol per day in the past month (chronic drinkers).

- Worse than the statewide proportion.
- Similar to the national proportion.
- Favorably low among residents of Mitchell County.

RELATED ISSUE:  
See also *Stress* in the **Mental Health & Mental Disorders** section of this report.

“Chronic drinkers” include survey respondents reporting 60 or more drinks of alcohol in the month preceding the interview.

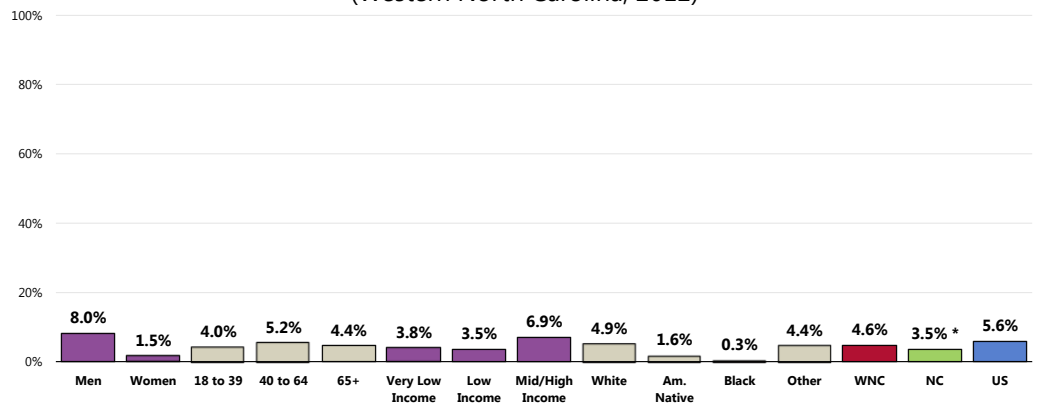
### Chronic Drinkers



- Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 89]
  - Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2010 North Carolina data.
  - 2011 PRC National Health Survey, Professional Research Consultants, Inc.
- Notes:
- Asked of all respondents.
  - Chronic drinkers are defined as having 60+ alcoholic drinks in the past month.
  - \*The state definition for chronic drinkers is males consuming 2+ drinks per day and females consuming 1+ drink per day in the past 30 days.

👤 Chronic drinking is more prevalent among men, upper income residents, Non-Hispanic Whites and “Other” races/ethnicity.

### Chronic Drinkers (Western North Carolina, 2012)



- Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 89]
  - Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2010 North Carolina data.
  - 2011 PRC National Health Survey, Professional Research Consultants, Inc.
- Notes:
- Asked of all respondents.
  - Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., “White” reflects non-Hispanic White respondents).
  - Income categories reflect respondent’s household income as a ratio to the federal poverty level (FPL) for their household size. “Low Income” includes households with incomes up to 200% of the federal poverty level; “Mid/High Income” includes households with incomes at 200% or more of the federal poverty level.
  - Chronic drinkers are defined as those having 60+ alcoholic drinks in the past month.
  - \*The state definition for chronic drinkers is males consuming 2+ drinks per day and females consuming 1+ drink per day in the past 30 days.

## Binge Drinking

“Binge drinkers” include:

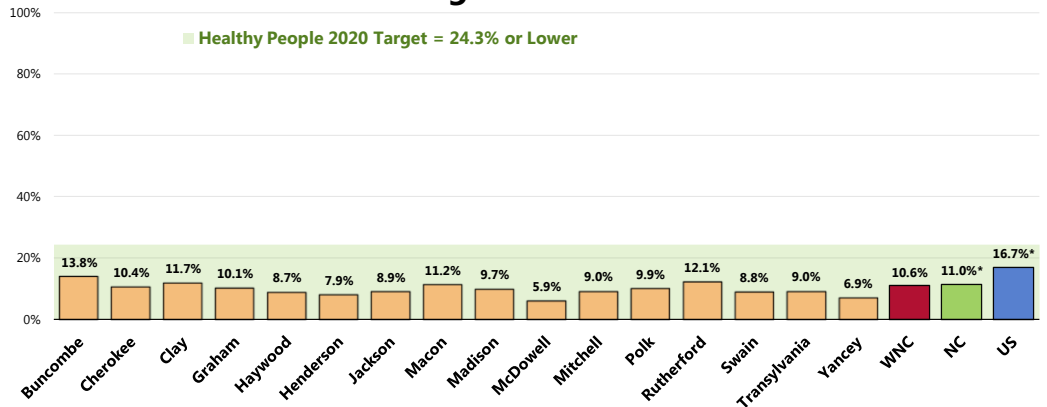
1) MEN who report drinking 5 or more alcoholic drinks on any single occasion during the past month; and

2) WOMEN who report drinking 4 or more alcoholic drinks on any single occasion during the past month.

### A total of 10.6% of Western North Carolina adults are binge drinkers.

- Similar to North Carolina findings.
- Better than national findings.
- Satisfies the Healthy People 2020 target (24.3% or lower).
- Highest in Buncombe County; favorably low in McDowell and Yancey counties.

### Binge Drinkers



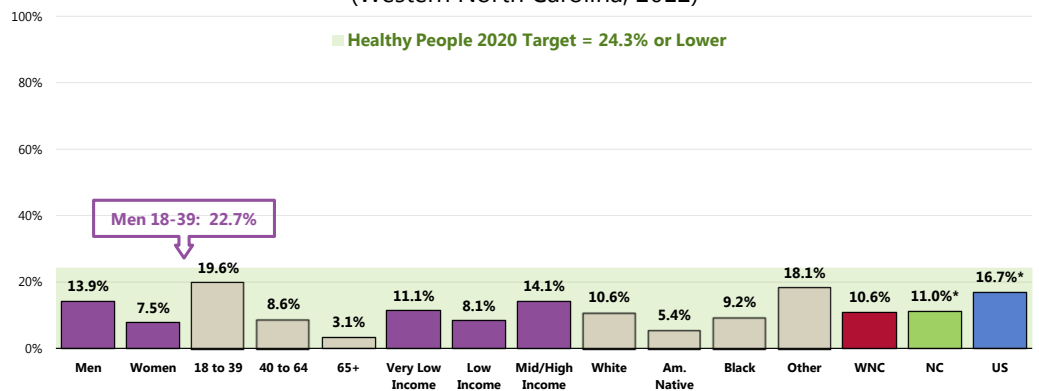
Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 90]  
 • Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2010 North Carolina data.  
 • 2011 PRC National Health Survey, Professional Research Consultants, Inc.  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective SA-14.3]  
 Notes: • Asked of all respondents.  
 • Binge drinkers are defined as those consuming 5+ alcoholic drinks on any one occasion in the past 30 days; \* note that state and national data reflect different thresholds for men (5+ drinks) and women (4+ drinks).

Binge drinking is more prevalent among:

- Men (especially those under age 40).
- Young adults.
- Residents at either end of the income spectrum.
- Adults of “Other” races/ethnicity.

### Binge Drinkers

(Western North Carolina, 2012)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 90]  
 • Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2010 North Carolina data.  
 • 2011 PRC National Health Survey, Professional Research Consultants, Inc.  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective SA-14.3]  
 Notes: • Asked of all respondents.  
 • Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., “White” reflects non-Hispanic White respondents).  
 • Income categories reflect respondent’s household income as a ratio to the federal poverty level (FPL) for their household size. “Low Income” includes households with incomes up to 200% of the federal poverty level; “Mid/High Income” includes households with incomes at 200% or more of the federal poverty level.  
 • Binge drinkers are defined as those consuming 5+ alcoholic drinks on any one occasion in the past 30 days; \* note that state and national data reflect different thresholds for men (5+ drinks) and women (4+ drinks).



## Illicit Drug Use

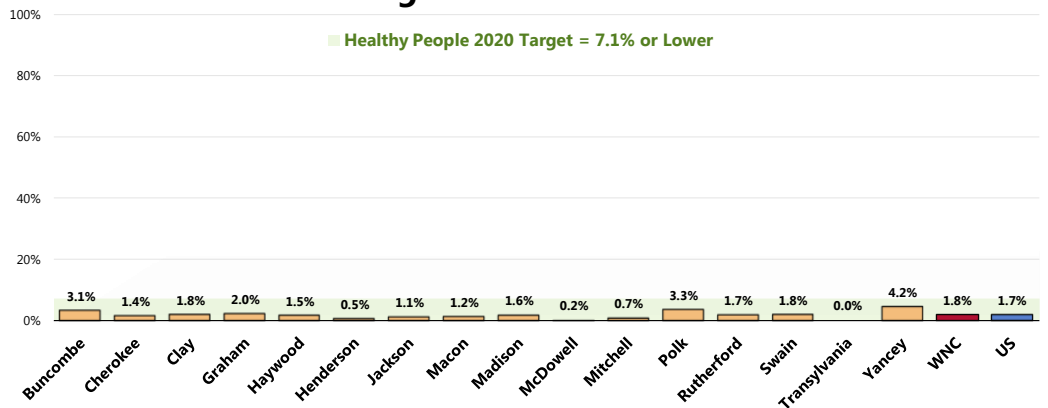
For the purposes of this survey, "illicit drug use" includes use of illegal substances or of prescription drugs taken without a physician's order.

Note: As a self-reported measure – and because this indicator reflects potentially illegal behavior – it is reasonable to expect that it might be underreported, and that actual illicit drug use in the community is likely higher.

**A total of 1.8% of Western North Carolina adults acknowledge using an illicit drug in the past month.**

- Nearly identical to the proportion found nationally.
- Easily satisfies the Healthy People 2020 target of 7.1% or lower.
- Lowest in Henderson, McDowell and Transylvania counties.

### Illicit Drug Use in the Past Month

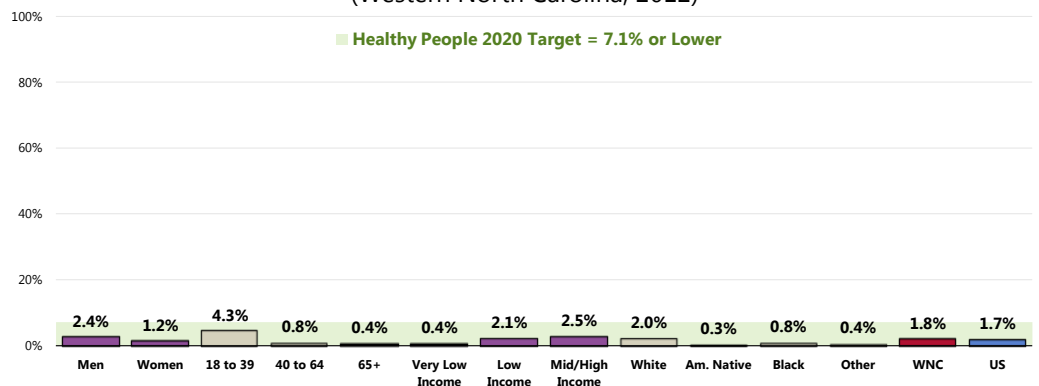


Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 52]  
 • 2011 PRC National Health Survey, Professional Research Consultants, Inc.  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective SA-13.3]  
 Notes: • Asked of all respondents.  
 • Includes reported use of an illegal drug or of a prescription drug not prescribed to the respondent.

Illicit drug use is more often reported among:

- Men.
- Adults under age 40.
- Residents in the higher income breakouts.
- Non-Hispanic Whites.

### Illicit Drug Use in the Past Month (Western North Carolina, 2012)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 52]  
 • 2011 PRC National Health Survey, Professional Research Consultants, Inc.  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective SA-13.3]  
 Notes: • Asked of all respondents.  
 • Includes reported use of an illegal drug or of a prescription drug not prescribed to the respondent.  
 • Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).  
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

# Tobacco Use

Tobacco use is the single most preventable cause of death and disease in the United States. Each year, approximately 443,000 Americans die from tobacco-related illnesses. For every person who dies from tobacco use, 20 more people suffer with at least one serious tobacco-related illness. In addition, tobacco use costs the US \$193 billion annually in direct medical expenses and lost productivity.

Scientific knowledge about the health effects of tobacco use has increased greatly since the first Surgeon General's report on tobacco was released in 1964.

Tobacco use causes:

- Cancer
- Heart disease
- Lung diseases (including emphysema, bronchitis, and chronic airway obstruction)
- Premature birth, low birth weight, stillbirth, and infant death

There is no risk-free level of exposure to secondhand smoke. Secondhand smoke causes heart disease and lung cancer in adults and a number of health problems in infants and children, including: severe asthma attacks; respiratory infections; ear infections; and sudden infant death syndrome (SIDS).

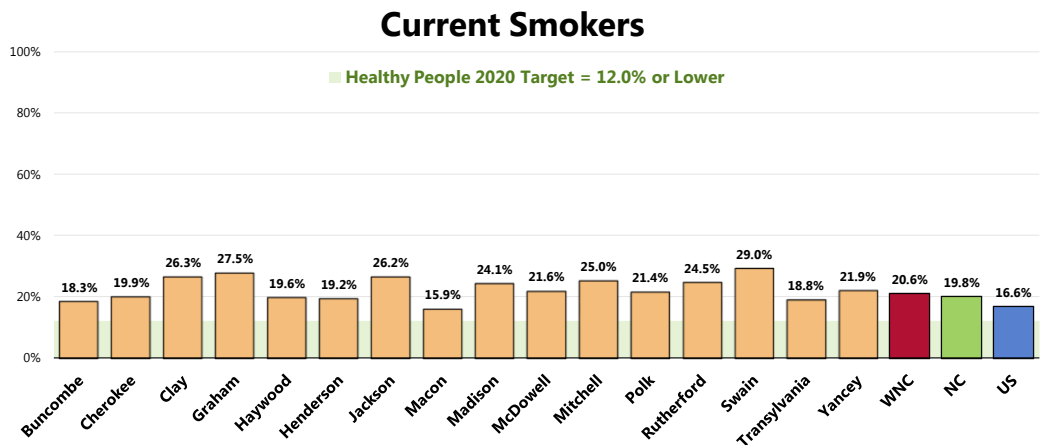
Smokeless tobacco causes a number of serious oral health problems, including cancer of the mouth and gums, periodontitis, and tooth loss. Cigar use causes cancer of the larynx, mouth, esophagus, and lung.

– Healthy People 2020 ([www.healthypeople.gov](http://www.healthypeople.gov))

## Cigarette Smoking

**A total of 20.6% of Western North Carolina adults currently smoke cigarettes, either regularly or occasionally.**

- Similar to statewide findings.
- Less favorable than national findings.
- Fails to satisfy the Healthy People 2020 target (12% or lower).
- The smoking prevalence is higher in Graham and Swain counties.



Sources:
 

- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 86]
- 2011 PRC National Health Survey, Professional Research Consultants, Inc.
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2010 North Carolina data.
- US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective TU-1.1]

Notes:
 

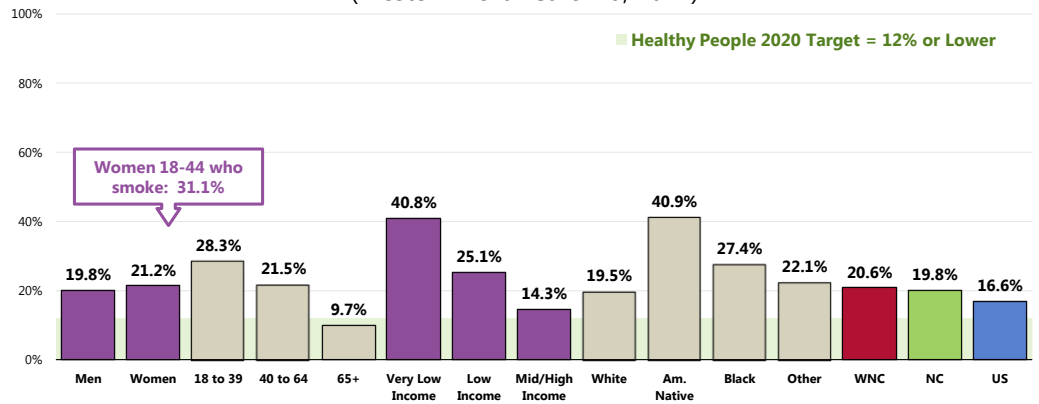
- Asked of all respondents.
- Includes regular and occasional smokers (everyday and some days).

Cigarette smoking is more often reported among:

- ☹☹☹ Adults under 65.
- ☹☹☹ Lower-income residents.
- ☹☹☹ American Natives.
- ☹☹☹ Note also that 31.1% of women of child-bearing age (ages 18 to 44) currently smoke. This is notable given that tobacco use increases the risk of infertility, as well as the risks for miscarriage, stillbirth and low birthweight for women who smoke during pregnancy.

### Current Smokers

(Western North Carolina, 2012)



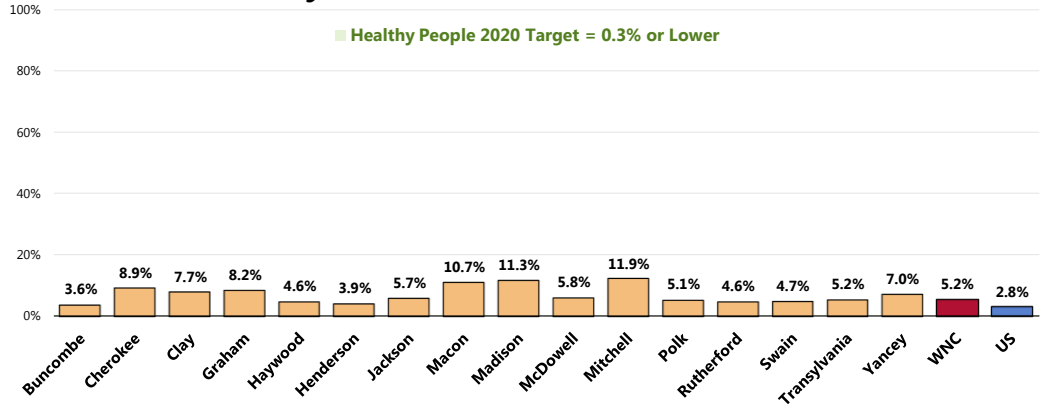
- Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 86-87]
  - 2011 PRC National Health Survey, Professional Research Consultants, Inc.
  - Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2010 North Carolina data.
  - US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective TU-1.1]
- Notes:
- Asked of all respondents.
  - Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).
  - Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.
  - Includes regular and occasion smokers (everyday and some days).

## Other Tobacco Use

**A total of 5.2% of Western North Carolina adults use some type of smokeless tobacco every day or on some days.**

- Worse than the national percentage.
- Fails to satisfy the Healthy People 2020 target (0.3% or lower).
- Higher in Macon, Madison and Mitchell counties, lowest in Buncombe County.

### Currently Use Smokeless Tobacco Products

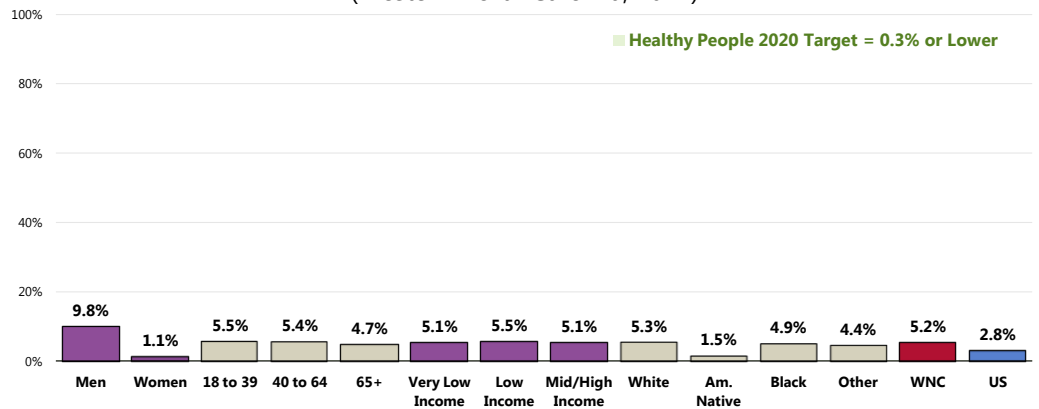


Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 43]  
 • 2011 PRC National Health Survey, Professional Research Consultants, Inc.  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective TU-1.2]  
 Notes: • Asked of all respondents.  
 • Includes regular and occasional users (everyday and some days).

Use of smokeless tobacco is more often reported among:

- Men.
- Non-Hispanic Whites.

### Currently Use Smokeless Tobacco Products (Western North Carolina, 2012)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 43]  
 • 2011 PRC National Health Survey, Professional Research Consultants, Inc.  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective TU-1.2]  
 Notes: • Asked of all respondents.  
 • Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).  
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.  
 • Includes regular and occasional users (everyday and some days).

Examples of smokeless tobacco include chewing tobacco, snuff, or "snus."

## Resources to Aid in Smoking Cessation

Preventing tobacco use and helping tobacco users quit can improve the health and quality of life for Americans of all ages. People who stop smoking greatly reduce their risk of disease and premature death. Benefits are greater for people who stop at earlier ages, but quitting tobacco use is beneficial at any age.

Many factors influence tobacco use, disease, and mortality. Risk factors include race/ethnicity, age, education, and socioeconomic status. Significant disparities in tobacco use exist geographically; such disparities typically result from differences among states in smoke-free protections, tobacco prices, and program funding for tobacco prevention.

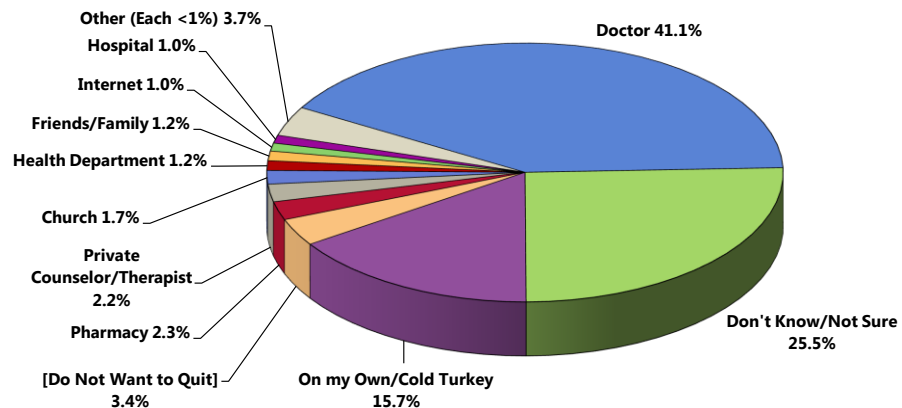
– Healthy People 2020 ([www.healthypeople.gov](http://www.healthypeople.gov))

**When asked where they would go for help if they were a smoker who wanted to quit smoking, the largest share of respondents (41.1%) of survey respondents mentioned their physician.**

- While 25.5% of survey respondents were **uncertain** and could not provide a response, another 15.7% indicated they would quit **on their own/cold turkey**.
- Other resources mentioned much less often include pharmacies, private counselors or therapists, church, health department, friends and family, the Internet, and hospitals.

### Resource Would Go to for Help Quitting Tobacco

(Western North Carolina, 2012)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 48]

Notes: • Asked of all respondents.

- The following chart illustrates respondents' responses by county of residence; as seen, the top three responses were uniform across the region.

### Top Three Resources Respondents Would Go to for Help Quitting Tobacco

(By County, 2012)

	Doctor	On My Own/Cold Turkey	Don't Know
Buncombe	✓	✓	✓
Cherokee	✓	✓	✓
Clay	✓	✓	✓
Graham	✓	✓	✓
Haywood	✓	✓	✓
Henderson	✓	✓	✓
Jackson	✓	✓	✓
Macon	✓	✓	✓
Madison	✓	✓	✓
McDowell	✓	✓	✓
Mitchell	✓	✓	✓
Polk	✓	✓	✓
Rutherford	✓	✓	✓
Swain	✓	✓	✓
Transylvania	✓	✓	✓
Yancey	✓	✓	✓
WNC	✓	✓	✓

Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 48]  
 Notes: • Asked of all respondents.

## Environmental Tobacco Smoke

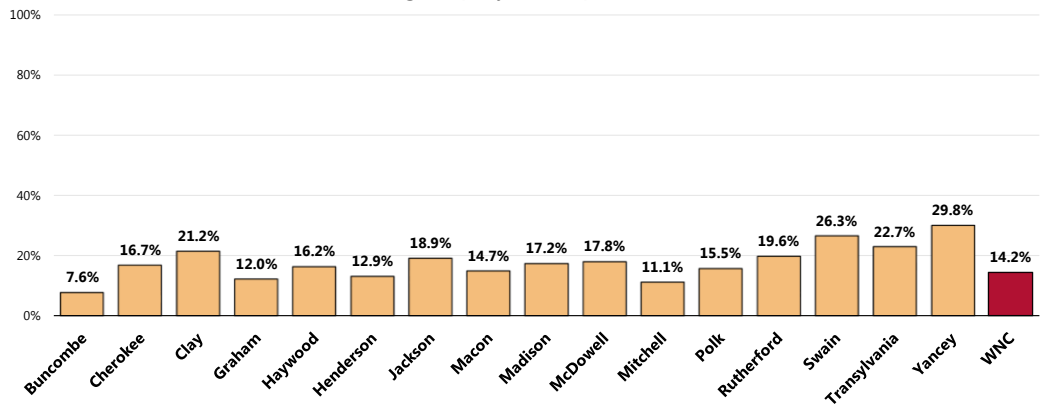
### Exposure at Workplace

Among employed respondents, 14.2% report breathing the smoke from someone else's cigarette while at work in the past week.

- The prevalence is highest in Clay, Swain, Transylvania and Yancey counties, but favorably low in Buncombe County.

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

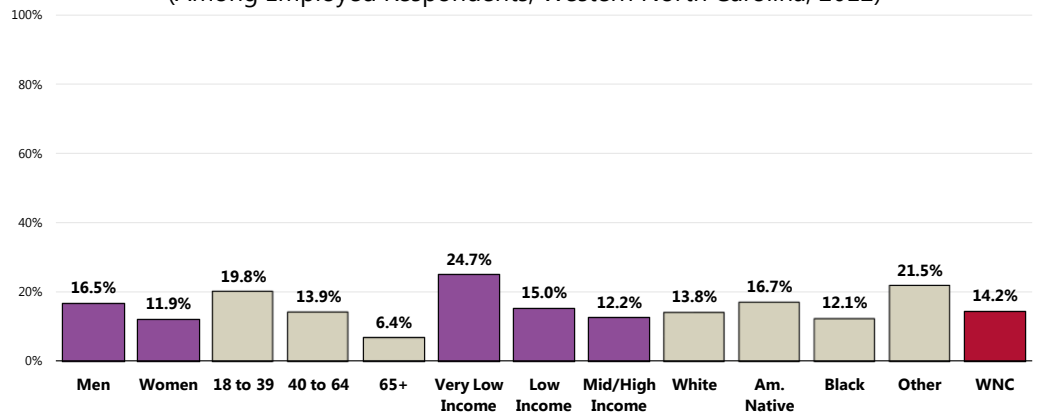
(Among Employed Respondents)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 44]  
 Notes: • Asked of employed respondents.

👤 Exposure to secondhand smoke in the workplace is more often reported among men, adults under 65 and very low income residents.

### Have Breathed Someone Else's Cigarette Smoke at Work in the Past Week (Among Employed Respondents; Western North Carolina, 2012)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 44]  
Notes: • Asked of employed respondents.  
• Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).  
• Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

## Public Perceptions of Secondhand Smoke

In order to evaluate community members' perceptions about environmental tobacco smoke, survey respondents were given a series of three statements regarding smoking in public places and asked whether they "strongly agree," "agree," "neither agree nor disagree," "disagree" or "strongly disagree" with each statement.

***"I believe it is important for universities and colleges to be 100% tobacco-free" — 74.4% of WNC survey respondents agree (including "strongly agree" and "agree" responses).***

- Another 7.7% were neutral regarding the statement (neither agreeing nor disagreeing), while 18.0% do not agree that universities and colleges should be 100% tobacco-free.

***"I believe it is important for government buildings and grounds to be 100% tobacco-free" — 77.8% of WNC survey respondents agree (including "strongly agree" and "agree" responses).***

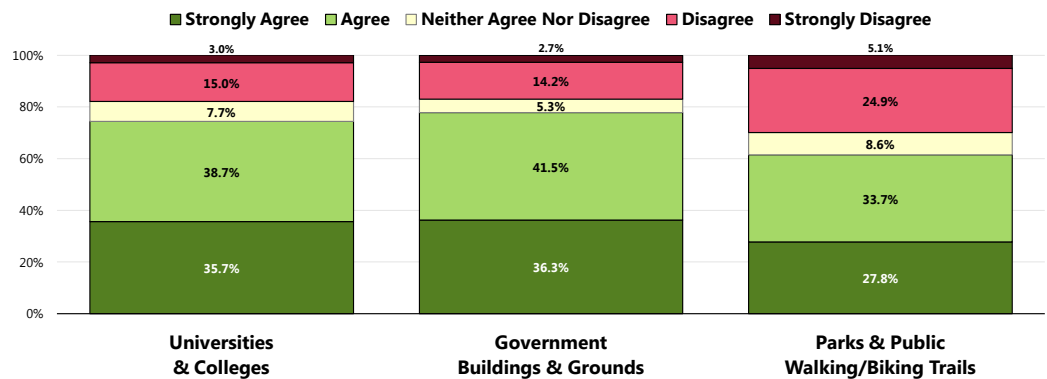
- Another 5.3% were neutral regarding the statement (neither agreeing nor disagreeing), while 16.9% do not agree that government buildings and grounds should be 100% tobacco-free.

***"I believe it is important for parks and public walking/biking trails to be 100% tobacco free" — 61.5% of WNC survey respondents agree (including "strongly agree" and "agree" responses),***

- Another 8.6% were neutral regarding the statement (neither agreeing nor disagreeing), while 30.0% do not agree that parks and public walking/biking trails should be 100% tobacco-free.

### **"I believe it is important for \_\_\_\_\_ to be 100% tobacco-free."**

(Western North Carolina, 2012)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 45-47]  
 Notes: • Asked of all respondents.

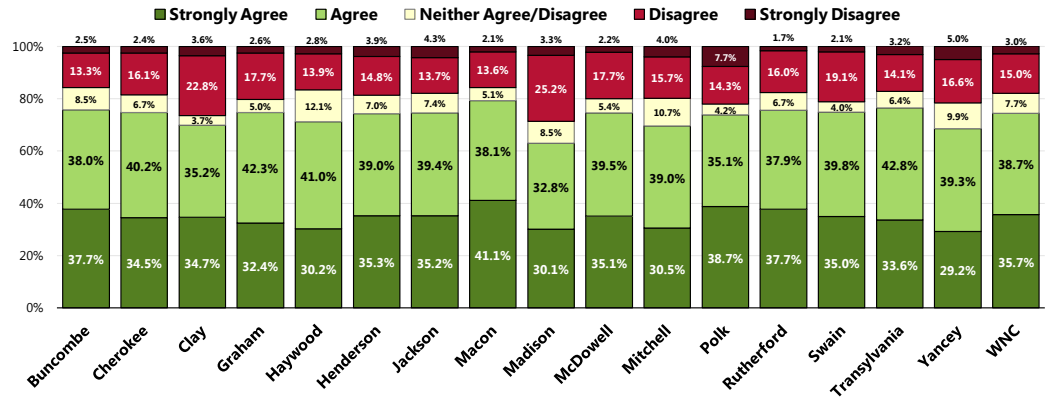


## Universities & Colleges

- Residents in Madison County are least likely to agree that universities and colleges should be 100% tobacco-free.

### **“I believe it is important for universities and colleges to be 100% tobacco-free.”**

(By County, 2012)

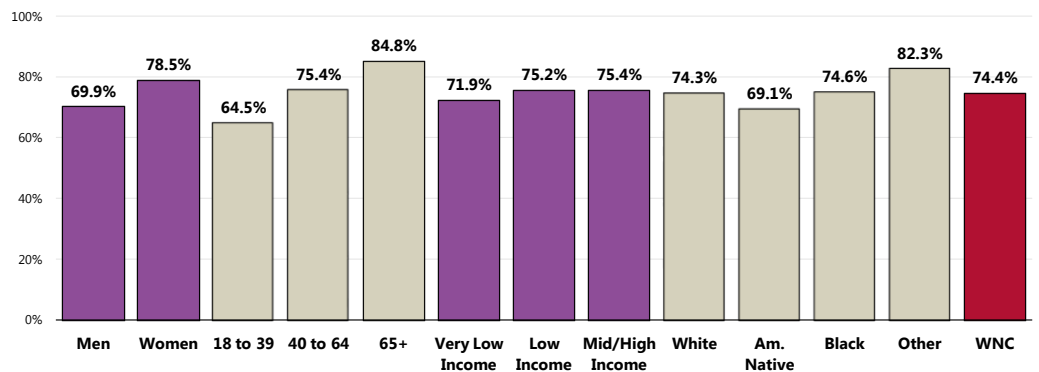


Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 45]  
 Notes: • Asked of all respondents.

Demographic segments less likely to agree that universities and colleges should be 100% tobacco-free include:

- Men.
- Young adults (under 40).
- Residents living at very lower incomes.

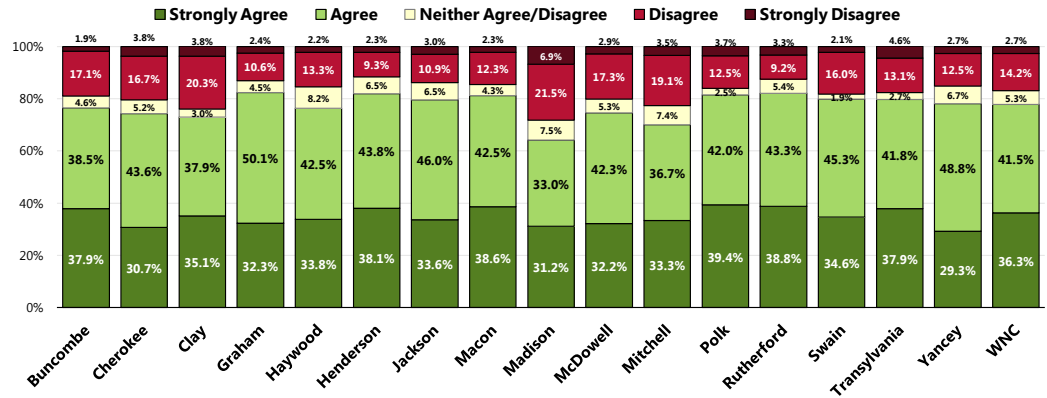
### **Believe It Is Important That Universities and Colleges Are 100% Tobacco-Free** (“Strongly Agree” and “Agree” Responses; Western North Carolina, 2012)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 45]  
 Notes: • Asked of all respondents.  
 • Includes “very important” and “somewhat important” responses.

- Survey respondents in Madison and Mitchell counties are less likely to agree that government buildings and grounds should be 100% tobacco-free.

**“I believe it is important for government buildings and grounds to be 100% tobacco-free.”**  
(By County, 2012)

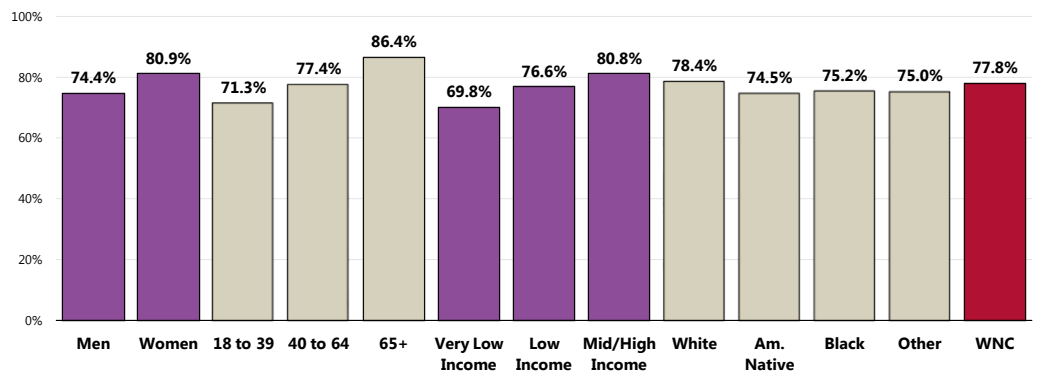


Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 46]  
Notes: • Asked of all respondents.

Demographic segments less likely to agree that government buildings and grounds should be 100% tobacco-free include:

- Men.
- Adults under 40.
- Residents living at the lowest income level.

**Believe It Is Important That Government Buildings and Grounds Are 100% Tobacco-Free**  
(“Strongly Agree” and “Agree” Responses; Western North Carolina, 2012)



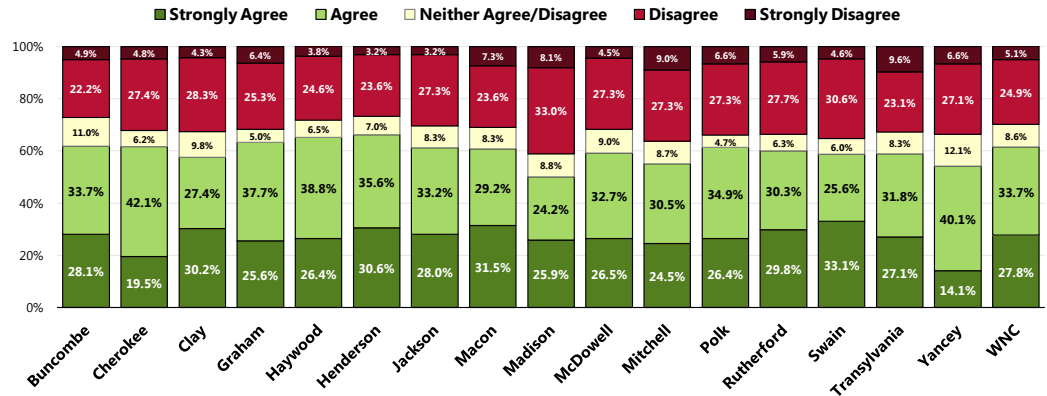
Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 46]  
Notes: • Asked of all respondents.  
• Includes “very important” and “somewhat important” responses.

## Parks & Public Walking/Biking Trails

- Residents of Madison and Yancey counties are least likely to agree that parks and public walking/biking trails should be 100% tobacco-free.

### **“I believe it is important for public walking/biking trails to be 100% tobacco-free.”**

(By County, 2012)



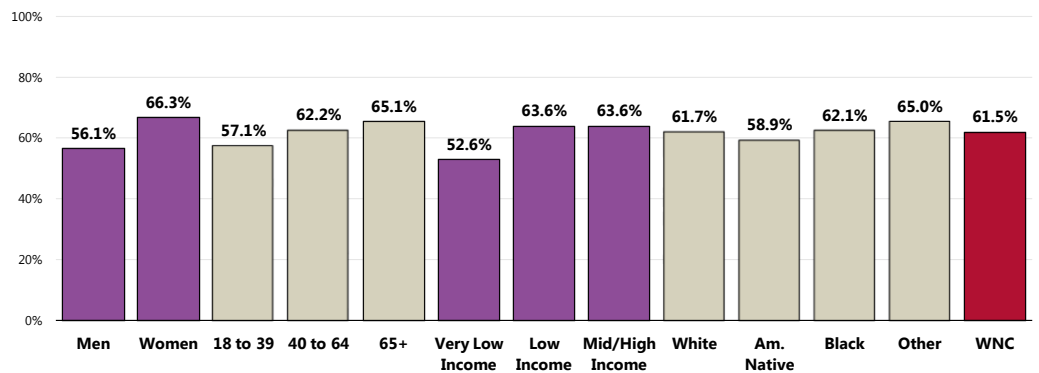
Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 47]  
 Notes: • Asked of all respondents.

Demographic segments less likely to agree that parks and public walking/biking trails should be 100% tobacco-free include:

- Men.
- Young adults.
- Residents living in the lowest income category.

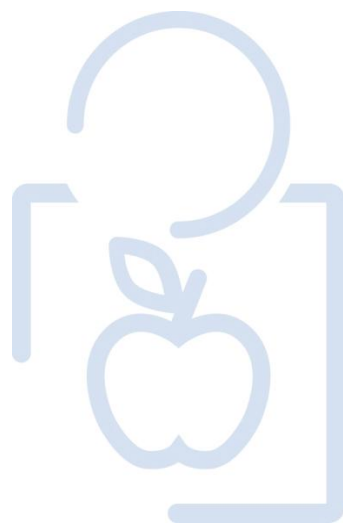
### **Believe It Is Important That Parks and Public Walking/Biking Trails Are 100% Tobacco-Free**

(“Strongly Agree” and “Agree” Responses; Western North Carolina, 2012)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 47]  
 Notes: • Asked of all respondents.  
 • Includes “very important” and “somewhat important” responses.

# ACCESS TO HEALTH SERVICES



# Barriers to Healthcare Access

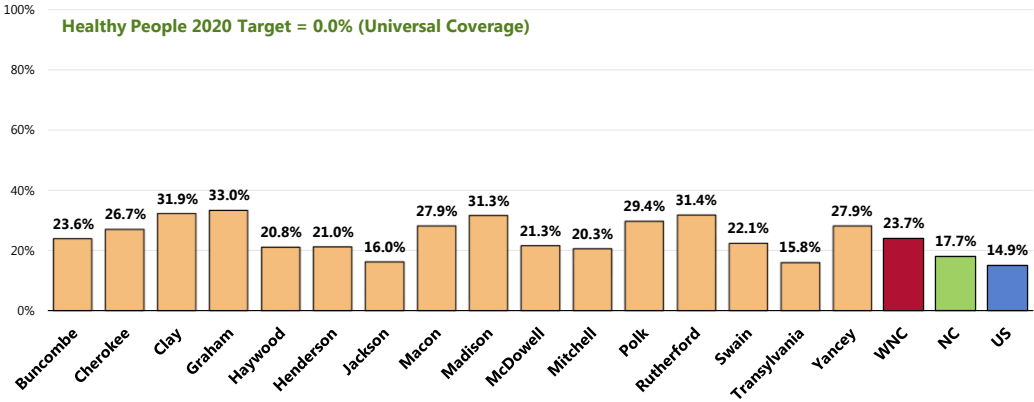
Here, lack of health insurance coverage reflects respondents age 18 to 64 (thus, excluding the Medicare population) who have no type of insurance coverage for healthcare services – neither private insurance nor government-sponsored plans (e.g., Medicaid).

## Lack of Health Insurance Coverage

**Among adults age 18 to 64, 23.7% report having no insurance coverage for healthcare expenses.**

- Higher than the state finding.
- Higher than the national finding.
- The Healthy People 2020 target is universal coverage (0% uninsured).
- Unfavorably high in Graham, Madison and Rutherford counties; lowest in Jackson and Transylvania counties.

**Lack of Healthcare Insurance Coverage**  
(Among Adults 18-64; By County)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 125]  
 • Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC). 2010 North Carolina data.  
 • 2011 PRC National Health Survey, Professional Research Consultants, Inc.  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective AHS-1]

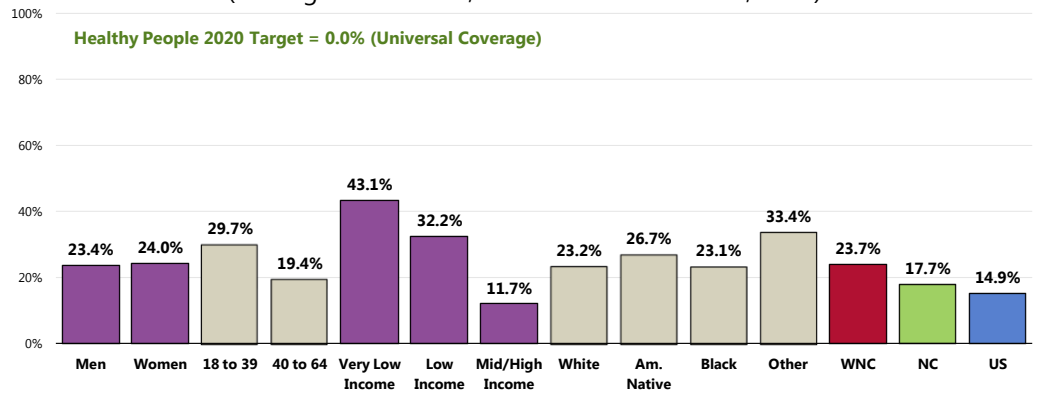
Notes: • Reflects adults under the age of 65.  
 • Includes any type of insurance, such as traditional health insurance, prepaid plans such as HMOs, or government-sponsored coverage (e.g., Medicare, Medicaid, Indian Health Services, etc.).

The following population segments (under age 65) are more likely to be without healthcare insurance coverage:

- 👥 Young adults.
- 👥 Residents living at lower incomes (note the 43.1% uninsured prevalence among very low income adults).
- 👥 "Other" races/ethnicity.

## Lack of Healthcare Insurance Coverage

(Among Adults 18-64; Western North Carolina, 2012)

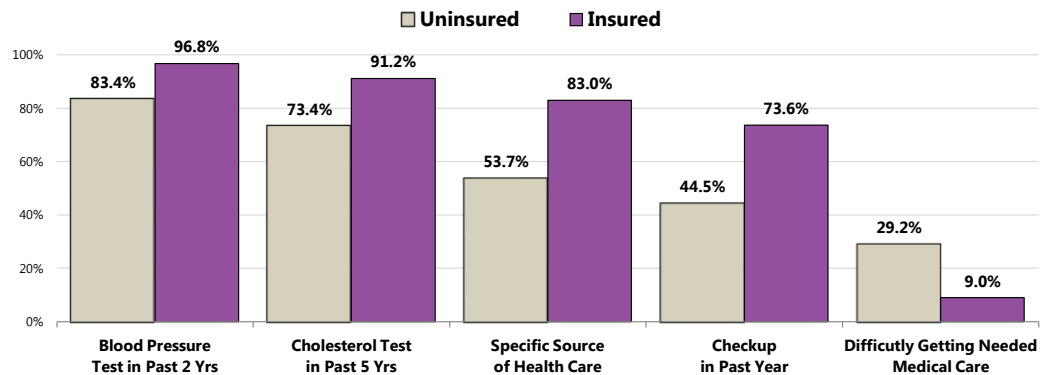


- Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 125]
  - 2011 PRC National Health Survey, Professional Research Consultants, Inc.
  - Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2010 North Carolina data.
  - US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective AHS-1]
- Notes:
- Reflects adults under the age of 65.
  - Includes any type of insurance, such as traditional health insurance, prepaid plans such as HMOs, or government-sponsored coverage (e.g., Medicare, Medicaid, Indian Health Services, etc.).
  - Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).
  - Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

As might be expected, uninsured adults in Western North Carolina are less likely to receive routine care and preventive health screenings, and are more likely to have experienced difficulties accessing healthcare.

## Preventive Healthcare

(Among Adults Age 18 to 64 By Insured Status; Western North Carolina, 2012)



- Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 13, 15, 16, 24, 27]
- Notes:
- Asked of all respondents.

## Difficulties Accessing Healthcare Services

Access to comprehensive, quality health care services is important for the achievement of health equity and for increasing the quality of a healthy life for everyone. It impacts: overall physical, social, and mental health status; prevention of disease and disability; detection and treatment of health conditions; quality of life; preventable death; and life expectancy.

Access to health services means the timely use of personal health services to achieve the best health outcomes. It requires three distinct steps: 1) Gaining entry into the health care system; 2) Accessing a health care location where needed services are provided; and 3) Finding a health care provider with whom the patient can communicate and trust.

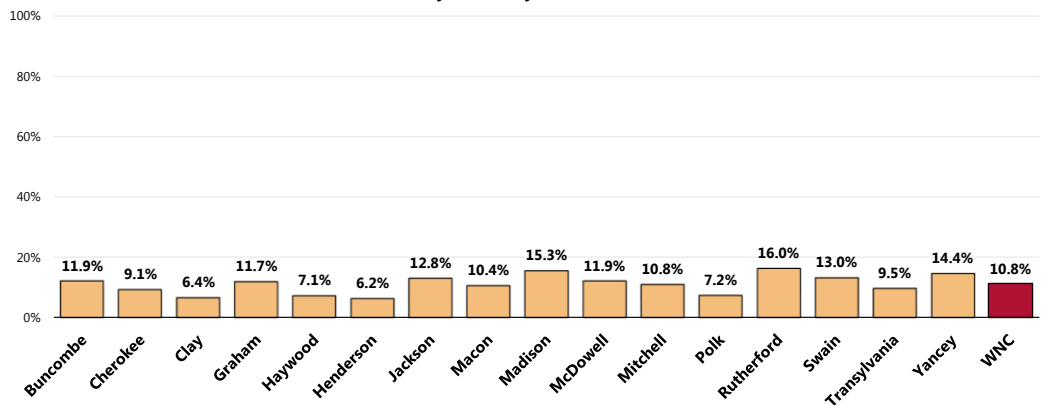
– Healthy People 2020 ([www.healthypeople.gov](http://www.healthypeople.gov))

**A total of 10.8% of Western North Carolina adults report having difficulty accessing medical care at some point in the past year.**

- Unfavorably high in Rutherford County, but comparatively low in Clay, Haywood and Henderson counties.

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

(By County, 2012)



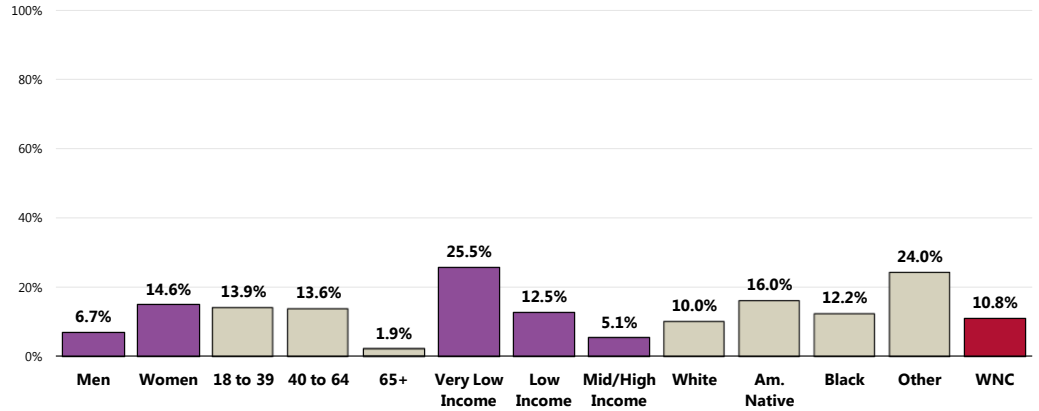
Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 13]  
Notes: • Asked of all respondents.

Note that the following demographic groups more often report difficulties accessing healthcare services in the past year:

- 👥 Women.
- 👥 Adults under the age of 65.
- 👥 Lower-income residents (strongly correlated to income).
- 👥 Non-Hispanic American Natives and "Other" races/ethnicity.

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

(Western North Carolina, 2012)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 13]

Notes: • Asked of all respondents.

• Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).

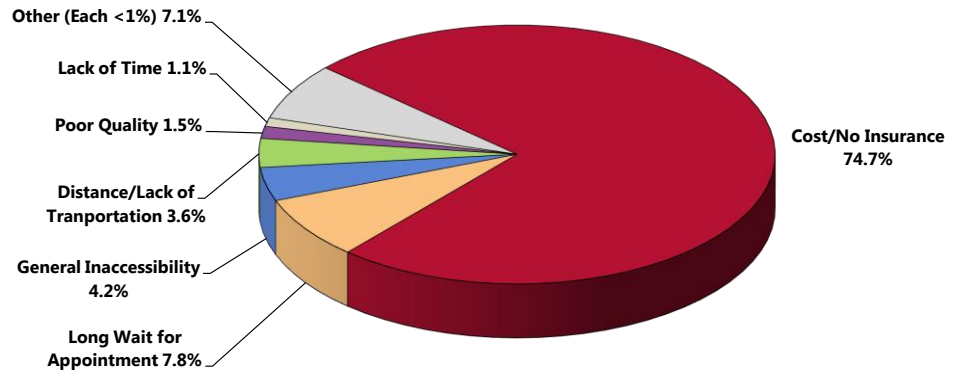
• Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

When asked, the largest share of adults with recent difficulties accessing medical care mentioned problems with cost or insurance issues (74.7%), followed by long waits for appointments (7.8%).

- Other reasons given included various references to general **inaccessibility** (4.2%), **distance** or a lack of **transportation** (3.6%), poor **quality** (1.5%) and lack of **time** (1.1%).

### Primary Reason for Inability to Get Needed Medical Care

(Adults Unable to Get Needed Medical Care at Some Point in the Past Year; WNC, 2012)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 14]

Notes: • Asked of all respondents.



# Primary Care Services

Improving health care services depends in part on ensuring that people have a usual and ongoing source of care. People with a usual source of care have better health outcomes and fewer disparities and costs. Having a primary care provider (PCP) as the usual source of care is especially important. PCPs can develop meaningful and sustained relationships with patients and provide integrated services while practicing in the context of family and community. Having a usual PCP is associated with:

- Greater patient trust in the provider
- Good patient-provider communication
- Increased likelihood that patients will receive appropriate care

Improving health care services includes increasing access to and use of evidence-based preventive services. Clinical preventive services are services that: **prevent** illness by detecting early warning signs or symptoms before they develop into a disease (primary prevention); or **detect** a disease at an earlier, and often more treatable, stage (secondary prevention).

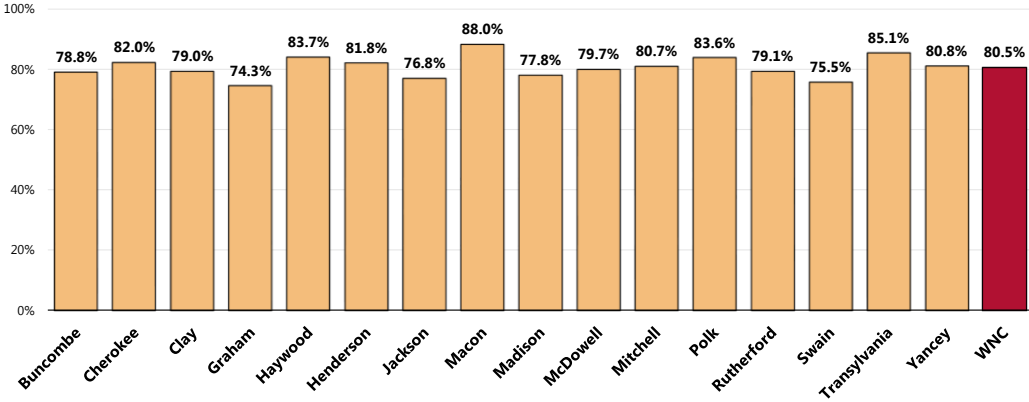
– Healthy People 2020 (www.healthypeople.gov)

## Regular Source of Ongoing Care

**A total of 80.5% of Western North Carolina adults have one person whom they consider to be their personal physician or healthcare provider.**





- Notably higher among respondents in Macon County.

**Have One Person Thought of as Respondent’s Personal Doctor or Healthcare Provider**



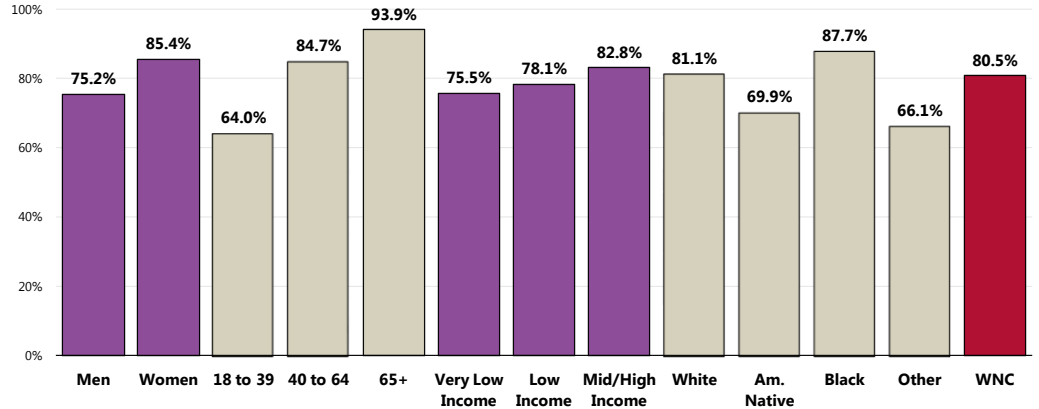
Sources: ● 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 16]  
 Notes: ● Asked of all respondents.

When viewed by demographic characteristics, the following population segments are less likely to have one person whom they consider to be their personal physician or healthcare provider:

-  Men.
-  Adults under age 40.
-  Lower-income adults.
-  Non-Hispanic American Natives and "Other" races/ethnicity.

### Have One Person Thought of as Respondent's Personal Doctor or Healthcare Provider

(Western North Carolina, 2012)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 16]  
 Notes: • Asked of all respondents.  
 • Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).  
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

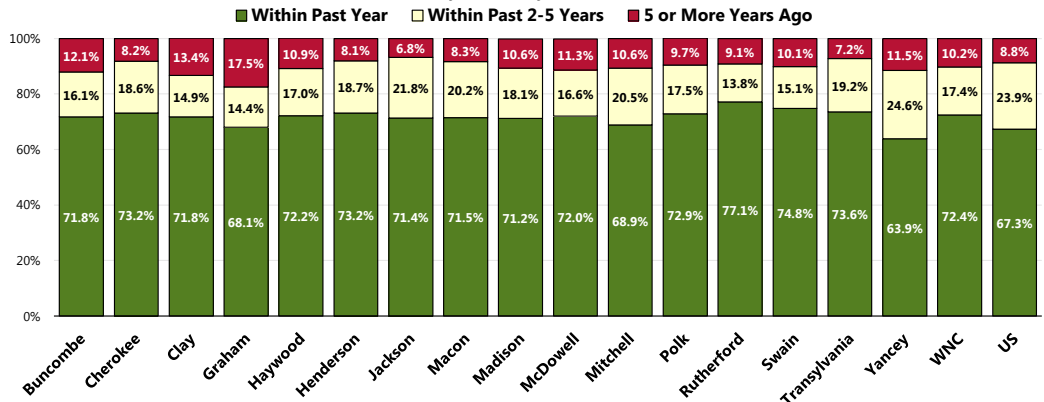
### Utilization of Primary Care Services

**Most WNC adults (72.4%) visited a physician for a routine checkup in the past year.**

- More favorable than national findings.
- Unfavorably low in Yancey County.

### Length of Time Since Last Routine Check-Up

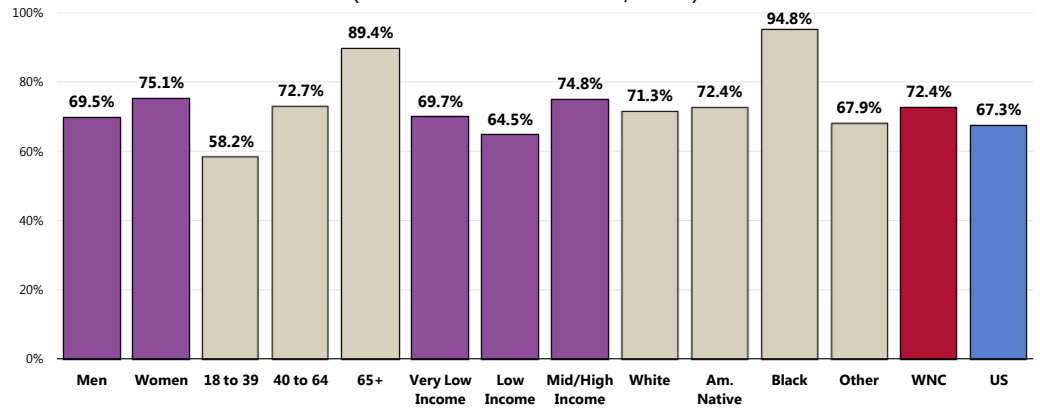
(By County, 2012)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 15]  
 • 2011 PRC National Health Survey, Professional Research Consultants, Inc.  
 Notes: • Asked of all respondents.

- Men, young adults and lower-income residents are less likely to have received routine care in the past year (note the positive correlation with age).
- Note also the high prevalence of routine checkups among Non-Hispanic Blacks in the region.

### Have Visited a Physician for a Checkup in the Past Year (Western North Carolina, 2012)



- Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 15]
  - 2011 PRC National Health Survey, Professional Research Consultants, Inc.
- Notes:
- Asked of all respondents.
  - Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).
  - Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

# Oral Health

The health of the mouth and surrounding craniofacial (skull and face) structures is central to a person's overall health and well-being. Oral and craniofacial diseases and conditions include: dental caries (tooth decay); periodontal (gum) diseases; cleft lip and palate; oral and facial pain; and oral and pharyngeal (mouth and throat) cancers.

The significant improvement in the oral health of Americans over the past 50 years is a public health success story. Most of the gains are a result of effective prevention and treatment efforts. One major success is community water fluoridation, which now benefits about 7 out of 10 Americans who get water through public water systems. However, some Americans do not have access to preventive programs. People who have the least access to preventive services and dental treatment have greater rates of oral diseases. A person's ability to access oral healthcare is associated with factors such as education level, income, race, and ethnicity.

Oral health is essential to overall health. Good oral health improves a person's ability to speak, smile, smell, taste, touch, chew, swallow, and make facial expressions to show feelings and emotions. However, oral diseases, from cavities to oral cancer, cause pain and disability for many Americans. Good self-care, such as brushing with fluoride toothpaste, daily flossing, and professional treatment, is key to good oral health. Health behaviors that can lead to poor oral health include:

- Tobacco use
- Excessive alcohol use
- Poor dietary choices

Barriers that can limit a person's use of preventive interventions and treatments include:

- Limited access to and availability of dental services
- Lack of awareness of the need for care
- Cost
- Fear of dental procedures

There are also social determinants that affect oral health. In general, people with lower levels of education and income, and people from specific racial/ethnic groups, have higher rates of disease. People with disabilities and other health conditions, like diabetes, are more likely to have poor oral health.

Community water fluoridation and school-based dental sealant programs are 2 leading evidence-based interventions to prevent tooth decay.

Major improvements have occurred in the nation's oral health, but some challenges remain and new concerns have emerged. One important emerging oral health issue is the increase of tooth decay in preschool children. A recent CDC publication reported that, over the past decade, dental caries (tooth decay) in children ages 2 to 5 have increased.

Lack of access to dental care for all ages remains a public health challenge. This issue was highlighted in a 2008 Government Accountability Office (GAO) report that described difficulties in accessing dental care for low-income children. In addition, the Institute of Medicine (IOM) has convened an expert panel to evaluate factors that influence access to dental care.

Potential strategies to address these issues include:

- Implementing and evaluating activities that have an impact on health behavior.
- Promoting interventions to reduce tooth decay, such as dental sealants and fluoride use.
- Evaluating and improving methods of monitoring oral diseases and conditions.
- Increasing the capacity of State dental health programs to provide preventive oral health services.
- Increasing the number of community health centers with an oral health component.

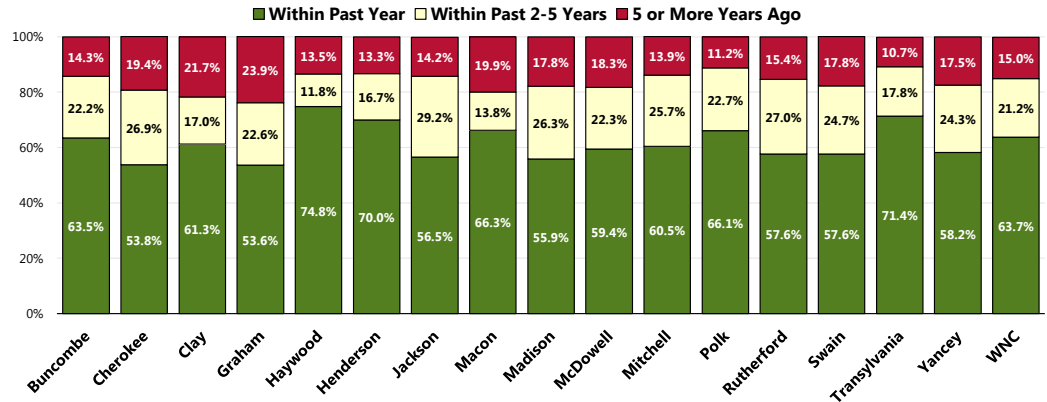
– Healthy People 2020 ([www.healthypeople.gov](http://www.healthypeople.gov))

When asked about their most recent visit to a dentist or dental clinic for any reason (including specialists such as orthodontists), 63.7% report a visit in the past year, while 21.2% visited a dentist or dental clinic between 2 and 5 years ago.

- On the other hand, 15.0% report that it has been 5 or more years since they visited a dentist or dental clinic.

### Length of Time Since Last Dental Visit

(By County, 2012)



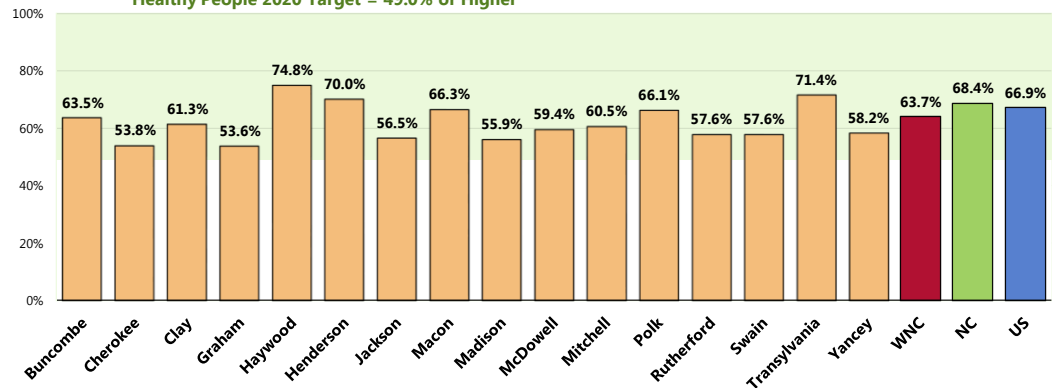
Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 17]  
 Notes: • Asked of all respondents.

The prevalence of WNC adults who visited a dentist or dental clinic for any reason in the past year is:

- Statistically lower than the statewide prevalence.
- Similar to national findings.
- Satisfies the Healthy People 2020 target (49% or higher).
- The prevalence is unfavorably low in Cherokee, Graham, Jackson and Madison counties, but comparatively higher (over 70%) in Haywood, Henderson and Transylvania counties.

### Have Visited a Dentist or Dental Clinic Within the Past Year

Healthy People 2020 Target = 49.0% or Higher



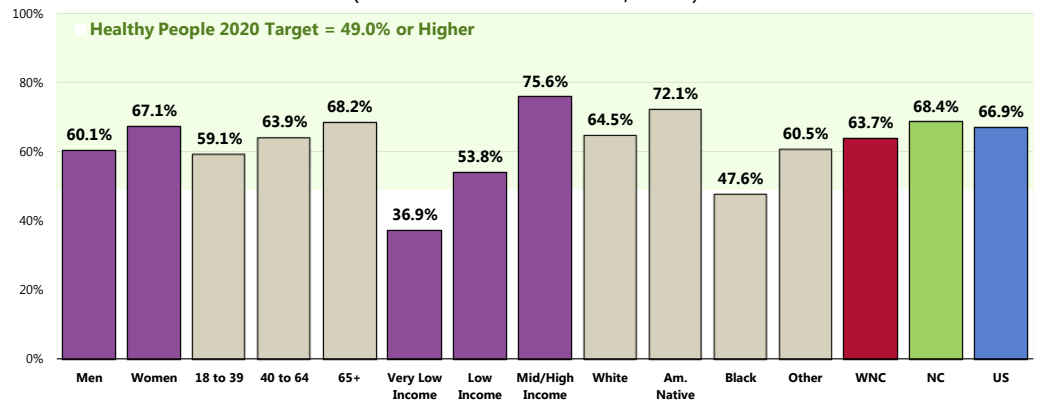
Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 17]  
 • 2011 PRC National Health Survey, Professional Research Consultants, Inc.  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective OH-7]  
 • Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC). 2010 North Carolina data.  
 Notes: • Asked of all respondents.

Note the following:

- 👤👤👤 WNC men are less likely than women to have received dental care in the past year.
- 👤👤👤 There is a positive correlation between age and recent dental visits.
- 👤👤👤 Persons living in the higher income categories report much higher utilization of oral health services (very low income adults fail to satisfy the Healthy People 2020 target).
- 👤👤👤 Non-Hispanic Whites and American Natives are much more likely than Non-Hispanic Blacks or "Other" races/ethnicity to report recent dental care.

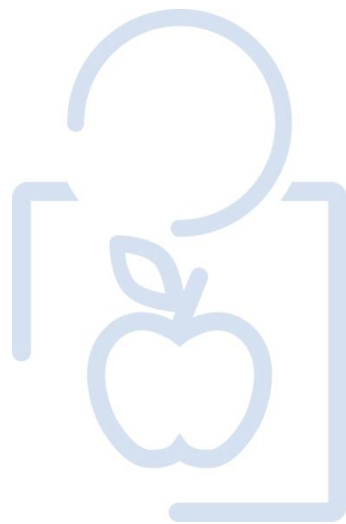
## Have Visited a Dentist or Dental Clinic Within the Past Year

(Western North Carolina, 2012)



- Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 17]
  - 2011 PRC National Health Survey, Professional Research Consultants, Inc.
  - Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2010 North Carolina data.
  - US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective OH-7]
- Notes:
- Asked of all respondents.
  - Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).
  - Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

# HEALTH EDUCATION & OUTREACH



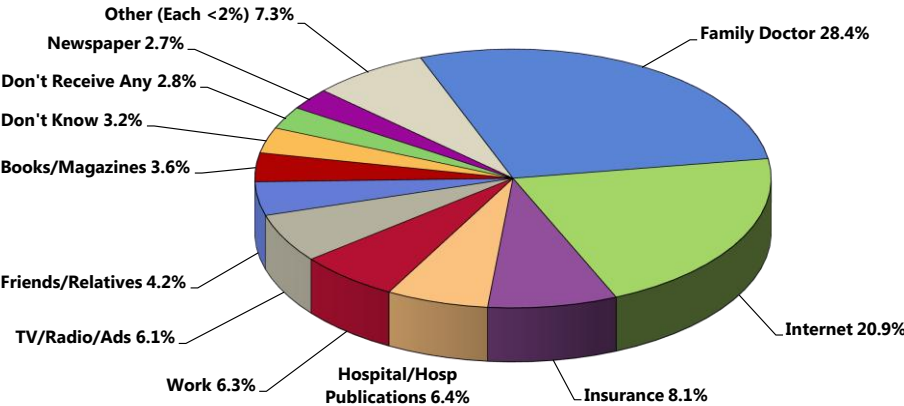
# Healthcare Information Sources

**Family physicians and the Internet are residents' primary sources of healthcare information.**

- 28.4% of Western North Carolina adults cited their **family physician** as their primary source of healthcare information.
- The **Internet** received the second-highest response, with 20.9%.
  - Other sources mentioned include insurance (8.1%), hospital publications (6.4%), work (6.3%), TV/radio/ads (6.1%), and friends and relatives (4.2%), to name a few.
- Just 2.8% of survey respondents say that they do not receive any healthcare information.

**Primary Source of Healthcare Information**

(Western North Carolina, 2012)



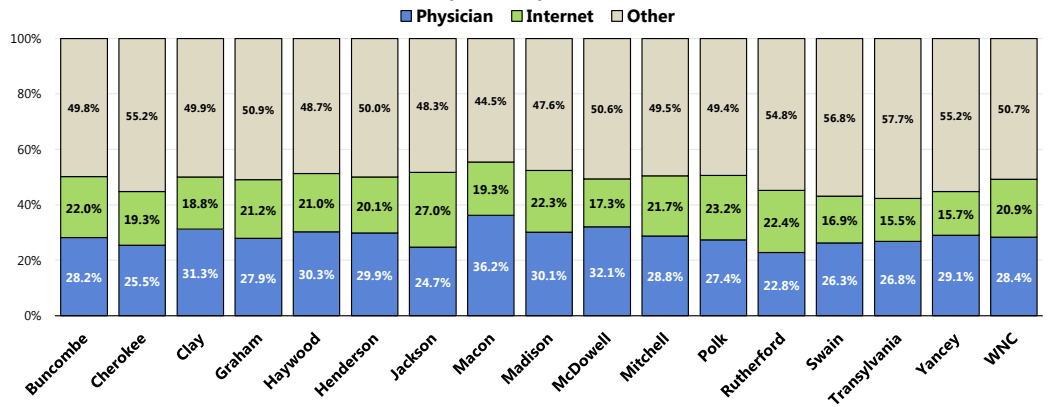
Sources: ● 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 11]  
 Notes: ● Asked of all respondents.

- Adults in Macon County were most likely to mention **physicians** as their primary source for healthcare information, while those in Rutherford County were least likely to mention a physician.
- The largest share of responses for the **Internet** was given by Jackson County respondents, while adults in Transylvania were least likely to mention the Internet as their primary source for healthcare information.



## Primary Source of Healthcare Information

(By County, 2012)



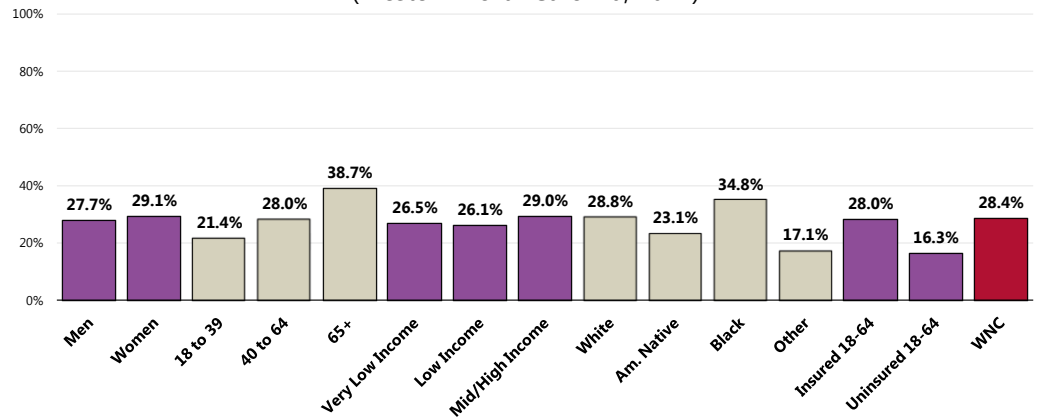
Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 11]  
Notes: • Asked of all respondents.

Western North Carolina residents more likely to depend primarily on family physicians for their healthcare information include:

- 👥 Seniors.
- 👥 Non-Hispanic Blacks.
- 👥 The insured population (under 65).





## Rely on Physicians for Most Healthcare Information

(Western North Carolina, 2012)

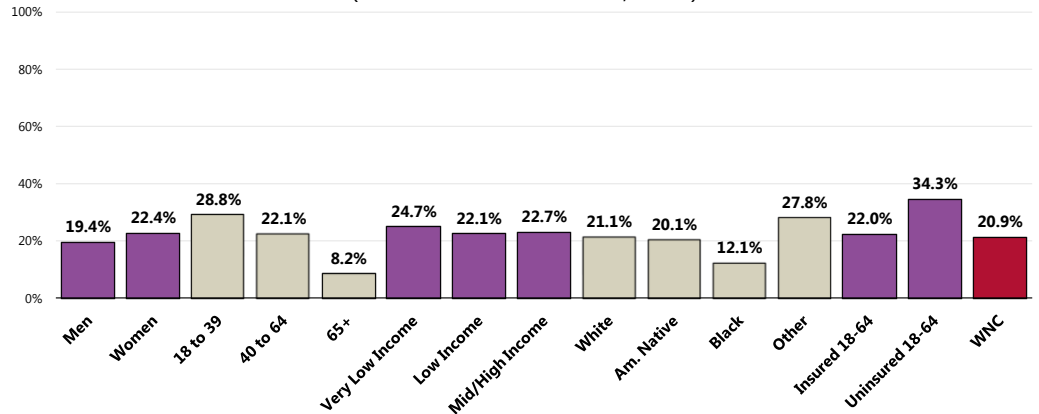


Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 11]  
Notes: • Asked of all respondents.  
• Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).  
• Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

Adults more likely to depend on the Internet for their healthcare information include:

-  Women.
-  Adults under 65.
-  All racial/ethnic groups other than Blacks.
-  The uninsured (under 65).

### Rely on the Internet for Most Healthcare Information (Western North Carolina, 2012)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 11]

Notes: • Asked of all respondents.

• Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).

• Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

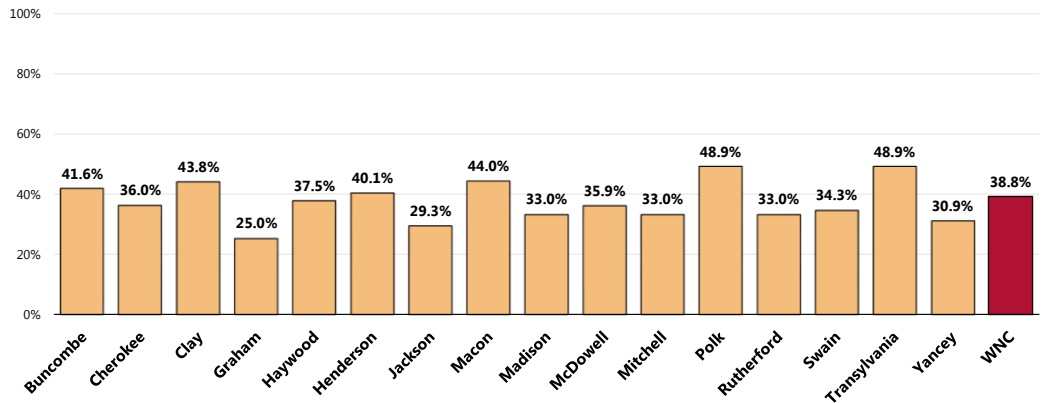
# Advance Directives

An Advance Directive is a set of directions given about the medical care a person wants if he/she ever loses the ability to make decisions for him/herself. Formal Advance Directives include Living Wills and Healthcare Powers of Attorney.

Among Western North Carolina adults, 38.8% have completed Advance Directive documents.

- The prevalence is notably lower in Graham, Jackson and Yancey counties, but is favorably high in Polk and Transylvania counties.

## Have Completed Advance Directive Documents

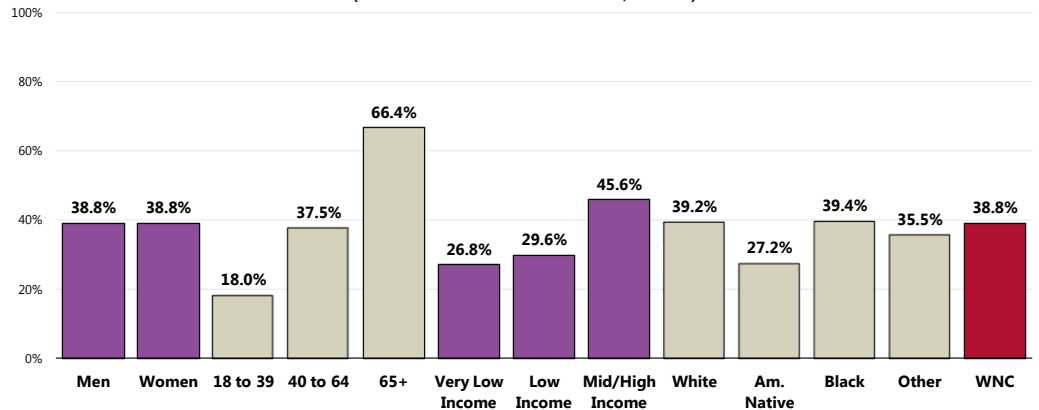


Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 34]  
 Notes: • Asked of all respondents.

Adults less likely to have completed Advance Directive documents include:

- Adults under 65.
- Those living in the lower income segments.
- American Natives and "Other" races/ethnicity.

## Have Completed Advance Directive Documents (Western North Carolina, 2012)

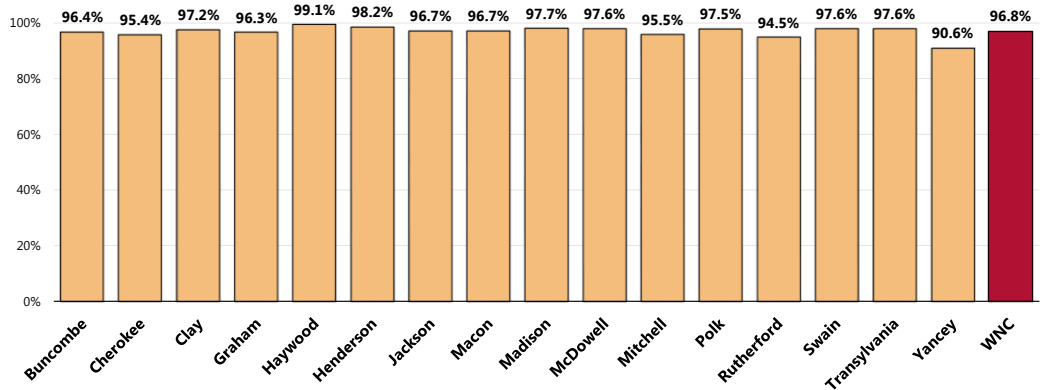


Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 34]  
 Notes: • Asked of all respondents.  
 • Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).  
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

Among those adults who have completed Advance Directive documents, the vast majority (96.8%) have communicated their healthcare decisions with their family or with their physicians.

- The prevalence is notably lower among Yancey County adults.

### Have Communicated Health Care Decisions to Family or Doctor (Among Respondents With Advance Directive Documents; Western North Carolina, 2012)

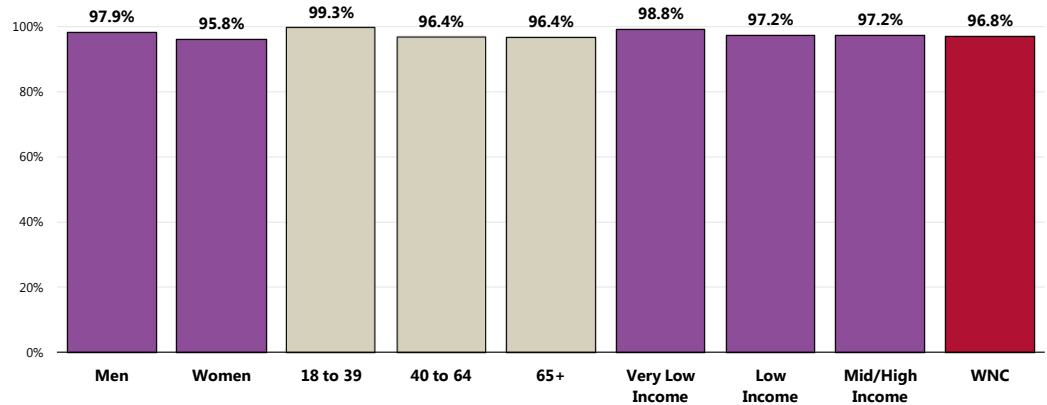


Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 35]  
Notes: • Asked of respondents with completed advance directive documents.

Although the numbers are still quite high, adults (with Advance Directive documents) less likely to have communicated their decisions include:

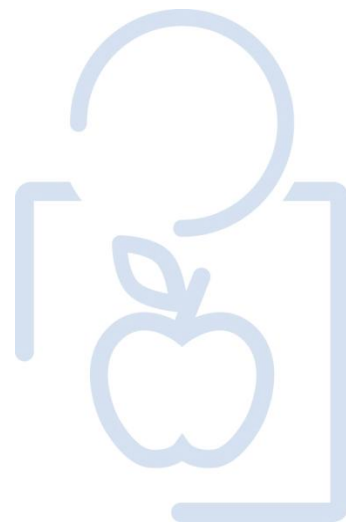
- Women.
- Adults over 39.

### Have Communicated Health Care Decisions to Family or Doctor (Among Respondents With Advance Directive Documents; Western North Carolina, 2012)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 35]  
Notes: • Asked of respondents with completed advance directive documents.  
• Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).  
• Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Very Low Income" includes households with incomes below 100% of the federal poverty level; "Low Income" includes households with incomes 100% to 199% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

# LOCAL HEALTHCARE



# Perceptions of Local Healthcare Services

Finally, survey respondents were asked to indicate their agreement with the following statement: "Considering cost, quality, number of options and availability, there is good healthcare in my county."

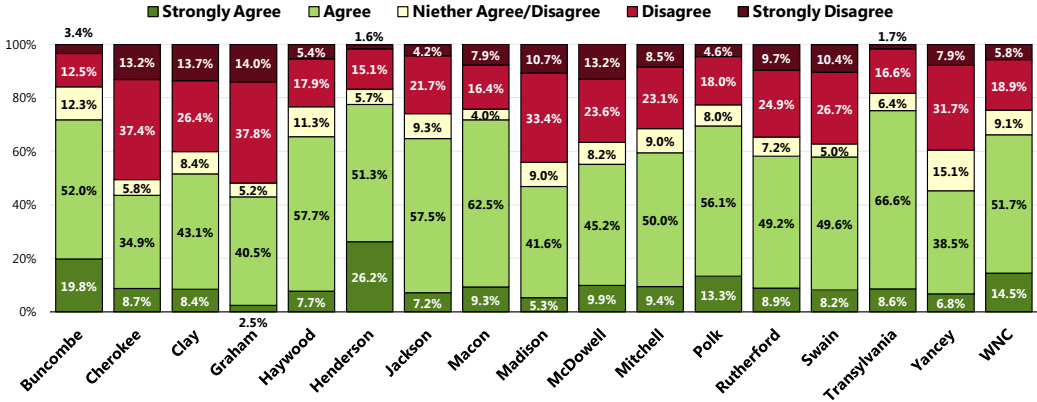
**Overall, nearly two-thirds (66.2%) of Western North Carolina adults agree with the statement (either "strongly agree" or "agree" responses to the inquiry).**

- Another 9.1% gave a neutral response to the statement.

**However, 24.7% of residents either "disagree" or "strongly" disagree that there is good healthcare in their county.**

- Agreement with the statement is higher in Buncombe, Henderson and Transylvania counties, but statistically low in Cherokee, Clay, Graham, Madison, McDowell, Rutherford, Swain and Yancey counties.

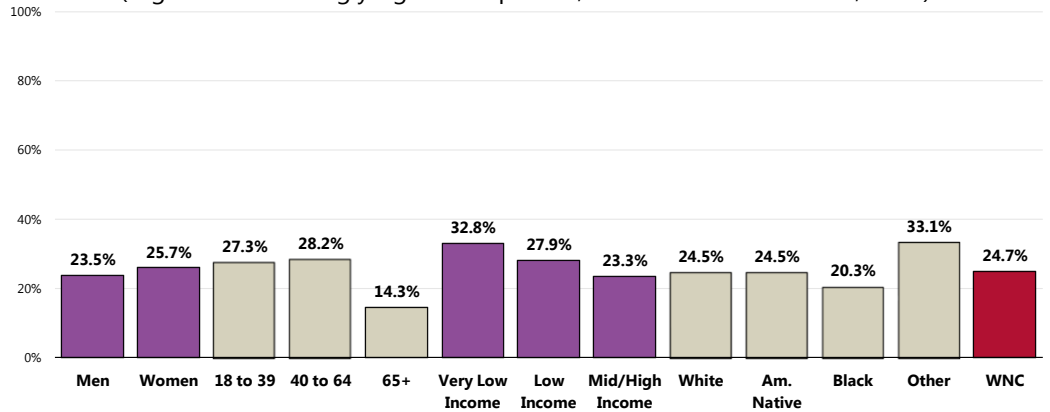
**"Considering cost, quality, number of options and availability, there is good healthcare in my county."**  
(By County, 2012)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 7]  
Notes: • Asked of all respondents.

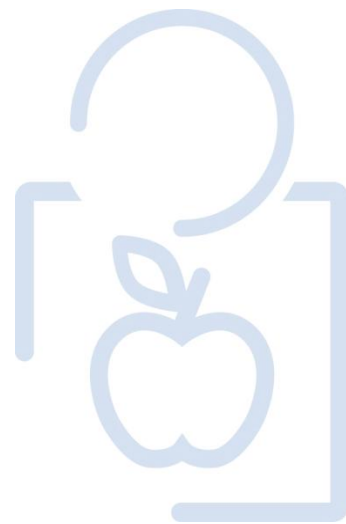
👥 Seniors and residents in the highest income segment are more critical of local healthcare.

### Agree That There Is Good Healthcare in the County ("Agree" and "Strongly Agree" Responses; Western North Carolina, 2012)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 7]  
Notes: • Asked of all respondents.  
• Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).  
• Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Very Low Income" includes households with incomes below 100% of the federal poverty level; "Low Income" includes households with incomes 100% to 199% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

# APPENDICES





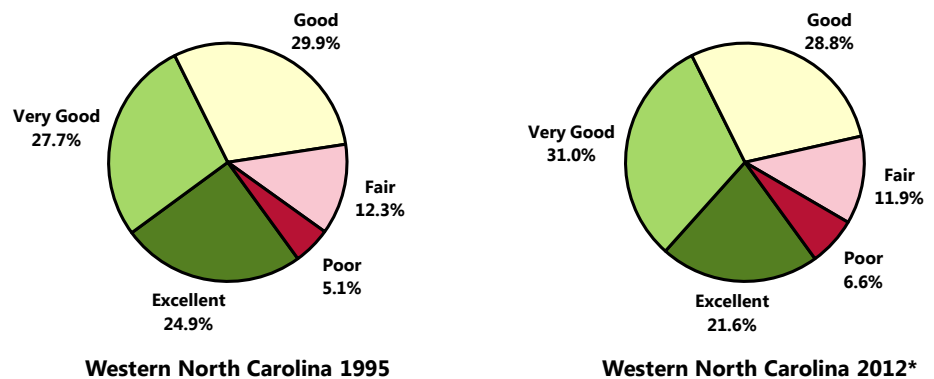
# Appendix I: 1995-2012 WNC Trends

A similar survey was conducted in the region in 1995 by PRC. Comparisons for questions asked in both of these surveys are outlined in the following appendix. *Note, however, that these data exclude Polk and Rutherford counties, which were not surveyed in 1995.*

## Overall Health Status

☒ Self-evaluations of overall health status (as measured by “excellent/very good” or “fair/poor” responses) has not changed significantly since 1995.

### Experience “Fair” or “Poor” Overall Health

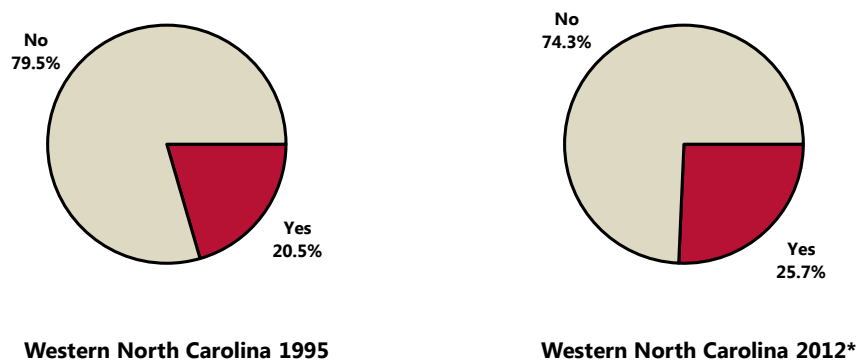


Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 12]  
 Notes: • Asked of all respondents.  
 \* 2012 data exclude Polk County and Rutherford County, which were not surveyed in 1995.

## Activity Limitations

☒ Since 1995, there has been a significant **increase** in activity limitations in the population.

### Limited in Activities in Some Way Due to a Physical, Mental or Emotional Problem (Among Adults Age 18 to 64)

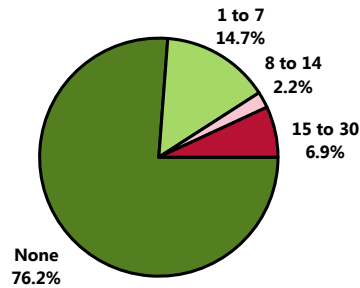


Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 67]  
 Notes: • Asked of all respondents.  
 \* 2012 data exclude Polk County and Rutherford County, which were not surveyed in 1995.

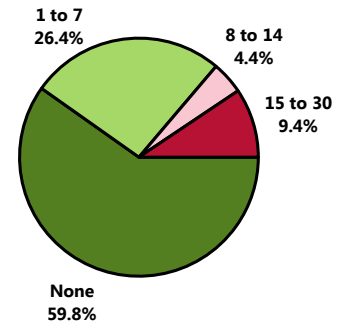
## Average Days of Poor Mental Health

- ☒ The prevalence of WNC residents experiencing days of poor mental health in the past month has **increased** significantly over time.

### Number of Days in the Past 30 Days on Which Mental Health Was Not Good



Western North Carolina 1995



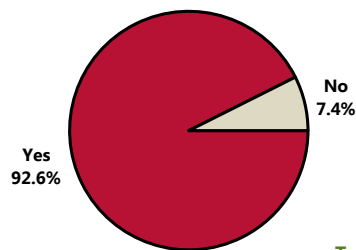
Western North Carolina 2012\*

Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 64]  
 Notes: • Asked of all respondents.  
 \* 2012 data exclude Polk County and Rutherford County, which were not surveyed in 1995.

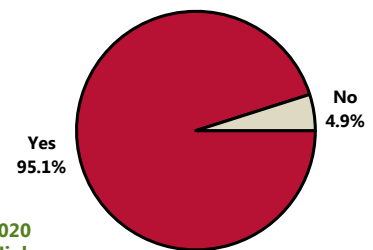
## Hypertension

- ☒ Blood pressure screening levels have **improved** since the 1995 survey.

### Have Had Blood Pressure Checked in the Past Two Years



Western North Carolina 1995



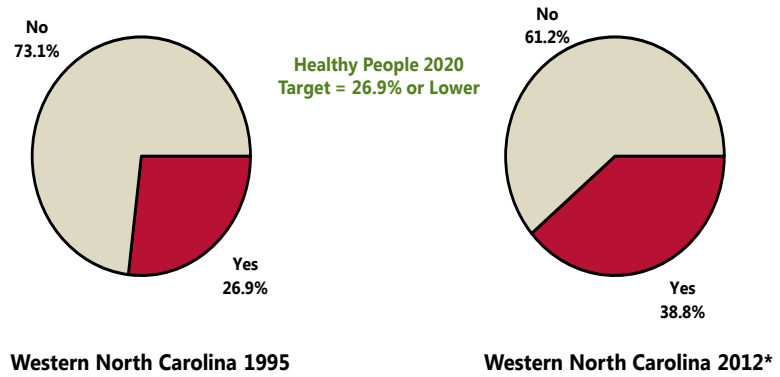
Western North Carolina 2012\*

Healthy People 2020  
 Target = 94.9% or Higher

Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 24]  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective HDS-4]  
 Notes: • Asked of all respondents.  
 \* 2012 data exclude Polk County and Rutherford County, which were not surveyed in 1995.

☒ Hypertension prevalence has shown a significant **increase** from the 26.9% reported in 1995.

### Prevalence of High Blood Pressure

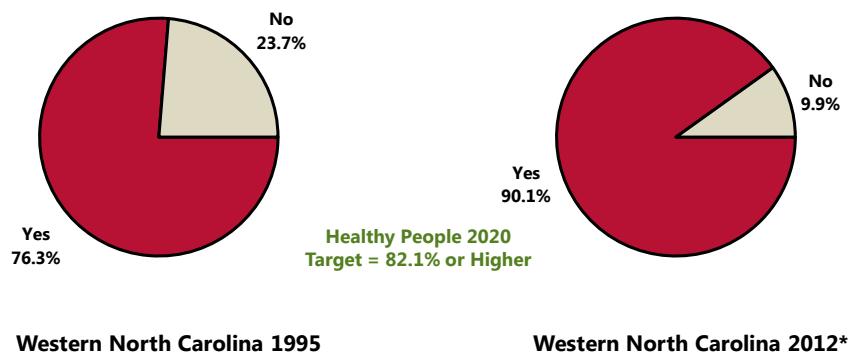


Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 76]  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective HDS-5.1]  
 Notes: • Asked of all respondents.  
 \* 2012 data exclude Polk County and Rutherford County, which were not surveyed in 1995.

### High Blood Cholesterol

☒ Cholesterol screening has **improved** significantly.

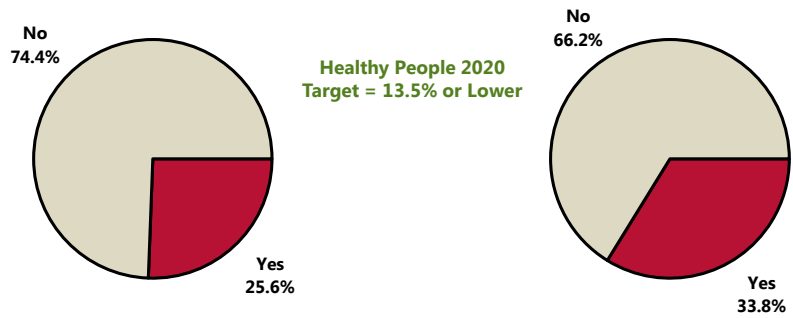
### Have Had Blood Cholesterol Levels Checked in the Past Five Years



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 27]  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective HDS-6]  
 Notes: • Asked of all respondents.  
 \* 2012 data exclude Polk County and Rutherford County, which were not surveyed in 1995.

☒ The prevalence of high blood cholesterol has **increased significantly** from the 25.6% reported in 1995.

### Prevalence of High Blood Cholesterol



Western North Carolina 1995

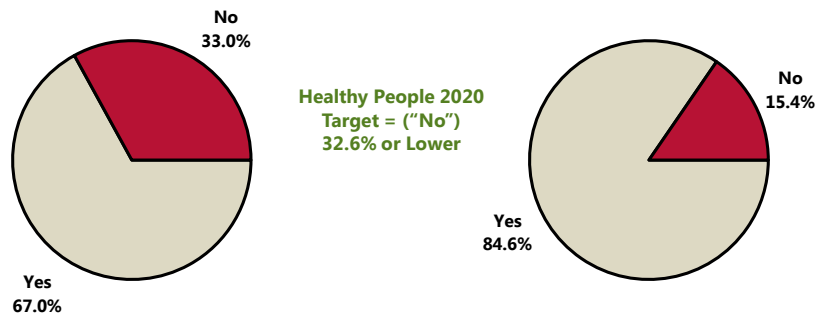
Western North Carolina 2012\*

Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 77]  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective HDS-7]  
 Notes: • Asked of all respondents.  
 \* 2012 data exclude Polk County and Rutherford County, which were not surveyed in 1995.

### Leisure-Time Physical Activity

☒ Leisure-time physical activity has **improved** over time.

### Engaged in Any Leisure-Time Physical Activities in the Past Month



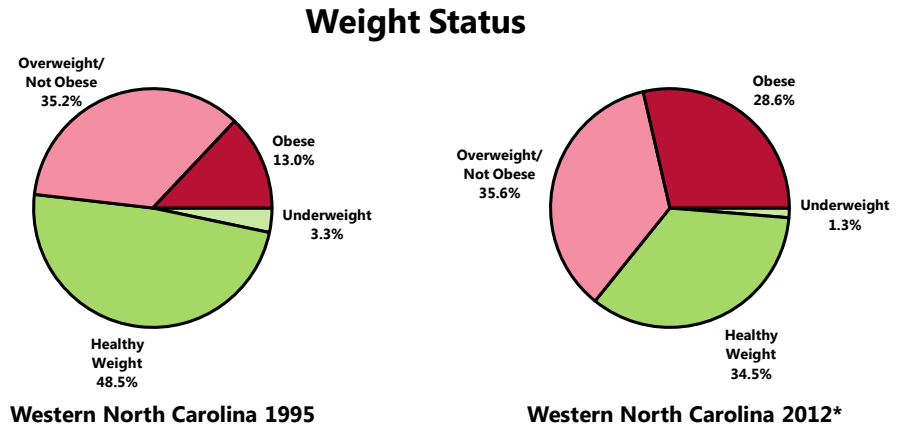
Western North Carolina 1995

Western North Carolina 2012\*

Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 56]  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective PA-1]  
 Notes: • Asked of all respondents.  
 \* 2012 data exclude Polk County and Rutherford County, which were not surveyed in 1995.

## Weight Status

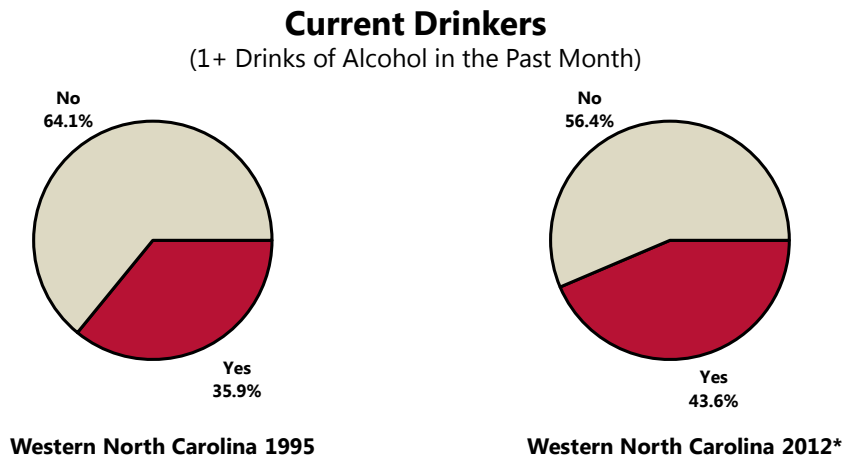
- ☒ The prevalence of healthy weight among WNC residents has **decreased** since 1995, with a subsequent **increase** in both overweight and obesity.



- Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 85]  
 Notes: • Based on reported heights and weights, asked of all respondents.  
 • The definition of healthy weight is having a body mass index (BMI), a ratio of weight to height (kilograms divided by meters squared), between 18.5 and 24.9.  
 • The definition of overweight is having a body mass index (BMI), a ratio of weight to height (kilograms divided by meters squared), greater than or equal to 25.0, regardless of gender. The definition for obesity is a BMI greater than or equal to 30.0.  
 \* 2012 data exclude Polk County and Rutherford County, which were not surveyed in 1995.

## Drinking Levels

- ☒ The prevalence of current drinking (reflecting adults having at least one alcoholic drink in the past month) has **increased** significantly over time.

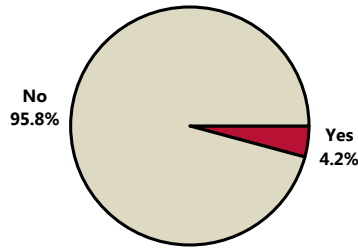


- Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 88]  
 Notes: • Asked of all respondents.  
 \* 2012 data exclude Polk County and Rutherford County, which were not surveyed in 1995.

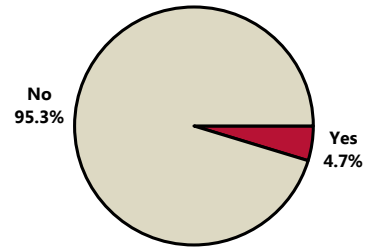
- ☒ The prevalence of chronic drinking (with 60+ drinks of alcohol in the past month) is statistically similar to 1995 survey findings.

### Chronic Drinkers

(60+ Drinks of Alcohol in the Past Month)



Western North Carolina 1995



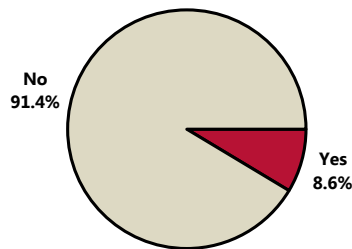
Western North Carolina 2012\*

Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 89]  
 Notes: • Asked of all respondents.  
 \* 2012 data exclude Polk County and Rutherford County, which were not surveyed in 1995.

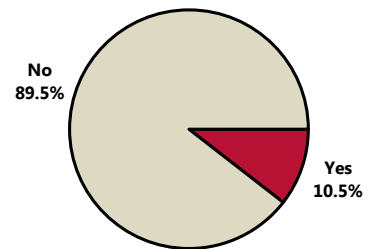
- ☒ Binge drinking (with 5+ drinks of alcohol on a single occasion in the past month) has **increased** significantly since the 1995 survey.

### Binge Drinker

(5+ Drinks of Alcohol on a Single Occasion at Least Once in the Past Month)



Western North Carolina 1995



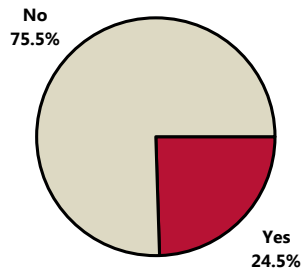
Western North Carolina 2012\*

Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 90]  
 Notes: • Asked of all respondents.  
 \* 2012 data exclude Polk County and Rutherford County, which were not surveyed in 1995.

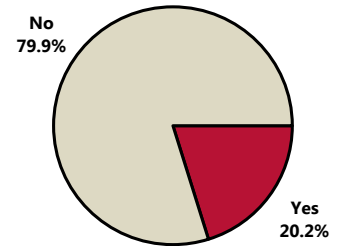
## Tobacco Use

- ☒ The prevalence of cigarette smoking (whether regularly or occasionally) has **decreased** significantly over time.

### Current Smokers



Western North Carolina 1995



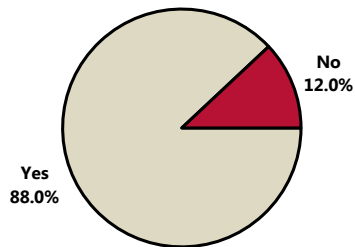
Western North Carolina 2012\*

Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 86]  
Notes: • Asked of all respondents.  
\* 2012 data exclude Polk County and Rutherford County, which were not surveyed in 1995.

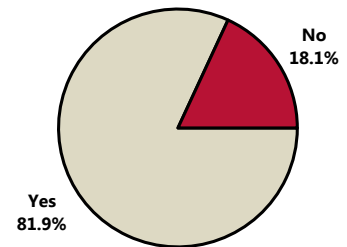
## Lack of Healthcare Insurance Coverage

- ☒ There has been a significant **increase** in lack of healthcare insurance coverage over time.

### Have Any Kind of Health Insurance Coverage (All Adults Age 18+)



Western North Carolina 1995



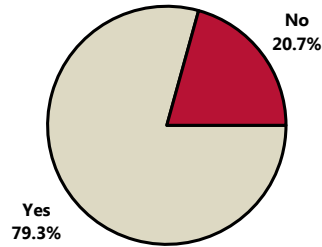
Western North Carolina 2012\*

Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 37]  
Notes: • Asked of all respondents.  
• Includes any type of insurance, such as traditional health insurance, prepaid plans such as HMOs, or government-sponsored coverage (e.g., Medicare, Medicaid, Indian Health Services, etc.).  
\* 2012 data exclude Polk County and Rutherford County, which were not surveyed in 1995.

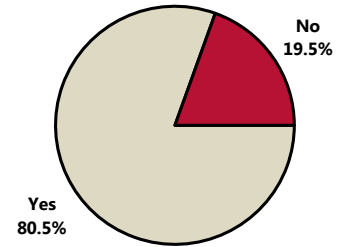
## Primary Care Services

- ☒ The prevalence of having a regular source of medical care is statistically unchanged over time.

### Have One Person Thought of as Respondent's Personal Doctor or Health Care Provider



Western North Carolina 1995

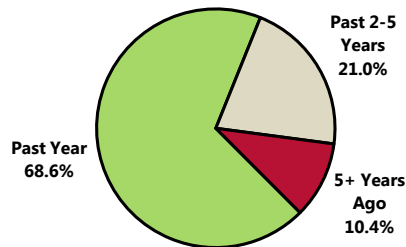


Western North Carolina 2012\*

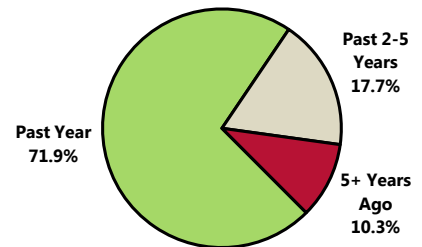
Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 16]  
 Notes: • Asked of all respondents.  
 \* 2012 data exclude Polk County and Rutherford County, which were not surveyed in 1995.

- ☒ The receipt of routine medical care within the past year has **improved** since 1995.

### Length of Time Since Last Routine Check-Up



Western North Carolina 1995



Western North Carolina 2012\*

Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 15]  
 Notes: • Asked of all respondents.  
 \* 2012 data exclude Polk County and Rutherford County, which were not surveyed in 1995.



# Appendix II:

## 2012 Findings for County-Specific Indicators

The following report details findings given in response to county-specific questions asked during the PRC survey. As part of this assessment, each county was allowed three additional questions to be asked among its own county population; findings are as follows:

### Availability of Affordable Housing

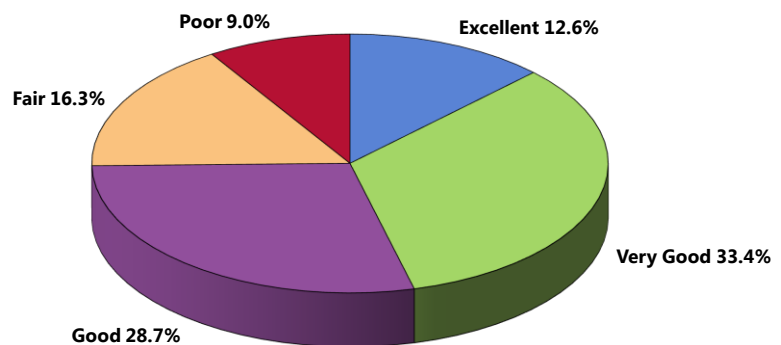
In Henderson County, survey respondents were asked to rate the availability of affordable housing in their community.

**Overall, 46.0% of Henderson County respondents gave “excellent” or “very good” ratings of the availability of affordable housing.**

- Another 28.7% gave a “good” rating.

**However, one-fourth (25.3%) of Henderson County residents gave “fair” or “poor” evaluations of the availability of affordable housing in the community.**

**Evaluation of the Availability of Affordable Housing in the Community**  
(Henderson County, 2012)



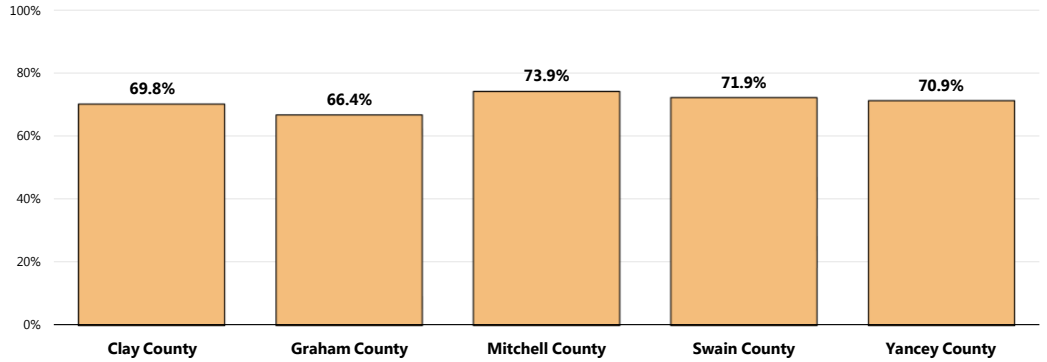
Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 97]  
Notes: • Asked of all respondents.

## Internet Access

Survey respondents in Clay, Graham, Mitchell, Swain and Yancey counties were asked about their access to the Internet for personal use at home, work or school.

**Overall, responses ranged from 66.4% of Graham County respondents to 73.9% in Mitchell County.**

### Have Access to the Internet for Personal Use at Home, Work or School

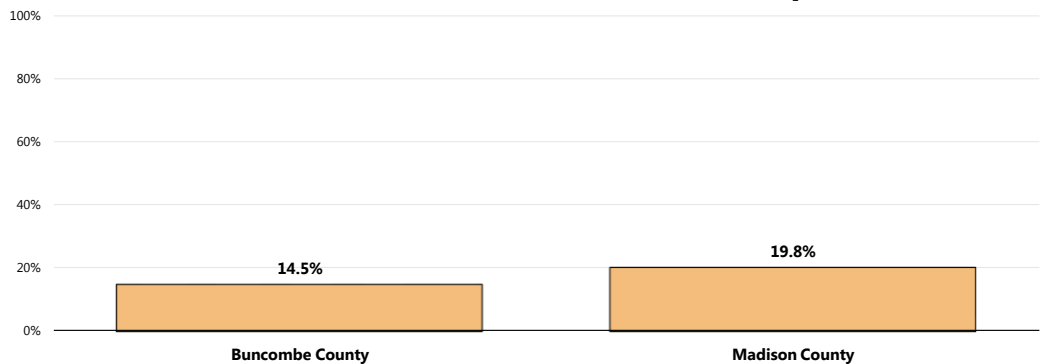


Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 98]  
Notes: • Asked of all respondents.

## Prescription Medication

**In Buncombe County, 14.5% of respondents had a time in the past year when they were unable to obtain a needed prescription; the same is true for 19.8% of Madison County adults.**

### Had a Time in the Past Year When Unable to Obtain a Desired Prescription



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 99]  
Notes: • Asked of all respondents.

## Site for Routine Checkups

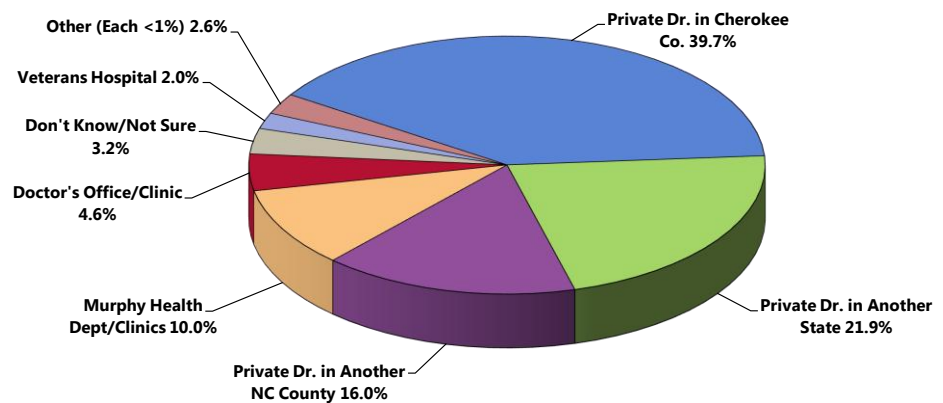
Respondents living in Cherokee County were asked to specify where they receive routine checkups.

**For routine checkups, the largest share of Cherokee County respondents visit private physicians within Cherokee County (39.7%), followed by private physicians in another state (21.9%), and private physicians elsewhere in North Carolina (16.0%).**

Other sites for routine checkups among Cherokee County respondents included **Murphy Health Department/Clinics** (10.0%), general references to a physician's **office or clinic** (4.6%) and **Veterans Hospital** (2.0%).

### Place Where Respondent Receives Routine Checkups

(Cherokee County, 2012)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 100]  
Notes: • Asked of all respondents.

## Location of Personal Physician/Provider

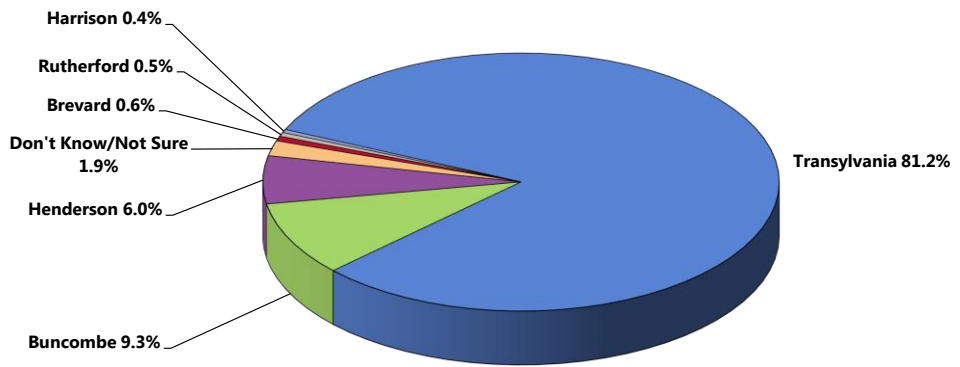
Respondents living in Transylvania County were asked to specify where their personal physician/healthcare provider is located.

**The vast majority (81.2%) of respondents mentioned Transylvania County as the location of their private physician/healthcare provider, followed by mention of Buncombe County (9.3%) and Henderson County (6.0%).**

Other counties mentioned with far less frequency included Brevard, Rutherford and Harrison.

### County in Which Personal Physician/Healthcare Provider Is Located

(Among Respondents With a Personal Physician/Healthcare Provider; Transylvania County, 2012)



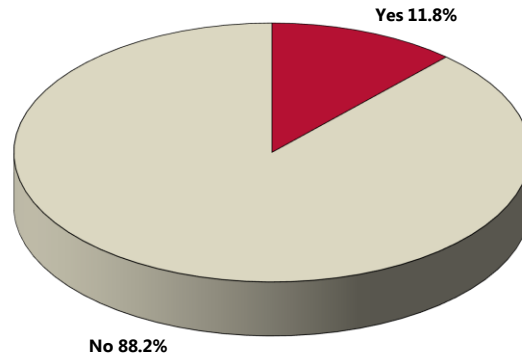
Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 101]  
Notes: • Asked of all respondents.

## Chronic Lung Disease

Henderson County residents were asked whether they currently suffer from some form of chronic lung disease, such as COPD (chronic obstructive pulmonary disease), bronchitis or emphysema.

**A total of 11.8% of Henderson County respondents currently suffer from some type of chronic lung disease.**

### Prevalence of Chronic Lung Disease (Henderson County, 2012)



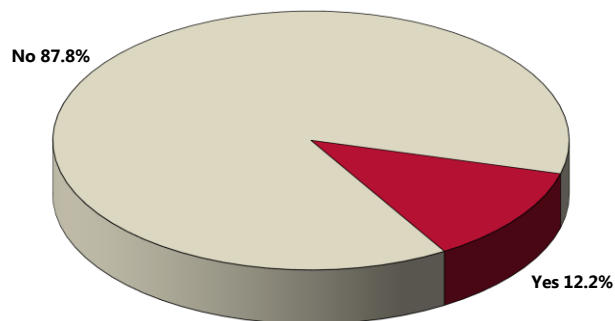
Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 102]  
Notes: • Asked of all respondents.  
• Examples of chronic lung disease include COPD (chronic obstructive pulmonary disease), bronchitis and emphysema.

## Prevalence of Domestic Abuse

Survey respondents in Henderson County were asked to indicate whether they have ever been hit, slapped, pushed, kicked or otherwise hurt by an intimate partner.

**In all, 12.2% of survey respondents in Henderson County have been victims of some form of domestic violence.**

### Have Ever Been Hit, Slapped, Pushed, Kicked or Otherwise Hurt by an Intimate Partner (Henderson County, 2012)



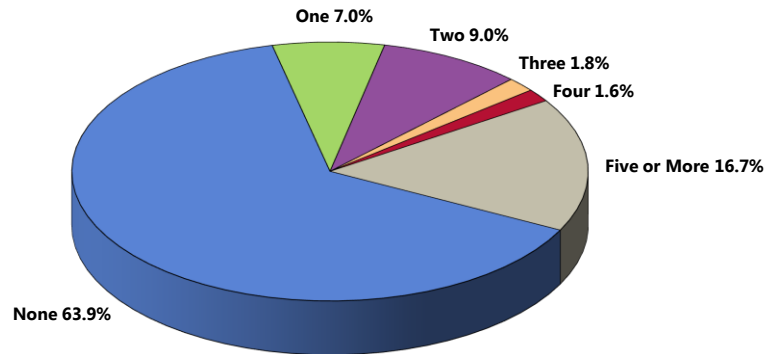
Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 103]  
Notes: • Asked of all respondents.

## Secondary Smoke Inhalation

In Cherokee County, survey respondents were asked how many times they have breathed someone else's tobacco smoke in an outdoor public space within the past month.

**While most (63.9%) respondents were not exposed to someone else's tobacco smoke in a public space within the past month, 36.1% were** (including 16.7% who were exposed 5+ times).

**Number of the Past 30 Days on Which Respondent Breathed Someone Else's Smoke in an Outdoor Public Space**  
(Cherokee County, 2012)



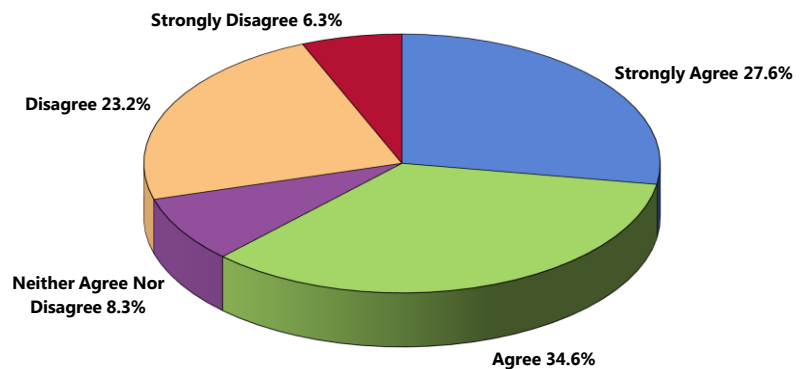
Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 104]  
Notes: • Asked of all respondents.

## Tobacco-Free Public Spaces

Macon County respondents were asked to describe their level of agreement with the following statement: "It is important that all public places are 100% tobacco-free."

**While 62.2% of Macon County respondents agreed ("agree" or "strongly agree") that all public spaces should be 100% tobacco-free, 8.3% were neutral, and 29.5% expressed some level of disagreement ("disagree" or "strongly disagree").**

**Importance That All Public Places Are 100% Tobacco-Free**  
(Macon County, 2012)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 105]  
Notes: • Asked of all respondents.

## Care of Medications

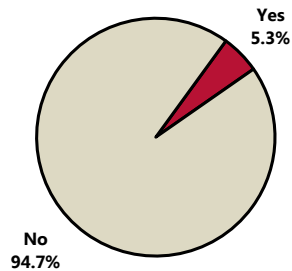
Residents of Rutherford County were asked whether they have ever given their own prescription medication to another person to use. They were also asked whether they keep all medicines locked up to prevent others from accessing them.

**Overall, just 5.3% of Rutherford County respondents acknowledge sharing a prescription medication with another person to use.**

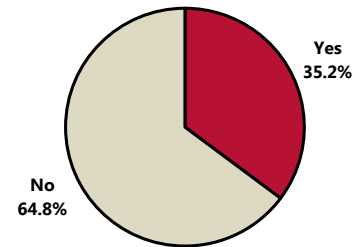
**A larger prevalence (35.2%) say that they keep their medications locked up so that others cannot access them.**

### Prescription Medications

(Rutherford County, 2012)



**Have Ever Given Own Prescription Medication to Someone Else to Use**



**Keep Medicine Locked Up So That No One Else Can Access It**

Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 106-107]  
Notes: • Asked of all respondents.

## Difficulty Accessing Affordable, Fresh Produce

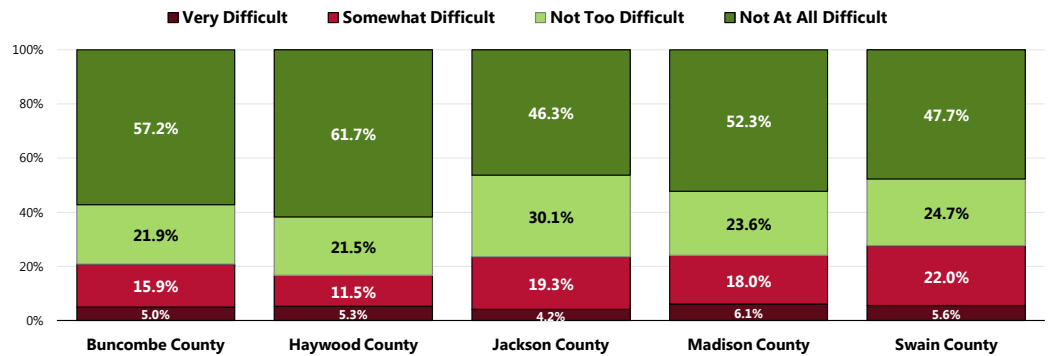
Survey respondents in five counties were asked about their level of difficulty accessing fresh produce at affordable prices

**Haywood County respondents report the easiest access to affordable, fresh produce, with most respondents (83.2%) giving “not too difficult” or “not at all difficult” responses, and 16.8% giving “very/somewhat difficult” responses.**

**Swain County respondents report the most difficulty of those asked, with 27.6% “very/ somewhat difficult” responses.**

### Level of Difficulty Accessing Fresh Produce at an Affordable Price

(By County, 2012)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 108]  
Notes: • Asked of all respondents.



## Sources for Fresh Produce

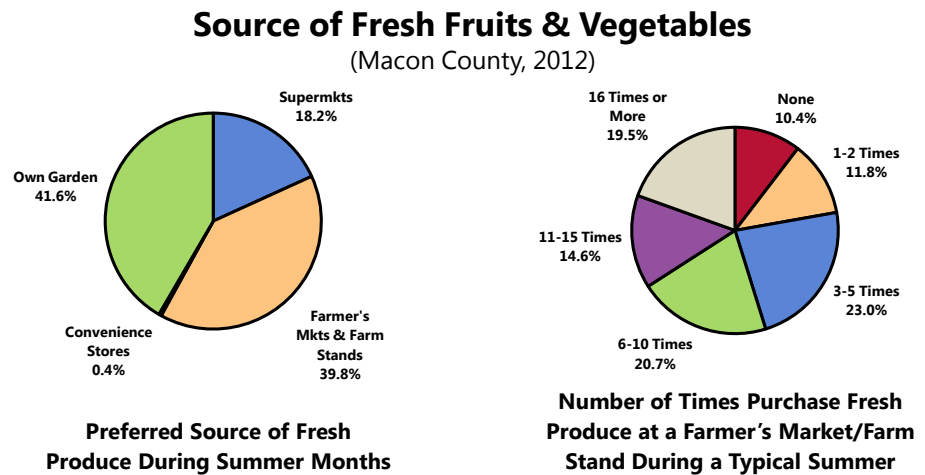
Macon County respondents were asked to name their preferred source for fresh produce during the summer months, and also to specify their number of visits to farmer's markets or farm stands during the summer.

**A large share of Macon County residents (41.6%) prefer their own gardens for fresh summer produce, and 39.8% prefer produce from farmer's markets or farm stands.**

Another 18.2% of Macon County residents prefer to purchase produce at supermarkets, while only 0.4% prefer to shop at convenience stores for summer produce.

**Nine out of 10 Macon County residents (89.6%) purchase fresh produce at farmer's markets or farm stands during a typical summer, with most reporting 6 or more summertime visits.**

One out of 10 Macon County residents (10.4%) do not typically visit farmer's markets or farm stands during the summer.

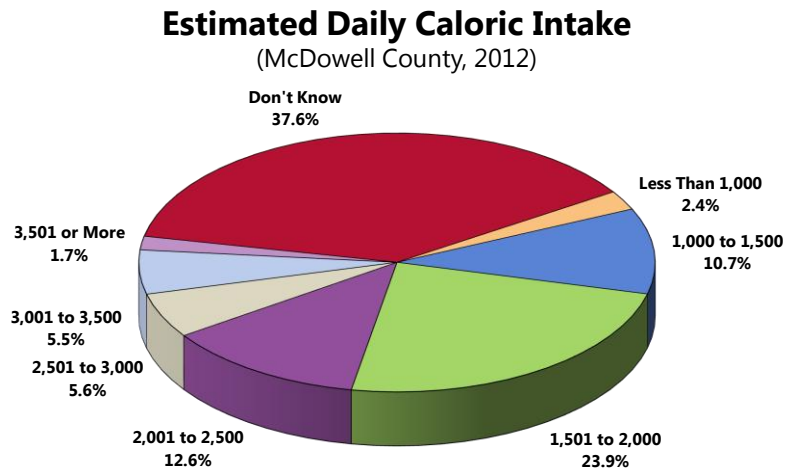


Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 109-110]  
Notes: • Asked of all respondents.

## Nutrition

McDowell County residents were asked to estimate their typical daily intake of calories. They were also asked to rate their own understanding of the information found on nutritional food labels.

When asked to estimate their daily caloric intake, 37.6% of McDowell County residents were uncertain or unable to answer the question. A total of 37.0% estimated up to 2,000 calories per day, while 25.4% estimated a higher daily caloric intake.



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 111]  
Notes: • Asked of all respondents.

More than one-half of McDowell County adults (52.7%) gave themselves "excellent" or "very good" ratings for their understanding of the nutritional information found on food labels; another 27.2% gave themselves "good" ratings.

On the other hand, 20.1% of McDowell County adults feel that they do a "fair" or "poor" job of understanding nutrition labels.



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 112]  
Notes: • Asked of all respondents.

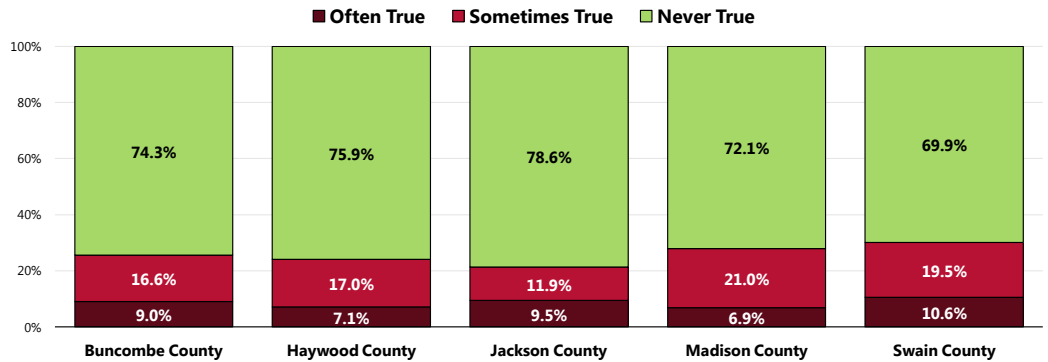
## Food Insecurity

Residents of Buncombe, Haywood, Jackson, Madison and Swain counties were asked to indicate whether the following statement has been “often true,” “sometimes true,” or “never true” for them in the past year: *“I worried about whether our food would run out before we got money to buy more.”*

**Adults in Madison and Swain Counties appear to be most affected by food insecurity, with more than 27% giving “often” or “sometimes true” answers. In contrast, residents of Jackson County gave the lowest “often/sometimes true” response (21.4%).**

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

(By County, 2012)

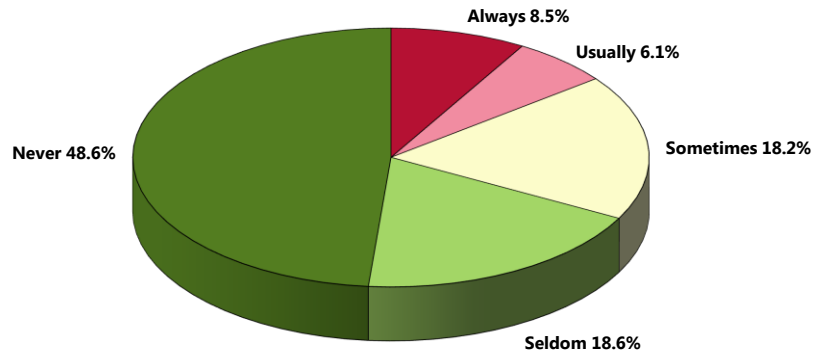


Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 113]  
Notes: • Asked of all respondents.

**In Rutherford County, just over one-half of adults report some level of anxiety in the past year due to worry or stress about having enough money to buy nutritional foods (including 14.6% who “always” or “usually” have such worries).**

### Frequency of Worry/Stress in the Past Year About Having Enough Money to Buy Nutritious Meals

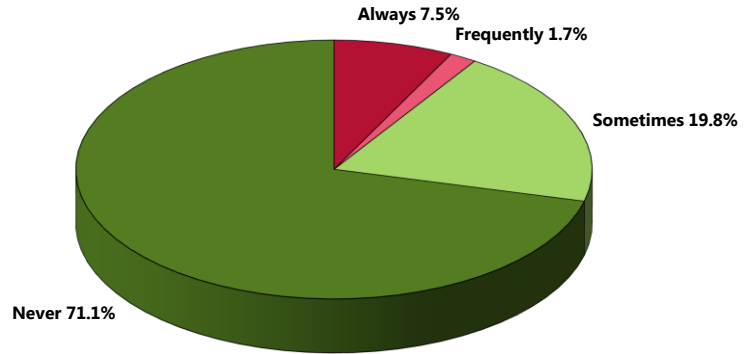
(Rutherford County, 2012)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 114]  
Notes: • Asked of all respondents.

In Polk County, 28.9% of residents have had to choose between buying food and paying bills at some point in the past year (including 9.2% who say that this is “always” or “frequently” the case).

### Frequency of Having to Choose Between Buying Food and Paying Bills in the Past Year (Polk County, 2012)



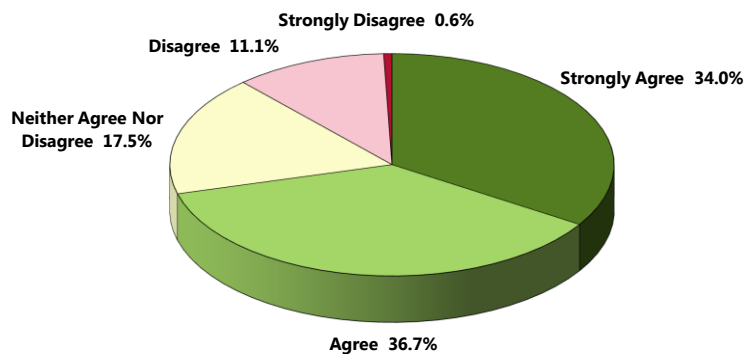
Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 115]  
Notes: • Asked of all respondents.

### Recreational Options

Residents of Transylvania County were asked to indicate their level of agreement with the following statement: *“To meet the health and wellness needs of its residents, my county needs more indoor public physical activity spaces such as gyms, recreation centers, or indoor pools.”*

**Most (70.7%) respondents gave “agree” or “strongly agree” responses to the statement, while 17.5% were neutral and 11.7% disagreed.**

### “To meet the health and wellness needs of its residents, my county needs more indoor public physical activity spaces such as gyms, recreation centers, or indoor pools.” (Transylvania County, 2012)

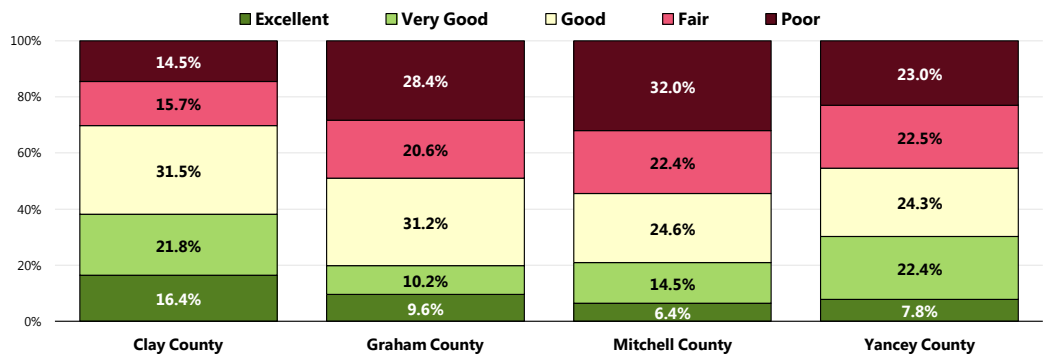


Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 116]  
Notes: • Asked of all respondents.

In Clay, Graham, Mitchell and Yancey counties, respondents were asked to evaluate the recreational options available to members of their communities throughout the year.

The largest share of “excellent” or “very good” ratings was given by residents of Clay County (38.2%); in contrast, more than one-half (54.4%) of Mitchell County residents gave “fair” or “poor” ratings of the community’s recreational options available throughout the year.

### Evaluation of the Recreational Options Available to Community Residents Throughout the Year (By County, 2012)



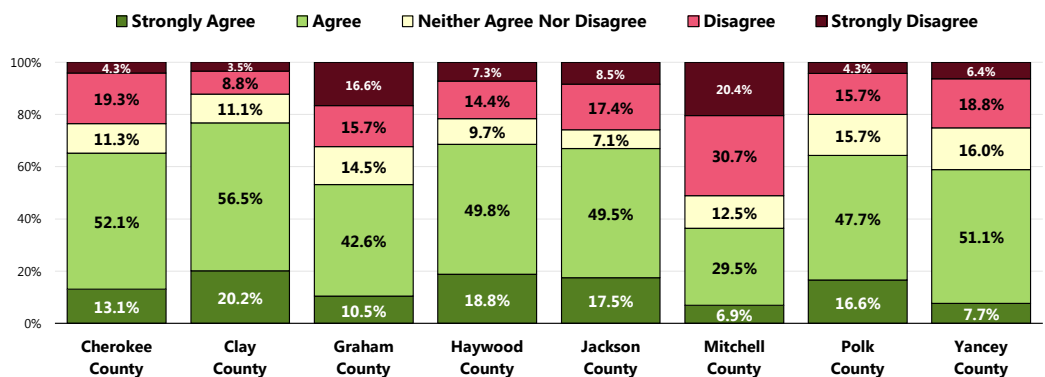
Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 117]  
 Notes: • Asked of all respondents.

Residents of Cherokee, Clay, Graham, Haywood, Jackson, Mitchell, Polk and Yancey counties were asked to indicate their level of agreement with the following statement: “I believe my county provides the facilities and programs needed for children and youth to be physically active throughout the year.”

Residents in Clay and Haywood counties are more likely to agree with the statement (76.7% and 68.6% “agree/strongly agree” responses, respectively).

In contrast, those in Mitchell and Graham counties gave the highest “disagree/strongly disagree” responses (51.1% and 32.3%, respectively).

### “I believe my county provides the facilities and programs needed for children and youth to be physically active throughout the year.” (By County, 2012)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 118]  
 Notes: • Asked of all respondents.

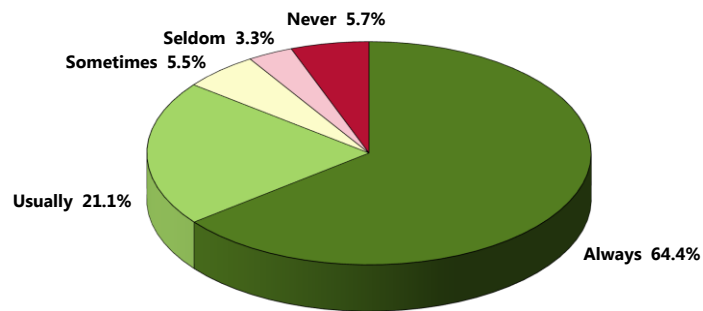
## Social Support

Polk County residents were asked about their personal social support network. Transylvania County residents were asked about any assistance they might have received from local programs or charitable organizations in the past year.

**In Polk County, the majority of residents (85.5%) “always” or “usually” have someone to rely on for help with things like food, transportation, child care or other support when needed. However, 14.5% have this type of support only “sometimes,” “seldom” or “never.”**

### Frequency of Having Someone to Rely on to Help With Things Like Food, Transportation, Child Care or Other Support

(Polk County, 2012)

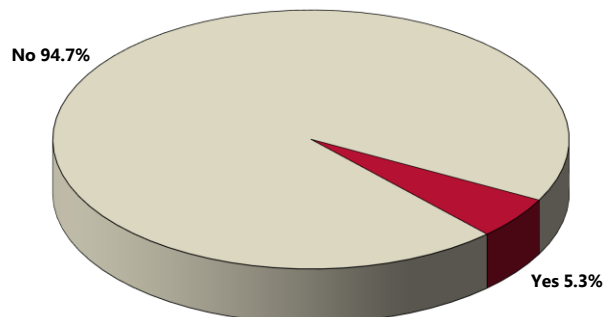


Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 119]  
Notes: • Asked of all respondents.

**Among Transylvania County respondents, 5.3% received assistance from a local program, church or charitable organization in the past year.**

### Have Received Assistance From a Local Program, Church or Charitable Organization in the Past Year

(Transylvania County, 2012)

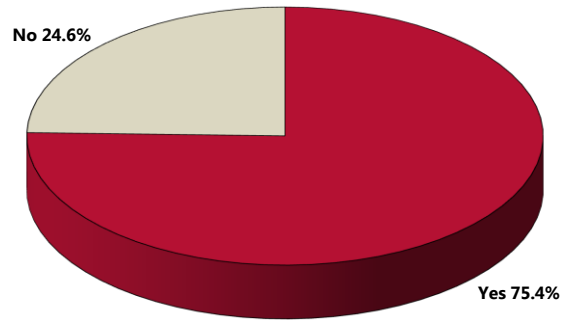


Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 120]  
Notes: • Asked of all respondents.

## Sex Education

In McDowell County, three-fourths (75.4%) of residents believe that sex education should be taught in the North Carolina public schools.

### Believe That Sex Education Should Be Taught in North Carolina Public School Systems (McDowell County, 2012)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 121]  
Notes: • Asked of all respondents.