



# **Wilkes County Community Health Assessment December 2009**

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## **Section One: Introduction**

The Community Health Assessment (CHA) is designed to promote a broader understanding of the health of the community and measure local progress in improving the health of the community through collaboration measures with community partners. Completed every four years, the CHA is a process by which community members gain an understanding of the health, concerns and healthcare systems of the community by identifying, collecting, analyzing and disseminating information on community assets, strengths, resources and needs. The Wilkes County Health Department (WCHD) provides leadership in a collaborative effort to conduct, produce and distribute a comprehensive Community Health Assessment (CHA) in conjunction with Wilkes Healthy Carolinians Council (WHCC). This assessment is part of the Healthy Carolinians recertification process which is conducted under the guidance of the Office of Healthy Carolinians/Health Education and the State Center for Health Statistics of the North Carolina Department of Health and Human Services. This is also an important component of the WCHD's strategic planning process and is a benchmark for community collaboration measured through the North Carolina Public Health Department Accreditation process. This document presents the collaborative process, assessment of primary and secondary data, overall results and Wilkes County's leading health priorities.

# Section Two: Picture of Wilkes County

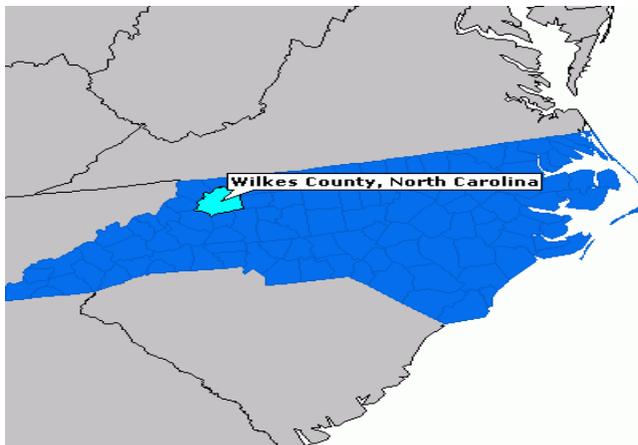
## Location and Geography

Wilkes County is located in the northwestern corner of North Carolina, south of the Virginia border and one county east of the Tennessee border. Wilkes County's western border is shared with Watauga and Ashe Counties. To the north, the county is bordered by Alleghany and Surry Counties, to the east by Yadkin County, and to the south by Caldwell, Alexander and Iredell Counties (Figure 1). Wilkes County consists of 21 townships. North Wilkesboro is the most populated city in the county and Wilkesboro is the county seat (1).

Wilkes County is easily accessible by Interstate Highways 77 and 40. US Highway 421 cuts across the southern portion of the county while several NC highways spread through the county from a central point in Wilkesboro. The Blue Ridge Parkway lies along the northwestern border of the county. US 421 and Interstate 40 provide residents with access to the Piedmont Triad International Airport located 80 miles to the east in Greensboro. Interstate 77 provides access to the Charlotte International Airport located 80 miles to the south. Local air access is provided by the Wilkes County Airport. Wilkes County is not a major stop on any passenger railway system (the closest stop is Winston-Salem) and there are no interstate bus lines within the county that offer passenger services (3, 4). The county land area is 760 square miles with 149 miles of paved roads. Approximately 74% of the county's population lives in rural areas and 24% of Wilkes County residents live within 10 miles of a four-lane highway (4).

With an elevation averaging just over 1,000 feet above sea level, Wilkes County enjoys a moderate year-round climate with an average annual temperature of around 56 degrees. Average annual rainfall is around 50 inches and the average snowfall is ten inches (5).

**Figure 1. Wilkes County Maps**



## Population Characteristics

According to the 2008 US Census, the population in Wilkes County was 66,655, approximately a 1.6% increase from the 2000 population of 65,632 (1). Table 1 shows estimates of the Wilkes County population by age, race and sex (6). Of the minority population in Wilkes County, 37% are black or African American alone, 6% are Asian alone and 6% are two or more races. Approximately 50% (3,754) of the minority population describe themselves as Hispanic or Latino (15). Table 2 shows estimates of the population of the municipalities in Wilkes County (1).

	Total	Race		Sex	
		White	Minority	Male	Female
<b>Total</b>	67,297	63,968	3,329	33,384	33,913
<b>0-4</b>	3,960	3,731	229	2,033	1,927
<b>5-9</b>	4,276	4,047	229	2,200	2,076
<b>10-14</b>	4,108	3,853	255	2,135	1,973
<b>15-19</b>	4,190	3,951	239	2,122	2,068
<b>20-24</b>	4,165	3,954	211	2,095	2,070
<b>25-29</b>	3,782	3,575	207	1,978	1,804
<b>30-34</b>	3,899	3,747	152	2,028	1,871
<b>35-39</b>	4,750	4,510	240	2,500	2,250
<b>40-44</b>	4,730	4,488	242	2,417	2,313
<b>45-49</b>	5,114	4,874	240	2,588	2,526
<b>50-54</b>	5,006	4,763	243	2,520	2,486
<b>55-59</b>	4,606	4,392	214	2,232	2,374
<b>60-64</b>	4,114	3,940	174	1,969	2,145
<b>65-69</b>	3,323	3,192	131	1,571	1,752
<b>70-74</b>	2,647	2,535	112	1,211	1,436
<b>75-79</b>	2,022	1,944	78	850	1,172
<b>80-84</b>	1,378	1,311	67	566	812
<b>85&amp;UP</b>	1,227	1,161	66	369	858

Geographic Area	Census 2000	Census 2008	Approximate Percent Growth
North Carolina	8,049,313	9,222,414	14.5%
Wilkes County	65,632	66,655	1.6%
Cricket	2,053	-----	N/A As Data is Unknown or Not Estimated
Fairplains	2,051	-----	N/A As Data is Unknown or Not Estimated
Hays	1,731	-----	N/A As Data is Unknown or Not Estimated
Millers Creek	2,071	-----	N/A As Data is Unknown or Not Estimated
Moravian Falls	1,440	-----	N/A As Data is Unknown or Not Estimated
Mulberry	2,269	-----	N/A As Data is Unknown or Not Estimated
North Wilkesboro	4,116	4,158	1%
Pleasant Hill	1,109	-----	N/A As Data is Unknown or Not Estimated
Ronda	460	456	N/A As Data is Unknown or Not Estimated
Wilkesboro	3,159	3,140	-0.6%

## Economy

Manufacturing is the largest industry in Wilkes County. Retail trade, health care and social assistance, and accommodation and food services are second, third and fourth respectively (7). Table 3 shows Wilkes County's top employers (7).

Rank	Company	Industry	Employment Range
1	Tyson Farms Inc	Manufacturing	1,000+
2	Wilkes County Board Of Education	Education & Health Services	1,000+
3	Lowe's Companies Inc	Professional & Business Services	1,000+
4	Wilkes Regional Medical Center	Education & Health Services	500-999
5	Wilkes County	Public Administration	500-999
6	Wilkes Community College	Education & Health Services	250-499
7	Lowe's Home Centers Inc	Trade, Transportation, & Utilities	250-499
8	Louisiana-Pacific Corporation Talx	Manufacturing	250-499
9	Compucredit Corporation	Financial Activities	250-499
10	East Coast Millwork Dist Inc	Trade, Transportation, & Utilities	250-499
11	Tyson Poultry Inc	Manufacturing	250-499
12	N C Department Of Transportation	Public Administration	250-499
13	Wal-Mart Associates Inc	Trade, Transportation, & Utilities	250-499

Unemployment rates in Wilkes County have increased significantly over the last two years as shown in Table 4 (8).

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009*
<b>Wilkes</b>	3.6%	6.1%	8.3%	7.4%	6.1%	5.6%	5.4%	5.4%	8.0%	12.9%
<b>N.C.</b>	3.7%	5.6%	6.6%	6.5%	5.5%	5.3%	4.8%	4.7%	6.3%	10.8% <sup>†</sup>

\* January – September, 2009 average

<sup>†</sup> January – September, 2009 not seasonally adjusted

	Oct 2009	Nov 2009
<b>McDowell</b>	11.1	11.0
<b>Surry</b>	12.4	12.2
<b>Wilkes</b>	13.4	13.1
<b>North Carolina*</b>	10.6	10.7

\*Not seasonally adjusted

## Concerns with High Unemployment Rates

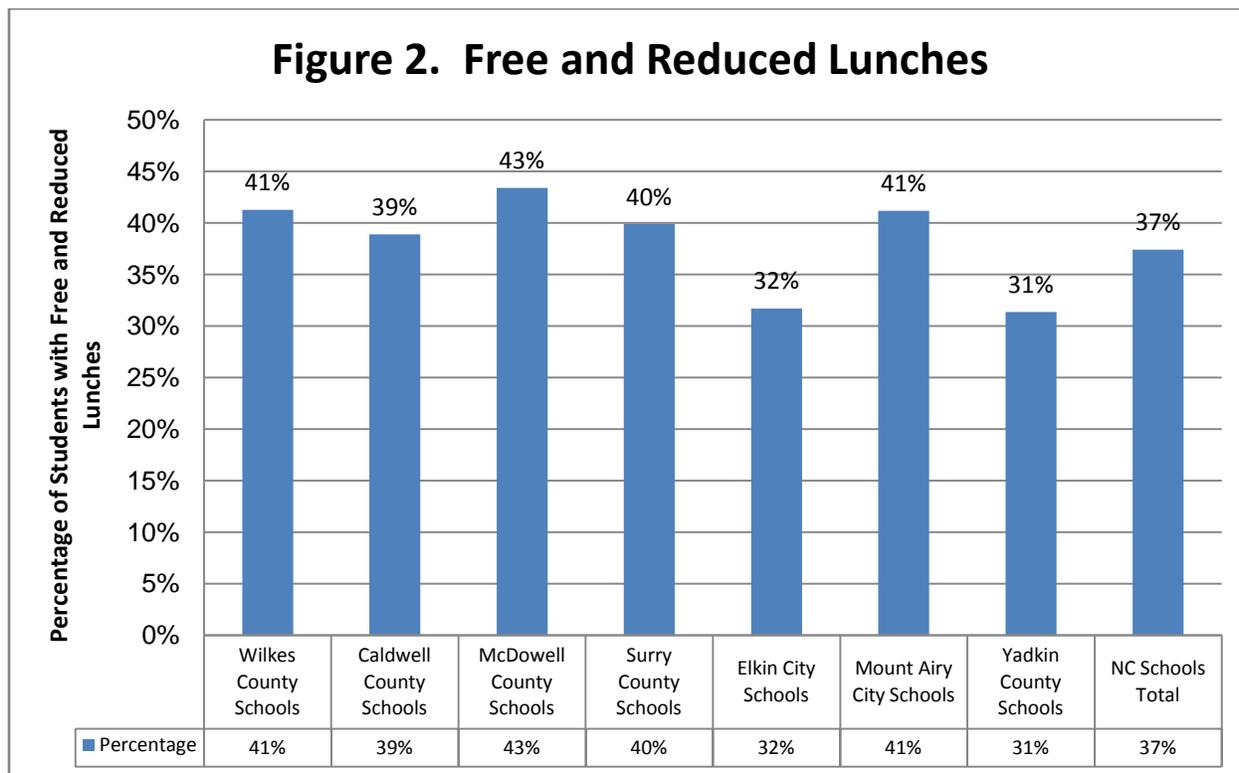
One concern is that high unemployment rates will lead to health problems, due to higher rates of uninsured in the un- and under-employed. Those who are un/underinsured are less likely to seek medical care, especially preventive care. It is also thought that the chronic stress of not being able to care for loved ones can also lead to serious health conditions, such as diabetes, heart disease and stroke. Those who are underemployed often feel as though they cannot miss work when they are sick, or cannot leave work for doctor visits. This leads to worsening of illness and spread of illness.

Household income is shown in Table 6 with the average or mean income as \$46,513 (9). According to the US Census Bureau, about 15.1% of Wilkes County residents were considered below poverty level in 2007 compared to 14.3% statewide (10).

<b>Subject</b>	<b>Households</b>
<b>Total</b>	<b>26,205</b>
Less than \$10,000	10.4%
\$10,000 to \$14,999	8.5%
\$15,000 to \$24,999	15.6%
\$25,000 to \$34,999	14.8%
\$35,000 to \$49,999	13.3%
\$50,000 to \$74,999	19.7%
\$75,000 to \$99,999	10.5%
\$100,000 to \$149,999	5.5%
\$150,000 to \$199,999	0.7%
\$200,000 or more	0.7%
Median income	\$35,649
Mean income	\$46,513

	<b>Number of People Living in Poverty, All Ages</b>	<b>Percent of Population Living in Poverty</b>	<b>Number of Children Living in Poverty, Under Age 18</b>	<b>Percent Living in Poverty, Under Age 18</b>	<b>Number of Children Living in Poverty, Ages 5 to 17</b>	<b>Percent Living in Poverty, Ages 5 to 17</b>	<b>Median Household Income</b>
<b>McDowell</b>	6,188	14.6%	2,085	22.1%	1,332	19.6%	\$37,394
<b>Surry</b>	11,350	15.9%	3,626	21.9%	2,442	20.3%	\$37,282
<b>Wilkes</b>	13,775	20.9%	4,298	29.5%	2,661	25.2%	\$34,692
<b>North Carolina</b>	1,301,882	14.6%	440,281	19.9%	282,961	18.2%	\$46,574

Figure 2 shows the percentage of free and reduced lunches with the comparison counties of Caldwell, McDowell, Surry and Yadkin along with the state (11).



## Education

There are four public [high schools](#) in the county: East Wilkes, [North Wilkes](#), West Wilkes and [Wilkes Central](#). There are also four public [middle schools](#) and thirteen public [elementary schools](#). The county also has several private schools; most of them are associated with one of the larger [Protestant](#) churches in the county. The only college in Wilkes is [Wilkes Community College](#) (WCC), a public [two-year college](#) within the [North Carolina Community College System](#). WCC is the home of the popular bluegrass and folk music festival [MerleFest](#).

The high school dropout rates for Wilkes County schools have held fairly steady as evidenced by Table 8 (13) but has remained higher than the overall rate for North Carolina.

School	2003-04		2004-05		2005-06		2006-07		2007-08	
	#	Rate								
Wilkes County Schools	224	7.15	223	7.14	189	6.14	189	6.12	211	6.81
McDowell County Schools	131	6.55	157	7.61	127	6.30	144	7.10	123	6.10
Surry County Schools	124	4.69	138	5.00	162	5.77	184	6.54	130	4.70
North Carolina	20,035	4.86	20,175	4.74	22,180	5.04	23,550	5.24	22,434	4.97

As indicated in Table 9, over a third of Wilkes County's population over 25 years of age had not finished high school according to the 2006 – 2008 estimates which is similar to the information presented in the 2005 Community Health Assessment.

<b>Subject</b>	<b>Total</b>
<b>Population 18 to 24 years</b>	<b>4,735</b>
Less than high school graduate	21.3%
High school graduate (includes equivalency)	39.6%
Some college or associate's degree	33.6%
Bachelor's degree or higher	5.6%
<b>Population 25 years and over</b>	<b>47,032</b>
Less than 9th grade	11.8%
9th to 12th grade, no diploma	18.3%
High school graduate (includes equivalency)	33.0%
Some college, no degree	17.7%
Associate's degree	8.3%
Bachelor's degree	8.2%
Graduate or professional degree	2.8%
Percent high school graduate or higher	69.9%
Percent bachelor's degree or higher	11.0%

The North Carolina Economic Intelligence System provided the following additional information on Education for Wilkes County for the years indicated;

<b>Year or Years</b>	<b>Subject</b>	<b>Number or Percentage</b>
2008-09	Kindergarten-12th Enrollment	10,097
2008	Average SAT score (2400 scale)	1,519
2008	Percent of Graduates taking SAT	47%
2006-07	Higher Education Total Enrollment	3,623

## Health Care Resources

Wilkes County is served by Wilkes Regional Medical Center, a 130-bed (including a 10-bed skilled nursing unit) facility located in North Wilkesboro. The Medical Center also manages the Wilkes County Wellness Center, a facility for fitness and rehabilitation. There are three rural health centers in Wilkes County: Boomer, West Wilkes and Mountain View Medical Centers.

According to 2006 data (14), the number of health professionals per 10,000 in Wilkes County fell below state averages as well as below the averages for peer county of Surry with the exception of Certified Nurse Midwives and Psychological Associates. Averages for Wilkes were above or equal to the peer county of McDowell in Dentists, Optometrists, Physical Therapist Assistants, Physical Therapists, Physicians, Podiatrists, Primary Care Physicians, Psychological Associates, Psychologists and Registered Nurses (Table 11).

	<b>Wilkes</b>	<b>McDowell</b>	<b>Surry</b>	<b>State</b>
Certified Nurse Midwives	N/A	N.A.	N/A	0.2
Chiropractors	0.9	1.4	0.7	1.4
Dental Hygienists	4.7	4.6	6.2	5.4
Dentists	<b>2.7</b>	2.3	3.3	4.4
Licensed Practical Nurses	12.0	28.1	22.9	19.8
Nurse Practitioners	2.1	2.5	2.6	3.0
Optometrists	<b>0.7</b>	0.5	1.7	1.1
Pharmacists	4.7	5.3	7.9	9.0
Physical Therapist Assistants	<b>2.1</b>	1.8	2.9	2.2
Physical Therapists	<b>2.1</b>	1.6	3.4	4.6
Physician Assistants	2.4	2.8	2.6	3.2
Physicians	<b>10.3</b>	6.6	14.5	20.8
Podiatrists	<b>0.1</b>	N/A	0.3	0.3
Primary Care Physicians	<b>6.3</b>	4.8	8.2	9.0
Psychological Associates	<b>0.9</b>	0.9	0.1	1.0
Psychologists	<b>0.3</b>	N/A	0.3	2.0
Registered Nurses	<b>61.3</b>	60.2	81.1	94.4
Respiratory Therapists	2.2	2.5	3.9	4.1

Although lack of health care providers is an issue, at the same time, Wilkes County has a strong infrastructure of health care resources. The Wilkes County Health Department, a North Carolina accredited health department, offers disease prevention, disease treatment, health promotion and environmental services. Its clinics provide family planning, prenatal care, limited gynecology, well and sick pediatric care, immunizations, and diagnose and treatment for sexually transmitted diseases. It also provides nutrition services, including WIC and health education programs to prevent teen pregnancy, stop the spread of HIV/AIDS, improve health resources in pre-schools and promote smoking cessation, physical activity and good nutritional practices. Its environmental programs include food and lodging inspections and it manages well water and septic system installations and repairs.

## Health Insurance

The rate for Wilkes County's uninsured remains below that of the state as a whole. Nearly 19% of the Wilkes County population from ages 18 – 64 was without insurance according to 2005 data (Table 12). Just over 11% of the population under the age of 18 was uninsured (14).

Compared to the peer counties, the percentages are very similar.

	<b>Wilkes</b>	<b>McDowell</b>	<b>Surry</b>	<b>State</b>
% Estimate of uninsured Age 0-17	11.3	11.8	13.5	12.4
% Estimate of uninsured Age 18-64	18.6	19.8	20.8	21.1
% Estimate of uninsured Age 0-64	16.7	17.7	18.8	18.6

The North Carolina Institute of Medicine & the Cecil G. Sheps Center for Health Services Research, ([http://www.nciom.org/data/DS\\_2009-01\\_UninUnemp.pdf](http://www.nciom.org/data/DS_2009-01_UninUnemp.pdf) ), states that the number of uninsured, based upon the increase in unemployment rate in North Carolina, increased by 22.5 percent from 2007 to 2009. This was the largest percentage increase in the country. North Carolina's estimated number of uninsured as of January 2009 (as released in March of 2009), was between 1.75 and 1.80 million. This translates to 21.2 to 21.7 percent of all non-elderly North Carolinians.

## Government, Medicine and Media

Wilkes County is governed by a group of five elected county commissioners. An elected board of education controls the county's public school system. Wilkes County is a member of the regional [High Country Council of Governments](#). The Wilkes Regional Medical Center, founded in 1951 as Wilkes General Hospital, is the largest hospital in North Carolina's [High Country](#) region. West Park, formerly a large shopping center built in [North Wilkesboro](#) in the 1970s, was transformed into northwest North Carolina's largest medical park in 2000, complete with offices for physicians, physical therapists, pharmacies, medical specialists and other medical-related fields.

Wilkes County has two local newspapers: the [Wilkes Journal-Patriot](#) and the *Record of Wilkes*. Founded in 1906, the *Journal-Patriot* is published three times per week. The *Record* is published once per week; it usually focuses on the local arts scene in Wilkes.

The county has three radio stations: [WKBC-FM](#), which plays [adult contemporary \(Hot AC\)](#) music; [WKBC \(AM\)](#), which plays American [country music](#); and [WWWC \(AM\)](#), which plays [Southern Gospel Music](#). In 2006, WKBC-FM was voted the best radio station in the [Charlotte](#) listening area by the music critics of Charlotte's [Creative Loafing](#) magazine.

## Section Three: Health Data

There are many reliable sources of health data that are appropriate for a comprehensive community health assessment. The data for this section was mined from the North Carolina State Center for Health Statistics, the North Carolina Comprehensive Assessment for Tracking Community Health (NC-CATCH) and the Behavioral Risk Factor Surveillance System (BRFSS). The data was evaluated in several ways including factors such as age, gender, race and ethnic background. Also, comparisons are frequently made between Wilkes County and the state as well as two comparison counties. Based on population size and make-up and general county characteristics, NC-CATCH has recommended that McDowell and Surry Counties are similar enough to Wilkes for appropriate comparison.

### Leading Causes of Death/Health Disparities

For all populations in Wilkes County, the four leading causes of death for persons aged 1-99 years were very similar to those across the state as a whole. Motor vehicle injuries, influenza/pneumonia, septicemia and intentional self-harm (suicide) stand out in Wilkes County when compared to the state (Table 13).

<b>Wilkes Rank</b>	<b>Cause</b>	<b>Wilkes Number</b>	<b>%</b>	<b>State Number</b>	<b>%</b>	<b>State Rank</b>
1	Cancer	154	22.8	17,424	23.3	2
2	Diseases of heart	139	20.6	17,479	23.4	1
3	Chronic lower respiratory diseases	47	7.0	4,228	5.7	4
4	Cerebrovascular diseases	32	4.7	4,332	5.8	3
5	Motor vehicle injuries	27	4.0	1,784	2.4	8
6	All other unintentional injuries	26	3.8	2,503	3.4	5
7	Influenza and pneumonia	22	3.3	1,642	2.2	10
8	Alzheimer's disease	21	3.1	2,449	3.3	6
9	Septicemia	17	2.5	1,026	1.4	-
10	Intentional self-harm (suicide)	16	2.4	1,074	1.4	-
	All other causes (Residual)	175	25.8	18,992	25.3	
<b>Total Deaths -- All Causes</b>		<b>676</b>	<b>100.0</b>	<b>74,696</b>	<b>100.0</b>	

Upon further analysis, overall men and women fared similarly with the leading causes of death with two notable exceptions. Men in Wilkes County were more likely to commit suicide as the seventh leading cause of death at 3.2%. Women were more likely to suffer from Alzheimer's disease as their fifth leading cause of death at 4.8% (16).

Of the 676 deaths, 94% were classified as white, 5% as African American and less than 1% as "other." Furthermore, 99.4% were non-Hispanic and 0.6% was classified as being of Mexican or Central/South American descent (17).

Of the 36 African American deaths, the top six causes of death were very similar percentage-wise to those classified as white. A higher percentage of African Americans died from cerebrovascular diseases and diabetes when compared to whites (16).

Of the 6 infant deaths (under 1 year of age) in Wilkes County in 2007, the top cause was “all other unintentional injuries” (2 deaths) followed by 1 each of bacterial sepsis of newborn, congenital malformations, deformations and chromosomal abnormalities, diseases of the circulatory system and intrauterine hypoxia and birth asphyxia. Five of the infants were classified as white (non-Hispanic) and one was classified as African American (16).

Motor vehicle injuries, influenza/pneumonia, septicemia and intentional self-harm (suicide) stand out in Wilkes County as well as unintentional injuries which includes the category of unintentional poisonings. Unintentional poisonings are deaths resulting from an unintentional overdose of prescription medications.

Unintentional poisoning is an issue that was also detected in the 2005 Community Health Assessment. This led to the formation of a Substance Abuse Task Force that will continue its efforts to reverse this negative trend, as Wilkes County has and still remains within the top three counties for unintentional poisonings in North Carolina.

## Cardiovascular and Circulatory Disease, Diabetes and Other Risk Factors

There are many factors that contribute to heart disease. Physical inactivity, smoking, diet, weight, high blood pressure and family history are just a few. The Behavioral Risk Factor Surveillance System (BRFSS) is a random telephone survey of state residents aged 18 and older in households with telephones. This survey does not yield statistically significant results in all North Carolina counties separately. However, Wilkes, Surry and McDowell all fall within the “Western Region” of the BRFSS survey areas.

Table 14 shows the responses to selected questions that can contribute to heart disease (18). These results are self reported. A list of the BRFSS questions can be found at <http://www.schs.state.nc.us/SCHS/brfss/pdf/BRFSSQ07.pdf>. As evidenced by Table 14, the Western Region showed a slightly less percentage of respondents reporting binge drinking and being classified as obese (based on reported height and weight) as compared to the state; the Western Region also showed a slightly higher percentage for responding as currently smoking, eating 5 or more servings of fruits and vegetables per day and having high blood pressure.

<b>Behavioral Risk Factor</b>	<b>Western Region</b>	<b>State</b>
% Reporting No Physical Activity in Past Month	24.8	24.6
% of Adults Who Currently Smoke	24.4	20.9
% of Adults who Reported Binge Drinking	10.5	12.3
% of Adults with a History of Any Cardiovascular Disease	9.5	8.5
% Body Mass Index Grouping - Obese	25.7	29.5
% Body Mass Index Grouping - Overweight	37.6	36.2
% Current Diabetes	9.6	9.3
% Current Diabetes - Borderline	1.3	1.2
% of Adults Who Reported Eating Five or More Servings of Fruits or Vegetables per Day *	25.7	21.6
% High Blood Pressure *	30.9	28.8
% High Blood Pressure - Borderline High or Pre-Hypertensive *	2.3	2.4

\* denotes data from 2007 BRFSS

Over the past three years, the Wilkes County Health Department began an initiative to measure body mass index (BMI) on sixth, seventh and eighth graders in order to obtain BMI statistics over time. As shown in Illustration 1, 51.5% of all sixth, seventh and eighth graders are overweight or at-risk for being overweight. Because of this information, it was determined that measuring BMIs should begin at an earlier age. Therefore in 2009, third graders also completed BMI screenings as part of the regular screening program through Wilkes County schools.

**Illustration 1.**

**Spring 2009 Wilkes County Middle Schools BMI Testing Results Totals**

	percent	number
Total		2,029
Under wt	0.8%	17
Normal	47.7%	967
At Risk	19.8%	401
Over Wt	31.7%	644

**6th Grade**

	percent	number
Total		730
Under wt	1.2%	9
Normal	44.9%	328
At Risk	21.0%	153
Over Wt	32.9%	240

**7th Grade**

	percent	number
Total		626
Under wt	0.2%	1
Normal	49.3%	309
At Risk	18.1%	113
Over Wt	32.4%	203

**8th Grade**

	percent	number
Total		673
Under wt	1.0%	7
Normal	49.0%	330
At Risk	2031.0%	135
Over Wt	29.9%	201

**6th Grade Girls**

	percent	number
Total		349
Under wt	1.4%	5
Normal	43.8%	153
At Risk	22.7%	79
Over Wt	32.1%	112

**7th Grade Girls**

	percent	number
Total		321
Under wt	0.0%	0
Normal	47.0%	151
At Risk	20.6%	66
Over Wt	32.4%	104

**8th Grade Girls**

	percent	number
Total		335
Under wt	1.2%	4
Normal	46.9%	157
At Risk	19.1%	64
Over Wt	32.8%	110

**6th Grade Boys**

	percent	number
Total		381
Under wt	1.0%	4
Normal	45.9%	175
At Risk	19.5%	74
Over Wt	33.6%	128

**7th Grade Boys**

	percent	number
Total		305
Under wt	0.3%	1
Normal	51.8%	158
At Risk	15.4%	47
Over Wt	32.5%	99

**8th Grade Boys**

	percent	number
Total	N/A	338
Under wt	0.9%	3
Normal	51.2%	173
At Risk	21.0%	71
Over Wt	26.9%	91

Table 15 shows the inpatient hospital utilization rates for Wilkes County for diabetes, heart disease and cerebrovascular disease diagnoses (19). While these numbers reflect a very small percentage of Wilkes County citizens, the costs of these hospital visits are significant.

**Table 15. Inpatient Hospital Utilizations and Charges by Principal Diagnosis and County of Residence, North Carolina, 2007 (excluding newborns and discharges from out of state hospitals) for Wilkes County**

DIAGNOSTIC CATEGORY	TOTAL CASES	DISCHARGE RATE (PER 1,000 POP)	AVERAGE DAYS STAY	TOTAL CHARGES	AVERAGE CHARGE PER DAY	AVERAGE CHARGE PER CASE
<b>ENDOCRINE, METABOLIC &amp; NUTRITION DISEASES</b>	332	4.9	4.1	\$4,643,917	\$3,400	\$13,988
-- Diabetes	124	1.8	4.6	\$1,679,847	\$2,963	\$13,547
<b>CARDIOVASCULAR &amp; CIRCULATORY DISEASES</b>	1,461	21.7	4.4	\$32,023,328	\$5,005	\$21,919
-- Heart Disease	992	14.8	4.2	\$22,115,994	\$5,319	\$22,294
-- Cerebrovascular Disease	245	3.6	4.7	\$5,104,316	\$4,439	\$20,834

Although Wilkes rates remain below the state and most peer counties, as evidenced by Tables 16 and 17, heart disease and cerebrovascular disease are significant problems for the peer counties as well as the state overall.

**Table 16. Heart Disease Deaths per 100,000 Population 2007 (Deaths due to Heart Disease/Total Population) \* 100,000**

<http://www.ncpublichealthcatch.com/>

	2006	2007
<b>McDowell</b>	142.5	No data available for 2007
<b>Surry</b>	218.4	208.5
<b>Wilkes</b>	193.7	173.8
<b>North Carolina</b>	198.7	196.5

**Table 17. Cerebrovascular Disease Deaths per 100,000 (Deaths due to Cerebrovascular Disease/Total Population) \* 100,000**

<http://www.ncpublichealthcatch.com/>

	2006	2007
<b>McDowell</b>	65.9	32.6
<b>Surry</b>	56.4	49.8
<b>Wilkes</b>	47.1	39.4
<b>North Carolina</b>	53.2	49.1

## Cancer

Cancer is the second leading cause of death in North Carolina but the first in Wilkes County. However, when compared to the peer counties and to the state overall, Wilkes had a lower rate of overall cancer deaths in 2006 and 2007.

**Table 18. Cancer Deaths per 100,000 Population 2007 (Deaths due to Cancer/Total Population) \* 100,000**

<http://www.ncpublichealthcatch.com/>

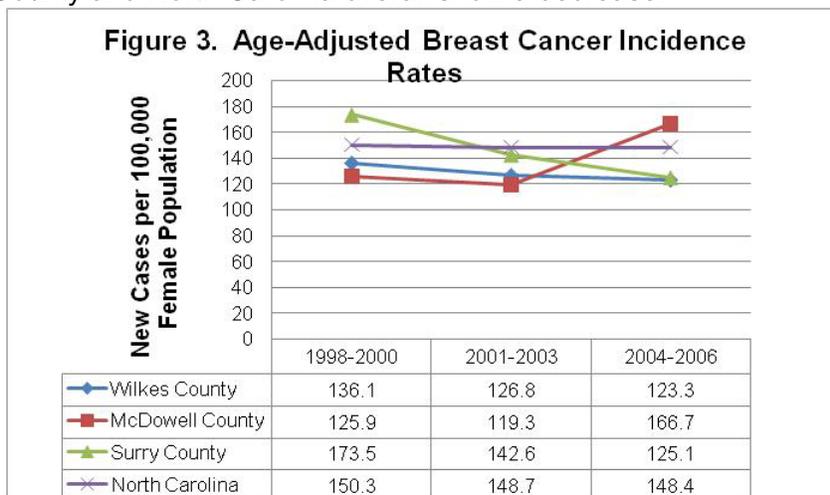
	2006	2007
<b>McDowell</b>	224.6	215.4
<b>Surry</b>	212.5	198.2
<b>Wilkes</b>	171.8	185.6
<b>North Carolina</b>	195.8	192.1

Table 19 shows the inpatient hospital utilization rates for Wilkes County for overall cancer cases as well as four specific types of cancers (19).

<b>Table 19. Inpatient Hospital Utilizations and Charges by Principal Diagnosis and County of Residence, North Carolina, 2007 (excluding newborns and discharges from out of state hospitals) for Wilkes County</b>						
DIAGNOSTIC CATEGORY	TOTAL CASES	DISCHARGE RATE (PER 1,000 POP)	AVERAGE DAYS STAY	TOTAL CHARGES	AVERAGE CHARGE PER DAY	AVERAGE CHARGE PER CASE
<b>MALIGNANT NEOPLASMS</b>	282	4.2	6.9	\$8,225,654	\$4,201	\$29,169
-- Female Breast	11	0.2	3.8	\$158,468	\$3,773	\$14,406
-- Prostate	30	0.4	2.1	\$445,955	\$7,079	\$14,865
-- Colon, Rectum, Anus	38	0.6	9.1	\$1,493,655	\$4,329	\$39,307
-- Trachea, Bronchus, Lung	42	0.6	8.0	\$1,232,504	\$3,690	\$29,345
<b>BENIGN, UNCERTAIN &amp; OTHER NEOPLASMS</b>	78	1.2	3.4	\$1,200,580	\$4,480	\$15,392

## Women's Health

In Wilkes County, death rates from cancer overall and from colon, rectum and anus cancers and trachea, bronchus and lung cancers individually have been decreasing slightly or remaining about the same since 1994. However, the incidence rate of breast cancer has decreased and the incidence rate of prostate cancer has increased significantly since 1998 in Wilkes County. Figure 3 shows the trend over the last 10 years with regards to the incidence (new cases) of female breast cancer (20). While McDowell County shows a significant increase, Wilkes County, Surry County and North Carolina overall show a decrease.



For breast cancer deaths, Table 20 shows that the North Carolina rate was almost twice the rate for Wilkes County. However, in 2007, there was a marked increase in breast cancer deaths in Wilkes County bringing the rate to nearly the state average but far less than McDowell County.

Table 20. Breast Cancer Deaths per 100,000 Population 2007 (Deaths Due to Breast Cancer/Total Population) * 100,000 <a href="http://www.ncpublichealthcatch.com/">http://www.ncpublichealthcatch.com/</a>		
	2006	2007
McDowell	35.1	41.9
Surry	27.5	15.5
Wilkes	12.3	22.0
North Carolina	24.9	25.3

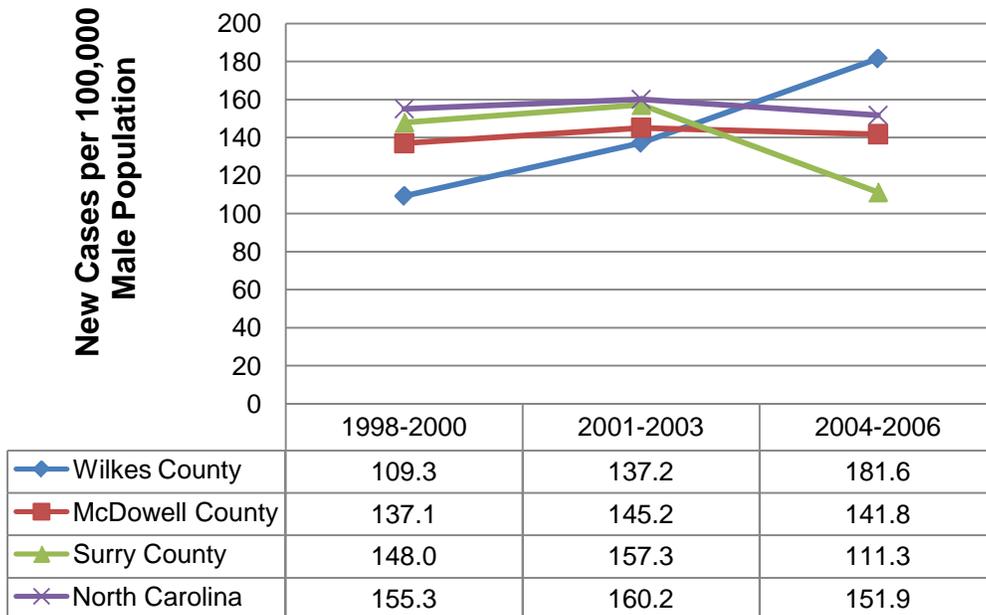
As Wilkes County is not uniquely identified in the BRFSS, the results for Western North Carolina will be used instead. In the 2008 survey, almost 68% of women surveyed had had a mammogram which was similar to the state overall. African Americans were significantly *more likely* to have had one (88%) than whites (68%). Women of Hispanic origin were significantly *less likely* to have had one (26%) than non-Hispanic women (69%). Over 90% of women over 45 years of age had had a mammogram. Education and household income did not seem to play a role in whether or not a woman had had a mammogram (24).

Additionally, the 2008 BRFSS asked women if they had had a Pap smear in the last 3 years. Over 82% of the women surveyed in Western North Carolina had had a Pap smear, compared to 87% for the state overall. African American women and other minorities were *more likely* to have had a Pap smear than whites. Hispanic women were *more likely* to have had a Pap smear than non-Hispanic women. Age was an important factor as those women age 18-24 were about 25% *less likely* to have had a Pap smear than those 25-34 years of age. Both education and household income seemed to be related to whether or not a woman had had a Pap smear with the percentage proportionally increasing as both education and household income increased (25).

## Men's Health

The incidence of prostate cancer in Wilkes County was relatively low when compared to McDowell County, Surry County and North Carolina as a whole until 2003 (Figure 4) (20). However, the incidence rate in Wilkes County has risen steadily over the last 10 years from 109.3 new cases per 100,000 in 1998-2000 to 181.6 new cases per 100,000 in 2004-2006. This number may or may not reflect an increase in the number of men getting prostate cancer screenings and not necessarily a natural occurrence of more cases than usual.

**Figure 4. Age-Adjusted Prostate Cancer Incidence Rates**



In the 2008 BRFSS Survey (22), 886 Western North Carolina males aged 40 and over were questioned about prostate cancer screening. Of these, the overwhelming majority was white (93%) and 45 years of age or over (92%). Overall, approximately 69% of the respondents stated that they had had a PSA test, a percentage similar to the state overall.

In 2008, those with some college education were significantly *more likely* to have had a PSA than those with a high school diploma or less. Similarly, those respondents with a household income greater than \$50,000 were significantly *more likely* to have had a PSA. These results were similar to the 2006 survey in which those with some college education and those making \$50,000 in the household were significantly *more likely* to have had a PSA (23).

Fortunately, it appears that the deaths from prostate cancer for Wilkes County are on a downward trend, possibly due to an increase in the detection rate in the early stages (Table 21).

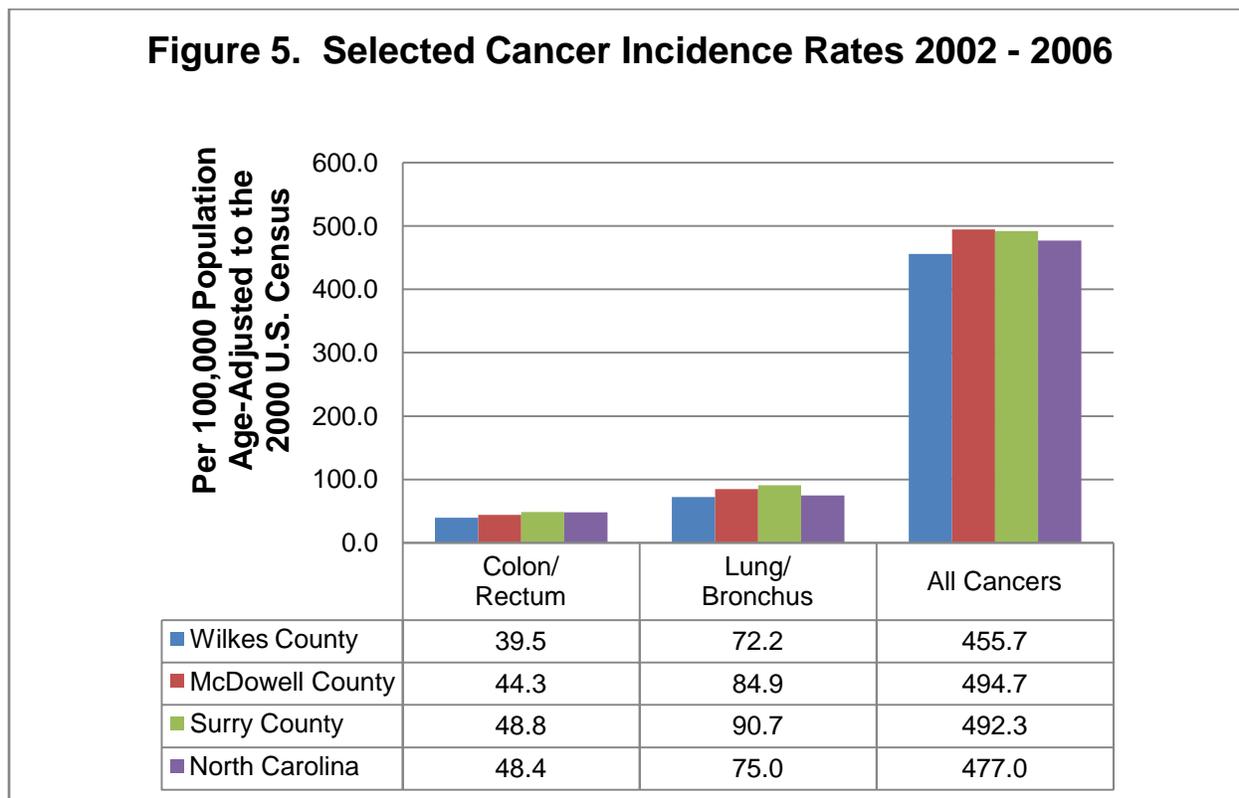
**Table 21. Prostate Cancer Deaths per 100,000 Population 2007  
(Deaths due to Prostate Cancer/Total Population) \* 100,000**

<http://www.ncpublichealthcatch.com/>

	2006	2007
<b>McDowell</b>	21.5	29.1
<b>Surry</b>	27.6	6.0
<b>Wilkes</b>	24.2	19.3
<b>North Carolina</b>	28.6	26.5

## Other Cancers

The incidence rates for selected other cancers are calculated in terms of five-year rates by the North Carolina State Center for Health Statistics and can be found in Figure 5 (21). For colon/rectum, lung/bronchus and total cancer, Wilkes County has slightly lower rates when compared with McDowell and Surry counties and the state overall.



## Colon/Rectum Cancer

Of those 2008 BRFSS respondents in Western North Carolina 50 years of age or over, 47% had had a blood stool test and nearly 64% had had a sigmoidoscopy or colonoscopy, both very similar to the state overall. African Americans were slightly *more likely* to have had a blood stool test and slightly *less likely* to have had an invasive exam. Respondents of Hispanic origin were significantly *less likely* to have either exam. For the most part, the older a respondent, the *more likely* it was that he or she would have had a colorectal cancer screening of any type. Household income did not seem to be a factor for the blood test but was a factor for the invasive exams with proportionally more respondents having an exam in the higher income brackets (26, 27).

While the 2006 death rates from colon, rectal or anus cancers reached a low 11.8%, the 2007 rate showed that the averages for the state and peer counties had leveled out around 17% (Table 22).

<b>Table 22. Colon, Rectal or Anus Cancer Deaths per 100,000 Population 2007</b> <b>(Deaths due to Colon, Rectal or Anus Cancer/Total Population) * 100,000</b> <a href="http://www.ncpublichealthcatch.com/">http://www.ncpublichealthcatch.com/</a>		
	<b>2006</b>	<b>2007</b>
<b>McDowell</b>	20.8	17.2
<b>Surry</b>	27.5	17.3
<b>Wilkes</b>	11.8	17.9
<b>North Carolina</b>	17.2	17.8

## Lung/Bronchus Cancer

Of those 2008 BRFSS respondents in Western North Carolina, 24% identified themselves as current smokers, a number unchanged from 2006. Males were more likely than females to be smokers. While the rates were relatively unchanged for whites and African Americans, the number of current smokers among minorities increased from 19% (2006) to 38% (2008). Additionally, education and smoking were disproportionally related with those with more education being *less likely* to smoke. Similarly, those with more household income were *less likely* to smoke. This was true for both 2006 and 2008 with one exception: Only 30% of those earning less than \$15,000 identified themselves as current smokers in 2006 while almost 42% of those in 2008 reported being current smokers (28, 29).

The death rate for these cancers is reflected in Table 23, which shows a significant increase in Wilkes County deaths from 2006 to 2007.

<b>Table 23: Trachea, Bronchus or Lung Cancer Deaths per 100,000 Population 2007</b> <b>(Deaths due to Trachea, Bronchus or Lung Cancer/Total Population) * 100,000</b> <a href="http://www.ncpublichealthcatch.com/">http://www.ncpublichealthcatch.com/</a>		
	<b>2006</b>	<b>2007</b>
<b>McDowell</b>	79.0	70.3
<b>Surry</b>	68.4	64.5
<b>Wilkes</b>	47.9	60.4
<b>North Carolina</b>	60.4	58.6

The use of cigarettes in public settings has been increasingly restricted because of the documented harmful effects of second-hand smoke to non-smokers. Second-hand smoke is tobacco smoke that is exhaled by smokers (mainstream smoke) and smoke that is produced by a burning tobacco product (sidestream smoke). The positive movement to limit passive exposure to secondhand smoke is driven by its content of upwards of 4,000 chemicals compounds, including many that are poisonous or can cause cancer. With the passing of House Bill 2, North Carolina has taken a great step forward in lowering the number of cancer cases such as trachea, bronchus or lung cancer which have been linked to smoking or as a result of exposure to second hand smoke.

## Maternal and Child Health

### Pregnancies and Live Birth Data;

From the data in the table below, Wilkes County's total birth rate (11.8) remains lower than that of the state (14.2) as well as our peer counties. However, the rate of minority birth in Wilkes County (14.4) is greater than that of both peer counties and only slightly below that of the state (15.6).

	<b>Total Births</b>	<b>Total Rate</b>	<b>White Births</b>	<b>White Rate</b>	<b>Minority Births</b>	<b>Minority Rate</b>
<b>McDowell</b>	2,624	12.0	2,513	12.3	111	8.2
<b>Surry</b>	4,494	12.3	4,283	12.4	211	10.3
<b>Wilkes</b>	3,966	11.8	3,727	11.7	239	14.4
<b>North Carolina</b>	632,103	14.2	456,054	13.8	176,049	15.6

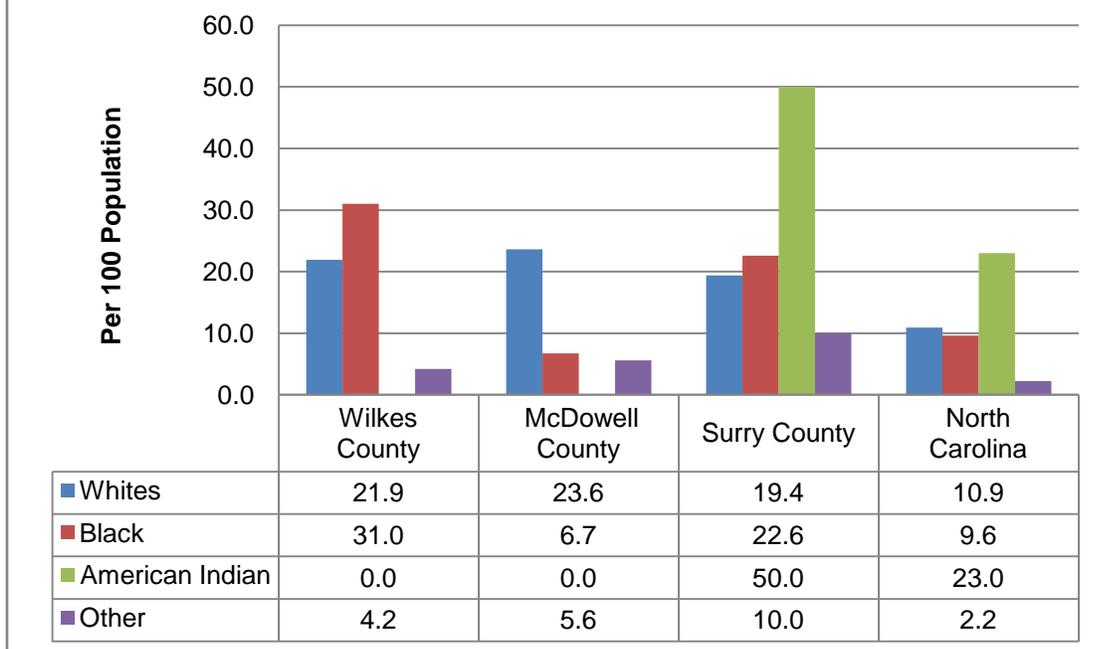
From 2004-2008, Wilkes County residents had 3,966 live births and a live birth rate of 11.8 per 1,000 population. The live birth rate in North Carolina during this period was 14.2. When compared to peer counties, Wilkes County remains slightly below the peer counties as well as the state rate for North Carolina which was 14.2.

In 2008, women in Wilkes County had 785 live births. In 2008, minority adults had a higher pregnancy rate than whites (94.3 vs. 77.1) and the county had higher pregnancy rates for total, white and minority women when compared with 2004. In 2007, the minority abortion rate was more than twice that for whites (20.8 per vs. 8.1) in spite of the rate dropping between 2004 and 2007.

	<b>Total # of Live Births</b>	<b>Total Number of Perinatal Deaths</b>	<b>Total Number of Fetal Deaths</b>	<b>Total # of Neonatal Deaths</b>	<b>Total # of Infant Deaths Under 1 yr of age</b>
<b>McDowell</b>	546	6	4	2	3
<b>Surry</b>	916	16	4	12	15
<b>Wilkes</b>	785	8	3	5	5
<b>North Carolina</b>	130,758	1,558	878	680	1,066

In 2008, Wilkes County had a rate of 21.9% for white women who smoked during pregnancy and a rate of 31.0% in black women who smoked during pregnancy. The state rate in 2008 was 10.9%; therefore Wilkes County had a rate that was twice that of the state in white women and over three times that of the state in the number of black women who were identified as having smoked during pregnancy. This information may be located in NC-CATCH at the website location: <http://www.ncpublichealthcatch.com/ReportPortal/design/view.aspx>.

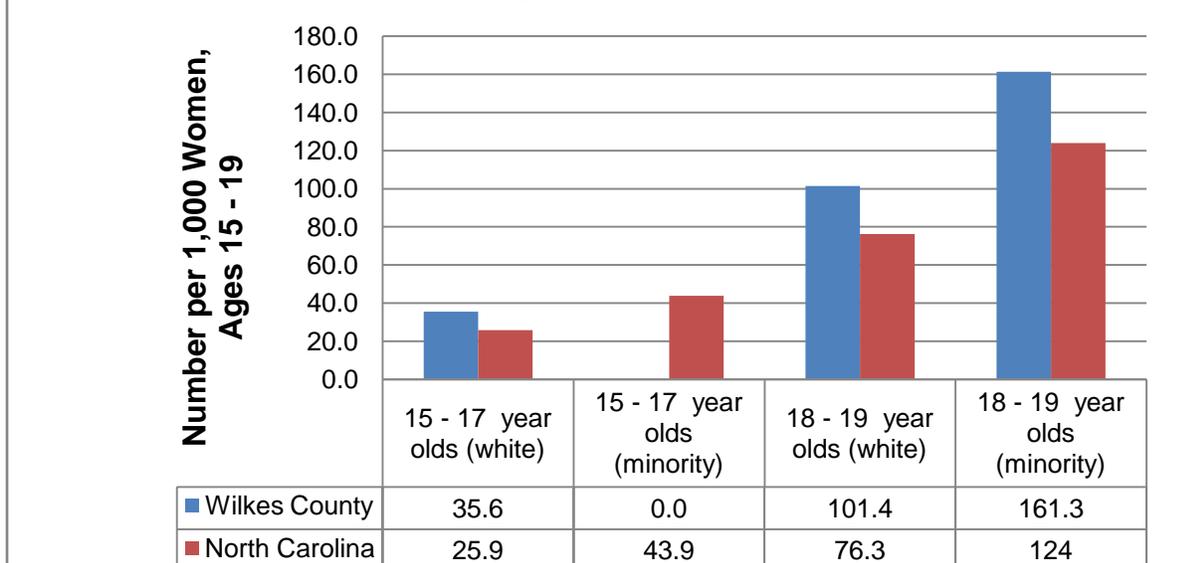
**Figure 6: Mothers Who Smoked During Pregnancy, By Race**



### Teenage Pregnancy Rates

When averaged together, the 2008 teen pregnancy rates for Wilkes County are similar to the state rates. When broken down by race, however, the data shows that all groups except 15 – 17 year old minorities in Wilkes County experienced significantly higher pregnancy rates as compared to the state (Figure 8) (31). At 3.9 per 1,000, Wilkes County has one of the lowest teenage abortion rates in the state for women 15 – 19 years of age (31).

**Figure 7. Teenage Pregnancy Rates, 2008**



From 2004 - 2008, 360 (9.1%) of babies born to Wilkes County residents had a low birth weight (less than 2,500 grams), which is equal to that of the state percentage while being slightly higher than that of the peer counties. Wilkes County's rate of low birth weight in minority babies (10.9) was lower than that of the state rate of 13.6 % however is higher than that of the 9.0 percent of white babies. Current programs such as Women's, Infant's and Children have seen a tremendous increase during the last four years. This is thought to be attributed to the high unemployment rate and lack of income in Wilkes County

**Table 26: NC Resident Births 2004-2008: Number and Percent Low Birth Weight Births By Race**  
<http://www.schs.state.nc.us/SCHS/data/databook/CD4%20LBW%20by%20race.html>

	Total Low Birthweight		White Low Birthweight		Minority Low Birthweight	
	Number	%	Number	%	Number	%
<b>McDowell</b>	220	8.4	209	8.3	11	9.9
<b>Surry</b>	389	8.7	361	8.4	28	13.3
<b>Wilkes</b>	360	9.1	334	9.0	26	10.9
<b>North Carolina</b>	57,823	9.1	33,941	7.4	23,882	13.6

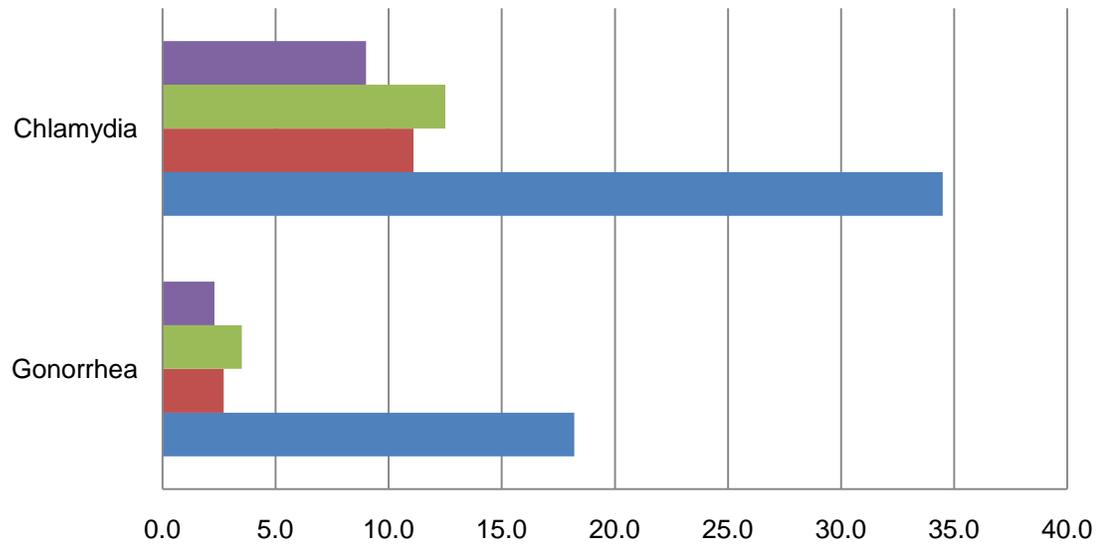
## Communicable Diseases

The communicable disease rates were analyzed for 2004-2008. For the following diseases, Wilkes County had a lower rate than North Carolina overall: *E. coli* Shiga Toxin-Producing, Hepatitis A, Hepatitis B, Hepatitis B, carrier, Legionellosis and Whooping Cough. No cases of *Haemophilus influenzae*, Lyme disease or Strep A (invasive disease) were reported from 2004 – 2008.

In 2008, Wilkes County had 1 case of Influenza – pediatric mortality, which was one of only four in the state. In addition, Wilkes County experienced a higher rate of illness for the following diseases: Campylobacter, Foodborne Illness (other), Hepatitis C, Rocky Mountain Spotted Fever, Shigellosis and Vancomycin-resistant Enterococci (VRE).

For cases of AIDS, syphilis and tuberculosis, Wilkes rates are lower than the state average. For chlamydia and gonorrhea, Wilkes County remains the lowest in comparison to peers and to the state average as evidenced by Figure 8.

**Figure 8. Chlamydia and Gonorrhea Disease Rates per 100,000, 2003-2007**



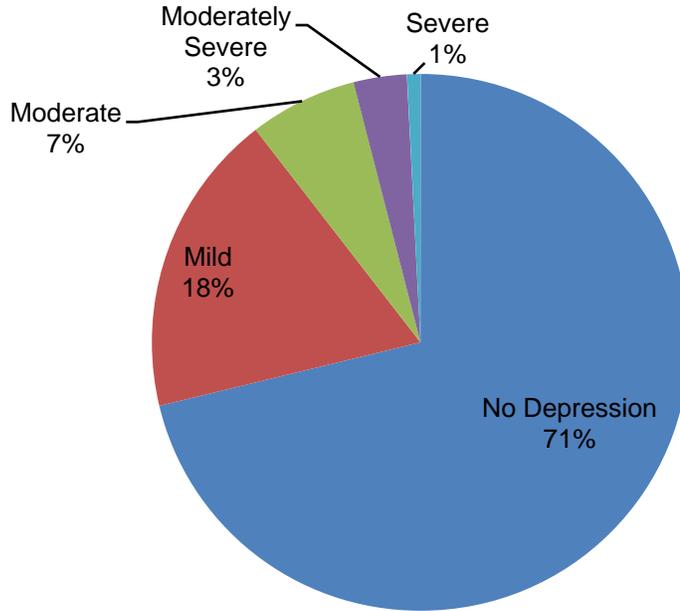
	Gonorrhea	Chlamydia
■ Wilkes County	2.3	9.0
■ McDowell County	3.5	12.5
■ Surry County	2.7	11.1
■ North Carolina	18.2	34.5

## Mental Health Issues

Depression is a key measure of mental and emotional health. The 2007 BRFSS data shows that of the 1,181 Western North Carolina residents surveyed, approximately 10.5% reported that they were “currently depressed” at the time of the survey as compared to 9.3% across North Carolina. Slightly more females reported depression than males. Those with higher education levels were less likely to report depression as well as those with higher household income (34).

Figure 9 shows the severity of depression for those Western North Carolina residents surveyed. Most had no depression or mild depression. These figures were similar to the North Carolina percentages overall (35).

**Figure 9. Western North Carolina: 2007 BRFSS Survey Results, Severity of Depression**



In 2009, 250 Wilkes County residents were involuntarily committed due to mental illness. The rate of 3.7 commitments per 1,000 population is in line with the state rate. The North Carolina Sheriff’s Office records the amount of time beginning with the time involved in serving the commitment papers and the continuation through transfer of custody to a care facility. The amount of time spent by sheriff’s staff in 2009 was 250 trips totaling 1,750 hours, a significant amount of time spent away from other county business.

Frequently, depression may be a factor in a person’s decision to commit suicide, especially when undiagnosed or untreated. This trend is often seen more frequently in males. Table 27 shows the age-adjusted suicide rates for Wilkes County as compared to North Carolina overall. Wilkes County continues on an upward trend while the state appears to be stable around 11%.

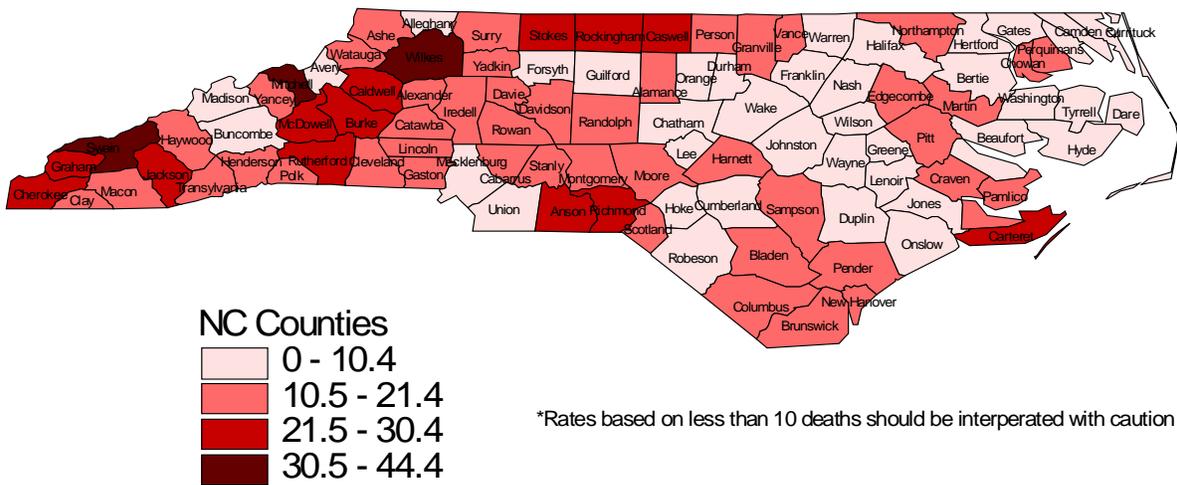
	<b>1994- 1998</b>	<b>1999- 2003</b>	<b>2004 -2008</b>
<b>Wilkes County</b>	10.9	12.5	17.0
<b>North Carolina</b>	11.8	11.5	11.9

According to Figure 10, Wilkes County, with rates based upon information from the vital statistics for the county, ranks with one of the three highest rates in the state of unintentional and undetermined intent poisoning death rates. The majority of this rate reflects use by individuals of prescription medications which may or may not have been prescribed for their use. These medications have resulted in death most often because they are used incorrectly or in conjunction with other substances such as alcohol, other prescriptions or street drugs. Currently, the Substance Abuse Task Force has helped secure funding for “Project Lazarus,” an

organization that focuses on the reduction of unintentional poisoning deaths from prescription medications through physician and patient education, detection of prescription drug trafficking and the prevention of unintentional overdose by providing naloxone to households that have been legally prescribed three or more medications.

**Figure 10.**

**North Carolina  
Resident unintentional and undetermined intent poisoning death rates  
2008**



Project Lazarus is supported by Purdue Pharma, L.P., Grant # NED101356

<b>Table 28. NC-CATCH Data of Hospital Charges for the CSS Coding of Mental Disorders for Wilkes County</b>	
2004	\$4,034,103.29
2005	\$4,879,326.77
2006	\$5,210,033.09

## Section Four: Environmental Health Assessment

Environmental health describes quality of life factors that are determined by physical, chemical, biological, social and psychological factors in the natural environment. Key dimensions of Wilkes County's environmental health are air quality, water quality, lead hazards and the built environment. Questions related to areas such as Air Quality and Recycling were addressed in the 2009 Community Health Survey. Air quality is affected by vehicle traffic, industry and geography – both inside and outside the county. We determine the quality of our outdoor air with the Air Quality Index (AQI) which measures concentrations of ozone, particulates, carbon monoxide, nitrogen dioxide and sulfur dioxide. While counties in our region are successfully reducing levels of many air pollutants, concentrations of ozone and particulate matter are still significant problems.

There are beneficial and harmful types of ozone. Good ozone occurs naturally in the earth's upper atmosphere – six to 30 miles above the earth's surface – where it forms a protective layer that shields us from the sun's harmful ultraviolet rays. Manmade chemicals can destroy this ozone, which led the U.S. to phase out the production and use of ozone-depleting substances. Bad ozone is a harmful air pollutant and a major component of smog. It is found near the ground and is formed when chemicals – emitted from automobiles, refineries, power plants, industrial boilers, chemical plants, dry cleaners and facilities that use solvents and paints – react in the presence of sunlight. Typically, it is formed in the atmosphere when ultraviolet radiation and high temperatures cause chemical reactions among volatile organic compounds and nitrogen oxides. These ozone levels are typically highest during warmer times of the day and year. This form of ozone contributes to asthma, lung infections, cell inflammation and shortness of breath. Our growing population and the increasing number of vehicle miles traveled on our roads will play a key role in the ozone levels in Wilkes County and our region.

Particle pollution, or “particulate matter,” is a mixture of liquid droplets and such solids as dust, dirt, soot and smoke. Some solids are emitted directly into the air by factories, power plants, construction activity, fires and vehicles while others are formed when pollutants react in the atmosphere. As many of the local manufacturing factories have closed in our county, the levels of particulate matter have been reduced. Particulate matter is categorized based on size: particles with diameters less than 10 micrometers – smaller than the width of a human hair – can enter the lungs and cause serious health problems.

The Air Quality Index (AQI) is a daily report of air quality that describes how clean or polluted our air is and describes health problems we may experience a few hours or days after breathing polluted air. The AQI employs a scale that runs from 0 to 300: the higher the AQI value, the greater the concentration of air pollution and the greater the threat to health. An AQI value of 100 generally corresponds to the national air quality standard for a pollutant; typically, AQI values below 100 are satisfactory but when above 100, air quality is unhealthy – initially for sensitive people, then for everyone as AQI values get higher.

Air Quality Index (AQI) Values)	Levels of Health Concern	Colors
<i>When the AQI is in this range:</i>	<i>...air quality conditions are:</i>	<i>..as symbolized by this color:</i>
0-50	Good	Green
51-100	Moderate	Yellow
101-150	Unhealthy for Sensitive Groups	Orange
151 to 200	Unhealthy	Red
201 to 300	Very Unhealthy	Purple
301 to 500	Hazardous	Maroon

The above table describes the numerical values and corresponding “colors” used to convey AQI. In Wilkes County, this information is disseminated through radio, television, newspapers, over the Internet, through email alerts and via road-side signs.

**Green 0 – 50:** Good air quality. No health risks are expected. Enjoy outdoor activities!

**Yellow 51 – 100:** Moderate air quality. Air quality is okay, but unusually sensitive people may be affected, especially when the AQI nears 100.

**Orange 101 – 150:** Air quality is unhealthy for sensitive groups: children, active adults and those with heart or respiratory disease, including asthma, should limit outdoor activity.

**Red 151 – 200:** Unhealthy air quality. Everyone should avoid prolonged outdoor activity.

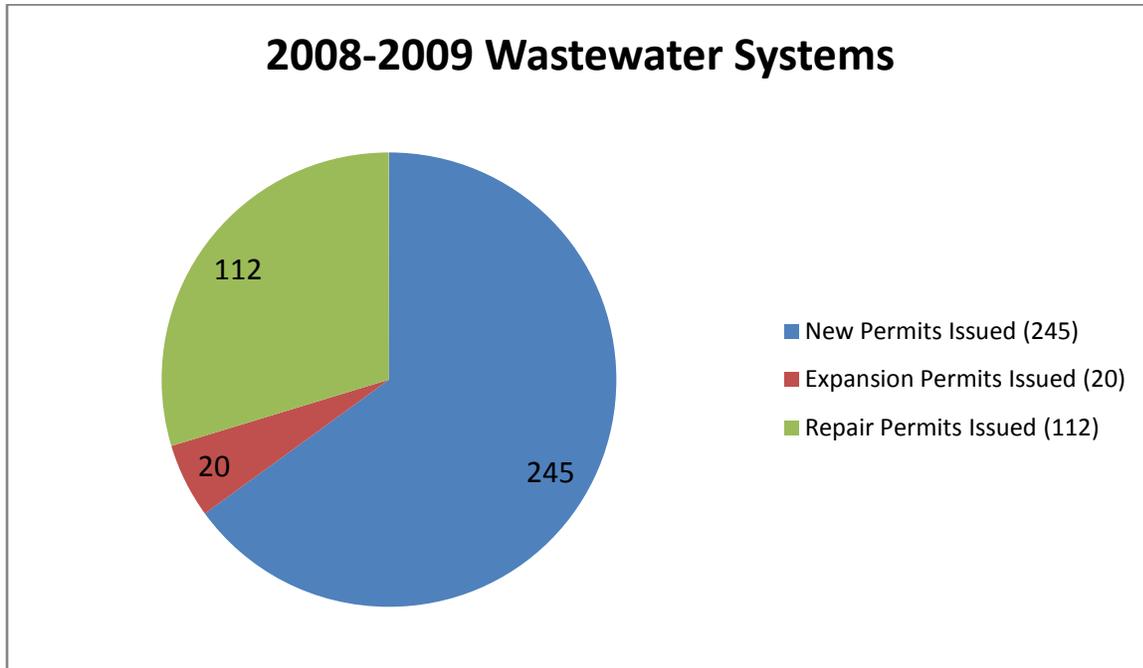
**Purple 201 – 300:** Very Unhealthy air quality. Everyone should avoid outdoor activity.

The North Carolina Department of Environment and Natural Resources (NCDENR) states that ozone levels generally hold well within the Code Green or Good category throughout the fall and winter in North Carolina. So, daily ozone predictions were suspended on November 1, 2009 and normal forecast operations are set to resume on April 1, 2010. Wilkes County is not a county in North Carolina where air quality information is monitored Wilkes is included within a

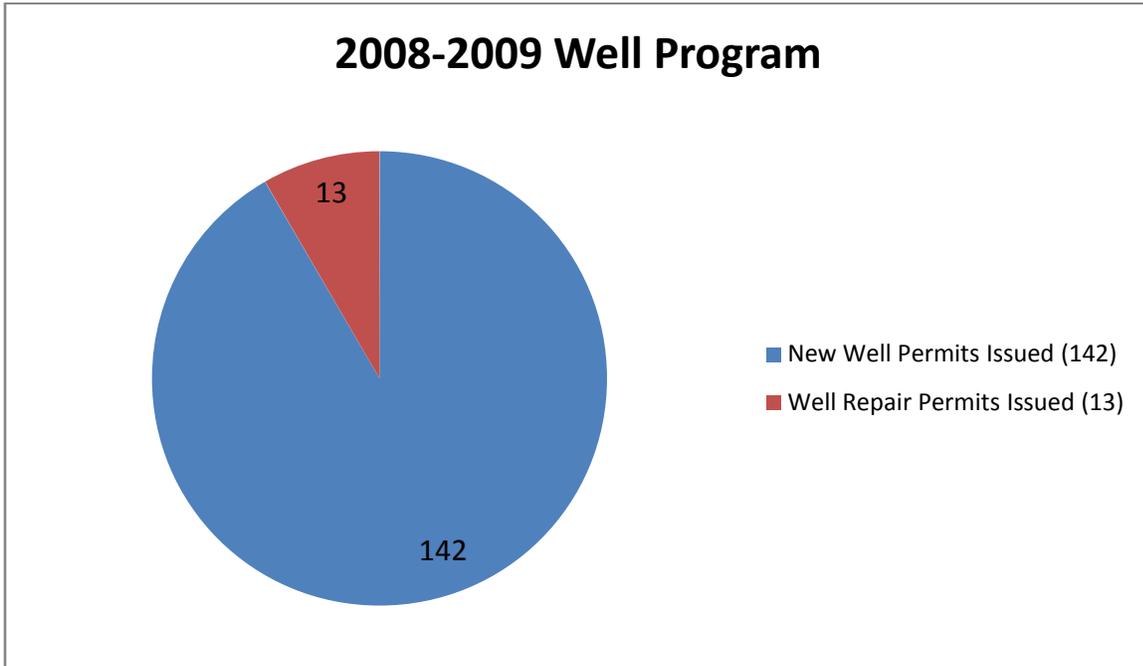
specific group. As a result, data from nearby counties will be used for this portion of the Community Health Survey.

The Environmental Health Section of the Wilkes County Health Department continues to provide necessary services to the community including On-Site Wastewater System management, Food, Lodging and Intuitional Sanitation and the Well Program. The chart below illustrates the numbers of these services provided by Environmental Health.

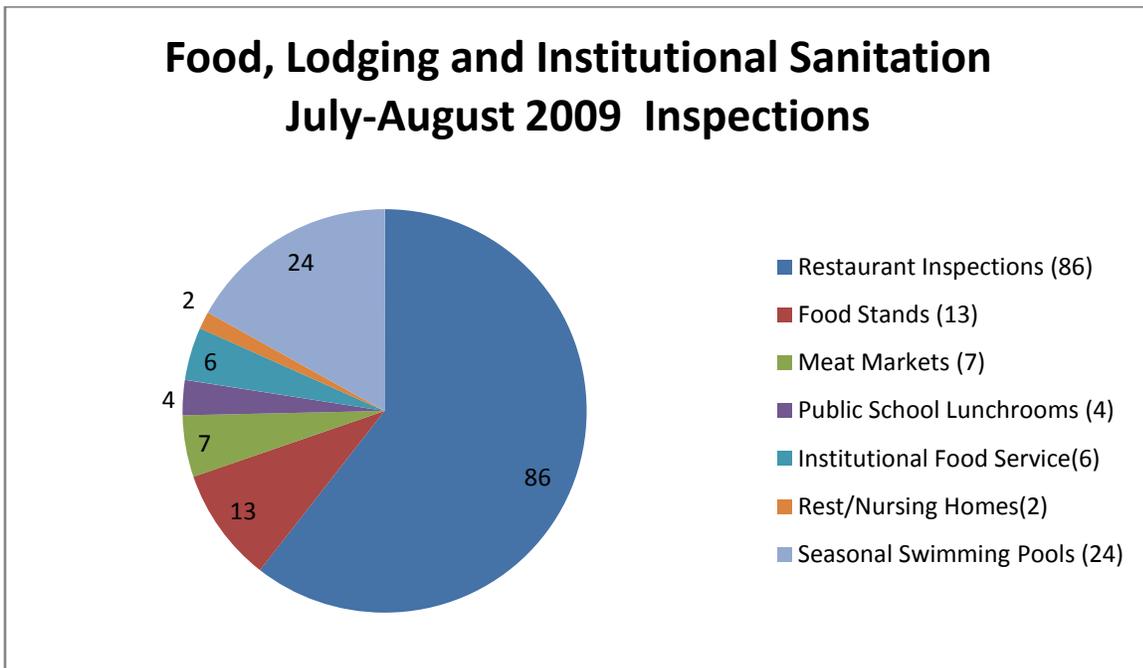
### Onsite Wastewater System:



**Well Permits:**



**Food, Lodging and Institutional Sanitation:**



## Section Five: Community Health Opinion Survey

In mid-2009, a workgroup consisting of Health Promotion Coordinators and Health Educators from the Northwest Partnership for Public Health met for two sessions to develop and create a survey that would be comprehensive in scope, limited to essential questions and easy to complete. Questions and data collection methods from the 2005 Community Health Assessment were analyzed, as well as the questionnaires from the other counties represented in the Northwest Partnership group. During the process a new and updated survey tool was submitted to the Executive Committee of the Wilkes Healthy Carolinians Council for approval. Some notable changes from the 2005 Survey included;

- The 2009 survey focused on barriers to health behaviors such as the question, “The recommendation for physical activity is 30 minutes a day 5 days a week (2 ½ hours per week). Pick the main reason that keeps you from getting this much physical activity.”
- A more refined attempt was made to ascertain where respondents learn most of their health-related information so that future social marketing campaigns can be guided by the responses. The survey listed several such methods including billboards, newspapers and social networking sites.
- The demographics section was revised to more closely reflect the categories used by the U.S. Census Bureau for classification of respondents.

During the Healthy Carolinians’ Executive Council meeting, the Executive Director of the Wilkes Healthy Carolinians Council, the Wilkes County Health Director and the Health Promotion Coordinator from the Health Department presented the process of a community health assessment and how the report can help all agencies and individuals within the county. They then distributed a copy of the questions and requested each member and guest to respond by writing their responses to the questions on the questionnaire. This group agreed that the modified tool recommended from the regional meetings of the Health Promotion Coordinators provided a better tool and would provide a more qualitative response from the group.

Upon review, Wilkes Healthy Carolinians Council, composed of representatives from businesses, elected officials, government agencies and community members of Wilkes, approved and adopted the amended survey and developed a plan of action toward survey distribution, with the goal of a successful and helpful Community Health Assessment at the forefront. Input was received from the Wilkes Chamber of Commerce, Wilkes County Cooperative Extension, Wilkes County Schools, Wilkes County Health Department, Wilkes County Government, Wilkes Regional Medical Center and the United Way of Wilkes County.

It was determined that the Wilkes County Health Department (WCHD) in collaboration with the Healthy Carolinians Council would use a convenience survey method to distribute the survey tool to, at least, 500 individuals, including (1) community leaders, (2) community residents, (3) persons with poor health status and low income, (4) current inmates within our county jail and (5) racial and ethnic minorities.

Methods of distribution included but were not limited to (1) e-mail distribution, (2) paper copies placed at the public library and health department (3) one-on-one assistance for non-English speaking residents through our access to care case management system.

Surveys were distributed to the following:

1. Wilkes Regional Medical Center Employees
2. Wilkes County Emergency Medical Services
3. North Wilkesboro Town Hall Employees and Citizens
4. Wilkesboro Baptist Church
5. Wilkes Senior Center
6. Public Health Clients (including Hispanic)
7. Wilkes County Employees
8. Wilkes Community College Students and Faculty
9. Smart Start
10. Local Physician's Office Employees and Patients
11. Britthaven of Wilkes Nursing Home for Staff, Patients and Families

Of the 1200 total distributed surveys, 522 community leaders and residents completed the survey for a response rate of 52.2%.

Survey data did not need to be weighted because the demographics of the surveys so closely matched the demographics of the county. The bias in the survey data is the use of convenience sampling instead of random sampling. Data entry into Epi-Info was performed by more than one person and an effort was made to be consistent with entering answers. The surveys were not fully completed by all individuals, resulting in missing data on various questions. On hindsight, the flexibility of allowing the participants to write-in answers on the survey was much more difficult to input and analyze through Epi-Info.

Demographics were obtained based upon the zip codes for the county of Wilkes.

<b>Table 1. Size of Survey Sample by Municipality, based upon the zip codes, for Wilkes County and Surrounding Area, 2009</b>		
<b>Zip Code</b>	<b>Location</b>	<b>Frequency</b>
Unidentified	Not Defined	52
28606	Boomer	13
28607	Boone	1
28608	Boone	1
28609	Catawba	1
28610	Claremont	1
28024	Cliff Side	1
28618	Deep Gap	1
28621	Elkin	11
28624	Ferguson	4
27020	Hamptonville	1
28635	Hays	12
28601	Hickory	1
28636	Hiddenite	1
28642	Jonesville	5
28644	Laurel Springs	1
28645	Lenoir	5
27299	Linwood	2
28649	McGrady	1
28651	Millers Creek	28
28654	Mo. Falls	18
28657	Newland	1
28656	North Wilkesboro	1
28659	North Wilkesboro	182
28660	Olin	1
28665	Purlear	14
27320	Reidsville	1
28669	Roaring River	13
28670	Ronda	8
28676	State Road	1
28681	Taylorsville	2
28683	Thurmond	1
28685	Traphill	7
28689	Union Grove	1
28692	Vilas	1
28697	Wilkesboro	123
27055	Yadkinville	4

The listening session was with a local faith based group during one of their regular scheduled meetings. During this session, one facilitator presented the information by reviewing the questions and then allowing them the opportunity to write their responses. By reviewing the questions with the group, the facilitator encouraged individual thought processes in the answers. As the facilitator presented each question and encouraged responses, the group was given the

opportunity to write their answers. It was determined that during the next assessment, all questions will be placed on PowerPoint and two presenters will attend each listening session in order to allow the participants the freedom from writing so that a more creative flow may occur. This type of facilitation for the listening sessions is thought to be best for ensuring responses were accurately recorded and all thoughts captured.

The second type of qualitative data collection was with stakeholder and key leadership interviews. These surveys/interviews used the same questions as the listening session. The key leadership surveys/interviews were conducted on approximately twenty individuals.

Key Leadership/Stakeholder Surveys Interviews

1. Health Department Leadership team (All eight members including Health Director, Finance Manager, Management Support Supervisor, Health Promotion Coordinator, Clinical Nurse Supervisor, Director of Nursing, Environmental Health Supervisor and Outreach Nurse Supervisor.)
2. Wilkes County Commissioners (Two)
3. Wilkes Regional Medical Center Healthy Carolinians Executive Director
4. Wilkes County Board of Health (eleven)
5. Wilkesboro Mayor, Town Manager and Wilkesboro Town Council.

The following are the results of the 2009 Community Health Assessment Survey.

**Demographics of Population Surveyed**

The Wilkes County Health Department employed several methods to distribute the Community Opinion Survey and to assure its responses adequately represented the demographics of county residents. The following tables illustrate the percentage of survey respondents by gender, age, race, ethnicity and the number of respondents that participated per zip code within the county.

<b>Table 2. Gender of Survey Respondents</b> (Question 20 of the 2009 CHA)		
*Not all survey participants completed all portions of the survey and may have omitted this question		
	<b>Male</b>	<b>Female</b>
2009 Wilkes CHA	165	313

<b>Table 3. Age of Survey Respondents</b> (Question 21 of the 2009 CHA)								
*Not all survey participants completed all portions of the survey and may have omitted this question								
	<b>18 – 20</b>	<b>21-24</b>	<b>25-34</b>	<b>35-44</b>	<b>45-54</b>	<b>55-64</b>	<b>65-74</b>	<b>75 +</b>
2009 Wilkes CHA	4.6% (23)	8.7% (44)	21.8% (110)	21.4% (108)	18.82% (95)	15.7% (79)	7.3% (37)	1.2% (6)

<b>Table 4. Race of Survey Respondents</b> (Question 22 of the 2009 CHA)						
*Not all survey participants completed all portions of the survey and may have omitted this question						
	Black or African American	Asian	Native Hawaiian or Other Pacific Islander	American Indian or Alaskan Native	White	Other/Mixed
2009 Wilkes CHA	30	14	1	3	385	46

<b>Table 5. Ethnicity of Survey Respondents</b> (Question 23 of the 2009 CHA)		
*Not all survey participants completed all portions of the survey and may have omitted this question		
Are you of Hispanic or Latino origin?	Yes	No
2009 Wilkes CHA	98	365

The representation of survey respondents by race and ethnic origin were within the necessary range of the county population, as noted by the population charts by race at the beginning of the document.

<b>Table 6. Highest level of Education of Survey Respondents</b> (Question 24 of the 2009 CHA)							
*Not all survey participants completed all portions of the survey and may have omitted this question							
	Some High School, no diploma	High School Diploma or GED	Associate Degree/Vocational Training	Other (answers given included 3 <sup>rd</sup> grade, 5 <sup>th</sup> grade, 7 <sup>th</sup> grade, etc)	Some College (no degree)	Graduate or Professional Degree	Bachelor's Degree
2009 Wilkes CHA	55	112	69	31	105	53	74

The percentage of respondents with four-year college degrees, technical certificates and associate degrees came closest to the percentage of county residents who hold these diplomas.

On the other hand, the survey over-represented individuals with graduate degrees and with some high school – which is likely due to the number of community leaders who completed the survey.

<b>Table 7. Total Household Income of Survey Respondents</b> (Question 25 of the 2009 CHA)								
*Not all survey participants completed all portions of the survey and may have omitted this question								
	<\$10,000	\$10,000-\$14,999	\$15,000-\$19,999	\$20,000-\$24,999	\$25,000-\$34,999	\$35,000-\$49,999	\$50,000-\$74,999	Over \$75,000
2009 Wilkes CHA	76	19	32	48	74	52	83	67

## Community Health Assessment Survey Findings on Community Issues

The Wilkes County Health Department used two methods to set the priorities for the upcoming years. One of these methods was the utilization of survey data and the percentage of individuals who chose specific responses to the questions within the tool. We will begin with question number one and continue to question number 19, which is a media/communication question.

In the following analysis, the following color-coding system was used:

	Most Frequently Chosen Answer	Second Most Frequently Chosen Answer	Third Most Frequently Chosen Answer	Forth Most Frequently Chosen Answer
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<b>Table 8. Biggest Health Issues of Survey Respondents</b> (Question 1 of the 2009 CHA which was a write in question)				
*Not all survey participants completed all portions of the survey and may have omitted this question				
	Concern #1	Concern #2	Concern #3	Concern #4
2009 Wilkes CHA	Access/ Availability/Lack of /Overall Cost of Healthcare	Substance Abuse including Prescription Medications	Obesity and Mental Health	Cancer and Diabetes

<b>Table 9. Physical Activity Level of Survey Respondents</b> (Question 2 of the 2009 CHA which was a multiple choice question)								
*Not all survey participants completed all portions of the survey and may have omitted this question								
Main reason you do NOT get the recommended amount of physical activity	Nothing. I get the correct amount	No time.	I get exercise at work.	I don't like exercise	Physically disabled.	No safe place to exercise.	Too expensive	Other/ Lazy/ In Jail
2009 Wilkes CHA	168	145	41	37	14	6	22	8/14

**Table 10. Healthy Eating Habits of Survey Respondents**  
(Question 3 of the 2009 CHA which was a multiple choice question)  
\*Not all survey participants completed all portions of the survey and may have omitted this question

Main reason you do NOT get the recommended 5 fruits and vegetables a day	Nothing, I eat 5 or more servings per day	I don't think about it	They are too expensive	I don't have time to fix them	I (or my family) won't eat them.	I don't know how to prepare them	They go bad before we eat them	I don't think they are important
2009 Wilkes CHA	161	100	66	42	13	7	29	4

**Table 11. Top 3 Substance Abuse Problems chosen by the Survey Respondents**  
(Question 4 of the 2009 CHA which was a ranking question)  
\*Not all survey participants completed all portions of the survey and may have omitted this question

	Substance Abuse Issue #1	Substance Abuse Issue #2	Substance Abuse Issue #3
Wilkes 2009 CHA	Abusing prescription drugs/pills	Alcohol abuse	Using someone else's prescription drugs/pills

**Table 12. Level of Sex Education To Be Taught in School as Chosen by the Survey Respondents**  
(Question 5 of the 2009 CHA which was a chose one question)  
\*Not all survey participants completed all portions of the survey and may have omitted this question

	Comprehensive Sex Education	Abstinence until marriage	None of the above
Wilkes 2009 CHA	366	121	15

**Table 13. Referral for Mental Health Problem as Chosen by the Survey Respondents**  
(Question 6 of the 2009 CHA which was a write in question)  
\*Not all survey participants completed all portions of the survey and may have omitted this question

	Recommendation #1	Recommendation #2	Recommendation #3
	Doctor/Psychiatrist/Counselor	New River/Individuals Counselors from NR	Clergy/Pastors/Friends
Wilkes 2009 CHA	173	141	137

**Table 14. Referral for Thoughts of Suicide as Chosen by the Survey Respondents**  
(Question 7 of the 2009 CHA which was a write in question)  
\*Not all survey participants completed all portions of the survey and may have omitted this question

	Recommendation #1	Recommendation #2	Recommendation #3
	Professional/Doctor/Counselor/Agency/Hotline	Pastor/Faith-Based Counselor/God/Jesus	Friends/Family/Someone who cares
Wilkes 2009 CHA			

**Table 15. Vaccines Up-to-Date as reported by the Survey Respondents**  
 (Question 8 of the 2009 CHA which was a check one question)  
 \*Not all survey participants completed all portions of the survey and may have omitted this question

	Choice #1 I keep my family's vaccines up to date	Choice #2 I do not know when they are due	Choice #3 Vaccines cost too much
Wilkes 2009 CHA	434	45	28

**Table 16. Awareness of Free Vaccinations at the Health Department as reported by the Survey Respondents**  
 (Question 9 of the 2009 CHA which was a yes or no question)  
 \*Not all survey participants completed all portions of the survey and may have omitted this question

	Yes	No	N/A
Wilkes 2009 CHA	317	180	5

**Table 17. Support of Tobacco-Free Environments reported by the Survey Respondents**  
 (Question 10 of the 2009 CHA which was a yes or no question)  
 \*Not all survey participants completed all portions of the survey and may have omitted this question

	Yes	No	N/A
Wilkes 2009 CHA	387	112	4

**Table 18. Recycling Information as reported by the Survey Respondents**  
 (Question 11 of the 2009 CHA which was a yes or no question)  
 \*Not all survey participants completed all portions of the survey and may have omitted this question

	Yes, we recycle	No, we do not recycle	N/A
Wilkes 2009 CHA	323	167	2

**Table 19. Top Environmental Health Concerns as reported by the Survey Respondents**  
 (Question 12 of the 2009 CHA which was a yes or no question)  
 \*Not all survey participants completed all portions of the survey and may have omitted this question

	Concern #1 Second- hand Smoke	Concern #2 Food Safety	Concern #3 Air Quality
Wilkes 2009 CHA	92	59	55

**Table 20. Over 50 with Colonoscopy as reported by the Survey Respondents**  
 (Question 13 of the 2009 CHA which was a yes or no question with write in if no)  
 \*Not all survey participants completed all portions of the survey and may have omitted this question

	No, not over 50	Yes	If no, why? (Answers: Cost, no insurance, do not need one.)
Wilkes 2009 CHA	274	132	98

**Table 21. Males Over 40 with Annual Prostate Exam as reported by the Survey Respondents**  
 (Question 14 of the 2009 CHA which was a yes or no question with write in if no)  
 \*Not all survey participants completed all portions of the survey and may have omitted this question

	No, not over 40	Yes	If no, why? (Answers: Cost, no insurance, do not want or need one.)
Wilkes 2009 CHA	140	52	51

**Table 22. Females Over 40 with Annual Mammogram as reported by the Survey Respondents**  
 (Question 15 of the 2009 CHA which was a yes or no question with write in if no)  
 \*Not all survey participants completed all portions of the survey and may have omitted this question

	Yes	Not over 40	If no, why? (Answers: Cost, no insurance, painful, lazy, can't take off from work, do not want or need one.)
Wilkes 2009 CHA	167	144	53

**Table 23. Females with Bi-Annual Pap smears as reported by the Survey Respondents**  
 (Question 16 of the 2009 CHA which was a yes or no question with write in if no)  
 \*Not all survey participants completed all portions of the survey and may have omitted this question

	Yes	No	If no, why? (Answers: I have one every year, cost, no insurance, had hysterectomy so I do not need it.)
Wilkes 2009 CHA	292	41	16

**Table 24. Most Often Used for Health Care when sick as reported by the Survey Respondents**  
 (Question 17 of the 2009 CHA which was a check one question)  
 \*Not all survey participants completed all portions of the survey and may have omitted this question

	Location #1: Private Doctor	Location #2: Health Department	Location #3: I do not go anywhere
Wilkes 2009 CHA	362	45	33

**Table 25. Location of yearly check-up or physical  
as reported by the Survey Respondents**

(Question 18 of the 2009 CHA which was a check all that apply question)

\*Not all survey participants completed all portions of the survey and may have omitted this question

	Location #1	Location #2	Location #3	Location 4
Wilkes 2009 CHA	Private doctor's office	OB/GYN or Women's Health Physician	Health department	Do not get a yearly physical

**Table 26. Location of Information about Events  
as reported by the Survey Respondents**

(Question 19 of the 2009 CHA which was a check all that apply question)

\*Not all survey participants completed all portions of the survey and may have omitted this question.

Numbers are based upon total times chosen, as individuals were asked to choose all that apply.

	Media Source #1: Newspaper	Media Source #2: TV	Media Source #3: Friends and Family
Wilkes 2009 CHA	400	296	257

## Section Six: Health Priorities

In December 2009, the survey results from the community health opinion surveys and data taken from NC-CATCH for the county of Wilkes were presented to key groups: the leadership team of the Wilkes County Health Department, the Wilkes County Board of Health and the Executive Committee of the Wilkes Healthy Carolinians Council. Discussions about prioritization began at that level. It was noted that the current priority areas including Access to Health Care, Fitness and Nutrition for Disease Prevention and Substance Abuse were still relevant to the community. This was based on the data presented within this document as well as the community opinion surveys, also summarized within this document.

The assessment was presented to the community-at-large at the 2009 Community Health Summit, attended by approximately 75 people, including agency leaders and staff, elected officials, consumers and faith community representatives. Attendees at this meeting are considered “stakeholders” either by their profession or their interest in public health that is indicated by their attendance. The keynote speaker was Dr. Ruth Petersen, Section Chief of the Chronic Disease and Injury Section of the NC Division of Public Health. Dr. Peterson emphasized the importance of local communities taking ownership of the preventable diseases and death by working together to put into action measures that have proven effective in other communities. The Health Department Health Promotion Coordinator presented the data to the group (presentation included in Appendix 3 of this report.) The Health Director then led a group discussion to validate the priority areas that were identified through the assessment and Mental Health was identified as a fourth priority for discussion and development. Breakout sessions on all four priorities were conducted that included understanding the current environment around the priorities in Wilkes and brainstorming for reasonable interventions and actions by the Wilkes Healthy Carolinians Council.

1. Substance Abuse including the unintentional poisonings that have placed Wilkes County within the top 3 for high frequency of deaths.
2. Access to Care which is a direct result of the dramatic increase in the unemployment rate which has increased those who are uninsured.
3. Obesity, including unhealthy eating and lack of physical activity for all age groups.
4. Mental Health which includes substance abuse, depression and suicide and the extreme lack of mental health services in our county for diagnosis and treatment

Priorities one through three are the same, or refinements of, priorities set by this group in 2005, which will continue Wilkes County’s ongoing work in addressing these issues. Priority four was added as a result of the Community Opinion Survey questions regarding Mental Health during the Health Summit as well as the drastic level of prescription substance abuse resulting in death due to unintentional poisonings.

## **Section Seven: Next Steps**

With the completion of this Community Health Assessment, Wilkes County will use all sources of data collected to implement and conduct programs that will improve the health of Wilkes County.

Utilizing the three current task force groups and working on the development of the fourth, the Wilkes Healthy Carolinians Council will develop interventions to address its list of priority health issues by:

1. Review of the progress that has been made on current goals;
2. Review of data from the 2009 Community Health Assessment;
3. Review of collective responses from the Community Health Opinion Survey;
4. Review of the information collected from the breakout sessions of the 2009 Community Health Summit;
5. Review of work on the selected priorities using a nominal group process;
6. Use of data from the NC-CATCH System to continue to monitor and identify geographic areas where the largest numbers of individuals are most affected by the problems they selected; and
7. Integration of data and development of targeted interventions that will prevent and treat priority health problems.

### **Wilkes County Health Department**

Under direction from the Board of Health, the Health Department will assure that strategic planning is updated to reflect the 2009 Community Health Assessment.

The Board of Health will utilize its community status and staff resources of the Wilkes County Health Department to advocate for and implement priority programs in collaboration with the Wilkes Healthy Carolinians Council. Information from State of the County Health Reports in the interim years will be utilized to monitor our community health with the goal of becoming increasingly better than the state and our recommended peer counties in as many areas as possible. The pending results from county health rankings within our state will also be used in the future.

### **For Future Use**

In conducting the 2013 Community Health Assessment, questions will begin formulation as current topics are being addressed. To deepen and broaden our understanding of community health needs, the Wilkes County Health Department and the Wilkes Healthy Carolinians Council will seek answers to current questions and gather new questions to be included within the next survey. Using the tool of NC-CATCH to analyze and map data, discussion and formulation of persistent and new questions for the next Community Health Assessment will also occur.

The Wilkes County Health Department and the Wilkes Healthy Carolinians Council will work to engage the community in discussions and deliberations about health care needs. Among the questions we will ask in relation to the 2009 survey will be: (1) Why are poor health/low income respondents not able to secure primary care services? (2) Why does Wilkes County have a high incidence rate for heart disease and cancer of the lung and bronchus? (3) Why does

Wilkes County have a high rate of suicide and unintentional poisonings? (4) Why does Wilkes County have a high rate of women who smoke when pregnant? WCHD will continue to provide the Wilkes County partner agencies and local governments with information for strategic planning, program planning and grant applications. The 2013 survey design will enable health department staff to analyze data by a number of variables, including the gender, age and residence as did the 2009 survey. To promote community use of the Community Health Assessment, the Wilkes County Health Department and the Wilkes Healthy Carolinians Council will post the 2009 report on their websites, place copies at the local public library and will develop and distribute a brochure summarizing assessment findings and how community members can obtain more detailed data. Other possible areas of distribution for the 2009 Community Assessment would be the utilization of the weekly local radio segment known as "Focus on The Foothills," to highlight specific topics for the general listener.

Finally, the Wilkes Healthy Carolinians Council will work on an "executive summary" of the 2009 Community Health Assessment for easy review by the average community member, which will be more broadly distributed.

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**2009  
Community Opinion Survey**

**Conducted by the  
Wilkes County Health Department  
and  
Wilkes Healthy Carolinians**

1. In your opinion, what is the biggest health issue(s) of concern in your community?  
\_\_\_\_\_
  
2. The recommendation for physical activity is 30 minutes a day 5 days a week (2 ½ hours per week). Pick the **main** reason that keeps you from getting this much physical activity. (Check one.)
 

<input type="checkbox"/> Nothing. I get this much physical activity.	<input type="checkbox"/> I don't have time to exercise.
<input type="checkbox"/> I feel like I get this at my work.	<input type="checkbox"/> It costs too much to exercise.
<input type="checkbox"/> I am physically disabled.	<input type="checkbox"/> I don't like exercise.
<input type="checkbox"/> There is no safe place to exercise.	<input type="checkbox"/> Other _____
  
3. One recommendation for healthy eating is to eat at least 5 servings of fruits and vegetables a day (not French fries or potato chips). Pick the **main** reason that keeps you from eating this way. (Check one.)
 

<input type="checkbox"/> Nothing. I eat 5 or more servings a day.	<input type="checkbox"/> I just don't think about it.
<input type="checkbox"/> I (or my family) won't eat them.	<input type="checkbox"/> I don't have time to fix them.
<input type="checkbox"/> I don't know how to prepare them.	<input type="checkbox"/> They're too expensive.
<input type="checkbox"/> They go bad before we eat them.	<input type="checkbox"/> Other _____
<input type="checkbox"/> I don't think they are important.	
  
4. What are the top 3 biggest substance abuse problems in this county? (Rank 1 to 3 with 1 as the biggest problem)
 

<input type="checkbox"/> Abusing prescription drugs/pills	<input type="checkbox"/> Marijuana
<input type="checkbox"/> Alcohol abuse	<input type="checkbox"/> Methamphetamine (Meth)
<input type="checkbox"/> Drinking and driving	<input type="checkbox"/> Other hard drugs (cocaine, crack, heroin)
<input type="checkbox"/> Huffing (inhaling glue, Dust-off, Whiteout)	<input type="checkbox"/> Using someone else's prescription drugs/pills
<input type="checkbox"/> Other _____	<input type="checkbox"/> I really don't know.
  
5. To prevent teen pregnancy and sexually transmitted diseases, which of the following should be taught in school? (Check one.)
 

<input type="checkbox"/> Abstinence until marriage
<input type="checkbox"/> Comprehensive sex education (including abstinence and other birth control methods)
<input type="checkbox"/> None of the above
  
6. If a friend or family member needed counseling for a mental health problem, who would you tell them to call or talk to? \_\_\_\_\_
  
7. If a friend or family member were thinking about suicide, who would you tell them to call or talk to?  
\_\_\_\_\_
  
8. What is the **main** reason that you or your family would not be up-to-date on vaccines? (Check one)
 

<input type="checkbox"/> I keep me and my family's vaccines up-to-date at the health department or at my doctor's office.	<input type="checkbox"/> I am afraid of possible side effects.
<input type="checkbox"/> Vaccines cost too much.	<input type="checkbox"/> I believe the vaccines cause the disease.
<input type="checkbox"/> I don't want to see my child in pain.	<input type="checkbox"/> I don't know when they are due.
<input type="checkbox"/> I have religious reasons.	

Please return the completed survey to the Wilkes County Health Department or the Healthy Carolinians that provided you with this information. For additional information, contact the Health Promotions Department at (336) 651-7457 or by email at [dshumate@wilkescounty.net](mailto:dshumate@wilkescounty.net). Surveys may also be mailed to WCHD/ CHA Survey 306 College Street, Wilkesboro, NC 28697.

- \_\_\_ Other \_\_\_\_\_
9. Did you know before now that your child can receive free school-required vaccines at the health department up to age 18?     \_\_\_ Yes                             \_\_\_ No
10. Do you support tobacco-free environments such as restaurants, workplaces, community colleges and other public areas?     \_\_\_ Yes                             \_\_\_ No
11. Do you and your family recycle?     \_\_\_ Yes                             \_\_\_ No  
If no, why not? \_\_\_\_\_
12. Which of the following Environmental Health concerns do you believe **most** affects your health? (Check one)
- |                    |                             |                           |
|--------------------|-----------------------------|---------------------------|
| ___ Drinking water | ___ Fluoride-enriched water | ___ Food safety           |
| ___ Mold           | ___ Ozone                   | ___ Rabies                |
| ___ Radon          | ___ Recycling               | ___ Second hand smoke     |
| ___ Lead exposure  | ___ Drought                 | ___ Septic system failure |
| ___ Meth labs      | ___ Air quality             |                           |
| ___ Other _____    |                             | ___ None of the above     |
13. If you are over age 50, have you ever had a colonoscopy?  
\_\_\_ Yes     \_\_\_ No     If no, why not? \_\_\_\_\_                             \_\_\_ I am not over age 50.
14. If you are a male over age 40, do you have an annual prostate exam? (Females skip to question 15)  
\_\_\_ Yes     \_\_\_ No     If no, why not? \_\_\_\_\_                             \_\_\_ I am not over age 40.
15. If you are a female over age 40, do you have an annual mammogram? (Males skip to question 17)  
\_\_\_ Yes     \_\_\_ No     If no, why not? \_\_\_\_\_                             \_\_\_ I am not over age 40.
16. If you are a female, do you have a pap smear at least every other year?  
\_\_\_ Yes     \_\_\_ No     If no, why not? \_\_\_\_\_
17. Where do you go **most often** for health care when you are sick? (Check one)
- |   |                        |                    |
|---|------------------------|--------------------|
| ___ Private Doctor's office             | ___ Health department  | ___ Free Clinic    |
| ___ Hospital                            | ___ Urgent Care Center | ___ Walk-in Clinic |
| ___ Pharmacy                            | ___ Other _____        |                    |
| ___ I don't go anywhere when I am sick. |                        |                    |
18. Where do you go when you need your yearly check-up or physical? (Check **all** that apply)
- |  |                        |                    |
|--|------------------------|--------------------|
| ___ Private Doctor's office                                | ___ Health department  | ___ Free Clinic    |
| ___ Hospital   | ___ Urgent Care Center | ___ Walk-in Clinic |
| ___ OB/GYN or Women's Health Provider                      | ___ Other _____        |                    |
| ___ I don't go anywhere for a yearly check-up or physical. |                        |                    |
19. Where do you find out about local news or events? (Check **all** that apply)
- |                   |                        |              |
|-------------------|------------------------|--------------|
| ___ Billboards    | ___ Blogs              | ___ Church   |
| ___ Email updates | ___ Friends and family | ___ Internet |
| ___ Magazines     | ___ Newspapers         | ___ Radio    |

Please return the completed survey to the Wilkes County Health Department or the Healthy Carolinians that provided you with this information. For additional information, contact the Health Promotions Department at (336) 651-7457 or by email at [dshumate@wilkescounty.net](mailto:dshumate@wilkescounty.net). Surveys may also be mailed to WCHD/ CHA Survey 306 College Street, Wilkesboro, NC 28697.



## II. Distribution List for 2009 CHA Surveys

<b>Update on Community Health Assessment June 15, 2009</b> The following locations have been chosen as Convenience survey distribution locations for the 2009 Community Health assessment survey. Locations were chosen by the Survey Distribution Team in an effort to obtain the proper demographic mix based upon Community Population by Race estimates.	
Wilkes Senior Center	ABC Stores (Wilkesboro & No. Wilkesboro)
Wilkes County Library	Journal Patriot Office in North Wilkesboro
Wilkesboro Town Hall and Councilmen	Lawson's Mental Health Support
North Wilkesboro Town Hall	Salvation Army of Wilkes
Our House	The Village of Wilkes Long-Term Care Center
United Way of Wilkes	Britthaven of Wilkes Long-Term Care Center
Wilkes County Court House	Black Beauty Hair Salon
Wilkes County Animal Shelter	Wilkes Regional Medical Center Employees
Dept. of Transportation on Brushy Mtn. Road	Wilkes County Emergency Medical Services
Artistic Beauty Academy	Public Health Clients (including Hispanic version of Survey)
Byrd Ridge Road Food Pantry	Wilkes County Office Employees
Wilkesboro Police Department	Wilkes Community College Students and Faculty
North Wilkesboro Police Department	Smart Start
Wilkes Cooperative Extension	Local Physician's Office Employees and Patients
Wilkes County Board of Education	NC Highway Patrol (Wilkes Co Officers)

# III. Presentation from the 2009 Community Health Summit



Beth Lovette,  
Health Director/Chair of  
Wilkes County Healthy  
Carolinians  
Paul Hugger, Executive  
Director of Wilkes County  
Healthy Carolinians

Fred Brason,  
Chair of The Substance  
Abuse Task Force

Armando Limon, Chair of  
The Access for Care Task  
Force

Jared Belk,  
Chair of The Fitness and  
Nutrition Task Force

# WILKES COUNTY 2009 COMMUNITY HEALTH SUMMIT



Presented By:  
Donna Shumate  
Health Promotion Coordinator and  
Emergency Preparedness Coordinator

## WILKES COUNTY NORTH CAROLINA



## POPULATION CHARACTERISTICS

JULY 1, 2008 POPULATION ESTIMATES,  
RACE AND SEX PROJECTED FROM THE APRIL 1 2000 CENSUS

	Total	Race		Sex	
		White	Minority	Male	Female
<b>Total</b>	67,297	63,968	3,329	33,384	33,913
0-4	3,960	3,731	229	2,033	1,927
5-9	4,276	4,047	229	2,200	2,076
10-14	4,108	3,853	255	2,135	1,973
15-19	4,190	3,951	239	2,122	2,068
20-24	4,165	3,954	211	2,095	2,070
25-29	3,782	3,575	207	1,978	1,804
30-34	3,899	3,747	152	2,028	1,871
35-39	4,750	4,510	240	2,500	2,250
40-44	4,730	4,488	242	2,417	2,313
45-49	5,114	4,874	240	2,588	2,526
50-54	5,006	4,763	243	2,520	2,486
55-59	4,606	4,392	214	2,232	2,374
60-64	4,114	3,940	174	1,969	2,145
65-69	3,323	3,192	131	1,571	1,752
70-74	2,647	2,535	112	1,211	1,436
75-79	2,022	1,944	78	850	1,172
80-84	1,378	1,311	67	566	812
85&UP	1,227	1,161	66	369	858

## POPULATION ESTIMATES BY MUNICIPALITIES

Population Estimates by Wilkes County Municipalities 2000 and 2008			
Geographic Area	Census 2000	Census 2008	Approximate Percent Growth
North Carolina	8,049,313	9,222,414	14.5%
Wilkes County	65,632	67,297	1.02%
Cricket 28659	2,053	-----	N/A
Fairplains 28659	2,051	-----	N/A
Hays 28635	1,731	-----	N/A
Millers Creek 28651	2,071	-----	N/A
Moravian Falls 28654	1,440	-----	N/A
Mulberry 28659	2,269	-----	N/A
North Wilkesboro 28659	4,116	4,158	1%
Pleasant Hill 27866	1,109	-----	N/A
Ronda 28670	460	456	N/A
Wilkesboro 28697	3,159	3,140	-0.6%

# ECONOMY

Manufacturing is the largest industry in Wilkes County. Retail trade, health care, social assistance, accommodation, food services are second, third and fourth. Table shows Wilkes County's top employers.

Rank	Company	Industry	Employment Range
1	Tyson Farms Inc	Manufacturing	1,000+
2	Wilkes County Board Of Education	Education & Health Services	1,000+
3	Lowe's Companies Inc	Professional & Business Services	1,000+
4	Wilkes Regional Medical Center	Education & Health Services	500-999
5	Wilkes County	Public Administration	500-999
6	Wilkes Community College	Education & Health Services	250-499
7	Lowes Home Centers Inc	Trade, Transportation, & Utilities	250-499
8	Louisiana-Pacific Corporation Talx	Manufacturing	250-499
9	Compucredit Corporation	Financial Activities	250-499
10	East Coast Millwork Dist Inc	Trade, Transportation, & Utilities	250-499
11	Tyson Poultry Inc	Manufacturing	250-499
12	N C Department Of Transportation	Public Administration	250-499
13	Wal-Mart Associates Inc	Trade, Transportation, & Utilities	250-499

# UNEMPLOYMENT RATES FOR WILKES COUNTY

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009*
<b>Wilkes</b>	3.6%	6.1%	8.3%	7.4%	6.1%	5.6%	5.4%	5.4%	8.0%	12.9%
<b>N.C.</b>	3.7%	5.6%	6.6%	6.5%	5.5%	5.3%	4.8%	4.7%	6.3%	10.8% †

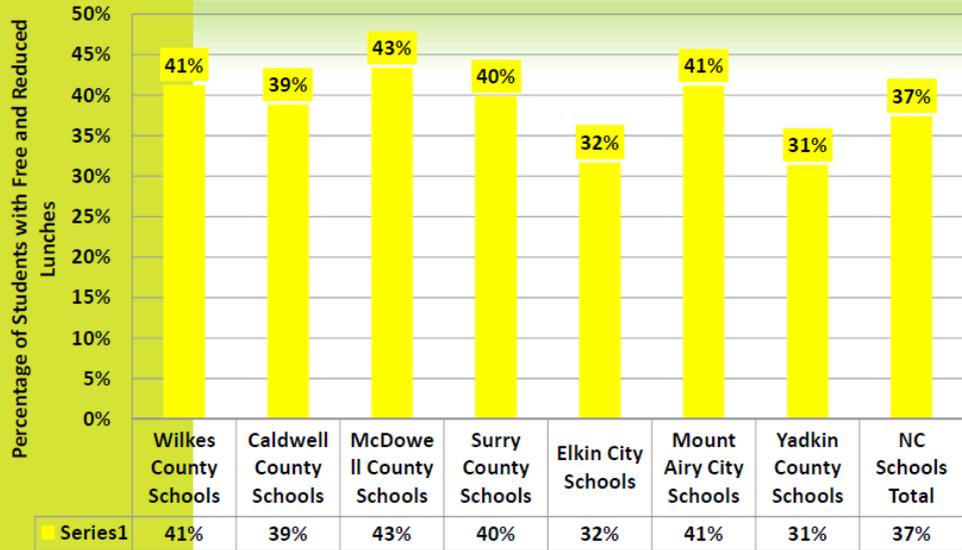
CURRENT ESC WORKFORCE INFORMATION  
 FROM  
 WILKES COUNTY  
 AS OF  
 DECEMBER 8, 2009

- ⊙ County Labor Force : **30,293**
- ⊙ Number Of Unemployed : **4,068**
- ⊙ County Unemployment Rate : 13.4% (Oct 2009)
- ⊙ 3 Months Ago    6 Months Ago    12 Months Ago  
                   **13.1%**            **12.4%**            **8.2%**
- ⊙ Unemployment Insurance (UI) Benefits Paid in  
     Wilkes County :  
     Last 30 Days : **\$2,247,093**  
     Year-To-Date : **\$18,502,661**

## HOUSEHOLD INCOME

Subject	Households
Total	26,205
Less than \$10,000	10.4%
\$10,000 to \$14,999	8.5%
\$15,000 to \$24,999	15.6%
\$25,000 to \$34,999	14.8%
\$35,000 to \$49,999	13.3%
\$50,000 to \$74,999	19.7%
\$75,000 to \$99,999	10.5%
\$100,000 to \$149,999	5.5%
\$150,000 to \$199,999	0.7%
\$200,000 or more	0.7%
Median income	\$35,649
Mean income	\$46,513

## FREE AND REDUCED SCHOOL LUNCHES



## EDUCATION

Subject	Total
Population 18 to 24 years	4,735
Less than high school graduate	21.3%
High school graduate (includes equivalency)	39.6%
Some college or associate's degree	33.6%
Bachelor's degree or higher	5.6%
Population 25 years and over	47,032
Less than 9th grade	11.8%
9th to 12th grade, no diploma	18.3%
High school graduate (includes equivalency)	33.0%
Some college, no degree	17.7%

## EDUCATION CONTINUED

Population 25 years and over	47,032
Associate's degree	8.3%
Bachelor's degree	8.2%
Graduate or professional degree	2.8%
Percent high school graduate or higher	69.9%
Percent bachelor's degree or higher	11.0%

## HIGH SCHOOL DROPOUT RATES FOR WILKES COUNTY

School	2003-04		2004-05		2005-06		2006-07		2007-08	
	#	Rate								
Wilkes County Schools	224	7.15	223	7.14	189	6.14	189	6.12	211	6.81
NORTH CAROLINA	20,035	4.86	20,175	4.74	22,180	5.04	23,550	5.24	22,434	4.97

# HEALTH INSURANCE

The percentage of people without health insurance coverage is growing at a faster rate in North Carolina than in most of the rest of the country. In Wilkes County the current population is estimated to be around 67 thousand people and around 13 thousand non-elderly county residents are estimated to be without health insurance coverage.

	Wilkes	McDowell	Surry	State
% Estimate of uninsured Age 0-17	11.3	11.8	13.5	12.4
% Estimate of uninsured Age 18-64	18.6	19.8	20.8	21.1
% Estimate of uninsured Age 0-64	16.7	17.7	18.8	18.6

# LEADING CAUSES OF DEATH FOR WILKES AND NORTH CAROLINA

NC Catch 2007

Wilkes Rank	Cause	Wilkes Number	%	State Number	%	State Rank
1	Cancer	154	22.8	17424	23.3	2
2	Diseases of heart	140	20.6	17479	23.4	1
3	Chronic lower respiratory diseases	47	7.0	4228	5.7	4
4	Cerebrovascular diseases	32	4.7	4332	5.8	3
5	Motor vehicle injuries	27	4.0	1784	2.4	8
6	All other unintentional injuries	28	3.8	2503	3.4	5
7	Influenza and pneumonia	22	3.3	1642	2.2	10
8	Alzheimer's disease	21	3.1	2449	3.3	6
9	Septicemia	17	2.5	1026	1.4	-
10	Intentional self-harm (suicide)	16	2.4	1074	1.4	-
	All other causes (Residual)	175	25.8	18992	25.3	
	<b>Total Deaths -- All Causes</b>	<b>679</b>	<b>100.0</b>	<b>74696</b>	<b>100</b>	

CHA Data 2005  
compared to CHA  
Data 2009

## LEADING CAUSES OF DEATH FOR WILKES AND NORTH CAROLINA

2003 Data Used for 2005 CHA	2007 Data Used for 2009 CHA
Heart Disease	Cancer
Cancer (All types)	Diseases of heart
Cerebrovascular Disease	Chronic lower respiratory diseases
Chronic Lower Respiratory Disease	Cerebrovascular diseases
Unintentional Injuries	Motor vehicle injuries
Alzheimer's	All other unintentional injuries
Pneumonia and Influenza	Influenza and pneumonia
Motor Vehicle Injuries	Alzheimer's disease
Diabetes	Septicemia
Septicemia	Intentional self-harm (suicide)

NC Catch  
2005-2008

## ADOLESCENT HEALTH

Peers  
Caldwell  
McDowell  
Surry  
Yadkin

% of Live Births to  
Mothers Less Than  
Age 18



NC Catch 2008

Child Deaths  
(Ages 0-17) per  
100,000 Population



NC Catch 2007

2009  
CHA

# METHODS OF INFORMATION UTILIZED IN A COMMUNITY HEALTH ASSESSMENT

## Primary Data

- ⊙ A community survey
- ⊙ Stakeholder interviews

## Secondary Data

(NC Catch which includes)

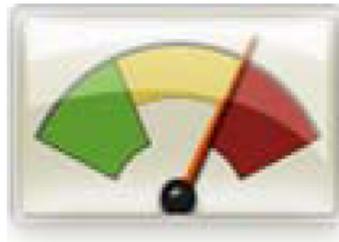
- ⊙ The 2000 US Census Bureau;
- ⊙ NC Department of Commerce
- ⊙ Employment Security Commission of NC
- ⊙ NC Department of Health and Human Services
- ⊙ Cecil B. Sheps Center for Health Services Research

NC Catch  
2005-2008

# ADOLESCENT HEALTH

Peers  
Caldwell  
McDowell  
Surry  
Yadkin

## Economically Disadvantaged (Free & Reduced Lunch) Needy Percentage



NC Catch 2006

NC Catch  
2005-2008

# ADOLESCENT HEALTH

Peers  
Caldwell  
McDowell  
Surry  
Yadkin

## Reduced Lunch



NC Catch 2006

## Free Lunch



NC Catch 2006

NC Catch  
2005-2008

# ADOLESCENT HEALTH

North Carolina  
Division of  
Mental  
Health, Develo  
pmental  
Disabilities and  
Substance  
Abuse Services

Peers  
Caldwell  
McDowell  
Surry  
Yadkin

## Estimated Persons with Severe Emotional Disturbance Age 0-17

Year	County	Peer Avg.	State
2007	1,546	1,398	219,149
2008	1,551	1,398	222,906

<http://www.dhhs.state.nc.us/MHDDSAS/> 2008

NC Catch  
2005-2008

# ADOLESCENT HEALTH

North Carolina  
Division of  
Mental  
Health, Develop-  
mental  
Disabilities and  
Substance  
Abuse Services

Peers  
Caldwell  
McDowell  
Surry  
Yadkin

## Estimated Youth with Substance Abuse Age 12-17

Year	County	Peer Avg.	State
2007	405	379	58,970
2008	402	369	57,885

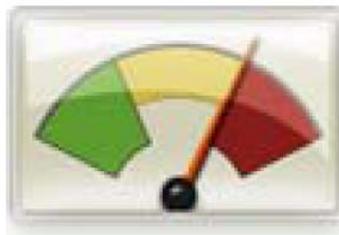
<http://www.dhhs.state.nc.us/MHDDSAS/> 2008

NC Catch  
2005-2008

# ADOLESCENT HEALTH

Peers  
Caldwell  
McDowell  
Surry  
Yadkin

## Medicaid Eligible Age 0-20



State Center for Health Statistics 2007

NC Catch  
2005-2008

## CHRONIC DISEASES: CANCER

Cancer Deaths per  
100,000 Population



[http://en-us.nielsen.com/tab/product\\_families/nielsen\\_claritas](http://en-us.nielsen.com/tab/product_families/nielsen_claritas) 2007

NC Catch  
2005-2008

## CHRONIC DISEASES: CANCER

Peers  
Caldwell  
McDowell  
Surry  
Yadkin

Breast Cancer  
Deaths per 100,000  
Population



State Center for Health Statistics  
2007

Female Breast  
Cancer Cases per  
100,000 Female  
Population



State Center for Health Statistics  
2005

Breast cancer in the United States in 2009:  
It occurs in both men and women, although male breast cancer is rare.

In 2009, there have been Breast Cancer Deaths:  
40,170 (female); 440 (male)

NC Catch  
2005-2008

## CHRONIC DISEASES: CANCER

Peers  
Caldwell  
McDowell  
Surry  
Yadkin

Prostate Cancer  
Cases per 100,000  
Male Population



[http://www.cdc.gov/nchs/  
about/major/dvs/popbrid  
ge/popbridge.htm](http://www.cdc.gov/nchs/about/major/dvs/popbridge/popbridge.htm)  
2005

Prostate Cancer  
Deaths per 100,000  
Population



[http://www.schs.st  
ate.nc.us/SCHS/](http://www.schs.state.nc.us/SCHS/)  
2007

NC Catch  
2005-2008

## CHRONIC DISEASES: CANCER

Peers  
Caldwell  
McDowell  
Surry  
Yadkin

Total Cancer Cases (All Sites) per 100,000  
Population



State Center for Health Statistics

NC Catch  
2005-2008

## CHRONIC DISEASES: CARDIOVASCULAR

### Cardiovascular and Circulatory Diseases Discharges per 10,000 Population

Peers  
Caldwell  
McDowell  
Surry  
Yadkin



<http://www.schs.state.nc.us/SCHS/> 2006

NC Catch  
2005-2008

## CHRONIC DISEASES: CARDIOVASCULAR

### Heart Disease Deaths per 100,000 Population

### Heart Disease Discharges per 10,000 Population

Peers  
Caldwell  
McDowell  
Surry  
Yadkin



<http://www.schs.state.nc.us/SCHS/> 2007

<http://www.schs.state.nc.us/SCHS/> 2006

NC Catch  
2005-2008

## CHRONIC DISEASES: CARDIOVASCULAR

Peers  
Caldwell  
McDowell  
Surry  
Yadkin

Cerebrovascular  
Disease Deaths per  
100,000 Population



<http://www.schs.state.nc.us/SCHS/> 2007

Cerebrovascular  
Disease Discharges per  
10,000 Population



<http://www.schs.state.nc.us/SCHS/> 2006

NC Catch  
2005-2008

## CHRONIC DISEASES: DIABETES

Peers  
Caldwell  
McDowell  
Surry  
Yadkin

⊙ Diabetes Deaths  
per 100,000  
Population



<http://www.schs.state.nc.us/SCHS/>  
2007

Diabetes  
Discharges per  
10,000 Population



<http://www.schs.state.nc.us/SCHS/>  
2006

NC Catch  
2005-2008

## CHRONIC DISEASES: OTHER

Alzheimer Disease Deaths per 100,000  
Population



<http://www.schs.state.nc.us/SCHS/> 2007

Peers  
Caldwell  
McDowell  
Surry  
Yadkin

NC Catch  
2005-2008

## CHRONIC DISEASES: OTHER

Chronic Liver  
Disease, Cirrhosis  
Discharges per  
10,000 Population



<http://www.schs.state.nc.us/SCHS/> 2007

Chronic Liver  
Disease, Cirrhosis  
Deaths per 100,000  
Population



<http://www.schs.state.nc.us/SCHS/> 2006

Peers  
Caldwell  
McDowell  
Surry  
Yadkin

NC Catch  
2005-2008

## CHRONIC DISEASES: RESPIRATORY

Peers  
Caldwell  
McDowell  
Surry  
Yadkin

Chronic Lower  
Respiratory Diseases  
Deaths per 100,000  
Population



Chronic Obstructive  
Pulmonary Disease  
Discharges per  
10,000 Population



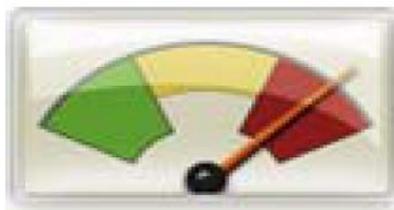
<http://www.schs.state.nc.us/SCHS/> 2007/2006

NC Catch  
2005-2008

## CHRONIC DISEASES: RESPIRATORY

Peers  
Caldwell  
McDowell  
Surry  
Yadkin

Respiratory Diseases Discharges per  
10,000 Population



<http://www.schs.state.nc.us/SCHS/> 2006

NC Catch  
2005-2008

## COMMUNICABLE/ INFECTIOUS DISEASE

Peers  
Caldwell  
McDowell  
Surry  
Yadkin

### ⊙ AIDS Discharges per 10,000 Population



<http://www.schs.state.nc.us/SCHS/> 2006

NC Catch  
2005-2008

## COMMUNICABLE/ STDs

Peers  
Caldwell  
McDowell  
Surry  
Yadkin

Gonorrhea rate per  
100,000 Population



NC HIV/STD Prevention  
& Care Branch

HIV Disease Deaths  
per 100,000  
Population



NC HIV/STD Prevention &  
Care Branch

NC Catch  
2005-2008

## COMMUNICABLE/ STDs

Peers  
Caldwell  
McDowell  
Surry  
Yadkin

HIV Disease rate per  
100,000 Population



NC HIV/STD Prevention  
& Care Branch

Primary & Secondary  
Syphilis rate per  
100,000 Population



NC HIV/STD Prevention  
& Care Branch

NC Catch  
2005-2008

## CRIME

Peers  
Caldwell  
McDowell  
Surry  
Yadkin

Aggravated assault



Burglary



<http://www.fbi.gov/> 2006

NC Catch  
2005-2008

# CRIME

## Index Crime



## Larceny-theft



Peers  
Caldwell  
McDowell  
Surry  
Yadkin

<http://www.fbi.gov/> 2006

NC Catch  
2005-2008

# CRIME

## Motor vehicle theft



## Murder



Peers  
Caldwell  
McDowell  
Surry  
Yadkin

<http://www.fbi.gov/> 2006

NC Catch  
2005-2008

# CRIME

Peers  
Caldwell  
McDowell  
Surry  
Yadkin

Property crime



Rape



<http://www.fbi.gov/> 2006

NC Catch  
2005-2008

# CRIME

Robbery



Violent crime



<http://www.fbi.gov/> 2006

# DEMOGRAPHICS

Estimate of Population within Wilkes County

Year	County	Peer Avg.	State
2006	67,444	58,288	8,719,727
2007	67,868	58,528	8,877,950

Estimate of Race within Wilkes County

White	62,149				
Black	2,801				
American Indian	136				
Other	2,782				

NC Catch 2005-2008

# DISABILITY

## % of Adults Who Report They are Disabled

Region Figures (Western North Carolina)

Year	Total	Yes	No
2004	1600	34.5	65.5
2005	1663	30.1	69.9
2006	1617	34.0	66.1
2007	2772	33.8	66.2
2008	2841	36.4	63.6

State Figures

Year	Total	Yes	No
2004	14601	30.2	69.8
2005	16779	28.0	72.0
2006	15154	31.7	68.3
2007	14153	31.0	69.0
2008	15384	31.7	68.3

NC Catch  
2005-2008

## ECONOMIC INDICATORS

**% Estimate of  
uninsured Age 0-17**



**% Estimate of  
uninsured Age 0-64**



2005-2006

NC Catch  
2005-2008

## ECONOMIC INDICATORS

**% Estimate of  
uninsured Age 18-64**



**% High School  
Dropout Information  
Grades 9-12**



2007

## ECONOMIC INDICATORS

**% Medicaid Births**



**% of Births to WIC Mothers**



2008

## INJURY AND VIOLENCE

⊙ **Injuries and Poisoning Discharges per 10,000 Population**



NC Catch  
2005-2008

## INJURY AND VIOLENCE

Intentional Self Harm  
(Suicide) per  
100,000 Population

Unintentional MVA  
Injury Deaths per  
100,000 Population



<http://www.schs.state.nc.us/SCHS/> 2007

NC Catch  
2005-2008

## INJURY AND VIOLENCE

Unintentional Non-MVA Injury Deaths per  
100,000 Population



<http://www.schs.state.nc.us/SCHS/> 2007

NC Catch  
2005-2008

## MEN'S HEALTH

Prostate Cancer  
Cases per 100,000  
Male Population



Prostate Cancer  
Deaths per 100,000  
Population



NC Catch  
2005-2008

## MENTAL HEALTH

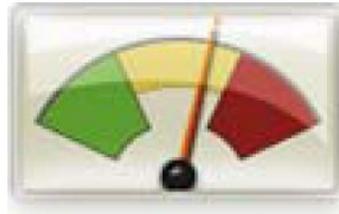
⊙ Intentional Self Harm (Suicide) per 100,000  
Population



NC Catch  
2005-2008

# REPRODUCTIVE HEALTH

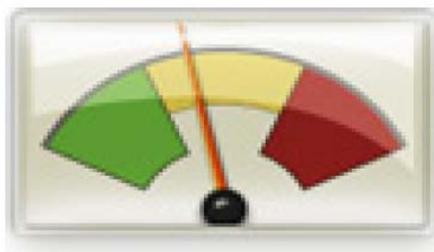
**% Live Births Delivered by Caesarean-Section**



NC Catch  
2005-2008

# REPRODUCTIVE HEALTH

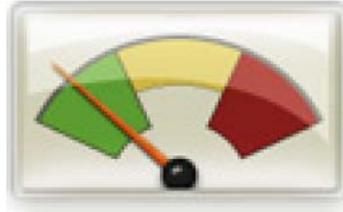
**% Live Births to Unmarried Mothers**



NC Catch  
2005-2008

# REPRODUCTIVE HEALTH

% of Births where Mothers Received  
Maternity Care Coordination



NC Catch  
2005-2008

# REPRODUCTIVE HEALTH

% of Births where Mothers Visited Local  
Health Dept



NC Catch  
2005-2008

## REPRODUCTIVE HEALTH

**% of Live Births Where the Mother  
Smoked During Pregnancy**



NC Catch  
2005-2008

## REPRODUCTIVE HEALTH

**Abortions per 1,000 Pregnancies**



NC Catch  
2005-2008

## TOBACCO AND SUBSTANCE USE

**% of  
Adults  
Who State  
They  
Currently  
Smoke**

### Region Figures (Western North Carolina)

Year	Total	Yes	No
2004	1633	25.4	74.6
2005	1998	23.0	77.0
2006	1660	24.3	75.7
2007	2890	23.6	76.4
2008	2326	24.4	75.6

### State Figures

Year	Total	Yes	No
2004	15003	22.5	77.5
2005	17183	22.6	77.4
2006	15569	22.1	77.9
2007	14734	22.9	77.1
2008	12898	20.9	79.1

2009  
CHA  
Surveys

## INFORMATION FROM OUR COMMUNITY

Top Health Concerns As Reported in the Community Surveys	Educational Choices for sex education
Obesity (Both adult and child)	Comprehensive Sex Education
Cancer	Abstinence
Drug Abuse (Precription)	None
Diabetes	

# INFORMATION FROM OUR COMMUNITY

## Other Findings of Interest Within the 522 Surveys

Most Families Keep Vaccinations Up To Date

Most See Private Doctors When Sick

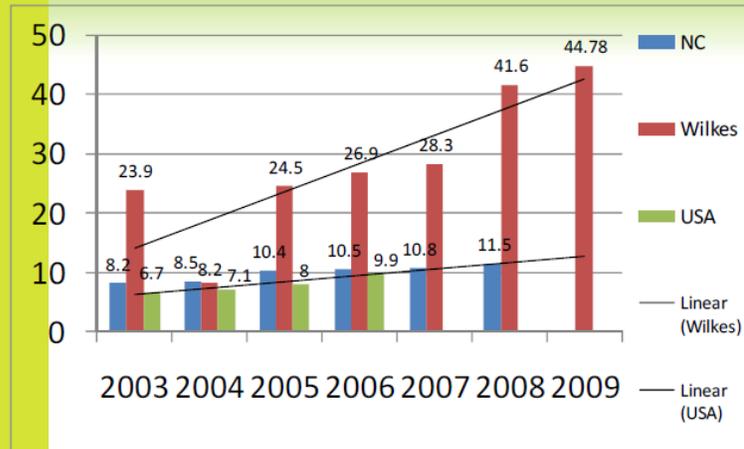
Newspaper, Radio, Internet, Billboards, and Friends and Families are the Main Ways of Communication

Most Surveys Were Completed By Females

Most Prevalent Income \$25,000 to \$34,999

## UNINTENTIONAL AND UNDETERMINED INTENT POISONING MORTALITY RATES: NC, WILKES AND SURRY COUNTIES, 2003-2008

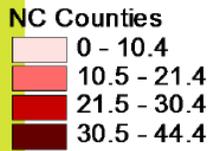
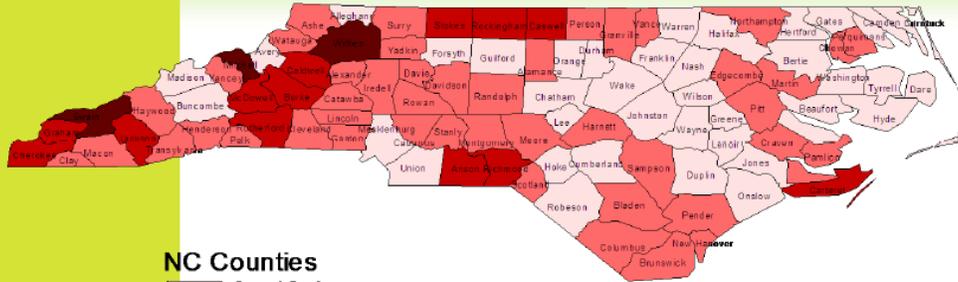
Mortality rate/100,000 population



Source: NC SCHS, August 2009

PREPARED BY C. SANFORD, 8/2009

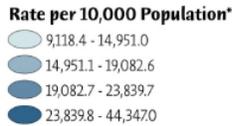
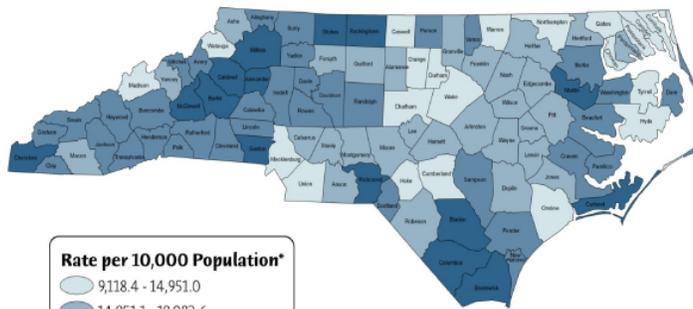
## North Carolina Resident unintentional and undetermined intent poisoning death rates 2008



\*Rates based on less than 10 deaths should be interpreted with caution

Project Lazarus is supported by Purdue Pharma, L.P., Grant # NED101356

## Rates of Out-Patient Prescriptions of Controlled Substances Dispensed in North Carolina by County, 2008



\*Note: Data is based on the total number of prescriptions, and may include multiple prescriptions per person.  
Source: NC Controlled Substances Reporting System.



PREPARED BY C. SANFORD, 8/2009



## **Purpose and Goals For Today's Summit**

- \*Gain A Greater Knowledge of The Wilkes Healthy Carolinians**
- \*Gain Knowledge of The Community's View of Health**
- \*View Actual Data In Reference To Health Issues Identified by NC**

AND...

**Begin To Formulate Plans To Correct Health Issues In Our Community!!**