2015 Wilkes County Community Health Assessment

Summary of Secondary Data Findings, Community Health Survey Results and Stakeholder Interview Results

November 17, 2015

Purpose of the Community Health Assessment

- Describe the health status of the community.
- Create a report that will serve as a resource for the Wilkes County Health Department, Wilkes Regional Medical Center, the Health Foundation, Inc., and other community organizations.
- Provide direction for the planning of disease prevention and health promotion services and activities.

Contributing Viewpoints

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

We Take Special Notice When...

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

Definitions and Symbols

Arrows

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

Color

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

Bold Type

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

Data Caveats

- Data sources presented among these slides are rudimentary, but are thoroughly cited in the supporting Data Workbooks.
- Most secondary data originated from authoritative sources in the public domain (e.g., US Census Bureau, US EPA, NC State Center for Health Statistics).
- Most data for Wilkes County is compared also to data for Surry County data (a state-sanctioned peer county) and data for North Carolina as a whole.
- All secondary data were mined at a point in time in the recent past, and may not represent present conditions. Numbers, entity names, program titles, etc. that appear in the data may no longer be current.

Demographic Data

General Population Characteristics

- The Wilkes County population has a slightly higher proportion of females than males.
- Median age of the Wilkes County population is 6.0 years older than NC average

July 1, 2014 US Census Bureau Estimate

Location	Total Population	Number Males	% Population Male	Median Age Males	Number Females	% Population Female	Median Age Females	Overall Median Age
Wilkes County	68,838	33,947	49.3	42.9	34,891	50.7	45.6	44.2
Surry County	72,968	35,693	48.9	41.4	37,275	51.1	44.4	43.0
State of NC	9,943,964	4,844,593	48.7	36.7	5,099,371	51.3	39.7	38.2

Population Growth

According to data from the NC Office of State
Budget and Management, the rate of population
growth in Wilkes County is expected to continue
to decline for the next two decades, remaining
well below the rate of growth for NC as a whole.

Pei	Percent Population Growth										
Decade	Wilkes County	State of NC									
1980-1990	1.3	12.8									
1990-2000	10.5	21.3									
2000-2010	5.6	18.5									
2010-2020	4.9	15.8									
2020-2030	4.6	12.9									

Minority Populations

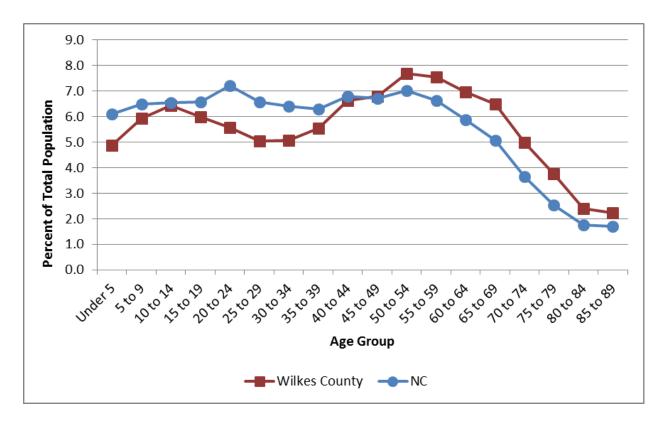
 Wilkes County has lower proportions of African Americans and Hispanics than NC as a whole.

Population Distribution by Race/Ethnicity July 1, 2014 US Census Bureau Estimate

	Percent of Overall Population									
Location	White Black AI/AN Asian		Asian	Multiple Races	Hispanic					
Wilkes County	93.3	4.5	0.4	0.5	1.3	5.8				
Surry County	93.4	4.1	0.6	0.8	1.1	10.1				
State of NC	71.5	22.1	1.6	2.8	2.1	9.0				

Population Age Distribution

 According to 2014 US Census Bureau estimates, compared to NC, Wilkes County has lower proportions of people in all age categories under age 44, and higher proportions of people in all age categories over age 44.



Growth of the Elderly Population

 According to figures from the NC Office of State Budget and Management, the population in every major age group age 65 and older in Wilkes County will increase between 2010 and 2030.

- **Age 65-74:** by 38%

— Age 75-84: by 73%

– Age 85+: by 60%

– Overall Age 65+: by 51%

 By 2030 estimates predict 18,472 persons age 65+ in Wilkes County.

Socioeconomic Data

Income

In Wilkes County (according to US Census Bureau figures):

- 2014 Per Capita Personal Income = \$19,492
 - \$5,792 below NC average
- 2014 Median Household Income = \$35,029
 - \$11,305 below NC average
- 2013 Median Family Income = \$42,083
 - \$14,845 below NC average

Household: all people in a housing unit sharing living arrangements; may or may not be related Family: householder and people living in household related by birth, marriage or adoption.

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

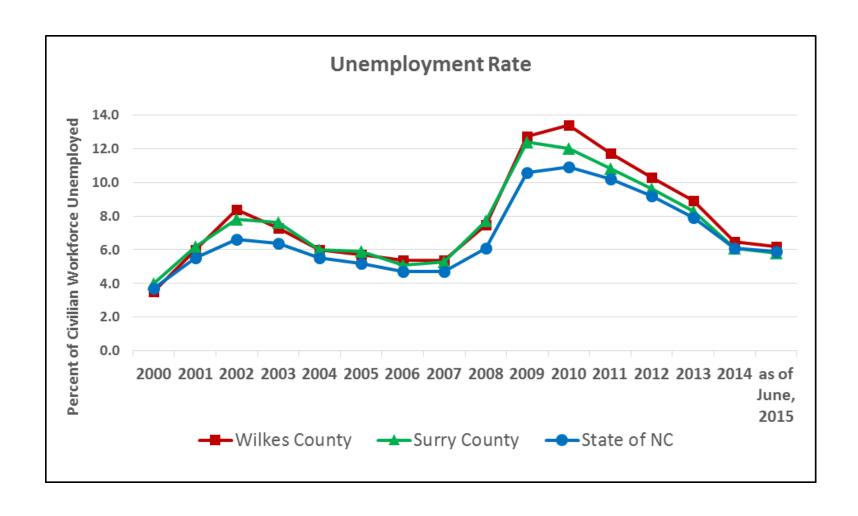
Employment

- According to NC Department of Commerce figures, in 2014 the three employment sectors in Wilkes County with the largest proportions of workers (and average weekly wages) were:
 - Manufacturing: 23.09% of workforce (\$673)
 - Retail Trade: 13.61% of workforce (\$454)
 - Health Care and Social Assistance: 12.84% of workforce (\$622)

Statewide in 2014 the largest employment sector was Health Care and Social Assistance (14.29%) at an average weekly wage of \$880 per employee.

Annual Unemployment Rate

(NC Department of Commerce Figures)



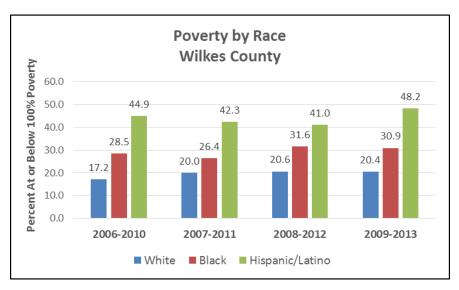
Overall Poverty Rate Trend

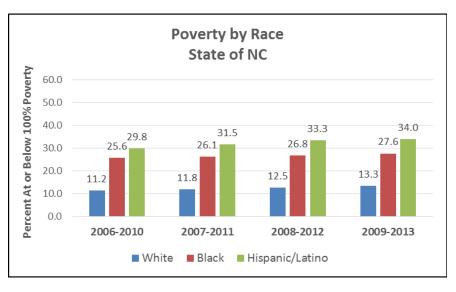
 According to US Census Bureau figures, the overall poverty rate in Wilkes County was higher than the comparable state and Surry County rates throughout the period cited.

1	Percent of All People in Poverty									
Location	2006-2010	2007-2011	2008-2012	2009-2013						
Wilkes County	19.2	21.7	22.4	22.7						
Surry County	16.9	18.0	18.3	19.9						
State of NC	15.5	16.1	16.8	17.5						

Poverty and Race

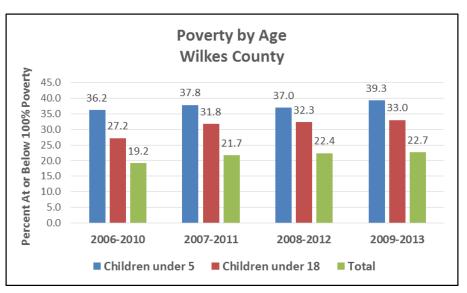
- According to US Census Bureau figures, the poverty rate among Hispanics in Wilkes County exceeded the comparable poverty rates for other groups throughout the period cited. In NC as a whole, the highest poverty rate over the period cited occurred among Hispanics.
- The poverty rates in all racial and ethnic groups in Wilkes County exceeded the comparable state rates.

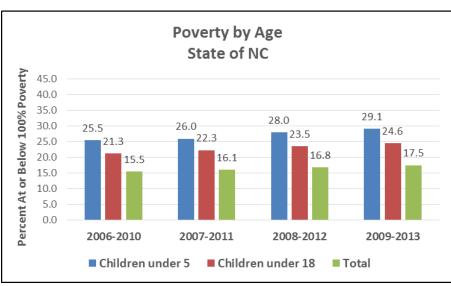




Poverty and Age

- According to US Census Bureau figures, the poverty rate among children in Wilkes County and NC exceeded the comparable poverty rates for the population as a whole throughout the period cited.
- The poverty rates for both <18 age groups in Wilkes County exceeded the comparable state rates.





Housing Costs

According to US Census Bureau figures:

 for 2009-2013, the estimated median monthly mortgage cost among Wilkes County homeowners = \$1,021.

\$260 less than the NC median

 for 2009-2013, the estimated median gross monthly rent among Wilkes County renters = \$573

\$203 less than the NC median

In Wilkes County for 2009-2013, approximately 54% of renters and 36% of mortgage-holders lived in a household paying > 30% of household income for housing. The comparable NC figures were 51% and 32%.

Children and Families

According to US Census Bureau figures for 2009-2013:

- There were 7,348 households in Wilkes County living with their own children under age 18.
 - 72% were headed by a married couple [NC = 65%]
 - 20% were headed by a female householder (no husband present) [NC = 27%]
 - 8% were headed by a male householder (no wife present) [NC = 8%]
- 67% of the estimated 1,649 Wilkes County grandparents living with their minor grandchildren *also* were financially responsible for their care. [NC = 49%]

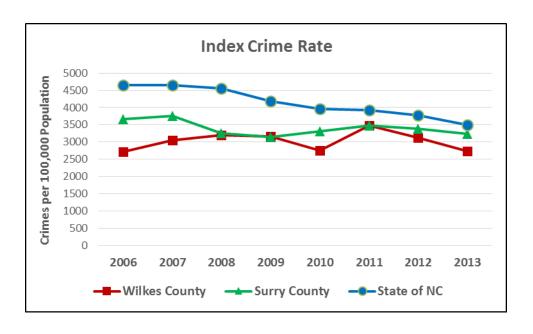
Educational Achievement and Investment

- Compared to the NC average, Wilkes County has:
 - 13% *lower* percentage of high school graduates (2009-2013)
 - 54% *lower* percentage of college graduates (2009-2013)
 - 25% lower HS drop-out rate (SY2013-2014)
 - 3% higher four-year cohort HS graduation rate (graduating in SY2014-2015 or earlier)
 - lower proficiency among 3rd and 8th graders on EOG reading and math tests (SY2013-2014)
 - 4% lower total per pupil expenditure (SY2013-2014)

Crime and Safety

Index Crime

- The "index crime rate" represents the sum of violent crime and property crime.
- According to data from the NC Department of Justice, the index crime rate in Wilkes County was lower than the comparable NC average in every year cited.



Crime and Safety

 According to data from the NC State Bureau of Investigation the crimes reported in Wilkes County in 2006-2013 were:

Type of Crime				Number	of Crime	S		
Type of Crime	2006	2007	2008	2009	2010	2011	2012	2013
Violent Crime	123	207	213	165	152	186	161	148
Murder	3	3	2	3	3	2	2	6
Rape	6	6	9	10	4	4	7	4
Robbery	19	29	29	26	23	25	22	22
Aggravated Assault	95	169	173	126	122	155	130	116
Property Crime	1,691	1,830	1,934	1,962	1,701	2,227	2,007	1,753
Burglary	553	622	678	799	607	696	620	571
Larceny	1,032	1,100	1,146	1,047	1,025	1,425	1,320	1,115
Motor VehicleTheft	106	108	110	116	69	106	67	67
Total Index Crimes	1,814	2,037	2,147	2,127	1,853	2,413	2,168	1,901

- Aggravated assault is the purposeful use of force, often involving a weapon, to inflict bodily harm.
- Larceny is theft of property without the use of force.

Crime and Safety

- According to the NC Department of Justice, of 14,469 registered sex offenders in NC in September 2015, 142 lived in Wilkes County.
- According to the NC Department of Justice, 143 clandestine methamphetamine lab busts took place in Wilkes County over the period 2005-2013. The number of busts in 2013 (50) was the highest among the 100 NC counties; the number in 2012 (59) was the second highest statewide.
- According to the NC Department of Crime Control and Public Safety, as of 2013 there were zero gangs reported in Wilkes County

Sexual Assault

 According to the NC Domestic Violence Commission, the number of individuals filing sexual assault claims increased dramatically in Wilkes County after FY2008-2009.

Location		No. of Individuals Filing Complaints ("Clients")											
	FY2004-05	FY2005-06	FY2006-07	FY2007-08	FY2008-09	FY2009-10	FY2010-11	FY2011-12	FY2012-13	FY2013-14			
Wilkes County	n/a	37	20	32	28	66	45	29	58	39			
Surry County	0	n/a	n/a	n/a	n/a	n/a	n/a	n/a	11	9			
State of NC	8,564	8,721	7,444	6,527	8,494	13,392	13,881	13,214	12,971	13,736			

- In 2013-2014 the most commonly reported type of sexual assault in Wilkes County was adult rape (49%). Statewide the most common complaint was child sexual offense (26%)
- In 2013-2014 the most frequently reported offender was an acquaintance. Statewide the most frequently reported offender was a relative.

Domestic Violence

 According to the NC Domestic Violence Commission, the number of individuals filing domestic violence claims in Wilkes County averaged 636 between FY2004-05 and FY2013-14.

Location		No. of Individuals Filing Complaints ("Clients")											
	FY2004-05	FY2005-06	FY2006-07	FY2007-08	FY2008-09	FY2009-10	FY2010-11	FY2011-12	FY2012-13	FY2013-14			
Wilkes County	557	551	584	567	624	683	637	580	869	712			
Surry County	108	105	83	305	297	458	454	57	681	482			
State of NC	50,726	48,173	47,305	41,787	51,873	66,320	61,283	51,563	57,345	55,274			

- The domestic violence shelter serving Wilkes County was full on 69 days in FY2013-2014.
- There were seven homicides attributable to domestic violence in Wilkes County over the period 2008 through 2013.

Child Maltreatment

According to Child Welfare data from the Social Services
Data Warehouse at UNC, the numbers of children subject
to abuse, neglect, or abuse and neglect in Wilkes County
have fluctuated over time without pattern. Neglect only
cases composed the most common type of child
maltreatment over the period cited.

Category	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
Total No. of Findings of Abuse, Neglect, Dependency	83	64	35	26	34	55
No. Substantiated ¹ Findings of Abuse and Neglect	2	5	6	2	6	16
No. Substantiated Findings of Abuse	10	1	0	0	2	2
No. Substantiated Findings of Neglect	71	58	29	24	26	37
Services Needed	19	36	38	54	64	38
Services Recommended	45	19	10	50	53	42
No. Unsubstantiated Findings	234	123	129	77	57	99
Services Not Recommended	90	100	181	249	210	227

¹ A "substantiated" report of child abuse, neglect or exploitation indicates that the investigation supports a conclusion that the subject child(ren) was/were abused, neglected, or exploited.

Health Resources

Health Insurance

 US Census Bureau data demonstrates that the percent uninsured in Wilkes County fluctuated without pattern in all age groups over the period shown.

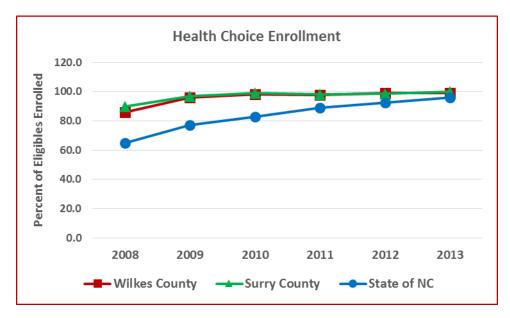
Percent of Population Without Health Insurance, by Age Group

Location	2011				2012		2013			
Location	0-18	19-64	0-64	0-18	19-64	0-64	0-18	19-64	0-64	
Wilkes County	7.1	25.4	20.5	7.9	26.6	21.6	7.4	25.3	20.5	
Surry County	8.9	25.9	21.1	9.1	27.0	22.0	7.5	25.1	20.2	
State of NC	7.9	23.0	18.7	7.9	23.4	19.0	6.9	22.5	18.1	

• The age group 0-18 tends to have a lower percentage of uninsured than the 19-64 age group, due partly at least to NC Health Choice.

NC Health Choice Enrollment

 Data from the NC Division of Medical Assistance shows that the percent of eligible children enrolled in NC Health Choice in all three jurisdictions increased between 2008 and 2013.



Medicaid Eligibility

- The total number of people in Wilkes County eligible for Medicaid increased annually in most years from 2008 through 2013.
- The programs with the largest numbers of eligibles were Infants & Children and ADFC.

Wilkes County Medicaid-Eligibles by Program Area

		Number of Eligibles												
Year	Aged	Blind	Disabled	ADFC	Foster Care	Pregnant Women	Infants & Children	Medicaid CHIP	Medicare Catastrophic	Refugees Aliens	ВСС	Total Eligibles		
2008	1,378	20	2,182	2,412	136	254	4,440	372	665	5	0	11,864		
2009	1,340	19	2,245	2,754	140	215	4,782	338	706	2	0	12,541		
2010	1,372	24	2,266	2,702	155	250	5,006	310	788	7	1	12,881		
2011	1,332	22	2,333	2,593	172	218	5,196	369	846	9	3	13,093		
2012	1,284	24	2,359	2,460	175	223	5,242	348	888	16	1	13,020		
2013	1,280	22	2,432	2,385	206	233	5,263	355	934	16	2	13,128		

Health Care Practitioners

- 2012 ratios of active health professionals per 10,000 population were *lower* in Wilkes County than NC for:
 - MDs: 11.90 (NC=22.31)
 - Primary Care MDs: 5.88 (NC=7.58)
 - Dentists: 2.58 (NC=4.51)
 - Registered Nurses: 62.93 (NC=98.56)
 - Pharmacists: 5.73 (NC=10.06)
- These ratios from the Sheps Center for Health Services Research do not take into consideration medical practitioners in neighboring counties accessible to Wilkes County residents.

Long-Term Care Facilities

According to data from the NC Division of Health Services Regulation, the number of beds in NC-licensed long-term care facilities in Wilkes County as of September, 2015 were:

- Adult Care Homes/Homes for the Aged (2): 201 beds
- Family Care Homes (1): 6 beds)
- Nursing Homes/Homes for the Aged (3): 407 beds
- Total: 614 beds, or 1 bed for every 22 persons age 65 and older (2014 US Census Bureau estimate). With no new beds, the ratio in 2030 could be as high as 1:30 (2030 NC Office of State Budget and Management population estimate).

Health Statistics

Health Rankings

- According to America's Health Rankings (2014)
 - NC ranked 37th overall out of 50 (where 1 is "best")
- According to County Health Rankings (2015) for NC, Wilkes County was ranked:
 - 67th overall out of 100 (where 1 is best) for health outcomes
 - 66th in length of life
 - 64th for quality of life
 - 61st overall out of 100 for *health factors*
 - 68th for health behaviors
 - 68th for clinical care
 - 54th for social and economic factors
 - 66th for physical environment

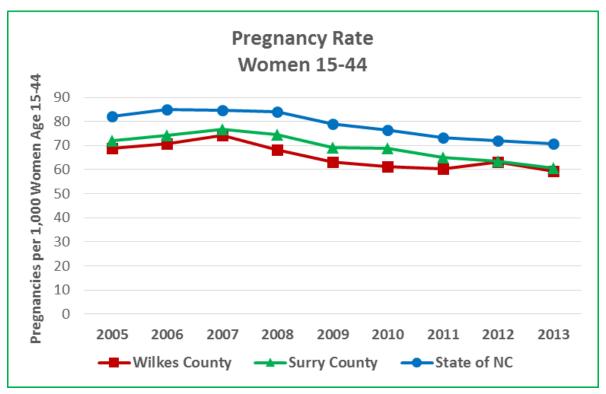
Maternal and Infant Health

(All data from the NC State Center for Health Statistics unless otherwise cited.)

Pregnancy Rate

Pregnancies per 1,000 Women Age 15-44

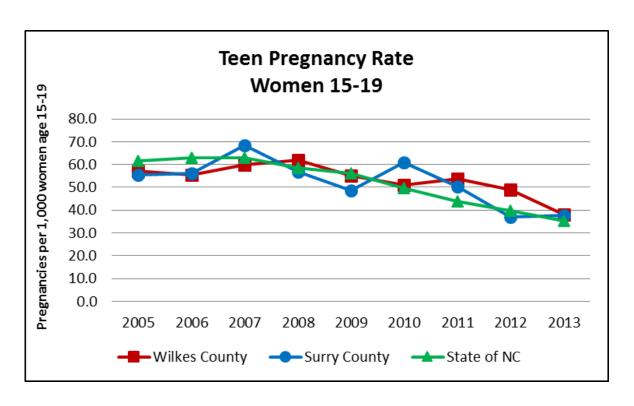
 The total pregnancy rates in Wilkes County, Surry County and NC have fallen overall since 2008.



Pregnancy Rate

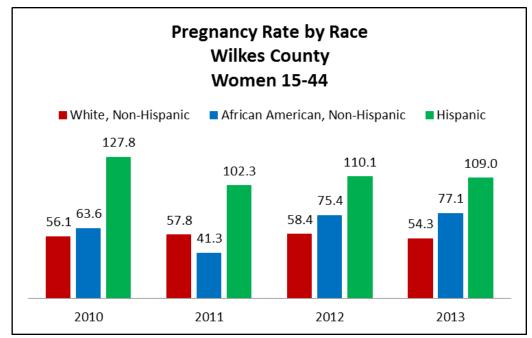
Pregnancies per 1,000 women Age 15-19 (Teens)

 The teen pregnancy rates in Wilkes County, and NC have fallen significantly since 2008, and appear to be falling still. Rates in Surry County have been variable.



Pregnancy Rate By Race/Ethnicity

 Among Wilkes County women age 15-44 the highest pregnancy rates appear to occur usually among Hispanics.
 Racially- and ethnically-stratified pregnancy data for the teen age group (15-19) are below threshold and do not yield stable reportable rates.



Pregnancy Risk Factors Smoking During Pregnancy

- According to NC Vital Statistics data, the percentage of Wilkes County women who smoked during pregnancy was lower in 2013 than in 2011 or 2012. Comparable percentages for the state did not change significantly over the same period.
- Wilkes County had a higher percentage of smoking during pregnancy than its comparators in 2012.

County	Percent of Births to Mothers Who Smoked While Pregnant					
	2011	2012	2013			
Wilkes County	23.2	24.5	18.9			
Surry County	23.5	20.8	21.4			
State of NC	10.9	10.6	10.3			

Pregnancy Risk Factors Prenatal Care

- According to data in the NC Baby Book, the percentage of Wilkes County women who received early prenatal care was lower in 2013 than in 2011 or 2012. Comparable percentages for the state did not change significantly over the same period.
- Wilkes County had higher percentages of early prenatal care than its comparators in 2011 and 2012.

County	Percent of Pregnancies Receiving Prenatal Care in 1st Trimester					
	2011	2012	2013			
Wilkes County	78.3	81.1	77.1			
Surry County	74.6	76.8	81.5			
State of NC	71.2	71.3	70.3			

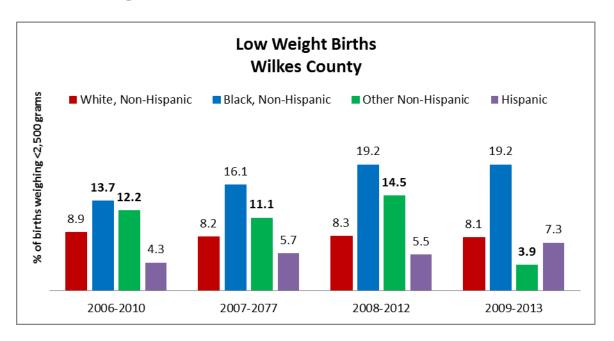
Pregnancy Risk Factors High Parity and Short-Interval Births

In Wilkes County:

- High Parity Births (2009-2013)
 - Mothers age <30 = 16.7% (NC = 16.0%)
 - Mothers age \geq 30 = 22.8% (NC = 21.7%)
- Short Interval Births (2008-2012) and change since 2005-2009
 - Overall = 14.4% (NC = 12.6%)
 - *A short interval birth results from a pregnancy commencing six or fewer months after the last birth.

Pregnancy Outcomes Low Birth Weight Births by Race

The highest percentages of low birth-weight (<5.5 lbs.) births in Wilkes County occur among African American women. Racially-stratified data for very-low birth-weight (<3.3 lbs.) birth are unstable.



Pregnancy Outcomes

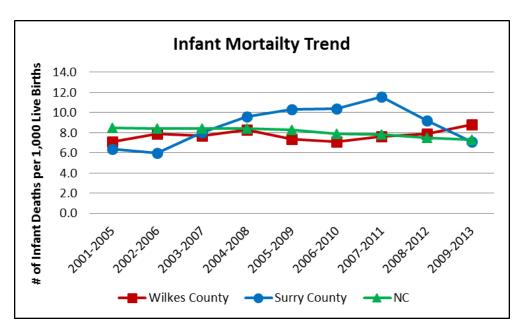
Hospital Discharges for Newborns and Neonates with Conditions Originating in the Perinatal Period

 According to local hospital data, the number of discharges associated with newborns or neonates in Wilkes County with some kind of problem originating in the perinatal period increased between 2013 and 2014.

Year	N	Number of Hospital Discharges by DRG (Diagnosis Related Group) Diagnosis										
	Total Newborns	Extreme Immaturity or Respiratory Distress	Prematurity with Major Problems	Prematurity without Major Problems	Full-Term Neonate with Major Problems	Neonate with Other Significant Problems	Normal Newborn					
2012	513	2	1	24	8	82	379					
2013	489	0	2	25	4	82	361					
2014	493	0	4	28	15	96	325					

Pregnancy Outcomes Infant Mortality

- The overall infant mortality rate in Wilkes County has been increasing since 2006-2010. Throughout most of the period cited, infant mortality was lower in Wilkes County than in either Surry County or NC as a whole.
- Note that according to the CDC the 2013 infant mortality rate in NC was the 10th highest in the nation.



Mortality

Life Expectancy

Life Expectancy Comparison: 1990-1992 and 2011-2013:

	Life Expectancy in Years									
Location		Person Born in 1990-1992					Person Born in 2011-2013			
Location	Overall	Male	Female	White	African- American	Overall	Male	Female	White	African- American
Wilkes County	75.7	72.5	78.8	76.0	69.6	77.2	74.7	79.7	77.1	76.6
Surry County	76.1	71.9	80.2	76.6	66.8	77.1	74.2	79.8	77.0	76.8
State of NC	74.9	71.0	78.7	76.4	69.8	78.2	75.7	80.6	78.8	75.9

Leading Causes of Death: Overall

Age-Adjust (2009-2		Wilkes County No. of Deaths	Wilkes County Mortality Rate	Wilkes Rate Difference from NC
1. Total Cancer		860	182.7	+5.4%
2. Diseases of the Heart		766	166.4	-2.1%
3. Chronic Lower Respir	atory Disease	250	53.0	+15.0%
4. All Other Unintentiona	I Injuries	170	47.0	+60.4%
5. Cerebrovascular Dise	ase	191	41.7	-4.6%
6. Pneumonia and Influe	nza	130	29.4	+64.2%
7. Diabetes Mellitus		114	24.8	+14.3%
8. Alzheimer's Disease		103	22.7	-21.5%
9. Unintentional Motor V	ehicle Injuries	61	17.7	+29.2%
10. Septicemia		78	17.1	+28.6%
11. Nephritis, Nephrotic S	yndrome, Nephrosis	73	16.1	-8.5%
12. Suicide		53	13.6	+11.5%
13. Chronic Liver Disease	and Cirrhosis	49	11.5	+21.1%
14. Homicide		19	5.4	+7.4%
15. AIDS		4	1.4	-51.7%

Leading Causes of Death: Gender Comparison

Wilkes County Rank by Descending Overall Age-Adjusted Rate (2009-2013)	Rank Among Males	Rank Among Females	% Male Rate Difference from Females
1. Total Cancer	1	1	+61%
2. Diseases of the Heart	2	2	+58%
3. Chronic Lower Respiratory Disease	4	3	+20%
4. All Other Unintentional Injuries	3	5	2.2X
5. Cerebrovascular Disease	5	4	+17%
6. Pneumonia and Influenza	7	6	+18%
7. Diabetes Mellitus	6	8	+88%
8. Alzheimer's Disease	13	7	-44%
9. Unintentional Motor Vehicle Injuries	8	11	n/a
10. Septicemia	10	9	+24%
11. Nephritis, Nephrotic Syndrome, Nephrosis	11	10	+26%
12. Suicide	9	13	n/a
13. Chronic Liver Disease and Cirrhosis	12	12	n/a
14. Homicide	14	14	n/a
15. AIDS	15	15	n/a

Leading Causes of Death: Race Comparison

Wilkes County Rank by Descending Overall Age-Adjusted Rate (2009-2013)	Rank Among White Non- Hispanic	Rank Among Black non- Hispanic	% Blacks Rate Difference from Whites
1. Total Cancer	1	1	+25%
2. Diseases of the Heart	2	2	+2%
3. Chronic Lower Respiratory Disease	3	n/a	n/a
4. All Other Unintentional Injuries	4	n/a	n/a
5. Cerebrovascular Disease	5	n/a	n/a
6. Pneumonia and Influenza	6	n/a	n/a
7. Diabetes Mellitus	7	n/a	n/a
8. Alzheimer's Disease	8	n/a	n/a
9. Unintentional Motor Vehicle Injuries	9	n/a	n/a
10. Septicemia	10	n/a	n/a
11. Nephritis, Nephrotic Syndrome, Nephrosis	11	n/a	n/a
12. Suicide	12	n/a	n/a
13. Chronic Liver Disease and Cirrhosis	13	n/a	n/a
14. Homicide	14	n/a	n/a
15. AIDS	15	n/a	n/a

Leading Causes of Death: Time Comparison

Wilkes County Rank by Descending Overall Age-Adjusted Rate (2009-2013)	Rank 2006-2010	Rank Change 2006-2010 to 2009-2013	% Rate Change 2006-2010 to 2009-2013
1. Total Cancer	1	nc	-1%
2. Diseases of the Heart	2	nc	-5%
3. Chronic Lower Respiratory Disease	4	+1	-1%
4. All Other Unintentional Injuries	3	-1	-13%
5. Cerebrovascular Disease	5	nc	-15%
6. Pneumonia and Influenza	8	+2	+15%
7. Diabetes Mellitus	9	+2	+7%
8. Alzheimer's Disease	7	-1	-15%
9. Unintentional Motor Vehicle Injuries	6	-3	-36%
10. Septicemia	11	+1	+3%
11. Nephritis, Nephrotic Syndrome, Nephrosis	12	+1	+29%
12. Suicide	10	-2	-22%
13. Chronic Liver Disease and Cirrhosis	13	nc	+12%
14. Homicide	14	n/a	n/a
15. AIDS	15	n/a	n/a

Leading Causes of Death - By Age

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

Mortality Trends, 2001-2005 to 2009-2013

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

Site-Specific Cancer Trends Wilkes County

Incidence: 1996-2000 to 2008-2012

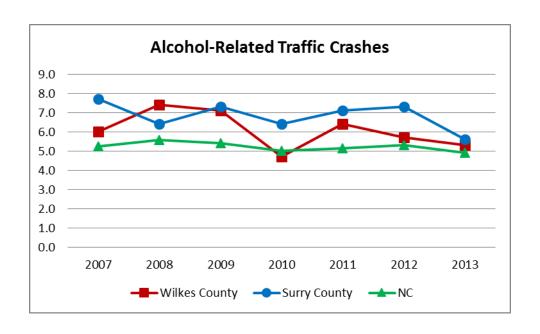
Mortality: 2001-2005 to 2009-2013

Cancer Site	Parameter	Overall Trend Direction
Lung Cancer	Incidence Mortality	•
Prostate Cancer	Incidence Mortality	•
Breast Cancer	Incidence Mortality	•
Colorectal Cancer	Incidence Mortality	*
Pancreas Cancer	Incidence Mortality	n/a ^

Morbidity

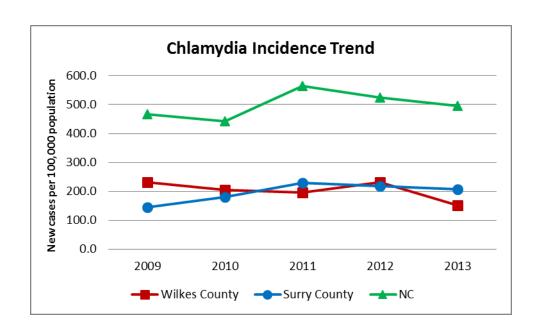
Vehicular Injury Alcohol-Related Motor Vehicle Crashes

 According to the NC Highway Safety Research Center, over the period 2007 through 2013 an annual average of 6.1% of all traffic crashes in Wilkes County were alcoholrelated. Statewide the comparable figure was 5.2%.



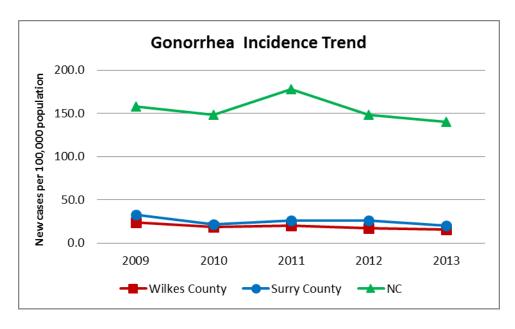
Sexually Transmitted Infections Chlamydia

According to data from the NC Communicable
 Disease Branch, the chlamydia infection rate in
 Wilkes County, which has fallen recently, was
 lower than the NC rate throughout the period
 cited.



Sexually Transmitted Infections Gonorrhea

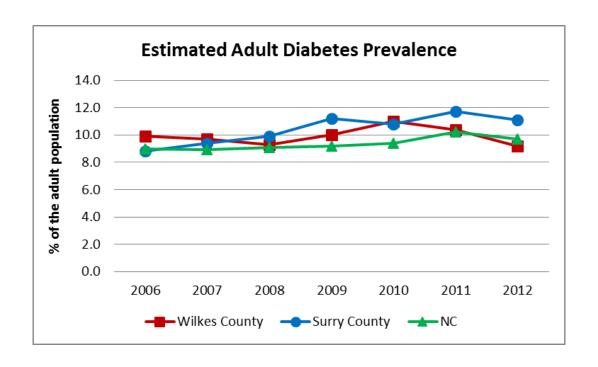
 According to data from the same source, the gonorrhea infection rate in Wilkes County was lower than the NC rate throughout the period cited.



Adult Diabetes

According to data from the CDC (based on BRFSS results):

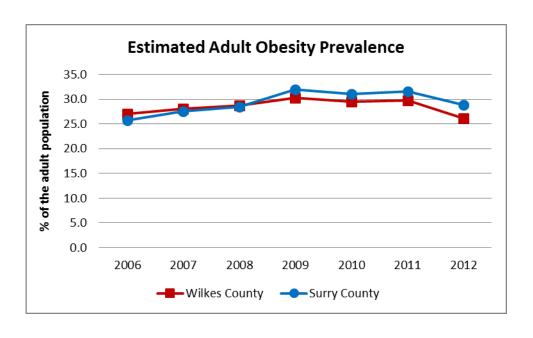
- The average self-reported prevalence of Wilkes County adults with diabetes was 9.9% in the period from 2006 - 2012.
- Over the same period the NC average was 9.4%.



Adult Obesity

According to data from the CDC (based on BRFSS results):

- The average prevalence of Wilkes County adults considered "obese" on the basis of self-reported height and weight (BMI > 30) was 28.5% in the period from 2006 - 2012.
- Over the same period the Surry County average was 29.3%.
 Comparable data for the state is not available.



Child Obesity Ages 2-4

- There is limited data on the prevalence of childhood obesity in Wilkes County.
- The NC-NPASS data presented below covers only children seen in health department WIC and child health clinics and certain other facilities and programs.
- According to this NC-NPASS data, over the period cited an annual average of 17.6% of the participating children in Wilkes County age 2-4 were deemed "overweight", and an additional 17.1% were deemed obese".

Prevalence of Overweight and Obese Children, Ages 2-4 2008-2010

		Prevalence of Overweight and Obesity in Children Ages 2-4, by Percent									
Location	2008		2009		2010		2011		2012		
	Overweight	Obese	Overweight	Obese	Overweight	Obese	Overweight	Obese	Overweight	Obese	
Wilkes County	17.4	15.7	17.4	15.7	18.9	18.0	16.5	16.6	17.8	19.7	
Surry County	16.8	16.2	16.8	16.2	14.7	20.3	17.0	18.1	13.0	15.8	
State of NC	16.3	15.4	15.8	15.4	16.1	15.6	16.2	15.7	14.9	14.5	

Mental Health

According to data from the NC Office of State Budget and Management:

- Between 2009 and 2014, the number of Wilkes County residents served by the Area Mental Health Program decreased overall by 40%. In 2014, 1,959 persons were served.
- Over the same 6-year period the number of Wilkes County residents served by State Psychiatric Hospitals decreased by 91%. In 2014, 10 persons were served.
- During the 6-year period from 2009 through 2014, a total of 201 Wilkes County residents were served by NC State Alcohol and Drug Abuse Treatment Centers (ADATCs), with the annual number averaging 34.

Mental Health

According to data from the local hospital:

- Emergency Department admissions for all Mental, Behavioral and Neurological Disorders among Wilkes County residents in recent years were:
 - 2012: 1,049 patients (3.7% of all ED admissions)
 - 2013: 1,060 patients (3.6%)
 - 2014: 1,144 patients (3.8%)

Mental Health

According to data from the local hospital:

- Inpatient hospital discharges for all Mental,
 Behavioral and Neurological Disorders among
 Wilkes County residents in recent years were:
 - 2012: 34 patients (0.7% of all IP discharges)
 - 2013: 43 patients (0.9%)
 - 2014: 31 patients (0.7%)

Environment

Air Quality

- EPA Air Quality Index (AQI) Summary, 2015
 - AQI Measurements: Not available
 - There is no EPA air quality monitoring station in Wilkes County.

Air Quality

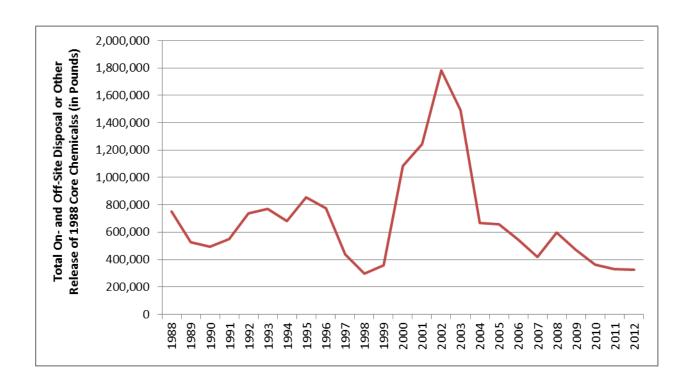
EPA Toxic Release Inventory (TRI), 2014

TRI Releases

- Wilkes County ranked 32nd among the 86 NC counties reporting TRI releases
- 384,869 pounds of TRI releases were reported for Wilkes County (Brunswick County had the highest level of releases in the state: over 5 million pounds)
- The TRI chemicals released in greatest quantity in Wilkes County and the releasing industries (and pounds of releases) are:
 - Methanol: Louisiana Pacific, Roaring River (156,132)
 - Zinc compounds: Louisiana Pacific (66,846)
 - Phenol : Louisiana Pacific (45,214)
 - Formaldehyde: Louisiana Pacific (34,093)
 - Styrene: Jeld-Wen Composites, North Wilkesboro (27,901)
 - Propionaldehyde: Louisiana Pacific (26,561)
 - Acetaldehyde: Louisiana Pacific (25,992)

Air Quality

- EPA Toxic Release Inventory (TRI) Trend, Wilkes County
 - TRI chemical releases in Wilkes County peaked in 2002 and have fallen dramatically since.



Water Quality

Wilkes County Drinking Water Systems, 2015 (from EPA SDWIS data):

- Community Water Systems (9)
 - Include municipalities, subdivisions and mobile home parks
 - Serve essentially the entire county population
 - Together these CWSs have had only one health violation in the past 10 years.
 - 63% of the estimated 2014 Wilkes County population is connected to one of these CWSs. (This means that approximately 37% of the population is served by a private well or other non CWS system.)
- Non-Transient/Non-Community Water Systems (3)
 - Includes schools, factories, office buildings and hospitals that have their own water systems
 - These N-T/N-Cs have had no health violations in the past 10 years.
- Transient/Non-Community Water Systems (91)
 - Includes churches, rest stops, campgrounds and gas stations

Solid Waste

According to data from NC DENR Division of Waste Management:

- Solid Waste Disposal Rates
 - 2013-14 Per-Capita Disposal Rate
 - Wilkes County = 0.77 tons
 - NC = 0.93 tons

Solid Waste Disposal Patterns in Wilkes County

- 99.9% of the solid waste generated in Wilkes is landfilled in the county.
 - The Wilkes County Municipal Solid Waste Landfill has a remaining capacity of approximately 21 years.
 - The Louisiana Pacific Industrial landfill has remaining capacity of approximately 15 years.

Community Health Survey

Survey / Population Comparison

Demographic Parameter	%, 2015 Survey (n=962)	%, Wilkes County 2014 US Census, etc.
GENDER		
Male	19.5	49.3
Female	80.2	50.7
RACE		
White/Caucasian	93.0	93.3
Black/African American	5.4	4.5
Hispanic	4.1	5.8
AGE		
20-34	24.8	15.7 (20.5)
35-64	64.4	41.2 (53.6)
65 and Older	9.7	19.9 (25.9)
EDUCATION		
Less than HS Diploma or GED	4.0	25.8
High School Diploma or Above	96.0	74.2
Bachelor's Degree or Higher	47.3	12.5
NOTE: Red figures in parentheses are specific to th	e population age 18 or older (the targe	et population for the survey).

NOTE: Red figures in parentheses are specific to the population age 18 or older (the target population for the survey)

Survey Demographics Summary

- Compared to US Census Bureau and other authoritative statistics for the overall Wilkes County population, the 2015 survey sample:
 - Was predominately female
 - Was racially balanced
 - Slightly under-represented Hispanics
 - Over-represented 35-64 year olds
 - Under-represented less well educated and overrepresented college (and above) educated persons

Community Issues

1.	Drug/alcohol abuse (62%)	12. Dropping out of school (5%)
2.	Low income/poverty (46%)	13. Theft (4%)
3.	Lack of jobs (39%)	14. Lack of transportation (4%)
4.	Lack of high-income jobs (34%)	15. Discrimination/racism (3%)
5.	Affordable health care (22%)	16. Elder neglect/abuse (3%)
6.	Mental health (15%)	17. Domestic violence (2%)
7.	Child neglect/abuse (15%)	18. Homelessness (2%)
8.	Lack of health insurance (9%)	19. Lack of community support (2%)
9.	Affordable housing (9%)	20. Violent crime (<1%)
10.	Hunger (8%)	21. Pollution (<1%)
11.	Affordable higher education (17%)	22. Rape/sexual assault (<1%)

Environmental Health Concerns

1.	Secondhand smoke (40%)	10. Fluoride-enriched water (7%)
2.	Air quality (36%)	11. Drought (7%)
3.	Drinking water quality (28%)	12. Septic system failure (4%)
4.	Methamphetamine labs (27%)	13. Radon (3%)
5.	Food safety (25%)	14. Lice (3%)
6.	Mold (24%)	15. Lead exposure (2%)
7.	Solid waste/recycling (16%)	16. Rabies (1%)
8.	Household hygiene (13%)	17. Bedbugs (1%)
9.	Ozone (9%)	

Services Needing Improvement

1.	Positive teen activities (37%)	11. Affordable housing (12%)
2.	Affordable health services (28%)	12. Food banks/pantries (12%)
3.	Substance abuse services (25%)	13. Unemployment assistance (10%)
4.	Healthy family activities (19%)	14. Transportation options (10%)
5.	Healthy food choices (19%)	15. Services for the disabled(9%)
6.	Recreational facilities (17%)	16. Access to healthcare providers (9%)
7.	Mental health services (16%)	17. Counseling/support groups (8%)
8.	Elder care options (15%)	18. Animal control (5%)
9.	Child care options (14%)	19. Transitional/halfway housing (4%)
10.	Road maintenance/safety (12%)	20. Culturally-appropriate health services (2%)

Health Behaviors: Need Information

1.	Substance abuse prevention (38%)	15. Crime prevention (6%)
2.	Anxiety/depression (28%)	16. Preparing for emergencies/disasters (6%)
3.	Eating well/nutrition (24%)	17. Going to dentist regularly (5%)
4.	Texting and driving (23%)	18. Caring for the disabled (5%)
5.	Child care/parenting (22%)	19. Going to doctor regularly (5%)
6.	Managing weight (20%)	20. Personal hygiene (5%)
7.	Exercise/fitness (15%)	21. End-of-life resources (5%)
8.	Quitting/preventing smoking (15%)	22. Using child safety seats (3%)
9.	Stress management (14%)	23. Suicide prevention (3%)
10.	Preventing pregnancy (10%)	24. Getting prenatal care (3%)
11.	Anger management (9%)	25. Preventing STDs (2%)
12.	Domestic violence prevention (8%)	26. Rape/sexual abuse prevention (2%)
13.	Elder care (8%)	27. Getting flu shots/vaccines
14.	Driving safely (6%)	

Health Topics: Youth Need Information

2015 Survey Results (929 Respondents)

1.	Do not have child 9-19 (53%, n=494)	12. Sexually transmitted diseases (3%)
2.	Internet/social media safety (22%)	13. Reckless driving (3%)
3.	Bullying (16%)	14. Suicide prevention (3%)
4.	Texting and driving (15%)	15. Dental hygiene (2%)
5.	Drug abuse (15%)	16. Eating disorders (2%)
6.	Self-esteem (13%)	17. Personal hygiene (2%)
7.	Sex/pregnancy prevention (15%)	18. Tobacco (2%)
8.	Nutrition (7%)	19. Asthma management (1%)
9.	Healthy food choices/school (5%)	20. Diabetes management (1%)
10.	Mental health issues (4%)	21. Infectious disease (<1%)
11.	Alcohol (4%)	22. Other (3%)

Personal Health

Percent participants with health care diagnoses of:

- Angina/heart disease 4.4%
- Asthma 17.8%
- Cancer 5.2%
- Depression 25.0%
- Diabetes 11.4%
- High cholesterol 28.8%
- Hypertension/high blood pressure 31.0%
- Osteoporosis 5.2%
- Overweight/obesity 44.6%

Personal Health Behavior

- Current Use of Tobacco Products (n=913)
 - Current tobacco user: 8%
 - Trying to quit: 4%
 - Have already quit: 21%
 - Never used tobacco: 67%
- Preferences for help in quitting tobacco use (n=114)
 - Don't want to quit: 20%
 - I don't know: 31%
 - Doctor: 31%
 - Free Quit Line: 13%
 - Health Department: 6%
 - Private counselor/therapist: 6%

Personal Health Behavior

- Why Not Getting Recommended Amount of Physical Activity (n=885)
 - No reason; getting adequate activity: 42%
 - Not enough time to exercise: 34%
 - Too tired to exercise: 29%
 - Costs too much to exercise: 13%
 - Uncomfortable working out in public: 12%
 - Don't like to exercise: 10%

Why Not Consuming Recommended Number of Fruits and Vegetables (n=885)

- No reason; consuming adequate amounts: 36%
- They are too expensive: 34%
- They go bad before they are eaten: 26%
- Just don't think about it: 23%
- Don't have time to fix them: 14%
- Lack of fruits and vegetables in restaurants: 12%

Health Screening Behaviors

- Prostate Exams Males age > 40 (n=131)
 - Get an annual prostate exam: 70%
- Mammograms Females age > 40 (n=427)
 - Get an annual mammogram: 81%
- Pap Smears Females (n=710)
 - Get a Pap smear at least every other year: 78%
- Colon Cancer Screenings Age > 50 (n=356)
 - Ever had a colonoscopy: 78%
- Dental Visit Everyone (n=870)
 - Ever been to a dentist: 77%

Health Insurance Coverage

Of 828 respondents:

- Currently no health insurance 7.5%
- Medicaid 5.0%
- Medicare 8.6%
- Blue Cross/Blue Shield 60.0%
- United Health Care 4.6%
- Other private insurance 20.4%
- Military-related coverage 1.9%

Health Information Access

- Where respondents get most of their general health-related information (n=914)
 - Doctor or nurse: 56%
 - Internet: 29%
 - Print media (books, newspaper, magazine): 5%
 - Friends or family: 4%
 - Television: 4%
 - Hospital: 3%
 - Health department: 2%
 - Pharmacist: 2%
 - Church: 1%
 - My child's school: <1%</p>
 - Help lines: <1%</p>
 - Other: 3%

Medical Care Preferences

- Where respondents go for check-ups (n=881)
 - Doctor's office: 76%
 - OB/GYN or Women's Health Provider: 12%
 - Health department: 3%
 - Urgent Care Center or Walk-in Clinic: <1%</p>
 - Free Clinic: <1%</p>
 - I don't get an annual check-up or physical: 8%
 - Other: <1%</p>

Medical Care Preferences

- Where respondents go when sick (n=879)
 - Doctor's office: 82%
 - Urgent Care Center or Walk-in Clinic: 6%
 - Health Department: 3%
 - Hospital Emergency Department: 3%
 - Pharmacy: <1%</p>
 - Free Clinic: <%</p>
 - Holistic Health Clinic: <1%</p>
 - Sobador/Curandero: <2%</p>
 - MESH Unit: 0%
 - I don't go anywhere when I'm sick: 4%
 - Other: 1%

Medical Care Access

- Problem in past year getting medical care for self or family member (875 respondents):
 - 79% had not had a problem
 - 21% did have a problem seeing particular practitioners:
 - Dentist: 52%
 - General practitioner: 34%
 - Specialist: 18%
 - Pharmacy/prescriptions: 14%
 - Optometrist/ophthalmologist: 11%
 - Hospital: 11%
 - OB/GYN: 8%
 - Urgent Care Center: 7%
 - Free Clinic: 6%
 - Health Department: 5%
 - Pediatrician: 1%
 - Holistic practitioner: 1%

Medical Care Access

- Of the 21% of respondents that did have a problem accessing health care, the main reasons were (multiple answers possible):
 - Deductible/co-pay was too high: 20%
 - Didn't have health insurance: 17%
 - Insurance didn't cover what was needed: 12%
 - The wait for an appointment was too long: 8%
 - Couldn't get an appointment: 7%
 - Doctor/dentist couldn't take my insurance (including Medicaid):
 6%
 - Didn't know where to go: 2%
 - No way to get there: 2%
 - Pharmacy couldn't take my insurance (including Medicaid): 1%
 - Hospital couldn't take my insurance (including Medicaid): <1%
 - Language barrier: <1%

Mental Health

- Where respondents would refer someone with a mental health or substance abuse problem (n=893):
 - Doctor: 25%
 - Private counselor or therapist: 20%
 - Local mental health agency: 13%
 - Minister or religious official: 10%
 - Daymark: 9%
 - Friends and/or family: 6%
 - Crisis hotlines: 4%
 - Call 9-1-1: 2%
 - Health Department: 1%
 - Hospital Emergency Department: 1%
 - Care Connection: 1%
 - School counselor: 1%
 - Support group (AA, NA, etc.): 1%
 - Don't know: 4%
 - Other: 1%

Mental Health

- Where respondents would first refer someone thinking about suicide (n=891):
 - Minister or religious official: 25%
 - Crisis hotlines: 16%
 - Friends and/or family: 14%
 - Doctor: 11%
 - Private counselor/therapist: 10%
 - Call 9-1-1: 9%
 - Local mental health agency: 4%
 - Hospital Emergency Department: 4%
 - Daymark: 3%
 - School counselor: 2%
 - Care Connection: 1%
 - Health Department: <1%</p>
 - Support group (AA, NA, etc.): <1%</p>
 - Don't know: 5%
 - Other: 1%

Mental Health

- Where respondents would refer someone who wanted help with a substance abuse problem (n=895):
 - Doctor: 29%
 - Support group (AA, NA, etc.): 15%
 - Daymark: 10%
 - Private counselor or therapist: 10%
 - Minister or religious official: 7%
 - Local mental health agency: 6%
 - Friends and/or family: 5%
 - Crisis hotlines: 4%
 - Hospital Emergency Department: 3%
 - Health Department: 2%
 - Call 9-1-1: 2%
 - Care Connection: 1%
 - Don't know: 7%
 - Other: 2%

Mental Health: Substance Abuse

- The three biggest substance abuse problems among ADULTS in Wilkes County (n=898):
 - Abusing prescription drugs: 77%
 - Methamphetamine (Meth): 58%
 - Alcohol abuse: 46%
 - Abusing someone else's prescription drugs: 38%
 - Tobacco: 23%
 - Drinking and driving: 18%
 - Marijuana: 13%
 - Cocaine/crack: 9%
 - Heroin: 7%
 - Huffing (inhaling glue, dust-off, etc.): <1%
 - Don't know: 2%
 - Other: 1%

Stakeholder Interviews

Stakeholder Interviews: Methodology

- Three working sessions
- Table-top discussions with note taker at each table
- All participants answered a fixed set of questions
- Participants represented a broad range of organizations and agencies serving clientele including:

All people of Wilkes County	Hispanic populations
Children	Substance abusing populations
Parents/families	Unemployed/job-seeking populations
School-age children/students	Employers
At-risk students	Pregnant women
Persons needing healthcare	Businesses/non-profit organizations
Persons needing mental health services	New residents
Aging populations	Childcare providers
Low-income populations	Caregivers of aging adults
Uninsured populations	Persons with transportation needs
Minority/disabled populations	Community organizations

- Changes in agency/organization clientele and their needs in past 5 years include:
 - Increased poverty, increased unemployment
 - Greater need for food supports
 - Greater need for temporary crisis services
 - Local transportation inadequate to meet need
 - More clients with mental health needs
 - Greater need for crisis care
 - Inadequate services for substance abusers
 - More clients with chronic illnesses
 - More elderly clients and retirees
 - More grandparents in parental role
 - Clients generally have more complex needs
 - Problems arising at younger client ages
 - Some say more uninsured; others say fewer
 - Growth of migrant populations (Hispanics, Burmese)

- Changes in *service infrastructure* and *agency needs* in past 5 years include:
 - Inadequate coordination of services among agencies and organizations
 - Increased need for translators and translated written materials
 - Change/greater complexity in determining client eligibility and in cost reimbursement
 - Lack of funding/unmet needs for infrastructure improvements
 - Inadequate knowledge of how to market services and programs
 - Greater need for knowledge of resource finding/resource leveraging

Client barriers to accessing services and care include:

- Poverty
- Lack of transportation
 - Physically "scattered" services; multiple trips sometimes required
 - Lack of evening transportation
- Lack of insurance
 - High cost of co-pays and deductibles for those insured
- Inadequate inter-agency communication/coordination of services
- Shortages of some services (e.g., daycare)
 - Lack of providers accepting Medicaid
 - Lack of services available in evenings/weekends
- Stigma of seeking and accepting services, especially DSS and mental health services
- Lack of information or misinformation about available services and providers
 - Language/cultural barriers

Unavailable but needed community services include:

- County-wide transportation with regular routes
- Improved community-wide awareness of mental health issues and treatment options
- More *local* mental health providers and services
 - Substance abuse treatment
 - On-site services for students
 - In-patient treatment facilities
- Better inter-agency communication and cooperation; deconstruction of service and information "silos".
- Better coordinated community advocacy
- Greater outreach to rural areas
- Greater use of electronic resources
 - Electronic medical records
 - Resource lists
 - Volunteer coordination
 - Improved telecommunications/broader Internet access
- More employment options, especially for the minimally prepared
- Affordable housing