



2011 Ashe County
Community Health Assessment

Secondary Data – Demographics, Socioeconomic, Health

TABLE OF CONTENTS

Demographic and Socioeconomic Data:	5
Location and Geography.....	6
History.....	7
Population Characteristics.....	9
General Demographic Characteristics.....	9
Population Growth Comparison.....	10
Population Density.....	10
Population Distribution by Race/Ethnicity.....	11
Population Distribution by Age, Number.....	11
Population Distribution by Age, Percent.....	11
Older Adults.....	13
Income (Years as Noted).....	14
Major Employers in Watauga County.....	14
Unemployment.....	15
Poverty.....	15
Annual Poverty Rate.....	15
Children in Poverty.....	16
Food Stamp Recipients.....	16
Housing.....	17
Education Attainment and Investment.....	17
High School Drop-Out Rate.....	18
Crime and Safety.....	19
Crime Rates.....	19
Number of Index Crimes Reported.....	20
Health Care Resources.....	21
Practitioners.....	21
Persons per Provider Type.....	21
Licensed Medical Practitioners.....	22
Medical Insurance.....	23
Percent of Population without Health Insurance.....	23

Health Data:	24
Maternal and Child Health	25
Adult and Teen Pregnancy and Birth Rates	25
Abortion	27
Pregnancy Risk Factors	28
High Risk Births	28
Percent of Babies Born to Mothers Who Smoked During Pregnancy	29
Women Receiving Care in First Trimester	30
Pregnancy Outcomes	31
Number/Percent of Low and Very Low Birth Weight Births by Race	31
Infant Mortality	33
Age-Adjusted Mortality Rates for Leading Causes of Death in Ashe Co and NC	34
Age-Adjusted Mortality Rates by Gender	35
Heart Disease and Stroke	36
Heart Disease and Stroke Incidence	36
Heart Disease Mortality	37
Stroke Mortality	38
Gender and Racial Disparities in Heart Disease and Stroke Mortality	40
Cancer	42
Total Cancer Incidence	42
Total Cancer Mortality	44
Gender and Racial Disparities in Total Cancer Mortality	45
Breast Cancer Incidence	46
Breast Cancer Mortality	47
Prostate Cancer Incidence	48
Prostate Cancer Mortality	49
Colorectal Cancer Incidence	50
Colorectal Cancer Mortality	51
Lung Cancer Incidence	52
Lung Cancer Mortality	53
Gender and Racial Disparities in Lung Cancer Mortality	54
Chronic Lower Respiratory Disease Mortality	55
Gender and Racial Disparities in COPD/CLRD Mortality	57
Pneumonia and Influenza Mortality	58
Diabetes Incidence	59

Diabetes Mortality.....	60
Unintentional Non-Motor Vehicle Injury Mortality.....	62
Septicemia Mortality.....	64
Unintentional Motor Vehicle Injury Mortality.....	65
Motor Vehicle Injuries.....	65
Kidney Disease Mortality.....	66
Alzheimer’s Disease Mortality.....	67
Chronic Liver Disease Mortality.....	68
Suicide.....	69
Homicide.....	70
Communicable Disease.....	71
Sexually Transmitted Diseases.....	72
Oral Health.....	74
Mental Health and Substance Abuse.....	76
Obesity.....	77
Adult Obesity.....	77
Childhood Obesity.....	78
Tobacco Use.....	80
Asthma.....	81

DEMOGRAPHIC AND SOCIOECONOMIC DATA
ASHE COUNTY

Location and Geography

Ashe County is located in the Northwestern corner of North Carolina atop the Blue Ridge mountains, in the Appalachian Mountains region. The County is characterized by scenic mountain vistas and thousands of acres covered in Fraser fir trees.

The nearest metropolitan area is Charlotte, NC which is located 90 miles to the south. The county is approximately 92 miles northwest of Winston-Salem, NC and nearly 200 miles northwest of Raleigh, NC.

Ashe County's western border is shared with Johnson County, Tennessee; the northern border is shared with Grayson County, Virginia, and by North Carolina Counties: Alleghany on the east, and Wilkes and Watauga to the south.

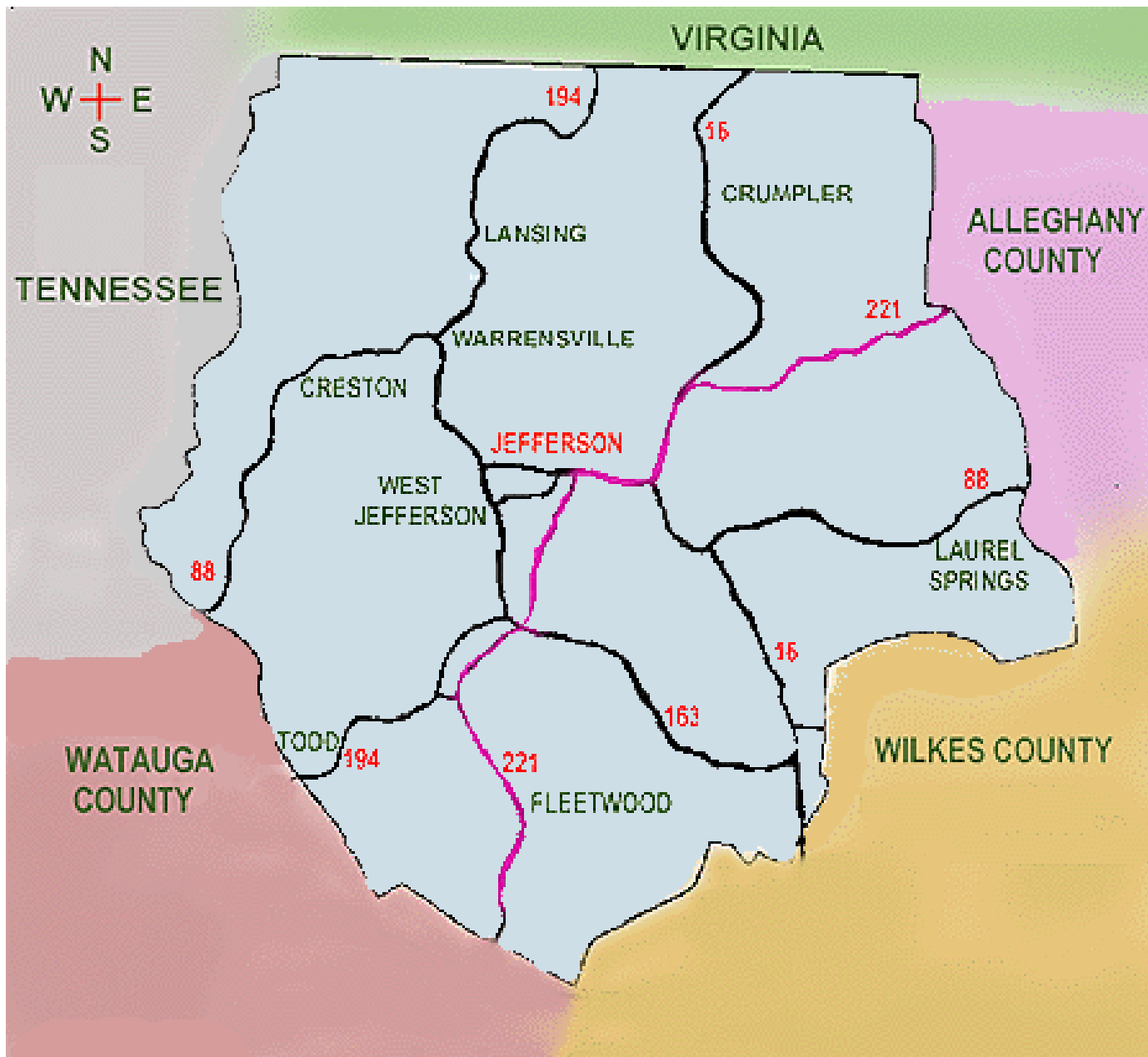
There are 19 townships in Ashe County. Jefferson is the most populated township and is also the county seat.

The nearest interstate highway is I-77, 50 miles east of the county. US Highway 221 runs southwest and then south through the county towards Deep Gap in Watauga County. NC State Highways 16 and 194 run south from Virginia into Ashe County and both run through Jefferson toward Wilkes County. NC Highway 88 runs west through Jefferson towards Tennessee.

The nearest airport offering commercial passenger service is Hickory Regional Airport, located 90 miles south in Hickory, NC. US Highway 77 provides access to the Charlotte Douglas International Airport located 90 miles to the south; and the Piedmont Triad International Airport located in Greensboro, is 120 miles east of Ashe County. There is also the Ashe County Airport, which sports a 4,300 foot runway capable of facilitating small to medium sized jets.

Winston-Salem is the closest stop on any passenger railway system; the nearest Greyhound Lines stop is in Winston-Salem. The physical area of Ashe County is approximately 421 square miles. None of Ashe County's residents live within 10 miles of a full-time four-lane highway.

The elevation of the county is approximately 2,770 feet above sea level. The climate in Ashe County is relatively mild, with an annual mean temperature of around 50.6 degrees. The average annual precipitation is around 48.6 inches.



History

From the official Ashe County (6) and Ashe County Chamber of Commerce (7) websites:

Encompassing approximately 427 square miles, Ashe County's boundaries have been a topic of continuing dispute throughout the years. The area was part of Anson County during the early English colonization period; became part of Rowan County in 1753, Surry County in 1771, Wilkes County in 1777 and was briefly part of the State of Franklin from 1784-89. Incorporated as a separate entity by the North Carolina General Assembly in 1799, Ashe County finally came into its own. There have, however been several small additional adjustments to county borders over time.

Seeking a "proper and convenient" place to be the County's seat, the North Carolina General Assembly appointed a special commission in 1799. In the first of many displays of exorbitant spending, the commissioners purchased 50 acres of land for \$100.00. With this expenditure, the Town of Jefferson (for a short time called Jeffersonton) was born, being the first town in the nation to bear the name of Thomas Jefferson, who happened to be the Vice President of the United States at the time.

Hunting, trapping and farming were of early significance to Ashe County citizens. Traditional crops included wheat, rye, oats, barley, buckwheat, fruits and vegetables. Cattle operations have also been historically important to the local economy. The early 1900s saw much activity in the dairy industry, with cheese making factories in Grassy Creek and Beaver Creek, Sturgills, Crumpler and Ashland. Eventually, the Kraft-Phoenix Creamery established a plant in West Jefferson in the 1930s. Having had several owners, the plant is now the Ashe County Cheese Plant, for many years, the only such facility in North Carolina. In addition to the harvesting of crops, mining operations have flourished locally, including those seeking iron and copper ores. Copper mining started in the late 1800s, with Ore Knob being possibly the best known mine (at one time, being the leading copper producing mine in the United States). During these times, most farm implements used locally were forged in Ashe County. Helton was the iron-making center of the County, producing plows, hoes, wagon wheels, axes, mattocks and shovels.

Today Ashe County is home to two wineries, the county courthouse in Jefferson is being renovated to accommodate The Museum of Ashe County History, and Glendale Springs is home to one of the county's two Churches of the Frescoes, painted by world-renowned artist Ben Long.

Population Characteristics

- In 2010 Ashe County had an estimated permanent population of 27,281 persons.
- Like the state as a whole, Ashe County's population is increasing, but at a slower rate. Between 2000 and 2010, the Ashe County population increased by 11.9%, while the average NC County population grew by more than 18% (Table 1).
- In 2000, the median age of Ashe County residents was 45.5 years, almost 9 years older than the median age for the state, 36.6 (Table 1).
- The majority of Ashe County residents (95.5%) are white, with minorities making up 4.5% of the population in 2000. In NC minorities represent over 25% of the total population (Table 1).
- People over the age of 65 make up 20.2% of the Ashe County population, compared to 12.9% of the population statewide (Table 6).
- Children under the age of five were less numerous in Alleghany County than statewide (Table 1), and represented a smaller proportion of the population: 5.3% vs. 6.6% (Table 6).

Table 1. General Demographic Characteristics (years as noted)

County	Total Population (2010)	% Pop Change 2000-2010	2010 Census								
			No. Males	No. Females	Median Age	No. Under 5 Years	No. 65 Years and Older		Race		% Hispanic or Latino, Any Race
							Male	Female	% White	% Other	
Ashe	27,281	11.9	13,489	13,792	45.5	1,452	2,407	3,094	95.5	4.5	4.8
State Total	9,535,483	18.5	4,872,632	4,662,852	36.6	677,019	464,100	656,970	68.5	25.1	8.4

US Census Bureau, 2010 Census, <http://factfinder2.census.gov>

- The population in Ashe County has grown every decade since 1990, but the rate of increase is expected to slow by 2010.

Table 2. Population Growth Comparison (1990-2010)

County	Number of Persons				
	1990	2000	% Change 1990-2000	2010	% Change 2000-2010
Ashe	22,209	24,387	9.81	27,281	11.9
State Total	6,632,488	8,046,813	21.3	9,535,483	18.5

Source: Log Into North Carolina (LINC) database, <http://linc.state.nc.us>; some % change was calculated

Table 3. Population Density (1990-2010)

County	Persons per Square Mile							
	1990		2000		2010		2020 (Est.)	
	Population	Density	Population	Density	Population	Density	Population	Density
Ashe	22,209	52.1	24,387	57.2	28,281	62.2	30,548	48.0
State Total	5,880,095	n/a	6,632,448	n/a	8,046,813	n/a	9,315,141	n/a

Source: Log Into North Carolina (LINC) database, <http://linc.state.nc.us>

- As detailed in Table 4, 95.5% of Ashe County residents are white, with minorities making up 4.5% of the population in 2010.
- Ashe County has a much lower proportion of African Americans (0.6%) than NC as a whole (21.5%). The proportion of Hispanic residents in the county (4.8%) – who may be of any race – is lower than in the state as a whole (8.4%).

Table 4. Population Distribution by Race/Ethnicity (2010)

County	Number and Percent												
	Total	White		Black		Native American		Asian		Other		Hispanic Origin	
		Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Ashe	27,281	26,053	95.5	164	0.6	55	0.2	109	0.4	273	1.0	1,310	4.8
State Total	9,535,483	6,531,805	68.5	2,050,129	21.5	123,961	1.3	209,781	2.2	219,316	2.3	800,981	8.4

Source US Census Bureau, 2010 Census, <http://quickfacts.census.gov/qfd/states/37/37009.html>

- In terms of both numbers (Table 5) and percent (Table 6) the largest age segment of the population in Ashe County is persons age 65 and older, representing 20.2% of the Ashe County population compared to 12.9% of the NC population.
- Children ages 0-4 represent the smallest portion of the population in Ashe County, accounting for 5.3% of the local population compared to 6.9% statewide (Table 6).

Table 5. Population Distribution by Age, Number (2010)

County	Total Population	0-4 Years	5-19	20-24	25-34	35-44	45-54	55-64	65+
Ashe	27,281	1,452	4,391	1,229	2,963	3,417	4,100	4,228	5,501
State Total	9,535,483	632,040	1,926,640	661,573	1,246,593	1,327,151	1,368,646	1,138,761	1,234,079

Source US Census Bureau, 2010 Census, <http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk>

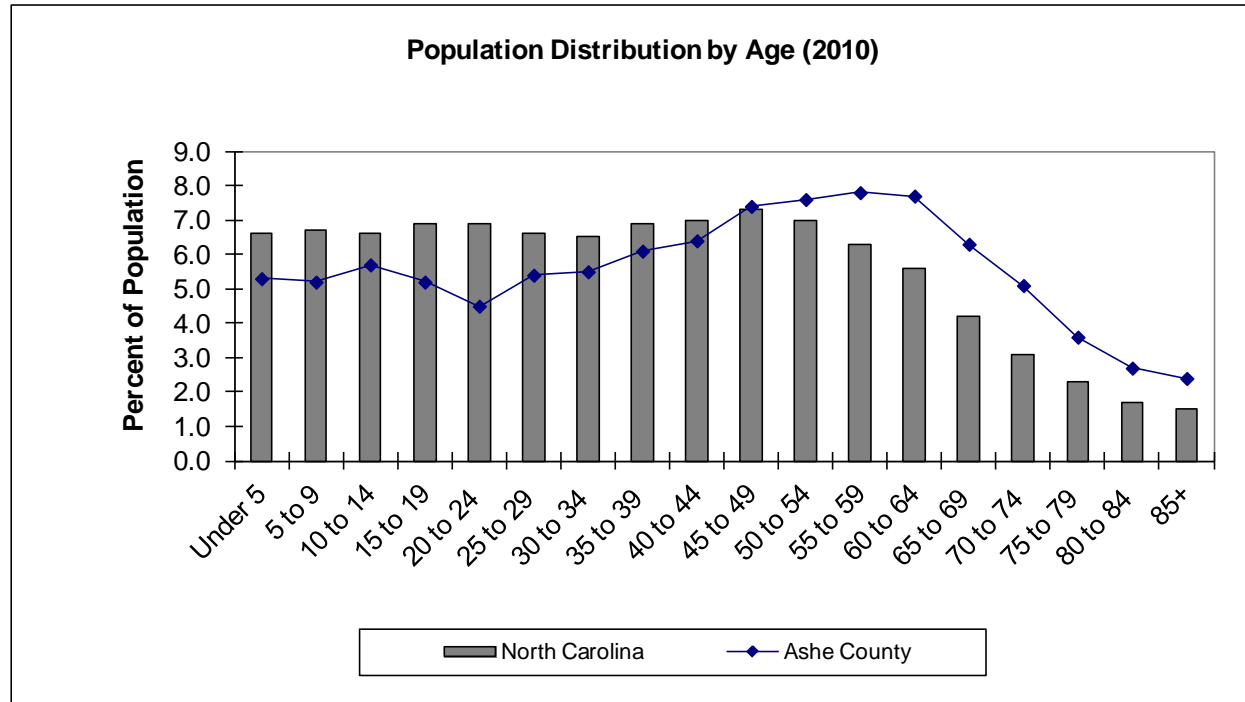
Table 6. Population Distribution by Age, Percent (2010)

County	Total Population	Percent of Total							
		0-4 Years	5-19	20-24	25-34	35-44	45-54	55-64	65+
Ashe	27,281	5.3	16.1	9.9	10.9	12.5	15.0	15.5	20.2
State Total	9,535,483	6.6	20.2	6.9	13.1	13.9	14.4	11.9	12.9

Source US Census Bureau, 2010 Census, <http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk>
 Calculated based on calculated US Census figures in the previous table

- The age distribution of the Ashe County population differs from the age distribution of the overall population in the state. Ashe County has larger proportions than the state of people aged 45-90+, and a smaller proportion of people aged 0-44. (Figure 1).

Figure 1



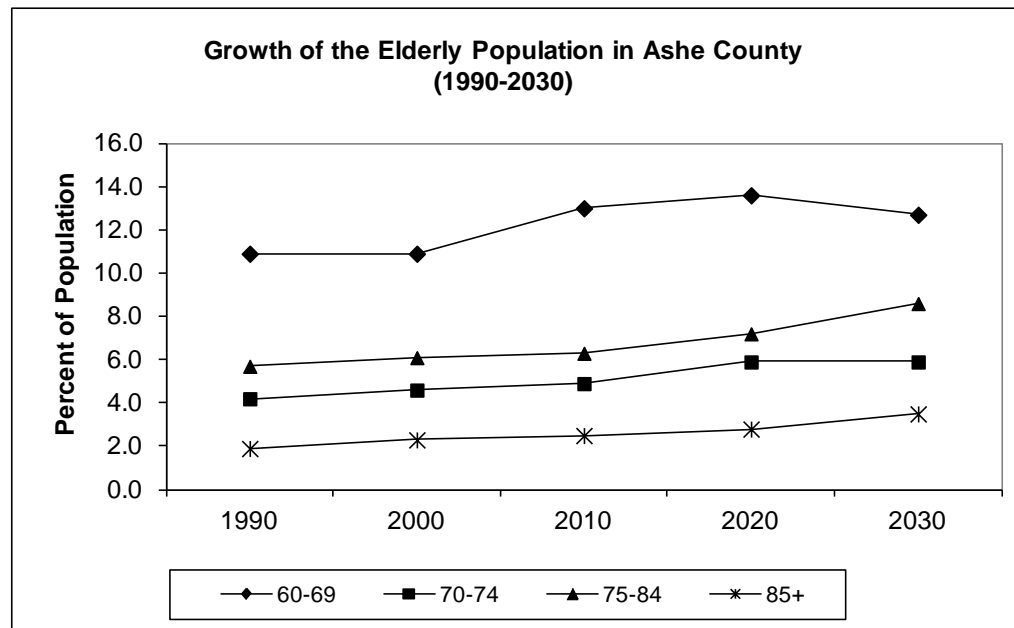
Source: US Census Bureau, 2010 Census,
<http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk>

Older Adults

Growth of the Elderly Population

- As demonstrated in Figure 2, the population of Ashe County adults over the age of 60 is increasing and is expected to continue to increase over the next 20 years.
- Though all segments of the elderly population are growing, the segment expected to grow the fastest in the 20 years between 2010 and 2030 is the group aged 85-and-older, which is predicted to grow by 40% over that period, from 1.5% to 2.5% of the total county population.
- The population segment aged 60-69 is predicted to increase by 23% over the period from 2010-2030; the county population in the group ages 75-94 is predicted to grow by 34% over that period, from 4.7% to 6.3% of the total county population.

Figure 2



Source: Log Into North Carolina (LINC) database, <http://linc.state.nc.us>. (Topic group: Population and Housing. Select: Population Ages: 60-64, 65-69, 70-74, 75-79, 80-84, 85 and over)

Income

- According to data in Table 7, in 2009 Ashe County residents had a per capita income that was \$3,843 (15.7%) lower than the state average.
- In 2009 the median household income in Ashe County was \$9,698 (22.2%) lower than the state average.

Table 7. Income (years as noted)

County	Per Capita Personal Income (2005-2009)	Per Capita Income Difference from State	Median Household Income (2009)	Median Household Income Difference from State
Ashe	\$20,706	-\$3,841	\$34,056	-\$9,698
State Total	\$24,547	n/a	\$43,754	n/a

Source: US Census, People QuickFacts, <http://quickfacts.census.gov/qfd/states/37000.html>

Table 8 lists the major employers in Ashe County, most of which employed between 250-499 people during the period cited.

Table 8. Major Employers in Ashe County, 2011

Employer	Industry	Number Employed
Ashe County Board of Education	Education and Health Services	500-999
Ashe Memorial Hospital	Education and Health Services	250-499
American Emergency Vehicles	Manufacturing	250-499
County of Ashe	Public Administration	250-499
United Chemi-Con, Inc.	Manufacturing	250-499
Gates Rubber Company	Manufacturing	250-499
Wal-Mart Associates, Inc.	Trade, Transportation and Utilities	100-249
Ashe Services for Aging, Inc.	Education and Health Services	100-249
Margate Health and Rehab Ctr.	Education and Health Services	100-249
General Electric Corp.	Manufacturing	100-249

Source: Employment Security Commission of NC, Labor Market Information, Industry Information: North Carolina's Largest Employers. 10 Largest Employers by County.
<http://esesc23.esc.state.nc.us/d4/ExportLargeEmployers.aspx>

Unemployment

- In 2011, an average 1,303 members of the Ashe County civilian labor force were unemployed.
- Unemployment rates in Ashe County have fluctuated historically, with the lowest unemployment rate (3.3) in 1999 and the highest rate (12.3) in 2010. The most recent (2011) Ashe County annual unemployment rate, 10.7, is slightly higher than the state rate of 10.4 (Table).

Table 9. Annual Unemployment Rate Trend (1999-2011 YTD)

County	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011 YTD
Ashe	3.3	6.0	8.7	9.1	9.3	6.3	5.6	5.0	5.0	6.8	12.2	12.3	10.7
State Total	3.2	3.6	5.5	6.7	6.5	5.5	5.3	5.2	4.7	6.2	10.8	10.6	10.4

Source: NC Employment Security Commission, <http://eslmi40.esc.state.nc.us/ThematicLAUS/clfasp/CLFAASY.asp>

Poverty

The *poverty rate* is the percent of the population (both individuals and families) whose money income (which includes job earning, unemployment compensation, social security income, public assistance, pension/retirement, royalties, child support, etc.) is below the threshold established by the Census Bureau.

- The poverty rate in Ashe County has been consistently above the comparable state rate since 1990 (Table 10).
- The Ashe County poverty rate fluctuated slightly between 1990 and 2004, but increased from 13.8% in 2004 to 16.2% in 2010.

Table 10. Annual Poverty Rate (1990-2010)

County	1990	2000	2010
Ashe	18.4	13.5	18.1
State Total	13.0	12.3	16.2

Source: US Census bureau, <http://quickfacts.census.gov/qfd/states/37/37009.html>
 USDA Economic Research Service, <http://www.ers.usda.gov/Data/Povertyrates>

* - The poverty rate is the percent of the population - individuals and families - whose money income (including job earnings, unemployment compensation, social security income, public assistance, pension/retirement, royalties, child support, etc.) is below the threshold established by the Census Bureau.

Children in Poverty

- Since 2006, Ashe County has demonstrated higher proportions of persons in poverty under the age of 18, when compared to the state, and the county rate has recently increased (Table 11).
- In 2009, 26.4% of Ashe County residents under the age of 18 lived in poverty, a proportion 17% higher than the comparable state proportion.
- Ashe County has had a consistently larger proportion of children under the age of 18 in poverty when compared to the state as a whole, but the percentage of children in poverty in the state as a whole is also increasing.

Table 11. Persons in Poverty by Age, Percent (2006-2009)

Percent in Poverty												
County	2006			2007			2008			2009		
	All Ages	Ages 0-17	Ages 5-17	All Ages	Ages 0-17	Ages 5-17	All Ages	Ages 0-17	Ages 5-17	All Ages	Ages 0-17	Ages 5-17
Ashe	16.3	25.0	21.3	15.2	23.0	19.7	15.8	24.8	22.8	18.1	26.4	24.2
State Total	14.6	20.1	18.3	14.3	19.5	17.8	14.6	19.9	18.2	16.2	22.5	20.3

Source US Census Bureau, People: Poverty. Small Area Income and Poverty Estimates, <http://census.gov>

Food Stamps

- The number of people in the county receiving food stamps increased significantly between 2002 and 2010. An increase was also noted at the state level during this same period (Table 12).

Table 12. Food Stamp Recipients (2002-2010)

County	Average Monthly Number of Food Stamp Recipients									
	2002	2003	2004	2005	2006	2007	2008	2009	2010	
Ashe	1,511	1,690	1,932	2,103	2,268	2,372	2,550	3,111	3,719	
State Total	555,951	624,167	727,710	787,756	842,363	874,426	924,265	1,077,914	1,294,732	

Source Log Into North Carolina (LINC) database, <http://linc.state.nc.us>

Housing

- In Ashe County the *number* of owned housing units increased between 2000 and 2010; during the same period the *percentage* of owned housing units decreased during this time (Table 13).
- The *number and percentage* of rental household units in the county increased between 2000 and 2010.
- The *percentage* of rental household units was significantly lower than the percentage in the state as a whole in 2010.

Table 13. Housing (2000 and 2010)

County	2000									2010								
	Total Housing Units	Average Persons/ Household	Owner Occupied Units		Renter Occupied Units		Median Rent	Mobil Home Units		Total Housing Units	Average Persons/ Household	Owner Occupied Units		Renter Occupied Units		Median Rent	Mobile Home Units	
	No.	No.	No.	%	No.	%	\$	No.	%	No.	No.	No.	%	No.	%	\$	No.	%
Ashe	13,268	2.3	8,428	63.5	1,983	14.8	\$375	2,734	20.6	17,342	2.3	9,152	52.8	2,603	15.0	no data	no data	n/a
State Total	3,523,944	n/a	2,171,355	n/a	959,658	n/a	n/a	577,323	n/a	4,327,528	2.50	2,497,900	57.7	1,247,255	28.8	no data	no data	n/a

Source: Log Into North Carolina (LINC) database, <http://linc.state.nc.us>

Educational Attainment and Investment

According to data presented in Table 14:

- As of 2010, Ashe County had 2% fewer high school graduates and 41% fewer college graduates than the state as a whole. Over 23% of the county's population had not finished high school.
- According to 2008 End of Grade (EOG) Test results, third graders in Ashe County schools performed at slightly lower rates of proficiency in math and reading than students statewide, but eighth graders performed at higher rates.
- The 2010 average SAT scores for students in Ashe County schools (1040) was 35 points above the NC average (1005).
- In 2009-2010 the rate of acts of school violence in Ashe County schools (9.8) was 22.5% lower than the NC system-wide average (8.0).
- The 2007-2008 total-per-pupil expenditure (i.e., per-pupil expenditure from state, federal, and local sources) in Ashe County schools (\$9,495) ranked 34th among the 115 school systems in the state.

Table 14. Educational Attainment of Residents (years as noted)

County	% High School Graduates (2010)	% College Graduates (2010)	Per Pupil Expenditure State, Fed and Local (2007-08)	Per Pupil Expenditure State Ranking (2007-08)	% 3rd Graders Proficient on EOG Math Test (2008)	% 3rd Graders Proficient on EOG Reading Test (2008)	% 8th Graders Proficient on EOG Math Test (2008)	% 8th Graders Proficient on EOG Reading Test (2008)	Average Total SAT Scores (2010)	School Violence: Acts/1,000 Students (2009-10)
Ashe	76.6	15.1	\$9,495	34.0	71.1	54.2	81.9	64.6	1040.0	9.8
State Total	78.1	25.6	\$8,521	n/a	73.2	54.5	68.2	54.2	1005.0	8.0
Source	a	a	b	b	c	c	c	c	c	d

a - NC Department of Commerce, Economic Development Information Service, <http://cmedis.commerce.state.nc.us/countyprofiles>
b - NC Department of Public Instruction, <http://www.ncpublicschools.org/docs/fbs/resources/data/statisticalprofile/2006profile.pdf>
c - Kids Count, <http://datafinder.kidscount.org/data>
d - <http://www.ncpublicschools.org/docs/research/discipline/reports>

High School Drop-Out Rate

- For the 2009-2010 school year, the high school dropout rate in Ashe County Schools (5.1) was 34% higher than the average dropout rate statewide (3.8).
- The average high school dropout rate in North Carolina has fluctuated since 2003 but has declined since 2007. The dropout rate in Ashe County schools has also fluctuated but has declined since 2007. Overall the Ashe County schools rate has increased by 4% between 2003 and 2010.

Table 15. High School Dropout Rate (SY2003-2004 - SY2009-2010)

County	Drop Out Rate						
	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010
Ashe	4.9	4.3	3.8	6.1	6.2	4.1	5.1
State Total	4.8	4.7	5.7	5.2	5.0	4.2	3.8
Source	NC Department of Public Instruction, Statistical Profiles 2007 -2010, http://www.ncpublicschools.org/docs/research/discipline/reports/consolidated						

Crime and Safety

Crime Rates

All crime statistics reported below were obtained from the North Carolina Department of Justice and the North Carolina State Bureau of Investigation, unless otherwise noted. Table 16 shows the rates for “index crime”, which consists of violent crime (murder, rape, robbery, and aggravated assault) plus property crime (burglary, larceny, arson, and motor vehicle theft). Table 17 shows the actual number of index crimes by type that occurred in Ashe County between 2004 and 2010.

- The index crime rate in Ashe County has fluctuated between 2004 and 2010. The county index crime rate remained below the comparable state rate for every year in the period cited (Table 16).
- The violent crime rate in Ashe County has fluctuated between 2004 and 2010. The county violent crime rate has remained below the comparable state rate for every year.
- The property crime rate in the county has also fluctuated between 2004 and 2010 and has remained below the state rate for every year.

Table 16. Crime Rates (2004-2010)

Crimes per 100,000 Population																					
County	2004			2005			2006			2007			2008			2009			2010		
	Index Crime	Violent Crime	Property Crime	Index Crime	Violent Crime	Property Crime	Index Crime	Violent Crime	Property Crime	Index Crime	Violent Crime	Property Crime	Index Crime	Violent Crime	Property Crime	Index Crime	Violent Crime	Property Crime	Index Crime	Violent Crime	Property Crime
Ashe	2052.9	127.6	1925.4	1744.7	127.5	1617.3	1882.4	180.4	1702.0	1908.9	143.6	1765.3	2045.9	100.0	1945.9	1911.2	167.2	1744.0	1898.8	147.2	1751.5
State Total	4573.9	446.9	4127.1	4617.9	478.1	4139.7	4654.4	483.5	4170.9	4659.4	480.6	4178.8	4580.8	477.0	4103.8	4191.2	417.1	3774.1	3956.0	374.4	3581.4

Source: North Carolina Department of Justice, Crime Statistics, <http://crimereporting.ncdoj.gov/Reports.aspx>

- As detailed in Table 17, the actual number of violent crimes committed in Ashe County fluctuates on a yearly basis but has increased overall since 2000. Aggravated assault accounts for the majority of violent crimes in the county.
- Property crimes committed in Ashe County also fluctuate yearly. Larceny (the theft of property without the use of force) was the most common property crime in most years, including 2010.

Table 17. Number of Index Crimes Reported in Ashe County (2001-2010)

Type of Crime	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Violent crime	25	18	34	32	32	46	40	26	44	39
<i>Murder</i>	2	0	2	5	2	0	0	0	0	1
<i>Rape</i>	3	3	2	5	5	5	6	4	5	5
<i>Robbery</i>	0	0	3	2	1	3	2	3	1	2
<i>Aggravated assault</i>	20	15	27	20	24	38	32	19	38	31
Property crime	366	399	396	483	406	434	484	506	459	464
<i>Burglary</i>	173	169	176	265	177	203	199	229	242	215
<i>Larceny</i>	171	215	183	194	212	206	265	241	188	224
<i>Motor vehicle theft</i>	22	15	37	24	17	25	20	36	29	25

Source: North Carolina State Bureau of Investigation, Crime Statistics, Uniform Crime Reporting Program. Annual Summary Reports (Available 2001-2010). In an individual year's report, under "Crime Trends - Offenses and Rates per 100,000", Select "County Offenses"

Health Care Resources

Access and utilization of healthcare is affected by a range of variables including the availability of medical professionals in a region, insurance coverage, transportation, cultural expectations and other factors. Compilation of comprehensive health resources data was beyond the scope of this project; nevertheless, some overview-type data were collected and are presented here.

Practitioners

- The proportional availability of active, licensed physicians in Ashe County has fluctuated with the state rate since 2001, as demonstrated by the persons-per-provider ratio data shown in Table 18.
- The persons-per-primary care physician ratio has also fluctuated since 2001, as has the person-per-physician extender ratio.
- The Ashe County persons-per-dentist has been higher than the comparable ratio for the state during all the available reporting periods.

Table 18. Persons per Provider Type (2001-2009)

County	2001				2003				2005				2007				2009			
	Primary Care Physician	Primary Care Physician Extender	Registered Nurse	Dentist	Primary Care Physician	Primary Care Physician Extender	Registered Nurse	Dentist	Primary Care Physician	Primary Care Physician Extender	Registered Nurse	Dentist	Primary Care Physician	Primary Care Physician Extender	Registered Nurse	Dentist	Primary Care Physician	Primary Care Physician Extender	Registered Nurse	Dentist
Ashe	1,459	1,183	147	6,202	1,476	1,197	201	5,017	1,500	1,145	214	5,100	1,857	1,262	206	5,201	1,558	1,063	201	4,415
State Total	1,198	872	109	2,471	1,193	860	110	2,432	1,056	749	109	2,302	1,043	717	107	2,313	1,008	678	103	2,292

Source: NC State Center for Health Statistics. Pocket Guides 2003-2011. <http://www.schs.state.nc.us/SCHS/data/pocketguide>

- The distribution of health care professionals in Ashe County according to specialty area is shown in Table 19.
- The data indicate that although there is representation in Ashe County in most major categories of health care, a few categories such as obstetrics/gynecology, pediatrics and podiatry lack representation.

Table 19. Licensed Medical Practitioners in Ashe County (2009)

Category of Provider	No.
Family practice	13
General practice	1
Internal medicine	2
Obstetrics/Gynecology	0
Pediatrics	0
Other medical specialties	8
Registered nurse	132
Nurse practitioner	8
Licensed practical nurse	30
Chiropractor	5
Physician assistant	4
Podiatrist	0
Dentist	6
Dental hygienist	5
Optometrist	3
Pharmacist	16
Physical therapist	9
Physical therapy assistant	9
Practicing psychologist	4
Psychological associate	3
Respiratory therapist	9

Source: Cecil G. Sheps Center for Health Services Research,
<http://www.shepscenter.unc.edu>

Medical Insurance

Medically Indigent Population

In most communities, citizens' access to and utilization of health care services is related to the ability to pay for those services, either directly or through private or government health insurances plans/programs.

- In Ashe County, the percentage of the total population that is uninsured has increased from 1999-2006 abut decreased in 2008 and 2009. The percentage has remained consistently higher than the comparable state percentage during the years 1999-2009 (Table 20).
- The percent of the population without health insurance was highest in the county in 2006 and in the state in 2005.

Table 20. Percent of Population without Health Insurance (1999-2009)

County	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Ashe	19.5	17.5	20.4	20.7	22.8	22.0	22.8	25.2	21.7	21.2	21.2	no data
State Total	16.3	15.6	17.7	19.0	19.4	17.5	21.2	18.6	18.2	17.4	18.0	no data
Source	b	b	b	a	a	a	b	b	b	b	b	b

a -Sheps Center for Health Servies, Research, County Level Estimates of the Uninsured, www.shepscenter.unc.edu
b - US Census Bureau, Small Area Health Estimates, <http://www.census.gov/did/www/sahie/data/index.html>

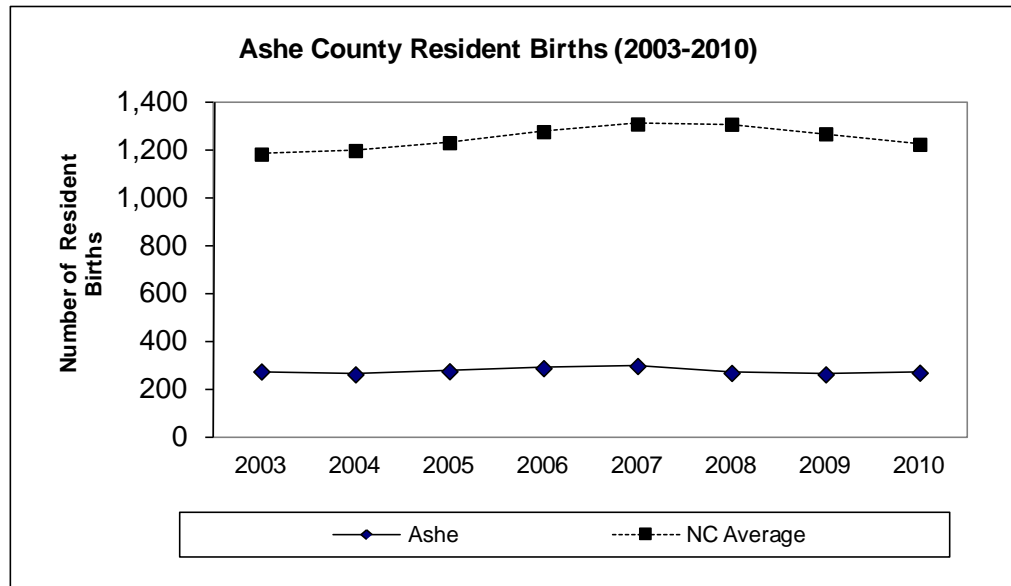
HEALTH DATA
ASHE COUNTY

Maternal and Child Health

Adult and Teen Pregnancy and Birth Rates

- Figure 3 plots the Ashe County and NC county averages for the annual number of live births from 2003 through 2010. The average number of live births per county statewide remained fairly stable (with a slight increase between 2006 and 2008) and was significantly higher than the comparable figures for Ashe County throughout the reporting period. The number of births in the county has remained stable since 2003.

Figure 3



Source: NC State Center for Health Statistics. Health Data. County-level Data. Basic Automated Birth Yearbook (Babybook); 2005-2011, Ashe County. <http://www.schs.state.nc.us/SCHS/data/county.cfm>.

- As monitored by the NC-SCHS, the overall pregnancy rate is the number of pregnancies per 1,000 women between the ages of 15 and 44 in the referenced population. The overall pregnancy rate in Ashe County for the period from 2007 to 2009 was 67.9, which was 17% lower than the average NC county pregnancy rate of 82.5 (Table 21).
- From 2007 through 2009, Ashe County had a 6.1% lower birth rate than the state (Table 21).
- From 2007 through 2009, Ashe County had a 93.4% higher percentage of births to mothers who smoked during pregnancy than the state (20.5% compared to 10.6%).
- From 2007 through 2009, Ashe County's pregnancy rate among teens ages 15-19 was 68.1%, 15.2% higher than the state rate of 59.1.
- In 2009, Ashe County had 25.3% higher percentage of births to Medicaid mothers than the state (65.9% vs. 52.6%).
- In 2009, Ashe County had 37% more births to Health Department mothers and 21.8% more births to WIC mothers than the state.

Table 21. Pregnancies and Births (2007-2009)

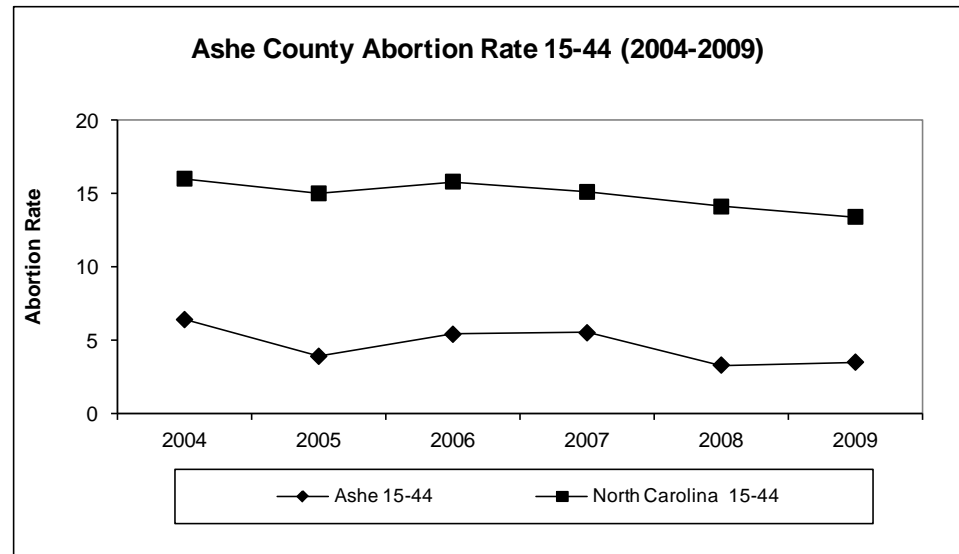
County	Pregnancy, Total (2007-2009)						Pregnancy, Females 15 - 19 (2007-2009)						2009 Percent of Live Births To:		
	Preg Rate	Birth Rate	Percent of Live Births				Preg Rate	Birth Rate	Percent of Live Births				Medicaid Moms	Health Dept. Moms	WIC Moms
			Minority	Low Weight	Late/No Care	Mother Smoked			Minority	Low Weight	Late/No Care	Mother Smoked			
Ashe	67.9	63.6	0.8	8.0	9.1	20.5	68.1	61.3	0.8	8.7	11.1	22.2	65.9	28.5	50.9
State Total	82.5	67.7	28.6	9.1	16.8	10.6	59.1	45.8	41.0	10.9	28.4	12.6	52.6	20.8	41.8

Source NC Center for Health Statistics, Pocket Guide - 2009. <http://www.schs.state.nc.us/SCHS/data/pocketguide/table7c.html>

Abortion

- For women between the ages of 15 and 44, the most recently calculated abortion rate in Ashe County was 3.5; a number much smaller than the overall state abortion rate of 13.4 (Figure 4).
- According to the data plotted in Figure 7, the annual abortion rate for Ashe County women ages 15-44 has decreased slightly overall since 2004.

Figure 4



Source: State Center for Health Statistics. County Health Data Books 2006-2011. Pregnancy, Fertility and Abortion Rates per 1,000 Population. Females 15-44. <http://www.schs.state.nc.us/SCHS/data/databook/>.

Pregnancy Risk Factors

- The percentage of high parity births among women aged <30 in Ashe county from 2005 through 2009 was lower than the comparable state rate (Table 22). According to NC-SCHS, a birth is high parity if the mother is younger than 18 when she has had one or more births, or aged 18 or 19 and has had two or more births, or is 20-24 and has had four or more births, etc.
- The percentage of high parity births among Ashe County women age 30 and older was slightly higher than the state rate.
- The percentage of short interval births (less than six months between pregnancies) was higher in Ashe County than the state as a whole (Table 22).
- From 2005 through 2009, 20.6% of babies born in Ashe County were born to mothers who smoked, a figure 87.3% higher than the state percentage (11%) (Table 22).

Table 22. High Risk Births (2005-2009)

	High Parity Births				Short Interval Births		Births to Mothers who Smoke	
	Mothers Under 30		Mothers 30 and Older		Number	Percent	Number	Percent
	Number	Percent	Number	Percent				
Ashe	165	16.3	81	21.6	114	13.3	286	20.6
State Total	74,727	17.9	45,075	20.4	54,565	12.9	70,529	11.0
Source	a	a	a	a	b	b	c	c

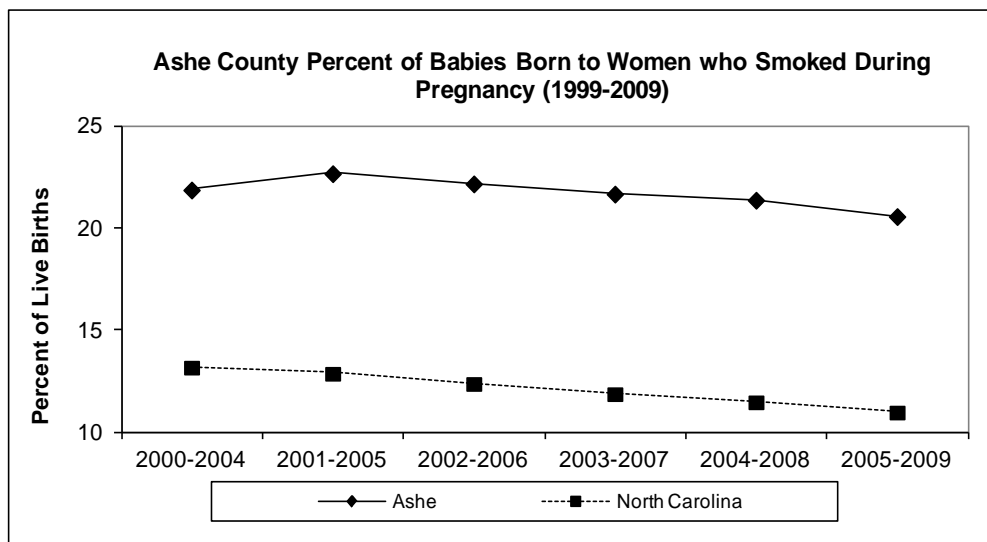
a - NC State Center for Health Statistics. County-level Data. County Health Databooks. 2011 County Health Data Book. 2005-2009 Number At Risk NC Live Births due to High Parity by County of Residence. <http://www.schs.state.nc.us/SCHS/data/databook/>

b - NC State Center for Health Statistics. County-level Data. County Health Databooks. 2011 County Health Databook. 2005-2009 NC Live Births by County of Residence; Number with Interval from Last Delivery to Conception of Six Months or Less. <http://www.schs.state.nc.us/SCHS/data/databook/>

c - NC State Center for Health Statistics. County-level Data. County Health Databooks. 2011 County Health Databook. 2005-2009 Number and Percent of Births to Mothers Who Smoked Prenatally. http://www.schs.state.nc.us/SCHS/data/databook

- The percentage of babies born to Ashe County mothers who smoked decreased overall since 2000, but remains significantly higher than the comparable figures for the state as a whole (Figure5).

Figure 5



Source: NC State Center for Health Statistics. County Health Databooks. County Health Data Books, 2006-2011.. Number and Percent of Births to Mothers Who Smoked Prenatally.
<http://www.schs.state.nc.us/SCHS/data/databook>

- Over 90% of pregnant women in Ashe County received prenatal care in the first trimester in the period 2005-2009, a proportion almost 10% higher than state rate of 82.1% (Table 23).
- A higher percentage of black women received prenatal care in the first trimester in Ashe County than in North Carolina as a whole (100% vs. 75.5%) (Table 23); however this percentage is based on a very small number of pregnancies.

Table 23. Women Receiving Care in the First Trimester (1997-2009)

	1997-2001		1998-2002		1999-2003		2000-2004		2001-2005		2005-2009	
	Total	Black	Total	Black	Total	Black	Total	Black	Total	Black	Total	Black
Ashe	87.4	87.5	88.7	90.0	89	90	88.6	88.9	88.9	100	90.3	100.0
State Total	84.0	74.7	84.0	75.1	84.0	75.4	83.7	75.4	83.5	75.5	82.1	75.5
Source	NC State Center for Health Statistics. County-level Data. County Health Databooks 2003-2011. Women Receiving Prenatal Care in the First Trimester. http://www.schs.state.nc.us/SCHS/data/databook/											

Pregnancy Outcomes

Low Birth Weight and Very Low Birth Weight

- Over the period from 2005 through 2009, the total percentage of low birth weight births (below 2500 grams or 5.5 pounds) was lower in Ashe County than North Carolina as a whole (8.3% vs. 9.1%). There were 3 minority low birth weight babies, for a percentage of 2.6% (Table 24).
- Over the same period the total percentage of very low birth weight births (below 1500 grams or 3.3 pounds) was 27.7% lower in the county than the state. There were no reported cases of very low weight births among minorities in the county.

Table 24. Number and Percent of Low and Very Low Birth Weight Births by Race (2005-2009)

	Low Birth Weight (<2500 grams) Births						Very Low Weight (<1500 grams) Births			
	Total		White		Black		Total		Black	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Ashe	115	8.3	112	97.4	3.0	2.6	18	1.3	0	0
State Total	58,461	9.1	36,696	85.6	21,765	14.4	11,650	1.8	5,242	3.5
Source	a	a	a	a	a	a	b	b	c	c

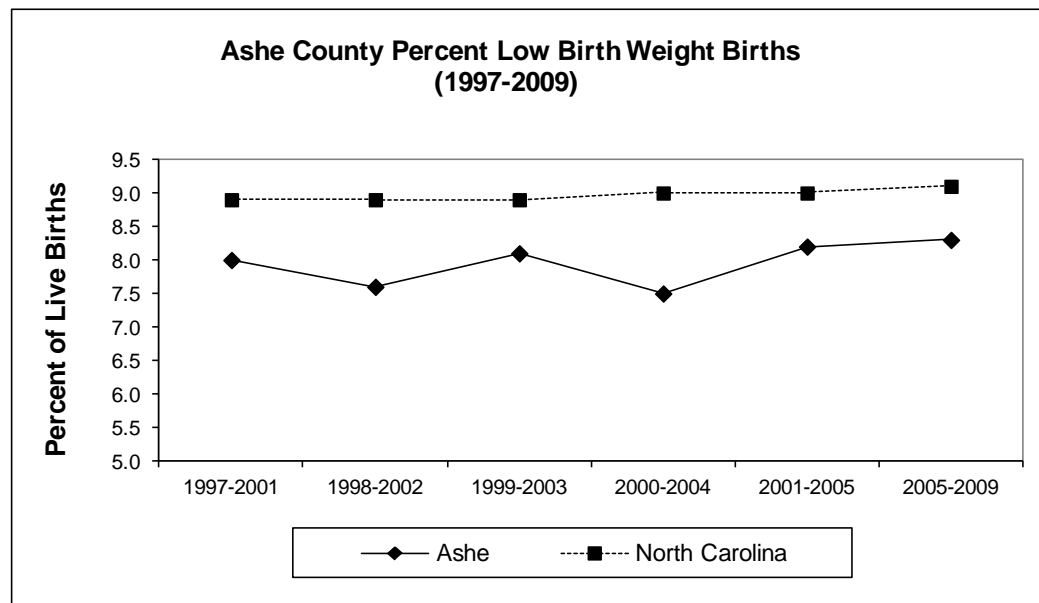
a - NC State Center for Health Statistics. County-level Data. County Health Databooks. 2011 County Health Data Book. Low Birth Weight Births by Race, 2005-2009. <http://www.schs.state.nc.us/SCHS/data/databook/>

b - NC State Center for Health Statistics. County-level Data. County Health Databooks. 2011 County Health Data Book. Low (<2500 grams) and Very Low (<1500 grams) Weight Births, 2005-2009. <http://www.schs.state.nc.us/SCHS/data/databook/>

c - NC State Center for Health Statistics. County-level Data. County Health Databooks. 2011 County Health Data Book. Low (<2500 grams) and Very Low (<1500 grams) Weight Black Births, 2005-2009. <http://www.schs.state.nc.us/SCHS/data/databook/>

- Since 1997, the percentage of low weight births has slightly increased in Ashe County while the percentages in the state remained relatively stable (Figure 6).

Figure 6



Source: NC State Center for Health Statistics. County Health Databooks, 2003-2011. Low (<2500 grams) and Very Low (<1500 grams) Weight Births. <http://www.schs.state.nc.us/SCHS/data/databook>

Infant Mortality

- For the aggregate period from 2005 through 2009 the total Ashe County infant mortality rate of 4.3 was 48% lower than the state rate (Table 25).
- The five-year aggregate overall infant mortality rate in Ashe County has fluctuated, while the rates for the state have remained stable.
- From 2000 through 2010, there were no infant deaths reported for minorities in Ashe County.
- In 2010 there was one white infant death in Ashe County, with a total infant mortality rate 47% lower than the state rate.

Table 25. Infant (<1 year) Death Rate per 1,000 Live Births (2000-2010)

County	2000-2004			2001-2005			2005-2009			2010					
	Total	White	Minority	Total	White	Minority	Total	White	Minority	White Infant Deaths	White Infant Death Rate	Minority Infant Deaths	Minority Infant Death Rate	Total Infant Deaths	Total Infant Death Rate
Ashe	10.9	11.0	0.0	13.1	13.2	0.0	4.3	4.3	0.0	1	4.0	0	0.0	1	3.7
State Total	8.4	6.1	14.6	8.5	6.1	14.7	8.3	6.0	14.0	362	5.3	492	12.7	854	7.0

Source: NC State Center for Health Statistics, County Health Databooks. <http://www.schs.state.nc.us/SCHS/data/databook/>

Table 26. Age-Adjusted Mortality Rates for the Leading Causes of Death in Ashe County and North Carolina (2005-2009)

NOTE: Rates based on fewer than 20 cases (indicated by N/A) are unstable and have been suppressed

Cause of Death	Ashe County		N. C.
	No.	Rate	Rate
1. Heart Disease	376	198.4	194.7
2. Total Cancer	330	175.9	188.8
3. Chronic Lower Respiratory Disease	111	58.9	48.0
4. Cerebrovascular Disease	97	51.1	51.3
5. Unintentional Non-Motor Vehicle Injury	52	35.8	28.7
6. Diabetes	36	20.4	24.0
7. Suicide	33	25.6	11.9
8. Pneumonia and Influenza	30	15.7	19.7
9. Unintentional Motor Vehicle Injuries	29	21.5	17.6
10. Alzheimer's Disease	27	14.1	28.8
11. Kidney Disease	25	12.9	26.3
12. Chronic Liver Disease and Cirrhosis	20	12.8	9.2
13. Septicemia	15	N/A	14.0
14. Homicide	4	N/A	7.0
15. AIDS	1	N/A	4.2

Source: State Center for Health Statistics, 2005-2009 NC Resident Race and Sex-Specific Age-Adjusted Death Rates; Rates per 100,000 Population, 2011 County Health Data Book, www.schs.state.nc.us/SCHS/data/databook

Gender Disparities in Mortality

Table 27 compares rates for males versus females in Ashe County. The mortality data cited in this section were obtained from the North Carolina State Center for Health Statistics and represent the period from 2005-2009.

Table 27. Age-adjusted Mortality Rates by Gender, Ashe County (2005-2009)

Cause of Death	Males		Females	
	Number	Rate	Number	Rate
Diseases of Heart	181	246.4	189	162.5
Cerebrovascular Disease	46	65.0	51	43.6
Total Cancer	182	228.4	147	140.2
Colon, Rectum, and Anus	17	N/A	11	N/A
Trachea, Bronchus, and Lung	62	73.8	36	34.1
Female Breast	0	0.0	19	N/A
Prostate	17	N/A	0	N/A
Diabetes Mellitus	19	N/A	16	N/A
Pneumonia and Influenza	10	N/A	20	16.7
Chronic Lower Respiratory Diseases	61	79.9	50	47.3
Chronic Liver Disease and Cirrhosis	10	N/A	10	N/A
Septicemia	4	10.0	5	8.5
Nephritis, Nephrotic Syndrome, and Nephrosis	11	N/A	14	N/A
Unintentional Motor Vehicle Injuries	23	37.1	5	N/A
Unintentional Non-Motor Vehicle Injuries	40	60.5	12	N/A
Suicide	25	40.3	8	N/A
Homicide	4	N/A	0	N/A
Alzheimer's disease	9	N/A	18	N/A
AIDS	1	N/A	0	N/A
Total Deaths - All Causes (some causes not listed)	76	1051.0	739	671.3

Source: North Carolina State Center for Health Statistics, 2011 County Health Databook
www.schs.state.nc.us/SCHS/data/databook

Heart Disease and Stroke

Heart disease and cerebrovascular disease (stroke) are both diseases of the circulatory system. While heart disease is any disease that diminishes or interrupts blood supply to the heart, stroke is an interruption in blood supply to the brain. The most common cause of both of these diseases is a narrowing or blockage of arteries that supply the heart and brain, respectively (59).

Heart Disease and Stroke Incidence

Hospital utilization data provided by the NC-SCHS for Table 28 give some indication of the burden of heart disease in Ashe County. Between 2004 and 2009, the hospital discharge rates for all circulatory diseases, as well as heart disease and cerebrovascular disease individually, declined overall.

Heart and cerebrovascular diseases account for more hospitalizations than any other health condition. Consequently, costs due to these two conditions were greater than for any other, together accounting for over \$25 million in hospital charges to Ashe County patients in 2009.

It should be noted that the usefulness of this information is limited in that it does not include people who may have cardiovascular or cerebrovascular conditions but have *not* sought medical care or been hospitalized. The category represented in Table 60 includes not only diagnoses of heart disease and cerebrovascular disease, but other diseases of cardiovascular and circulatory systems as well. Therefore, the sum of the rates for heart disease and cerebrovascular disease will not add up to the total discharge rates for all cardiovascular and circulatory diseases.

Table 28. Ashe County Hospital Discharges per 1,000 Persons (2004-2009)

Condition	2004	2005	2006	2007	2008	2009
Cardiovascular and Circulatory Diseases	23.8	22.7	21.1	24.1	19.9	20.2
Heart Disease	17.4	16.1	14.9	17.2	14.1	13.7
Cerebrovascular Disease	3.9	3.2	3.3	3.5	3.1	3.4

Source: North Carolina State Center for Health Statistics, County Health Databooks,
www.schs.nc.us/SCHS/data/databook

Heart Disease Mortality

Heart disease and stroke are the first and third leading causes of death among Ashe County residents. For the 2005-2009 time period, 376 Ashe County residents died of heart disease and 97 died of stroke (Table 26, cited previously).

The most recent data (aggregated for the years 2005-2009) show that the county mortality rate due to heart disease (198.4) is slightly higher than the state rate (191.7) (Table 29).

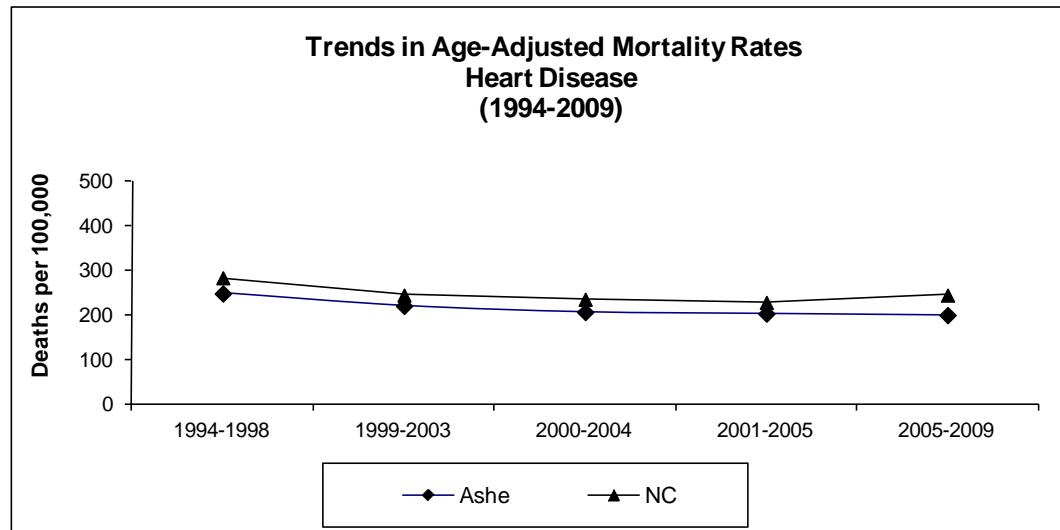
Table 29. Heart Disease Mortality (2005-2009)

County	Overall Rate		White Males		White Females		Minority Males		Minority Females	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Ashe	376	198.4	181	246.4	189	162.5	2	n/a	2	n/a
State Total	86,920	191.7	35,204	236.2	33,177	144.2	8,721	294.0	8,755	186.0
Source	NC State Center for Health Statistics, 2011 County Health Databook. http://www.schs.state.nc.us/SCHS/data/databook/									

The Healthy Carolinians 2020 goal is to reduce the heart disease mortality rate to 161.5 per 100,000 (61)). Ashe County currently exceeds the target rate by 23%. The Healthy People 2020 goal is to reduce mortality due to heart disease to 100.8 per 100,000 (63). Ashe County currently exceeds this national goal by 97%.

Since 1994, the mortality rate due to heart disease in Ashe has paralleled a decreasing trend seen at the state level (Figure 7, following page).

Figure 7



Source: NC Center for Health Statistics. North Carolina Vital Statistics, Volume 2, Leading Causes of Death (various years) <http://www.schs.state.nc.us/SCHS/data/vitalstats.cfm>

Stroke Mortality

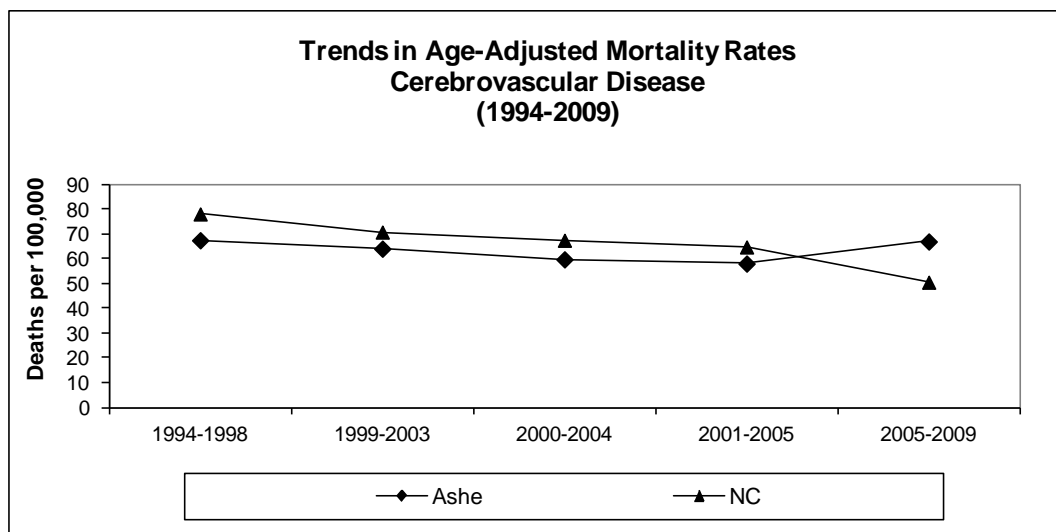
The county mortality rate for stroke (51.1) is slightly higher than the comparable rate in the state as a whole (50.5) (Table 30). The most recent (2007) death rate due to stroke in the United States is 42.2 per 100,000 population, a rate exceeded in Ashe County by 21%.

Table 30. Cerebrovascular Disease Mortality (2005-2009)

County	Overall Rate		White Males		White Females		Minority Males		Minority Females	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Ashe	97	51.1	46	65	51	43.6	0	0	0	0
State Total	22,600	50.5	6,658	47.1	10,341	45.1	2,205	77.1	2,989	63.8
Source	NC State Center for Health Statistics, 2011 County Health Databook. http://www.schs.state.nc.us/SCHS/data/databook/									

Between 1994 and 2009, the mortality rate due to stroke in Ashe County decreased, as did the comparable state rates until 2005 when the state saw a slight increase (Figure 8).

Figure 8

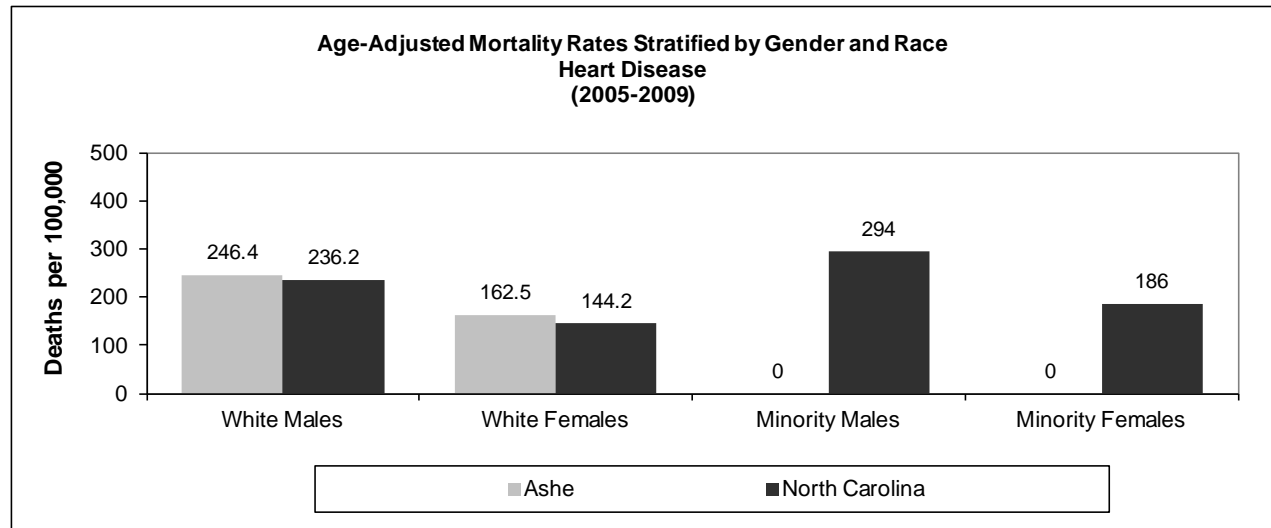


Source: NC Center for Health Statistics. County Health Databooks (various years), <http://www.schs.state.nc.us/SCHS/data/databook>

Gender and Racial Disparities in Heart Disease and Stroke Mortality

Figure 9 compares age adjusted mortality rates due to heart disease, aggregated between 2005-2009 among white males, minority males, white females, and minority females. (This is the same data that appeared in Table 29.) In Ashe County, the numbers of heart disease deaths among minority males and females were below the threshold for meaningful local mortality rate comparisons. However, valid sex-race comparisons remain among whites. The rate of heart disease mortality in white males was 63.8% higher than the rate of heart disease mortality for white females.

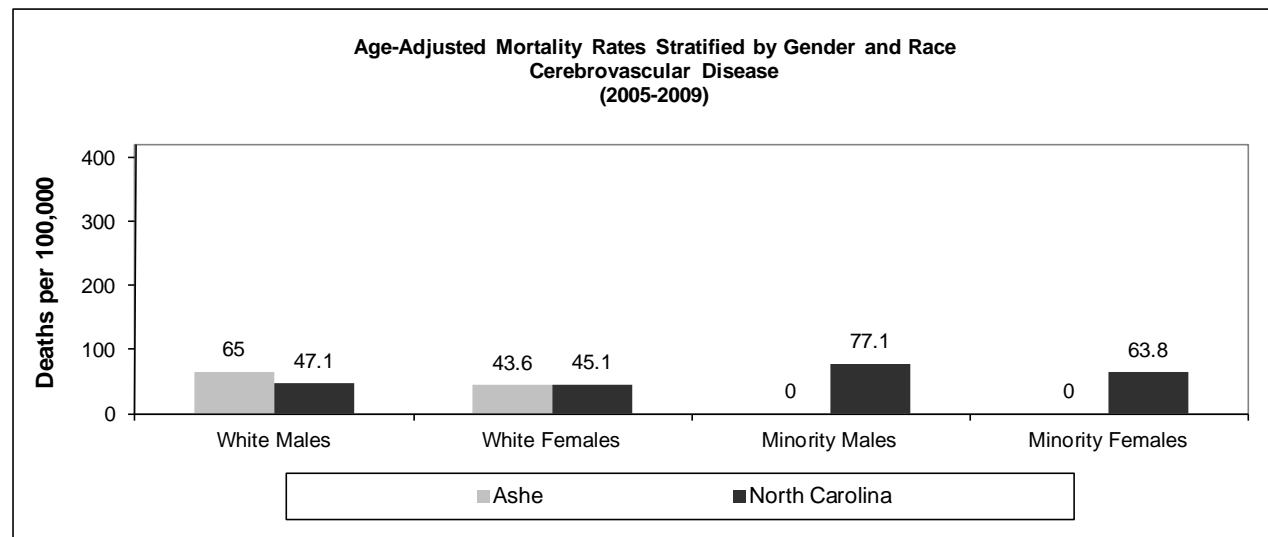
Figure 9



Source: NC State Center for Health Statistics. County-level Data. County Health Data Books. 2011 County Health Data Book. Mortality. 2005-2009 Race-Sex Specific Age-Adjusted Rates by County. <http://www.schs.state.nc.us/SCHS/data/databook>.

Figure 10 compares sex-race stratified age-adjusted mortality rates for cerebrovascular disease (with data from Table 30, cited previously). In Ashe County, the numbers of cerebrovascular disease deaths among minority males and females were below the threshold for meaningful local mortality rate comparisons. However, valid sex-race comparisons remain among whites. The rate of death due to cerebrovascular disease in white males was 49% higher than the rate of cerebrovascular disease mortality for white females.

Figure 10



Source: NC State Center for Health Statistics. County-level Data. County Health Data Books. 2011 County Health Data Book. Mortality. 2005-2009 Race-Sex Specific Age-Adjusted Rates by County. <http://www.schs.state.nc.us/SCHS/data/databook>.

Cancer

Cancer is the group of diseases characterized by the uncontrolled growth and spread of abnormal body cells. If the disease remains unchecked, it can result in death. Cancers of all kinds are sometimes grouped together in a parameter called “total cancer”. Total cancer was the second leading cause of death in Ashe County for the period from 2005-2009 (Table 26, cited previously). In 2009 hospital charges associated with cancer diagnoses and treatment in Ashe County residents totaled nearly \$3.7 million.

Total Cancer Incidence

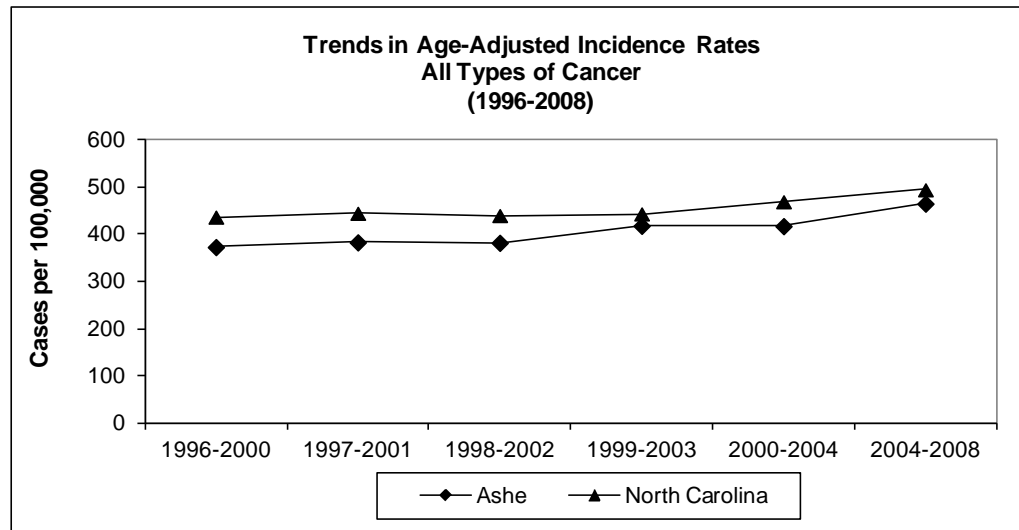
There were 843 newly diagnosed cases of all cancers combined in Ashe County between 2004 and 2008. Table 31 shows this total and the resultant age-adjusted total cancer incidence rates for the period, as well as individual incidence rates for colorectal, lung, breast, and prostate cancers. The incidence rate for all cancers during the period cited in Ashe County (465.8) was below the state rate (495.2).

Table 31. Cancer Incidence (2004-2008)

County	All Cancer		Colorectal Cancer		Lung Cancer		Female Breast Cancer		Prostate Cancer	
	# Cases	Incidence Rate	# Cases	Incidence Rate	# Cases	Incidence Rate	# Cases	Incidence Rate	# Cases	Incidence Rate
Ashe	843	465.8	71	37.1	139	73.9	100	107.5	129	149.4
State Total	227,397	495.2	21,349	46.8	34,881	76.3	38,098	151.9	32,943	158.8
Source	State Center for Health Statistics, Cancer Incidence Rates, http://www.schs.state.nc.us/SCHS/CCR/incidence/2008/5yearRates.pdf									

As shown in Figure 11, the total cancer incidence rate in Ashe County has remained slightly below the state rates throughout the reporting period. In recent years, the county rate has increased, but remains below the state rate.

Figure 11



Source: NCState Center for Health Statistics, County-Level Databooks, 2002-2011. Cancer Incidence Rates for All Counties by Specific Site (by five-year aggregate). Available at: <http://www.schs.state.nc.us/SCHS/CCR/reports.html>.

Total Cancer Mortality

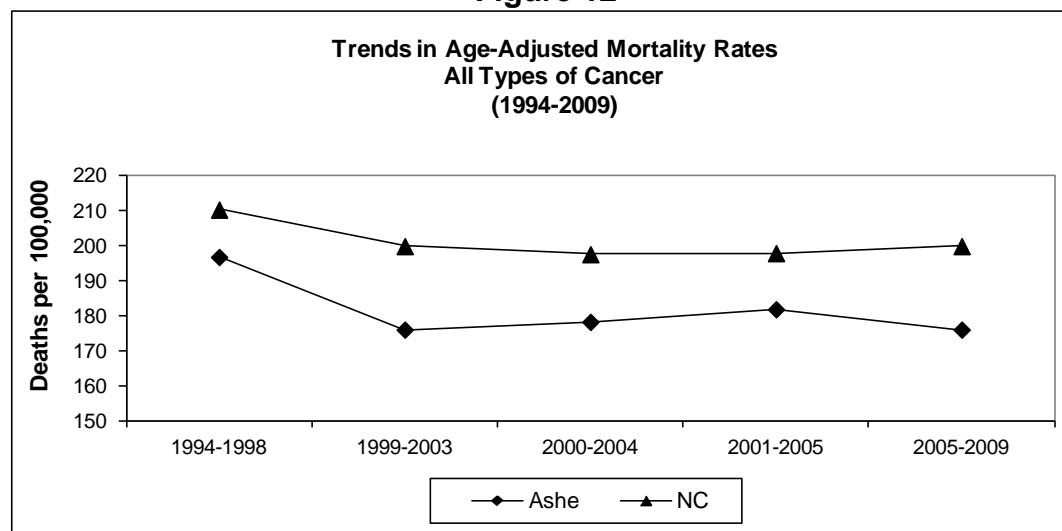
Cancer of all types was the second leading cause of death among Ashe County residents in the period from 2005 through 2009, resulting in 330 deaths (Table 26, cited previously). The mortality rate for all cancers in the county for that period was 175.9 deaths per 100,000, which was below the state rate of 185.6 (Table 32).

Table 32. Total Cancer Mortality (2005-2009)

County	Overall Rate		White Males		White Females		Minority Males		Minority Females	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Ashe	330	175.9	182	228.4	147	140.2	0	0	1	n/a
State Total	86,246	185.6	35,824	224.4	31,893	149.4	9,253	304.0	8,116	168.8
Source	NC State Center for Health Statistics, http://www.schs.state.nc.us/SCHS/data/databook/									

The national mortality rate for all types of cancer was 178.4 per 100,000 in 2007, with cancer ranking as the second leading cause of death. For 2005-2009, Ashe County was below the national rate but North Carolina exceeded the national rate. Since 1998, the overall cancer mortality rate for Ashe County has decreased and it is currently below the state rate. There actually has been only modest change in the total cancer mortality rate at any level over the past 12 years (Figure 12).

Figure 12

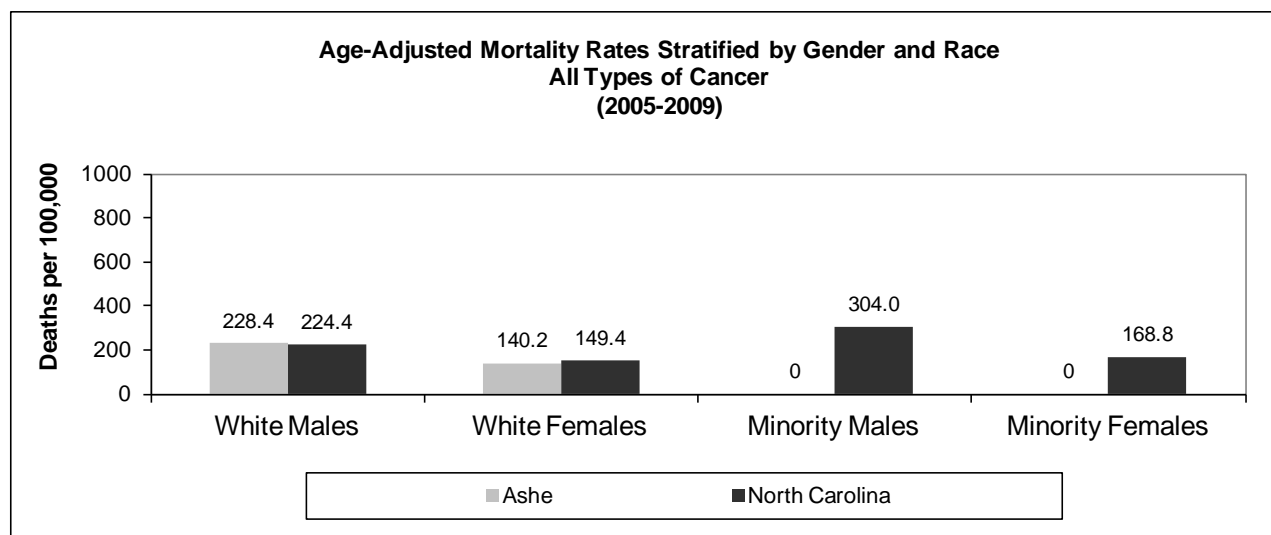


Source: NC Center for Health Statistics. County Health Databooks (various years), <http://www.schs.state.nc.us/SCHS/data/databook>

Gender and Racial Disparities in Total Cancer Mortality

Figure 13 compares stratified age-adjusted mortality rates due to all types of cancer in Ashe County. The data represent aggregate deaths between 2005 and 2009 among white males, minority males, white females, and minority females. In Ashe County, the numbers of cancer deaths among minority females were below the threshold for meaningful local mortality rate comparisons. However, valid sex-race comparisons remain for whites. The rate of cancer mortality in white males was 63% higher than the rate of cancer mortality for white females. At the state level, the cancer mortality rate was 63% higher among white males than the rate for white females.

Figure 13



Source: NC State Center for Health Statistics. County-level Data. County Health Data Books. 2011 County Health Data Book. Mortality. 2005-2009 Race-Sex Specific Age-Adjusted Rates by County. <http://www.schs.state.nc.us/SCHS/data/databook>.

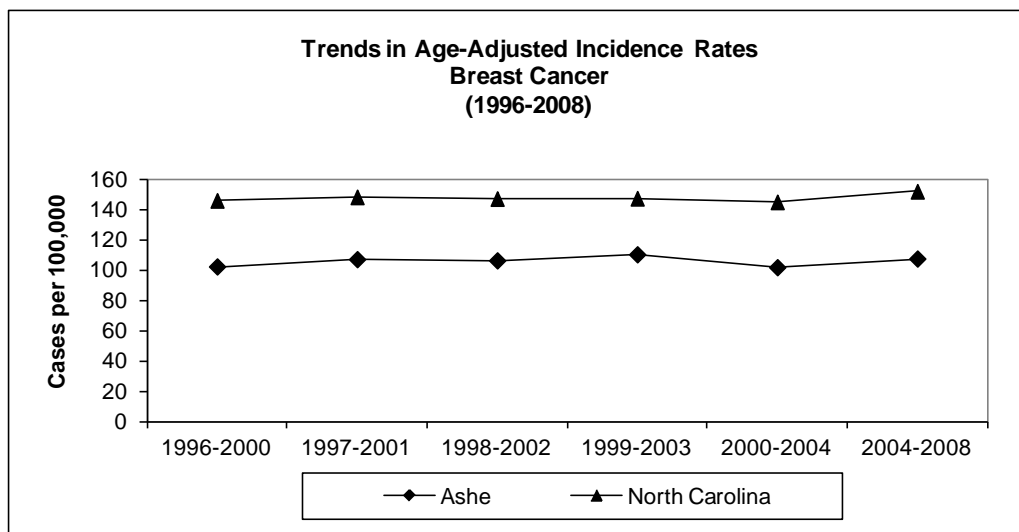
Breast Cancer

Breast Cancer Incidence

Between 2004 and 2008, breast cancer was the third most commonly diagnosed cancer in Ashe County, with 100 new cases diagnosed during that period (Table 31, cited previously). In North Carolina, breast cancer was the second most commonly diagnosed cancer, with an incidence rate of 151.9 per 100,000 during the same period.

Since 1996, breast cancer incidence rates have remained relatively steady overall in Ashe County and in North Carolina as a whole. Throughout most of the period cited the county breast cancer incidence rates have been below the state incidence rate (Figure 14).

Figure 14



Source: NC Center for Health Statistics. County Health Databooks (various years), <http://www.schs.state.nc.us/SCHS/data/databook>

Breast Cancer Mortality

Between 2005 and 2009, 19 people died of breast cancer in Ashe County. The number of deaths is too low for a meaningful mortality rate. During this time, 6,257 people died in the average NC county, representing an age-adjusted mortality rate of 13.4 (Table 33).

Table 33. Breast Cancer Mortality (2005-2009)

County	Overall Rate		White Males		White Females		Minority Males		Minority Females	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Ashe	19	n/a	0	0	19	n/a	0	0	0	0
State Total	6,257	13.4	39	0.3	4,571	21.8	15	n/a	1,551	31.3
Source	NC State Center for Health Statistics, http://www.schs.state.nc.us/SCHS/data/databook/									

Prostate Cancer

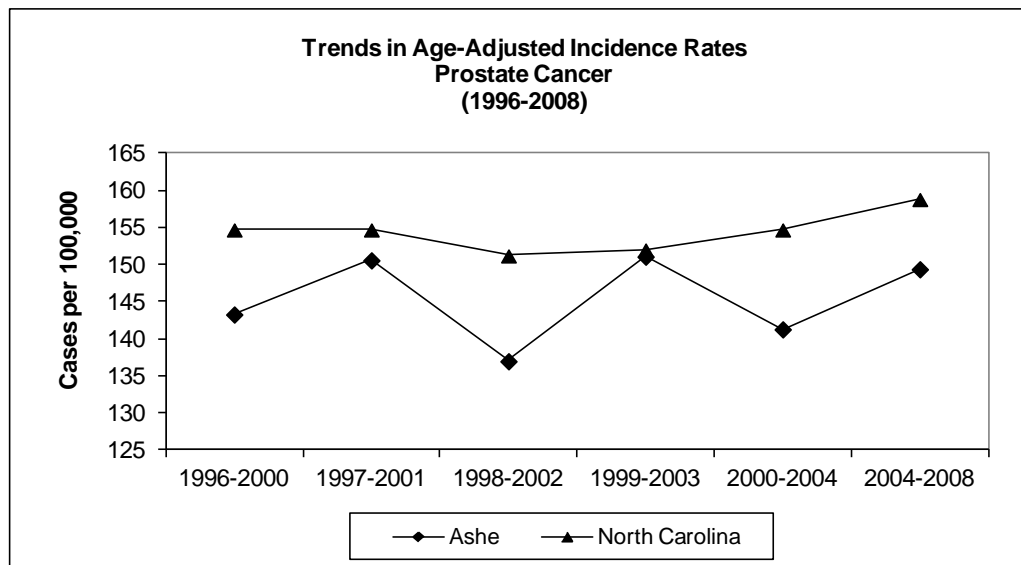
Prostate Cancer Incidence

As of 2007, prostate cancer had the highest incidence rate of all cancers nationwide, 156.9 new cases per 100,000. Nationally, the prostate cancer incidence rate was highest among African American males (226.0 per 100,000).

During the most recent reporting period, 2004-2008, there were 71 new cases of prostate cancer diagnosed in the county, making it the second most commonly diagnosed cancer (Table 31, cited previously). Over \$233,000 was spent treating Ashe County prostate cancer patients in 2009.

The prostate cancer incidence rate statewide has been stable, increasing slightly during the 2004-2008 period. The rate in Ashe County has fluctuated but has increased slightly overall since the 1996-2000 period (Figure 15).

Figure 15



Source: NC Center for Health Statistics. County Health Databooks (various years), <http://www.schs.state.nc.us/SCHS/data/databook>

Prostate Cancer Mortality

Nationally, prostate cancer has the fifth highest mortality rate (23.5) among the five main cancers (62).

From 2005 through 2009, 17 males in Ashe County died of prostate cancer (Table 34). The number of deaths is too low for a meaningful mortality rate. The state average was 9.6.

Table 34. Prostate Cancer Mortality (2005-2009)

County	Overall Rate		White Males		White Females		Minority Males		Minority Females	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Ashe	17	n/a	17	n/a	0	0	0	n/a	0	0
State Total	4,306	9.6	2,863	20.5	0	0.0	1,389	58.4	0	0.0
Source	NC State Center for Health Statistics, http://www.schs.state.nc.us/SCHS/data/databook/									

Colon and Rectal Cancer

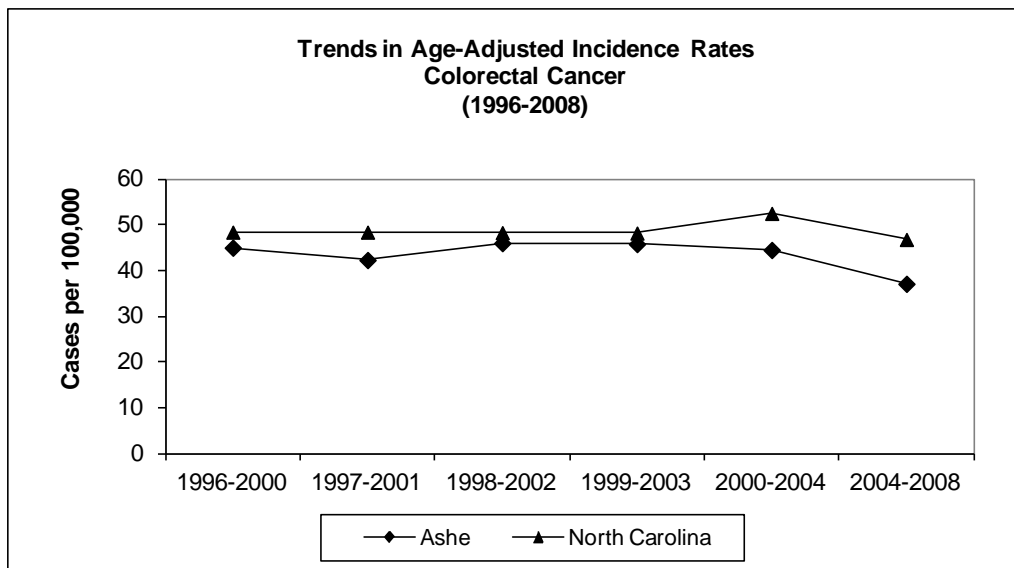
Colorectal Cancer Incidence

Colorectal cancer was the second most commonly diagnosed cancer in the US in 2007, with a national incidence rate of 17.8 new cases per 100,000.

From 2004 through 2008 cancers of the colon and rectum accounted for 71 new cancer diagnoses in Ashe County, making it the fourth most commonly diagnosed cancer (Table 31, cited previously). At that time, the local incidence rate was 21% lower than the rate for the state as a whole. In 2009, hospital charges attributable to colorectal cancers among Ashe County residents totaled almost \$188,000.

The Ashe County colorectal cancer incidence rate has decreased overall since 1996 and is slightly below the state rate (Figure 16).

Figure 16



Source: NC Center for Health Statistics. County Health Databooks (various years), <http://www.schs.state.nc.us/SCHS/data/databook>

Colorectal Cancer Mortality

The colorectal cancer mortality rate in Ashe County was lower than the state as a whole for the period between 2005 and 2009 (Table 35). During this period, 28 people in Ashe County died from colorectal cancer, representing an age-adjusted mortality rate of 14.9 per 100,000.

Table 35. Colorectal Cancer Mortality (2005-2009)

County	Overall Rate		White Males		White Females		Minority Males		Minority Females	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Ashe	28	14.9	17	n/a	11	n/a	0	0	0	0
State Total	7,621	16.5	2,939	18.4	2,789	12.8	906	29.5	899	18.8
Source	NC State Center for Health Statistics, http://www.schs.state.nc.us/SCHS/data/databook/									

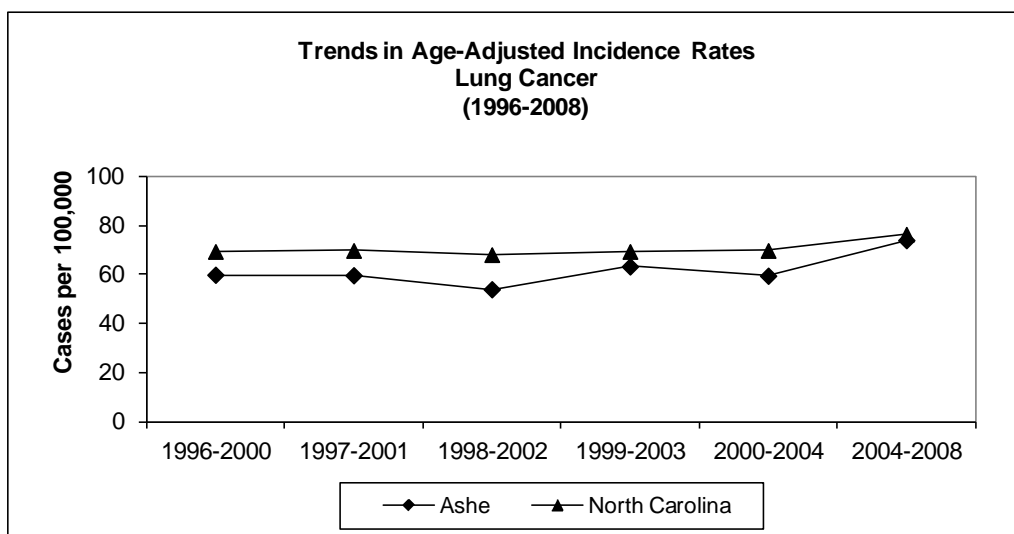
Lung Cancer

Lung Cancer Incidence

Between 2004 and 2008, 139 new cases of trachea, bronchus, and lung cancer were diagnosed in Ashe County, making it the most commonly diagnosed cancer (Table 31, cited previously). The resulting aggregate incidence rate of 73.9 per 100,000 was below the average county in the state (76.3). In 2009, hospital charges for the treatment of lung cancer in Ashe County residents totaled over \$550,000.

Since 1996 Ashe County lung cancer incidence rates remained below the relatively steady state rate. Most recently, the rates have increased and are closer to the state rate (Figure 17).

Figure 17



Source: NC Center for Health Statistics. County Health Databooks (various years), <http://www.schs.state.nc.us/SCHS/data/databook>

Lung Cancer Mortality

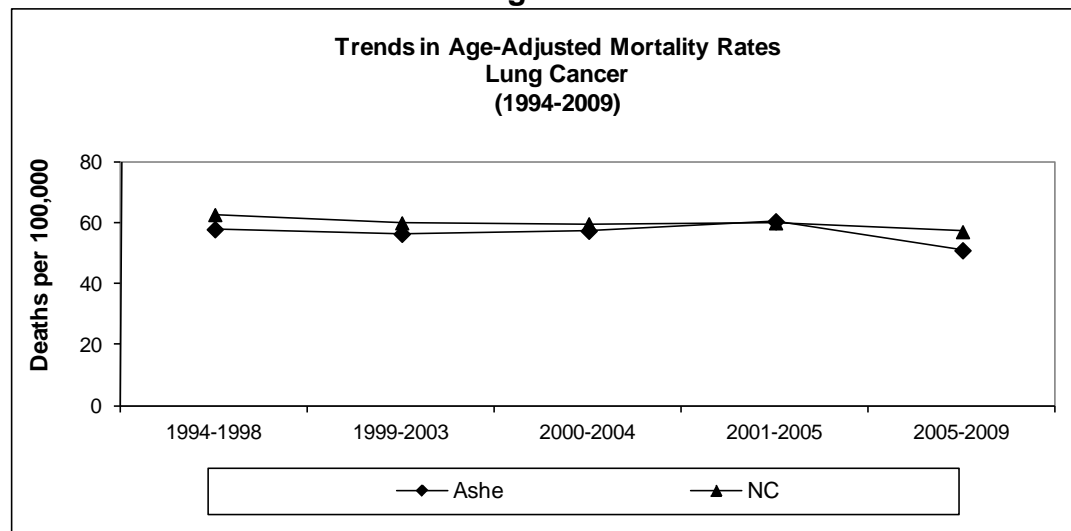
The 2005-2009 lung cancer mortality rate in Ashe County (50.9) was 10.7% lower than the rate statewide (57.0) (Table 36). Between 2005 and 2009, a total of 98 people died of lung cancer in Ashe County.

Table 36. Lung Cancer Mortality (2005-2009)

County	Overall Rate		White Males		White Females		Minority Males		Minority Females	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Ashe	98	50.9	62	73.8	36	34.1	0	0	0	0
State Total	26,681	57.0	12,605	76.9	9,292	43.7	2,871	90.3	1,587	33.0
Source	NC State Center for Health Statistics, http://www.schs.state.nc.us/SCHS/data/databook/									

Nationally, lung cancer is the leading cause of death from cancer with a mortality rate of 52.6 per 100,000 in 2007. Ashe County's current lung cancer mortality rate is lower than the national rate by 3.2%. The Healthy People 2020 goal is to reduce the lung cancer mortality rate to 45.5 per 100,000. The current lung cancer mortality rate in Ashe County exceeds the national target rate by 11.9%. Between 1994 and 2009 the lung cancer mortality rate in Ashe County decreased slightly (Figure 18), as has the state rate.

Figure 18

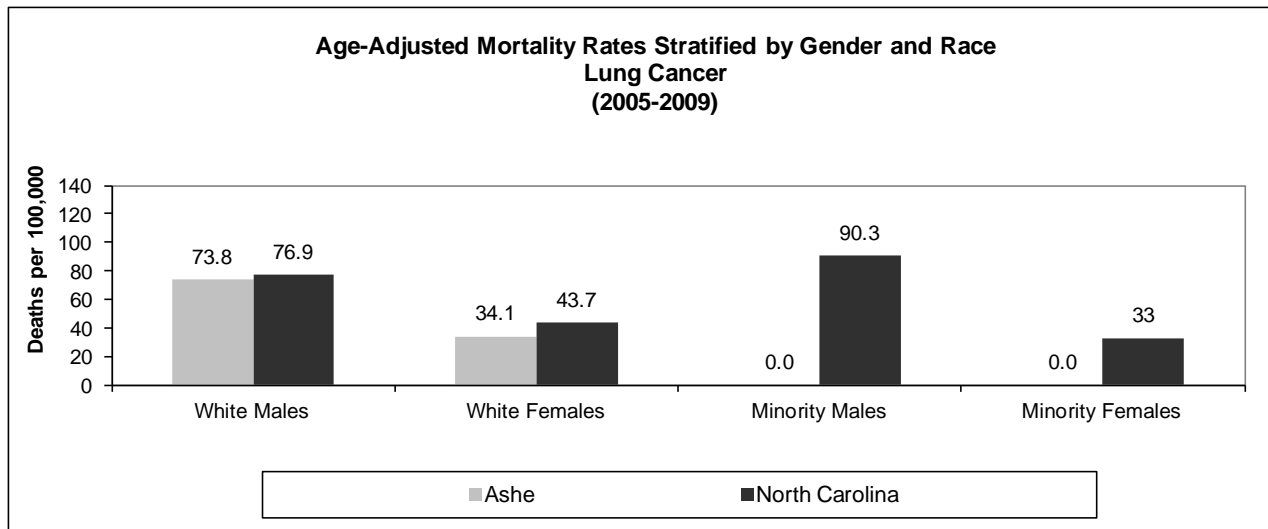


Source: NC Center for Health Statistics. North Carolina Vital Statistics, Volume 2, Leading Causes of Death (various years) <http://www.schs.state.nc.us/SCHS/data/vitalstats.cfm>

Gender and Racial Disparities in Lung Cancer Mortality

Figure 19 compares sex-age stratified aggregate age-adjusted mortality rates due to lung cancer for the period 2005-2009. In Ashe County, the numbers of lung cancer deaths among minority males and females (0) were below the threshold for meaningful local mortality rate comparisons. However, valid sex-race comparisons remain for whites. The rate of lung cancer mortality in white males was 116% higher than the rate for white females.

Figure 29



Source: NC State Center for Health Statistics. County-level Data. County Health Data Books. 2011 County Health Data Book. Mortality. 2005-2009 Race-Sex Specific Age-Adjusted Rates by County. <http://www.schs.state.nc.us/SCHS/data/databook>.

Chronic Lower Respiratory Disease

According to the National Institutes of Health (NIH), chronic obstructive pulmonary disease (COPD) is a group of lung diseases involving limited airflow, airway inflammation and the destruction of lung tissue. Around 1999 the NC State Center for Health Statistics started classifying COPD within the broader heading of chronic lower respiratory disease (CLRD), which was not used as a separate category previously. It can be assumed that COPD rates from pre-1999 can be compared to CLRD rates after 1999. Hospital charges for treating Ashe County residents with CLRD totaled almost \$9.4 million in 2009.

COPD/CLRD Mortality

COPD/CLRD was the third leading cause of death in Ashe County for the period 2005-2009 (Table 26, cited previously). For the most current aggregate time period (2005-2009), the overall COPD/CLRD mortality rate in Ashe County (58.9) was 25% higher than the state rate (Table 37).

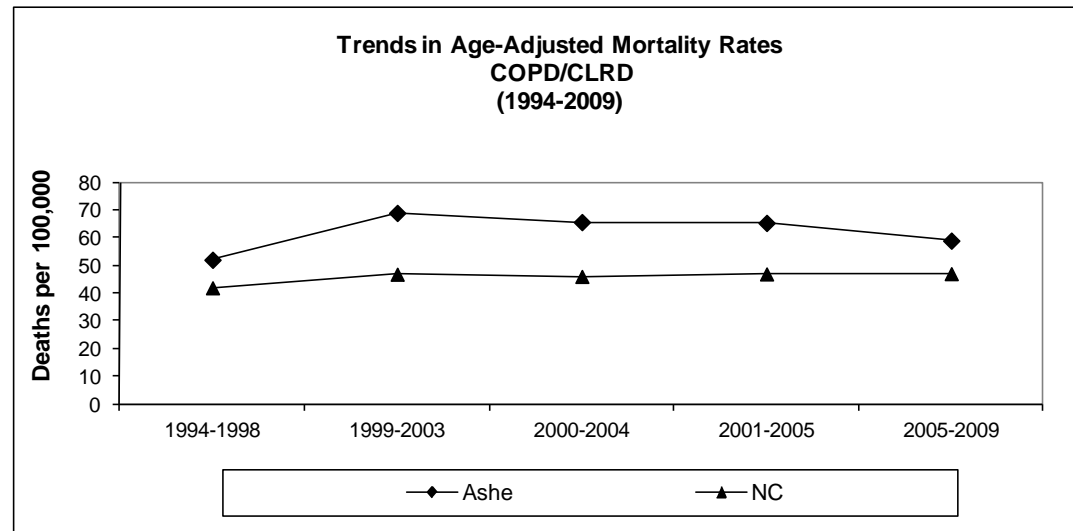
Table 37. Chronic Lower Respiratory Disease Mortality, including COPD (2005-2009)

County	Overall Rate		White Males		White Females		Minority Males		Minority Females	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Ashe	111	58.9	61	79.9	50	47.3	0	0	0	0
State Total	21,228	47.0	8,817	59.1	9,995	45.5	1,273	47.4	983	21.0
Source	NC State Center for Health Statistics, 2011 County Health Databook. http://www.schs.state.nc.us/SCHS/data/databook/									

In 2007 the national mortality rate for CLRD was 40.8 per 100,000 (62), a rate exceeded in Ashe County by 44%.

As demonstrated in Figure 20, COPD/CLRD mortality rates have slightly increased overall since 1994 in the county and the state. COPD/CLRD mortality rates in Ashe County have exceeded the state rates for every aggregate period.

Figure 20

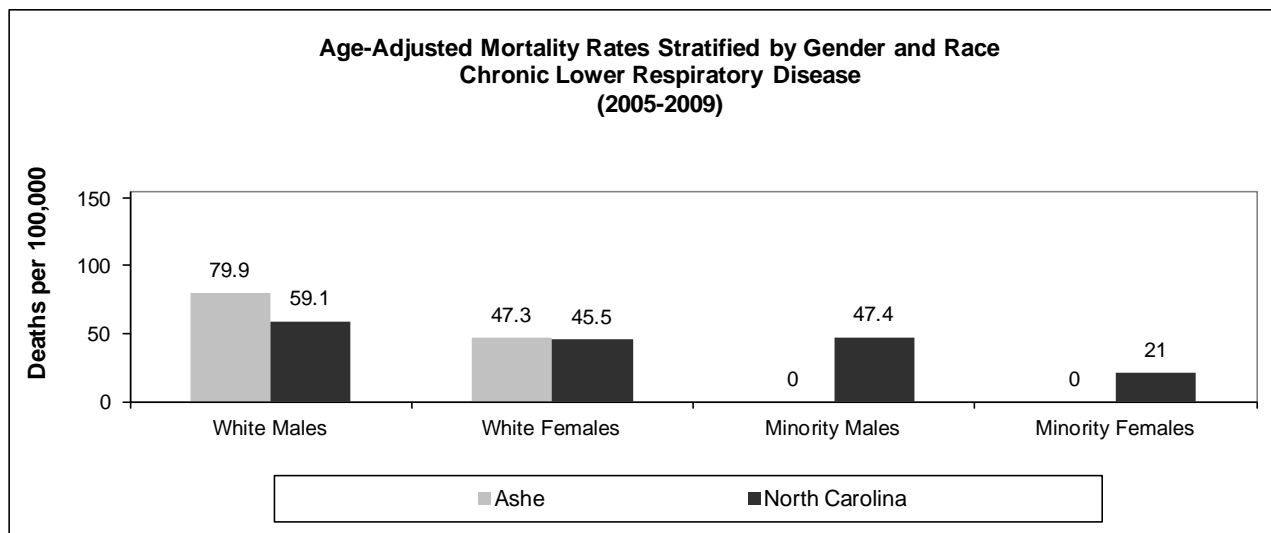


Source: NC Center for Health Statistics. North Carolina Vital Statistics, Volume 2, Leading Causes of Death (various years) <http://www.schs.state.nc.us/SCHS/data/vitalstats.cfm>

Gender and Racial Disparities in COPD/CLRD Mortality

Figure 21 compares sex-age stratified aggregate age-adjusted mortality rates due to COPD/CLRD for the period 2005-2009. In Ashe County, the number of COPD/CLRD deaths among minorities was zero. However, there are gender differences between whites. The rate of COPD/CLRD deaths among white males was 69% higher than the rate for white females. At the state level, the COPD/CLRD mortality rate among white males was 30% higher than the rate for white females. Ashe County's rate for white males was 35% higher than the state rate.

Figure 21



Source: NC State Center for Health Statistics. County-level Data. County Health Data Books. 2011 County Health Data Book. Mortality. 2005-2009 Race-Sex Specific Age-Adjusted Rates by County. <http://www.schs.state.nc.us/SCHS/data/databook>.

Pneumonia and Influenza

Pneumonia and influenza are diseases of the lungs. Influenza (the “flu”) is a contagious infection of the throat, mouth and lungs caused by an airborne virus. Pneumonia is an inflammation of the lungs caused by either bacteria or viruses. Bacterial pneumonia is the most common and serious form of pneumonia, and among individuals with suppressed immune systems it may follow influenza or the common cold. Pneumonia/influenza was the ninth leading cause of death in Ashe County in the period 2005-2009, and hospital charges in 2005 totaled over \$1.1 million.

Pneumonia and Influenza Mortality

In the 2005-2009 reporting period, the overall pneumonia/influenza mortality rate in Ashe County, 15.7, was 19% lower than the than the rate in the state as a whole (Table 38).

Table 38. Pneumonia/Influenza Mortality (2005-2009)

County	Overall Rate		White Males		White Females		Minority Males		Minority Females	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Ashe	30	15.7	10	n/a	20	16.7	0	0	0	0
State Total	8,632	19.4	3,047	22.2	4,107	18	641	25	755	16
Source	NC State Center for Health Statistics, 2011 County Health Databook. http://www.schs.state.nc.us/SCHS/data/databook/									

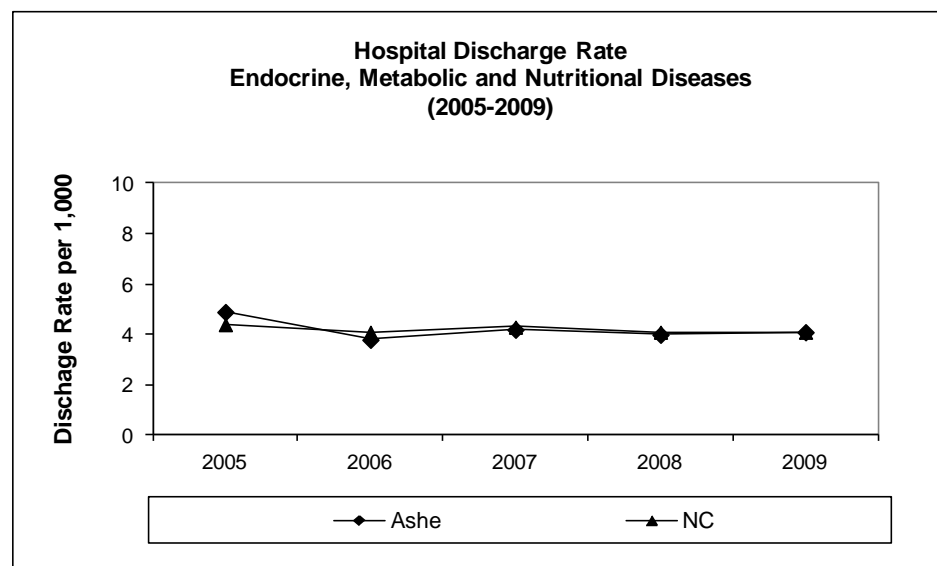
Diabetes

Diabetes is a disorder of the metabolic system resulting from a shortage of insulin, a hormone that allows sugar to enter body cells and convert into energy. If diabetes is uncontrolled, sugar and fats remain in the blood, over time damaging vital organs. Diabetes was the sixth leading cause of death in Ashe County in 2005-2009 (Table 26, cited previously) and caused nearly \$1.4 million in hospital charges to county residents in 2009.

Diabetes Incidence

Incidence data for diabetes is not routinely available, so it is necessary to estimate incidence by other means, such as hospital discharge rates. It should be noted that hospital discharge information tends to *underestimate* the true extent of a disease in the population because it does not include people being treated for the disease who do *not* require hospitalization. In 2009 in Ashe County and in the state, the hospital discharge rate for endocrine, metabolic and nutritional diseases (including diabetes) was 4.1 discharges per 1,000. The county discharge rate decreased slightly between 2005 and 2009 (Figure 22).

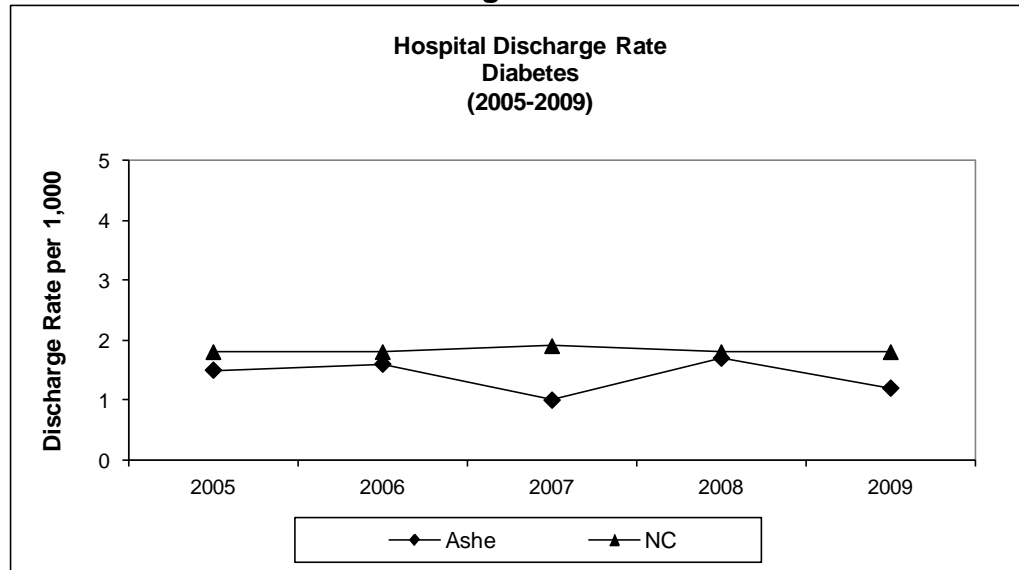
Figure 22



NC State Center for Health Statistics. Health Data. County-level Data. 2011 County Health DataBook. Inpatient Hospital Utilization and Charges by Principal Diagnosis, and County of Residence. Available at: <http://www.schs.state.nc.us/SCHS/data/databook/>

In 2009 the county discharge rate associated with *diabetes alone* was 1.2 per 1,000 (Figure 23). Comparing Figure 23 with 22, it is apparent that almost one third of the hospital discharges for endocrine diseases have been related to a diagnosis of diabetes.

Figure 23



NC State Center for Health Statistics. Health Data. County-level Data. 2011 County Health Databook. Morbidity. Inpatient Hospital Utilization and Charges by Principal Diagnosis, and County of Residence. Available at: <http://www.schs.state.nc.us/SCHS/data/databook/>

Diabetes Mortality

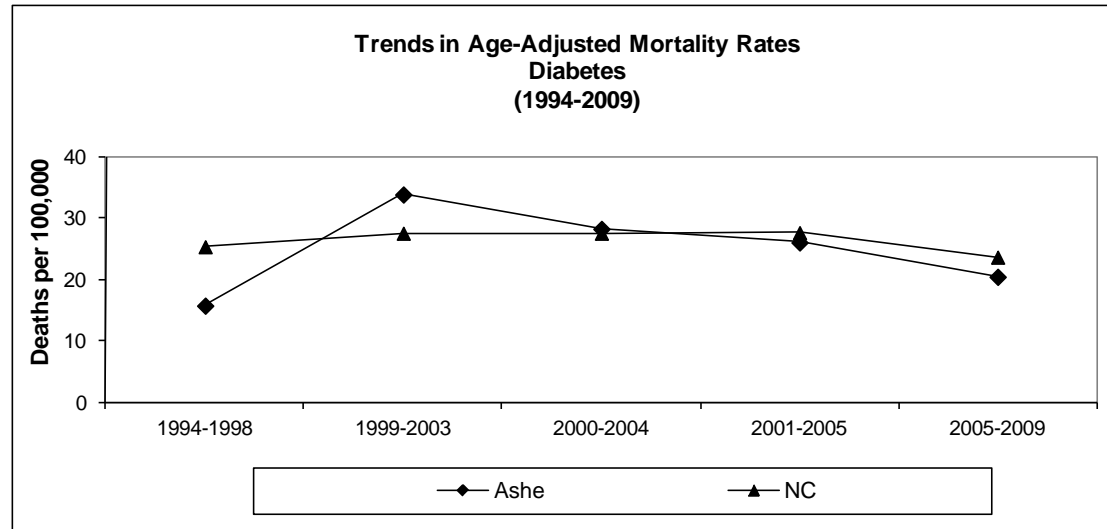
Between 2005 and 2009, 36 deaths in Ashe County were attributed to diabetes, computing to a mortality rate of 20.4 per 100,000 (Table 39). This rate is 13.6% below the state rate. Diabetes was the eighth leading cause of death in 2009.

Table 39. Diabetes Mortality (2005-2009)

County	Overall Rate		White Males		White Females		Minority Males		Minority Females	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Ashe	36	20.4	19	n/a	16	n/a	0	0	1	n/a
State Total	10,906	23.6	3,595	22.6	3,310	15.1	1,630	53.3	2,137	45.5
Source	NC State Center for Health Statistics, 2011 County Health Databook. http://www.schs.state.nc.us/SCHS/data/databook/									

Since 1999, the county diabetes mortality rates have decreased, as has the state's (Figure 24).

Figure 24



Source: NC Center for Health Statistics. North Carolina Vital Statistics, Volume 2, Leading Causes of Death (various years) <http://www.schs.state.nc.us/SCHS/data/vitalstats.cfm>

Unintentional Non-Motor Vehicle Injury

The NC-SCHS distinguishes unintentional non-motor vehicle injuries from motor vehicle injuries when calculating mortality rates for unintentional injuries and ranking leading causes of death. Unintentional non-motor vehicle injuries are the fifth leading cause of death in Ashe County (Table 26, cited previously). Unintentional injuries of all types are costly injuries and led to over \$7.5 million in hospital charges for Ashe County residents in 2009.

Unintentional Non-Motor Vehicle Injury Mortality

Between the years 2005 and 2009, there were 52 deaths in Ashe County due to unintentional non-motor vehicle injuries (e.g., boating accidents, falls, animal bites, drowning, choking, etc). The corresponding mortality rate was 35.8 per 100,000, a rate 25 % higher than the state rate (Table 40).

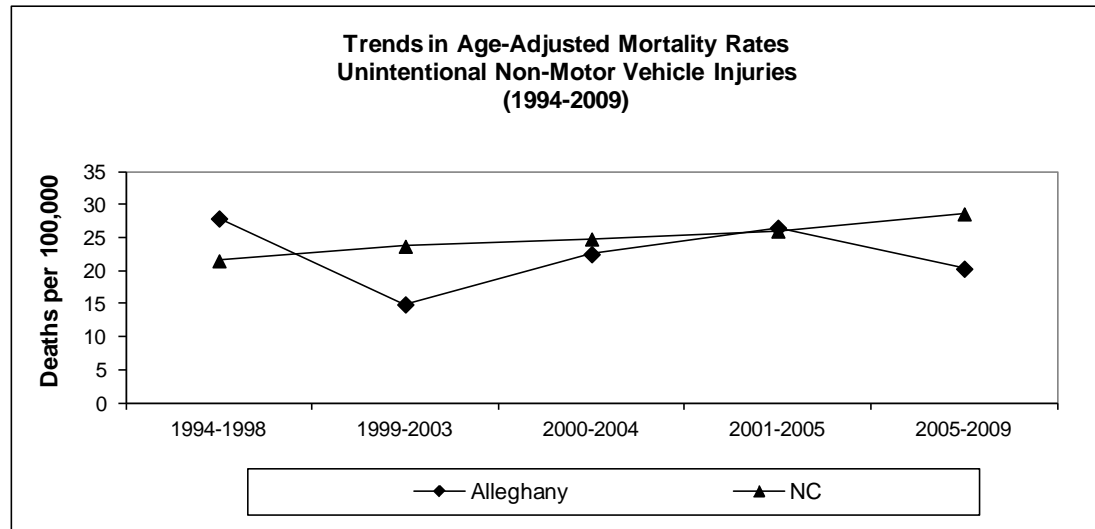
Table 40. Unintentional Non-Motor Vehicle Injury Mortality (2005-2009)

County	Overall Rate		White Males		White Females		Minority Males		Minority Females	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Ashe	52	35.8	40	60.5	12	n/a	0	0	0	0
State Total	12,896	28.6	6,364	40.5	4,435	21.9	1,220	32.6	678	13.9
Source	NC State Center for Health Statistics, 2011 County Health Databook. http://www.schs.state.nc.us/SCHS/data/databook/									

Unintentional non-motor vehicle injuries are the fifth leading cause of death nationwide. The 2007 national mortality rate was 40.0. The Healthy People 2020 goal is to reduce deaths due to unintentional injuries to no more than 53.3 per 100,000, which is 33% higher than the current rate in Ashe County.

Since 1994 Ashe County mortality rate due to non-motor vehicle injuries have fluctuated but currently appear to be decreasing, while the rate for the state as a whole also has been increasing (Figure 25).

Figure 25



Source: NC Center for Health Statistics. North Carolina Vital Statistics, Volume 2, Leading Causes of Death (various years) <http://www.schs.state.nc.us/SCHS/data/vitalstats.cfm>

Septicemia

Septicemia is a rapidly progressing infection resulting from the presence of bacteria in the blood. The disease often arises from other infections throughout the body, such as meningitis, burns and wound infections. Septicemia can lead to septic shock wherein low blood pressure and low blood flow cause organ failure.

Septicemia was the thirteenth leading cause of death in Ashe County for the period from 2005 through 2009 (Table 26, cited previously). Hospital charges associated with this treatment totaled over \$1.7 million for county residents in 2009. Septicemia is certainly not as well known a health condition as heart disease, for example, but in Ashe County it cost more to treat. In 2009 the per-case hospital charge associated with heart disease in Ashe County averaged \$26,625; the comparable cost for a septicemia case was \$31,677.

Table 41. Septicemia Mortality (2005-2009)

County	Overall Rate		White Males		White Females		Minority Males		Minority Females	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Ashe	15	n/a	4	n/a	10	n/a	1	n/a	0	0
State Total	6,241	13.8	2,007	13.4	2,524	11.4	708	24.4	918	19.5
Source	NC State Center for Health Statistics, 2011 County Health Databook. http://www.schs.state.nc.us/SCHS/data/databook/									

Unintentional Motor Vehicle Injury

The NC-SCHS distinguishes unintentional motor vehicle injuries from all other injuries when calculating mortality rates and ranking leading causes of death. Injury mortality attributable to motor vehicle accidents is the ninth leading cause of death in Ashe County (Table 26, cited previously).

Unintentional Motor Vehicle Injury Mortality

Between 2005 and 2009, there were 29 deaths due to motor vehicle injuries in Ashe County (Table 42). The mortality rate associated with these deaths was 21.5 per 100,000, which was 22% higher than the corresponding state rate.

Table 42. Unintentional Motor Vehicle Injury Mortality (2005-2009)

County	Overall Rate		White Males		White Females		Minority Males		Minority Females	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Ashe	29	21.5	23	37.1	5	n/a	0	0	0	0
State Total	8,027	17.6	4,211	25.3	1,848	10.5	1,221	27.4	454	8.8
Source	NC State Center for Health Statistics, 2011 County Health Databook. http://www.schs.state.nc.us/SCHS/data/databook/									

According to the NC Highway Research Center, in 2009 there were 554 motor vehicle accidents in Ashe County, resulting in 286 nonfatal injuries and 5 fatalities (Table 43).

Table 43. Motor Vehicle Injuries, 2009

	Crashes			Number of Injuries				Alcohol Related Injuries			DWI Charges and Convictions		
	Total Number	Number Alcohol Related	Percent Alcohol Related	Non-Fatal	Fatal	Alcohol Related Non-Fatal	Alcohol Related Fatal	Percent of Total Injuries	Percent of Non-Fatal Injuries	Percent of Fatal Injuries	No. DWI Charges	No. DWI Convictions	% DWI Convictions
Ashe	554	30	5.4	286	5	291	2	7.2	6.6	40.0	182	129	70.9
State Total	204,167	11,263	5.5	108,669	1,346	8,767	394	8.3	8.1	29.3	72,926	41,927	57.5
Source:	Highway Safety Research Center, NC Alcohol Facts, http://www.hsrb.unc.edu/ncaf												

Frequently, motor vehicle crashes are associated with alcohol consumption. In 2009, 5.4% of Ashe County motor vehicle crashes were associated with alcohol, a figure slightly lower than the state average of 5.5% (Table 43). Alcohol was involved in 6.6% of all *nonfatal* motor vehicle injuries in the county and 40% of the *fatal* accidents. In the state as a whole, 8.1% of all *nonfatal* motor vehicle injuries and 29.3% of all *fatal* motor vehicle injuries were alcohol-related.

Nephritis, Nephrosis and Nephrotic Syndrome

Nephritis, nephrosis and nephrotic syndrome are renal (kidney) disorders. Nephritis is any inflammation of the kidneys, while nephrotic syndrome (also known as nephrosis) is a kidney disease resulting from damage to the blood vessels that filter waste from the blood. These conditions can result from infections, drug exposure, malignancy, hereditary disorders, immune disorders, or diseases that affect multiple body systems (e.g., diabetes and lupus). This complex of kidney disorders represented the eleventh leading cause of death in Ashe County for the period from 2005 through 2009 (Table 26, cited previously), and cost county residents over \$2.3 million in hospital charges in 2009.

Kidney Disease Mortality

From 2005 through 2009 a total of 25 deaths in Ashe County were attributed to kidney diseases, yielding a mortality rate for the period of 12.9 per 100,000 (Table 44), 31% lower than the rate for the state as a whole (18.7).

Table 44. Nephritis, Nephrosis and Nephrotic Syndrome Mortality (2005-2009)

County	Overall Rate		White Males		White Females		Minority Males		Minority Females	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Ashe	25	12.9	11	n/a	13	n/a	0	0	0	0
State Total	8,449	18.7	2,725	19.0	2,830	12.5	1,173	41.6	1,587	34.0
Source	NC State Center for Health Statistics, 2011 County Health Databook. http://www.schs.state.nc.us/SCHS/data/databook/									

Alzheimer's Disease

Alzheimer's disease is a progressive neurodegenerative disease affecting mental abilities including memory, cognition and language. Alzheimer's disease is characterized by memory loss and dementia. The risk of developing Alzheimer's disease increases with age (e.g., almost half of those 85 years and older suffer from Alzheimer's disease). Early-onset Alzheimer's has been shown to be genetic in origin, but a relationship between genetics and the late-onset form of the disease has not been demonstrated. No other definitive causes have been identified.

Alzheimer's Disease Mortality

Alzheimer's disease data has been recorded only in recent years, so trend data is not yet available. According to data aggregated between 2005 and 2009, there were 27 deaths attributable to Alzheimer's disease in Ashe County where it was the fifth leading cause of death (Table 26, cited previously). The mortality rate in Ashe County (14.1) was 50% lower than the comparable state rate (28.3) (Table 45).

Table 45. Alzheimer's Disease Mortality (2005-2009)

County	Overall Rate		White Males		White Females		African-American Males		African American Females	
	Ashe	27	14.1	9	n/a	18	n/a	0	0	0
State	12,386	28.3	2,897	22.7	7,745	32.3	398	20.1	1,232	27.0

Chronic Liver Disease and Cirrhosis

Chronic liver disease is marked by the gradual destruction of liver tissue over time. Cirrhosis is a group of chronic liver diseases in which normal liver cells are damaged and replaced by scar tissue, progressively diminishing blood flow through the liver. Risk factors for chronic liver disease include: exposure to hepatitis and other viruses; use of certain drugs; alcohol abuse; chemical exposure; autoimmune diseases; diabetes; malnutrition; and hereditary diseases.

Chronic Liver Disease Mortality

Between 2005-2009, 20 people died of chronic liver disease/cirrhosis in Ashe County, making it the twelfth leading cause of death (Table 26, cited previously). The corresponding mortality rate, 12.8 per 100,000, was 40.6% higher than the statewide mortality rate (Table 46).

Table 46. Chronic Liver Disease and Cirrhosis Mortality (2005-2009)

County	Overall Rate		White Males		White Females		Minority Males		Minority Females	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Ashe	20	12.8	10	n/a	10	n/a	0	0	0	0
State Total	4,356	9.1	2,326	13.1	1,204	5.9	489	12.2	248	4.9
Source	NC State Center for Health Statistics, 2011 County Health Databook. http://www.schs.state.nc.us/SCHS/data/databook/									

Suicide

Between 2005 and 2009, there were 33 deaths due to suicide in Ashe County, making it the sixth leading cause of death in the county (Table 26, cited previously). For the period 2005 through 2009, the suicide mortality rate in Ashe County was 25.6 per 100,000, 113% above the statewide suicide rate (Table 47).

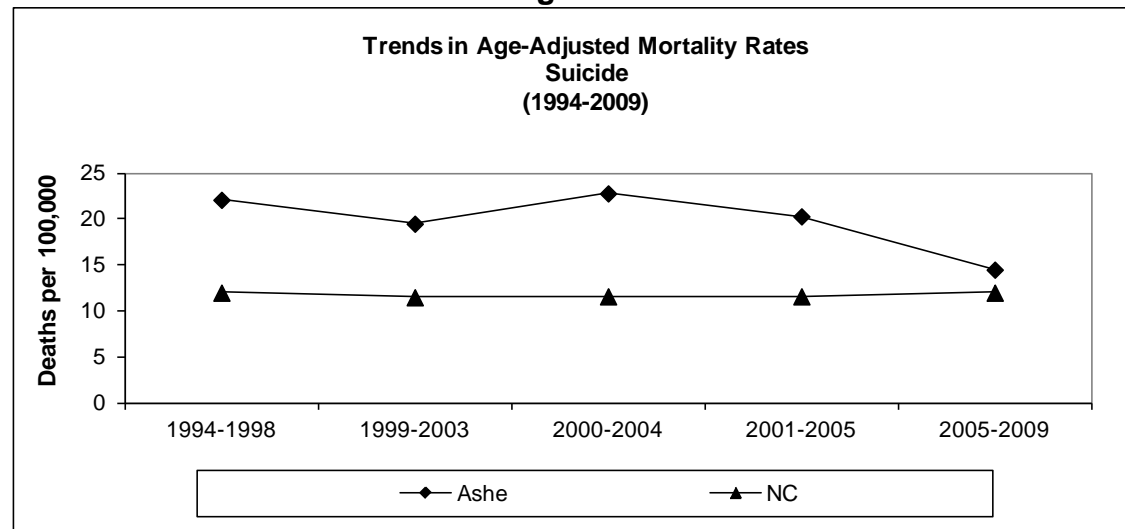
Table 47. Suicide Mortality (2005-2009)

County	Overall Rate		White Males		White Females		Minority Males		Minority Females	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Ashe	33	25.6	25	40.3	8	n/a	0	0	0	0
State Total	5,483	12.0	3,757	22.3	1,127	6.4	401	8.7	86	1.6

Source: NC State Center for Health Statistics, 2011 County Health Databook. <http://www.schs.state.nc.us/SCHS/data/databook/>

The Healthy Carolinian’s 2020 goal for suicide is 8.2 per 100,000, a figure exceeded in Ashe County by 212%. Nationally, the mortality rate due to suicide is 11.3 per 100,000, a rate Ashe County exceeds by 126%. Suicide mortality rates in the state have remained fairly stable since 1994, while the mortality rates in Ashe County have fluctuated but decreased overall since 2000 (Figure 26).

Figure 26



Source: NC Center for Health Statistics. North Carolina Vital Statistics, Volume 2, Leading Causes of Death (various years) <http://www.schs.state.nc.us/SCHS/data/vitalstats.cfm>

Homicide

Homicide was the fourteenth leading cause of death in Ashe County for the period 2005-2009 (Table 26, cited previously) and was responsible for four deaths in that five-year aggregate period. The numbers of homicide related deaths in Ashe County were too few to calculate any meaningful mortality rates for comparison.

Table 48. Homicide Mortality (2005-2009)

County	Overall Rate		White Males		White Females		Minority Males		Minority Females	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Ashe	4	n/a	4	n/a	0	0	0	0	0	0
State Total	3,160	7.0	976	5.8	414	2.4	1,328	27.0	288	5.4
Source	NC State Center for Health Statistics, 2011 County Health Databook. http://www.schs.state.nc.us/SCHS/data/databook/									

Communicable Disease

Health professionals are required to report cases of certain communicable diseases to the North Carolina Department of Health and Human Services through their local health department. Tables 49 and 50 present Ashe County and North Carolina average data for several important infectious diseases subject to this requirement.

Reportable Communicable Diseases

The disease in the following list with the highest incidence in Ashe County was Chlamydia, followed by E Coli and Campylobacter. Statewide the disease in the list with the highest incidence was Chlamydia, followed by Salmonellosis (Table 49).

Table 49. Communicable Disease Incidence (2010)

County	Hepatitis A	Hepatitis B	Hepatitis C	Chlamydia	E Coli	H Flu	Measles	Men DIS	Salmonellosis	Mumps	Rubella	Strep A	Campylobacter
	Cases	Cases	Cases	Cases	Cases	Cases	Cases	Cases	Cases	Cases	Cases	Cases	Cases
Ashe	0	1	0	18	5	0	0	0	4	0	0	0	5
State Total	48	123	39	42,171	97	128	0	14	2,352	10	0	152	851

Source Epidemiology: Communicable Disease Control, <http://www.epi.publichealth.nc.gov/gcdc.html>

H Flu = Haemophilus Influenzae

An infection of the membranes covering the brain and spinal cord (meninges) caused by H. influenzae bacteria.

Men Dis = Meningococcal Invasive Disease

An infection of the tissue which covers the brain caused by the bacterium Neisseria meningitidis.

Campylobacter

A bacterium associated with gastritis and implicated as a causative agent of gastric and duodenal ulcers.

Strep A = Group A Streptococcus

A bacterium often found in the throat and on the skin. Most GAS infections are relatively mild illnesses such as "strep throat," or impetigo.

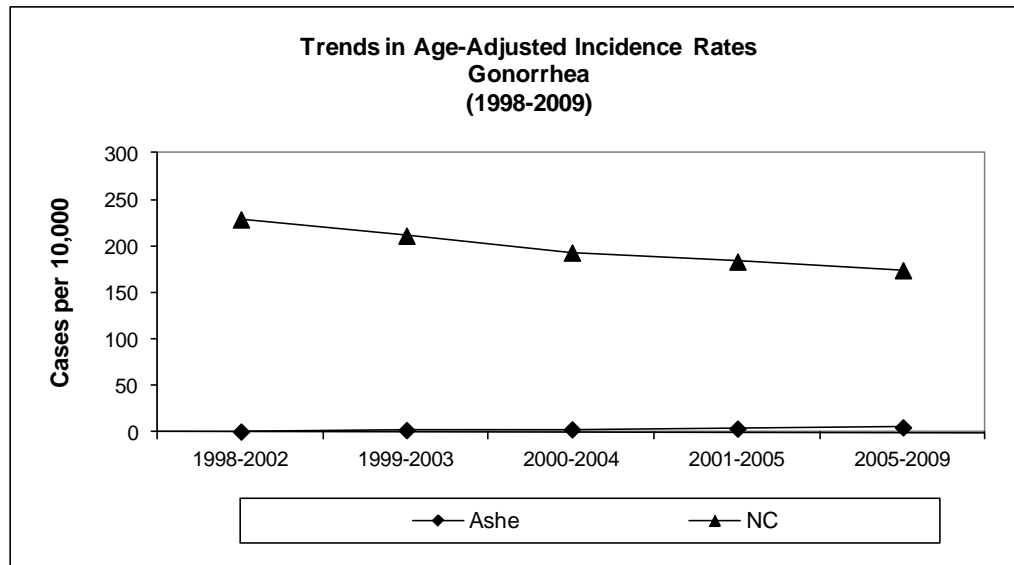
Sexually Transmitted Diseases

Table 50 lists incidence rates for the most prevalent STDs in Ashe County.

Table 50. Sexually Transmitted Disease Incidence, Cases per 100,000 (years as noted)

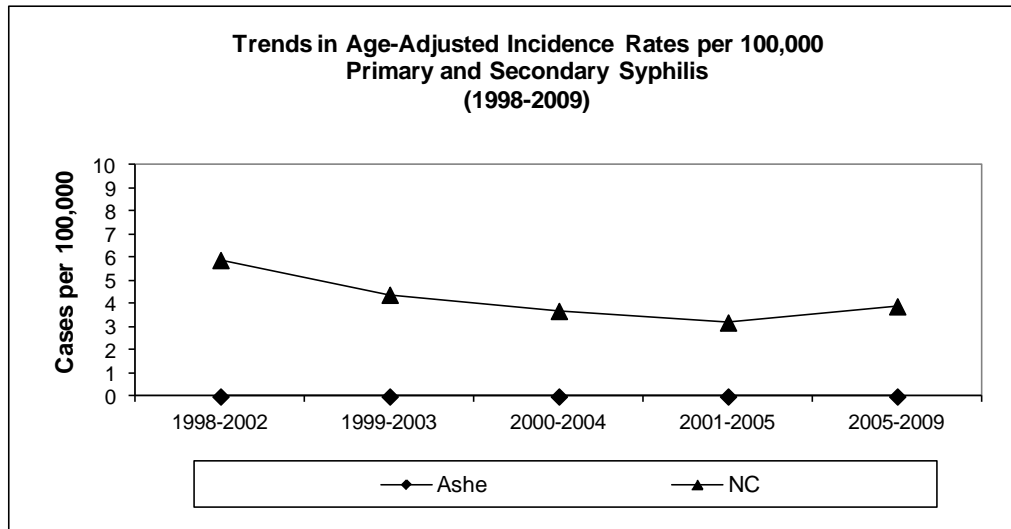
County	Gonorrhea, 2005-2009				I° & II° Syphilis, 2005-2009			
	Total		Minority		Total		Minority	
	Number	Rate	Number	Rate	Number	Rate	Number	Total Rate
Ashe	7	5.4	1	45.6	0	0	0	0
State Total	78,778	174.2	61,230	528.0	1,772	3.9	1,236	10.7
Source	NC State Center for Health Statistics, 2011 County Health Databook. http://www.schs.state.nc.us/SCHS/data/databook/							

Figure 27



NC State Center for Health Statistics, County-level Data. County Health Data Books. 2004-2011 County Health Data Books. Morbidity. <http://www.schs.state.nc.us/SCHS/data/databook/>

Figure 28



NC State Center for Health Statistics, County-level Data. County Health Data Books.
2004-2011 County Health Data Books. Morbidity. <http://www.schs.state.nc.us/SCHS/data/databook/>

Oral Health

Child Oral Health

The Oral Health Section of the North Carolina Division of Public Health periodically coordinates a dental assessment screening for kindergarten and fifth-grade schoolchildren. Dental hygienists use a standardized technique to measure the prevalence of decayed and filled teeth among these children. Table 51 presents the results of the SY2008-2009 screenings in Ashe County and in North Carolina.

Compared to North Carolina county averages in 2008-2009 (Table 51):

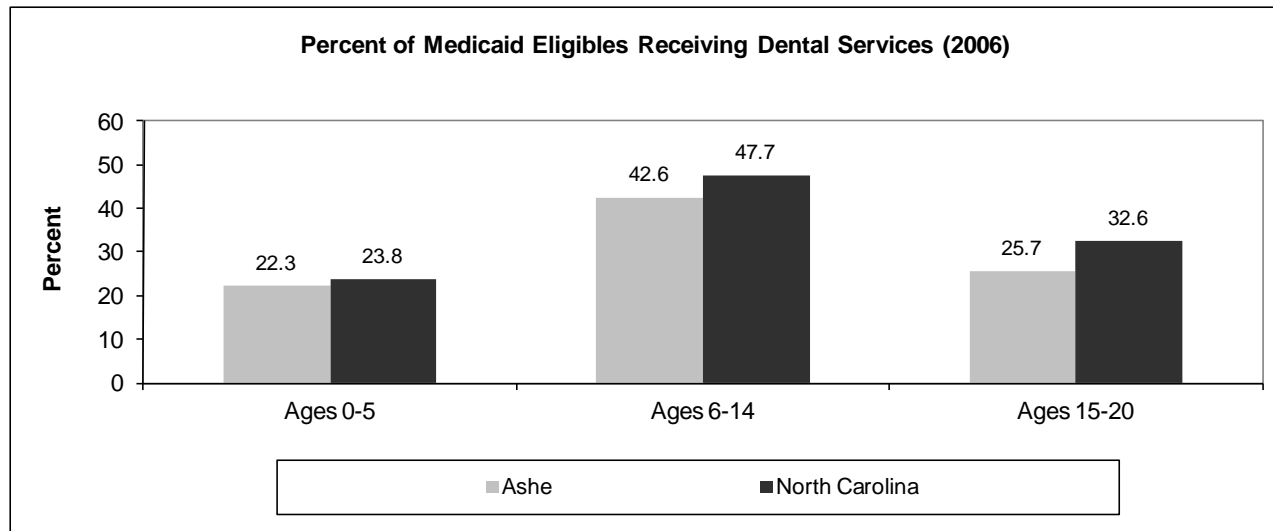
- A higher proportion of kindergarteners and fifth graders were screened in Ashe County.
- Ashe County kindergarteners had a higher prevalence of untreated decay, and by small margins, a higher average number of decayed teeth (DT) per child, and a higher number of decayed, missing and filled (DMFT) teeth per child.
- Ashe County fifth graders had a slightly lower prevalence of untreated decay, average number of decayed teeth (DT) per child and decayed, missing and filled teeth (DMFT) per child.

Table 51. Child Oral Health Screening Results (2008-2009)

County	Percent Children Screened		Percent of Children with Sealants	Percent of Children with Decayed Teeth (DT)		Average Number of Decayed Teeth per Child (DT/Child)		Average Number of Decayed, Missing or Filled Teeth per Child (DMFT/Child)	
	K	5th Grade	5th Grade	K	5th Grade	K	5th Grade	K	5th Grade
Ashe	95	96	78	22	3	0.71	0.04	1.78	0.39
State Total	83	77	44	17	4	0.47	0.05	1.50	0.56
Source	School Level Oral Health Status Data, 2008-2009, NC Division of Public Health, Oral Health Section								

Compared to North Carolina averages, a smaller percentage of Ashe County Medicaid-eligible youth of under the age of 20 received dental services in 2006 (Figure 29).

Figure 29



Source: Annie E. Casey Foundation, Kids Count Data Center, 2006 Child Health Report Card.
<http://datacenter.kidscount.org>

Adult Oral Health

Ashe County residents are surveyed about their dental health status and dental health behaviors in the state's annual Behavioral Risk Factor Surveillance System (BRFSS) Survey, as part of an aggregate sample that includes 26 western North Carolina counties.

- According to the results of the 2010 BRFSS Survey, 62.5% of adults in the Ashe County region (compared to 67% statewide) reported that they had visited a dentist within the last 12 months.
- Approximately 44% of the Ashe region respondents, compared to 51.3% statewide, reported that they had lost no teeth due to decay.

Mental Health and Substance Abuse

Table 52 presents data on utilization of mental health, developmental disability and substance abuse services (MH/DD/SAS) by Ashe County residents.

- The number of Ashe County residents served by state developmental centers remained the same between 2007 and 2010. The number served by substance abuse treatment centers slightly decreased.
- The number of people served in state psychiatric hospitals decreased by almost half between 2007 and 2010 in Ashe County and statewide.
- The number of Ashe County residents served by MH/DD/SAS management entity/area programs has increased overall since 2007.

Table 52. Mental Health, Developmental Disability, Substance Abuse Service Utilization (years as noted)

County	Persons Served											
	Developmental Centers			Alcohol and Drug Abuse Treatment Centers			State Psychiatric Hospitals			Area Programs		
	2007-2008	2008-2009	2009-2010	2007-2008	2008-2009	2009-2010	2007-2008	2008-2009	2009-2010	2007-2008	2008-2009	2009-2010
Ashe	2	2	2	10	8	9	31	25	16	878	1,315	1,156
State Total	1,409	1,404	1,375	4,284	4,812	4,483	14,643	9,643	7,188	306,987	309,155	332,796
Source	NC DHHS, Division of Mental Health, Publications, Statistical Reports. http://www.ncdhhs.gov/mhddsas/statspublications/reports/index.htm											

Obesity

Adult Obesity

Obesity is often the end result of an overall energy imbalance due to poor diet and limited physical activity. Obesity increases the risk for health conditions such as coronary heart disease, type 2 diabetes, cancer, hypertension, dyslipidemia (high cholesterol), stroke, liver and gallbladder disease, sleep apnea and respiratory problems, and osteoarthritis.*

Based on several separate questions pertaining to weight the 2010 Behavioral Risk Factor Surveillance System (BRFSS) Survey estimated the proportion of respondents in each of four weight categories: underweight, recommended weight, overweight and obese. These derived figures were based on the **Body Mass Index (BMI)** of respondents. BMI is a calculation relating weight to height by the following formula:

$$\text{BMI} = (\text{weight in kilograms}) / (\text{height in meters})$$

By definition, for **adults**, Underweight=BMI less than 18.5, Recommended Range= BMI 18.5-24.9, Overweight=BMI 25.0-29.9, and Obese=BMI 30.0 or greater.

As noted previously, Ashe County residents are part of a BRFSS survey region that also includes the entire area of western North Carolina (26 counties). Of the 1,875 survey participants whose responses were included in the 2010 obesity results, 64.4% were considered overweight or obese (compared to 65.3% of respondents statewide). In 2006, 394 responses were included in the obesity analysis; at that time 64.6% were categorized as overweight or obese (compared to 62.8% of respondents statewide). Note that the 2006 results included only the counties of Alleghany, Ashe, Avery, Watauga and Wilkes.

The 2011 County Health Rankings, using data from the CDC's National Center for Chronic Disease Prevention and Health Promotion, Division of Diabetes Translation, states that 24% of Ashe County's population is **obese**, compared to 29% in North Carolina.*

*www.countyhealthrankings.org

Childhood Obesity

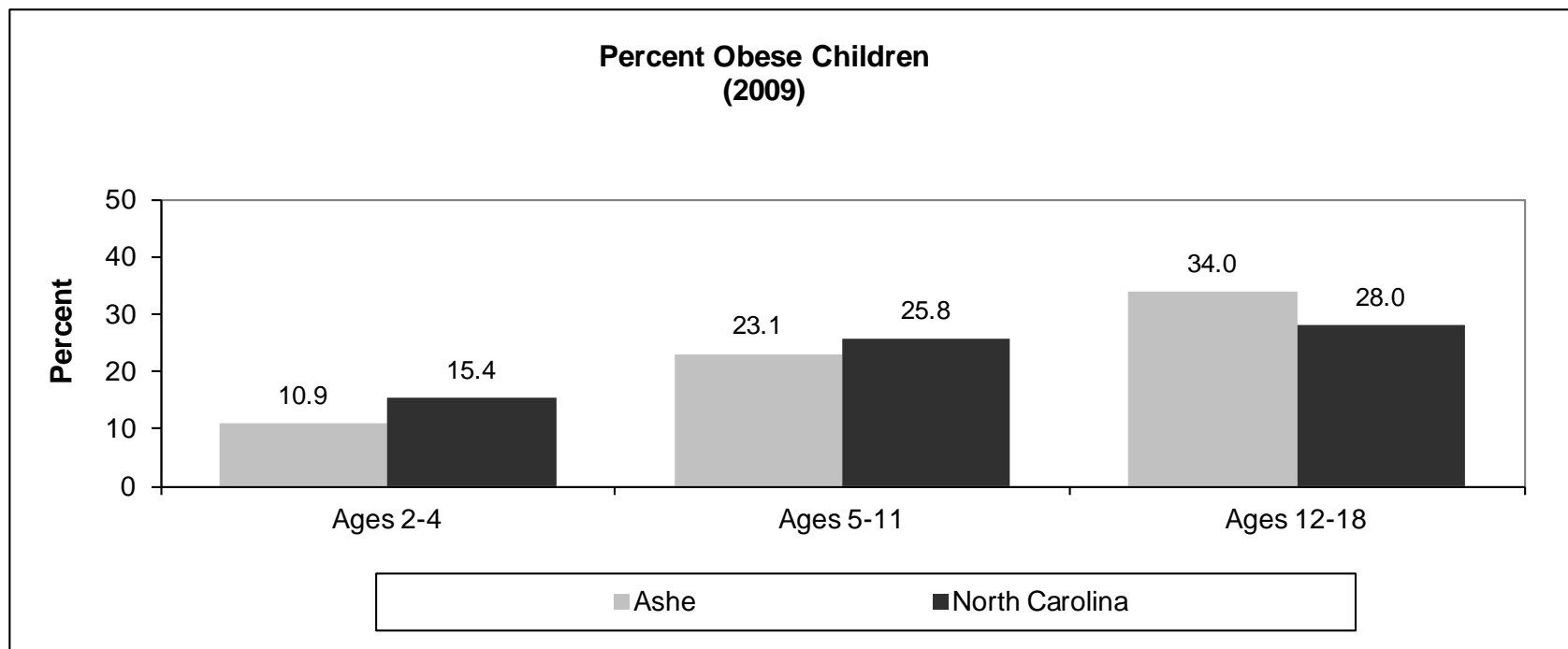
The North Carolina Healthy Weight Initiative, using the North Carolina Nutrition and Physical Activity Surveillance System (NC-NPASS), collects height and weight measurements from children seen in North Carolina Division of Public Health-sponsored WIC and Child Health Clinics, as well as some school-based Health Centers. This data is used to calculate Body Mass Indices (BMI) in order to gain some insight into the prevalence of childhood obesity.

Children with BMIs in the 95th percentile or above are considered obese, while children with BMIs that are between the 85th and 94th percentiles are considered overweight. Caution should be exercised when using these data, since the survey sample is relatively small, especially in some age groups, and may not be representative of the countywide population of children. For example, the 2006 Ashe County sample was composed of 165 2-4 year-olds, 13 5-11 year-olds, and 53 12-18 year-olds.

According to NC-NPASS data for children who are obese (Figure 30):

- Ashe County has a lower percentage of overweight 2-4 year-olds than the state as a whole.
- Ashe County has a slightly lower percentage of 5-11 year-olds who are overweight than the state as a whole.
- Ashe County has a higher percentage of 12-18 year-olds who are overweight than the state as a whole.

Figure 30

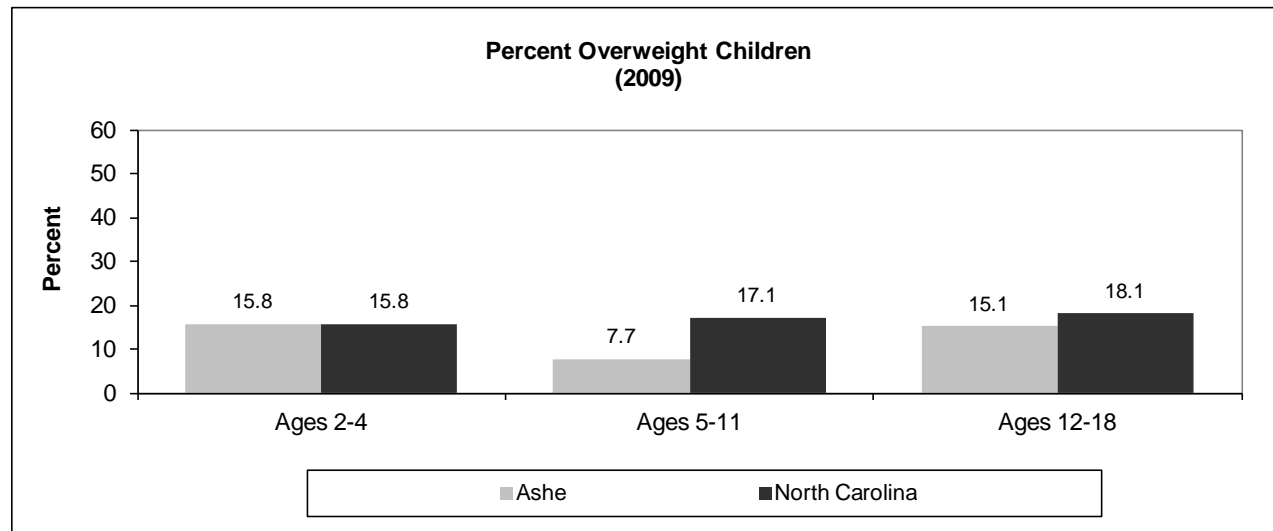


North Carolina Healthy Weight Initiative. Eat Smart Move More. Data. NC NPASS. <http://www.eatsmartmovemorenc.com/data.htm>.

According to NC-NPASS data for children who are overweight (Figure 31):

- Ashe County has a lower proportion of 2-4 year-olds at risk than the state as a whole.
- Ashe County has a slightly lower proportion of 5-11 year-olds at risk than the state as a whole.
- Ashe County has a higher proportion of 12-18 year-olds who are overweight.

Figure 31



North Carolina Healthy Weight Initiative. Eat Smart Move More. Data. NC NPASS. <http://www.eatsmartmovemorenc.com/data.htm>.

Tobacco Use

Tobacco use is the number one preventable cause of death in the United States. Each year approximately 443,000 premature deaths occur, primarily due to smoking. Cigarette smoking is identified as a cause in multiple diseases including various cancers, cardiovascular disease, respiratory conditions, low birth weight, and other adverse health outcomes. Measuring the prevalence of tobacco use in the population can alert communities to potential adverse health outcomes and can be valuable for assessing the need for cessation programs or the effectiveness of existing programs.*

Adult Smoking

The 2011 County Health Rankings, using data from the Centers for Disease Control and Prevention's Behavioral Risk Factor Surveillance system (BRFSS), states that 23% of Ashe County's adult population smokes, compared to 22% in North Carolina. Smoking is defined as currently smoking every day or "most days" and smoking at least 100 cigarettes in a lifetime.*

*www.countyhealthrankings.org

Youth Tobacco Use

The 2009 North Carolina Youth Tobacco Survey (YTS) is a public school-based survey of students in grades 6-12. A multi-stage cluster sample design was used to produce representative data for middle and high school students for all of North Carolina. Classes were randomly selected and all students in selected classes were eligible to participate. Results were compiled for the Western, Central and Eastern regions of North Carolina and were further divided into high school and middle school.

High School:

Currently smokes cigarettes: 18.9% in western NC vs. 16.7% statewide
Currently uses smokeless tobacco: 12.9% in western NC vs. 8.5% statewide

Middle School:

Currently smokes cigarettes: 5.1% in western NC vs. 4.3% statewide
Currently uses smokeless tobacco: 6.0% in western NC vs. 3.0% statewide

Youth tobacco use is higher in the 26 western North Carolina states than in the state a whole. See the Youth Risk Behavior Survey, included in this report, for county-specific data on tobacco use.

www.tobaccopreventionandcontrol.ncdhhs.gov

Asthma

One way the burden of asthma in a community can be assessed by reviewing hospital records. According to hospital records from 2005 that tally information about patients from Ashe County regardless of the location of their hospitalization (Table 53):

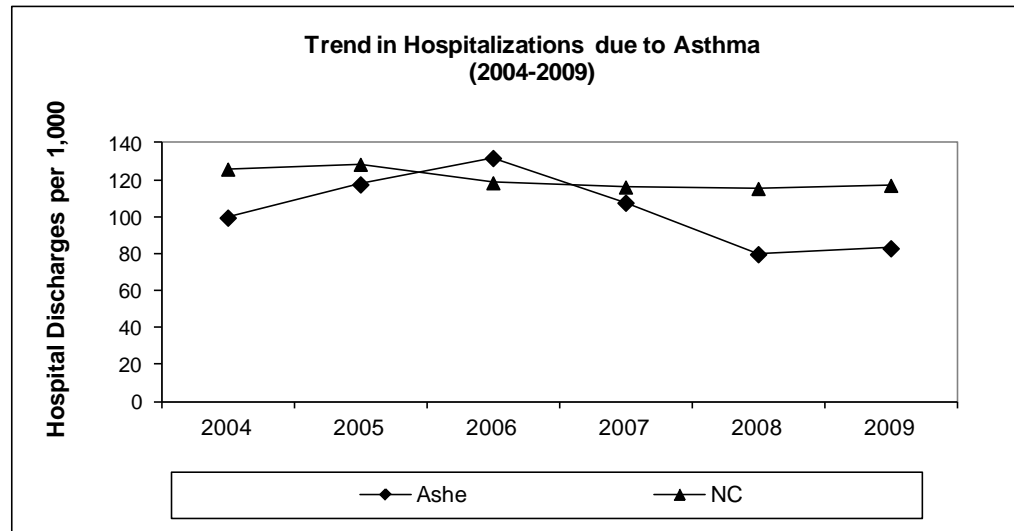
- The total hospitalization rate due to asthma (including children and adults) in 2009 in Ashe County (83.0) was 29% lower than the state rate.
- For children age 0-14, the Ashe County asthma hospitalization rate of 190.2 is 8.7% higher than the state rate of 175.0.

Table 53. Asthma Hospitalization Rates (2009)

County	Asthma Hospitalizations Per 100,000 (2009 Hospital Discharge Reports)			
	Total		Ages 0-14 Years	
	Number	Rate	Number	Rate
Ashe	22	83.0	8	190.2
State Total	10,986	117.1	3,228	175.0
Source	NC State Center for Health Statistics, 2011 County Health Databook. http://www.schs.state.nc.us/SCHS/healthstats/databook/			

Since 2004, the Ashe County total hospitalization rate due to asthma has fluctuated; however the rate has decreased overall and is currently is lower than the state rate (Figure 32).

Figure 32



NC State Center for Health Statistics, County-level Data. County Health Data Books. 2006-2011
County Health Data Books. Morbidity. Asthma Hospital Discharges
<http://www.schs.state.nc.us/SCHS/data/databook/>