

# BURKE COUNTY

## State of the County Health Report

### A Community Health Update 2012

#### Overview

Healthy Burke is a certified Healthy Carolinians partnership of collaborating agencies committed to creating a healthy community of Burke County residents. Every four years this partnership completes a comprehensive Community Health Assessment in which the collection of data identifies health issues, trends and priorities affecting the health and well being of our citizens. As of 2013, IRS requires hospital systems to complete a similar assessment for the communities in which they serve so beginning January, 2013 a combined effort will begin and offer a greater pool of resources.

This report is an update on the State of the Burke

County's Health since the 2011 Community Health Assessment (CHA).

The SOTCH report details any changes to health data during the past year along with progress with new and established task forces and current and emerging health needs or priorities.

Based on data from the 2011 Community Health Assessment, the following areas were identified as priorities to be addressed over the next four years; 1) Physical Inactivity, 2) Substance Use/Abuse among Adolescents and 3) Increasing Meals on Wheels to homebound adults.

Three task forces are in place to direct these efforts: Healthy Lifestyle

Choices Task Force, Healthy Youth Task Force and the Healthy Aging Task Force.

#### Healthy Burke A Healthy Carolinians Partnership



#### INSIDE THIS ISSUE:

<i>Economic Climate</i>	2
<i>Poverty</i>	2
<i>Education</i>	2
<i>Pregnancy</i>	3
<i>Water Quality</i>	3
<i>Air Quality</i>	3
<i>Morbidity/Mortality Stats</i>	4-5
<i>Burke County Changes</i>	6
<i>Emerging Issues</i>	7
<i>Task Force Developments</i>	7

#### 2011 Community Health Assessment Findings

Since the Community Health Assessment (CHA) was recently completed and reported within the community, most health data has not been updated but the following is important findings within the CHA.

##### Population Characteristics

- The median age in Burke County is 41.2 which is up 4 years from 36.9 in the year 2000.
- In both the 2000 and 2010 Census, the population was evenly split between males and females in Burke County.
- The number of children under 5 years of age has declined slightly from 6.2% in 2000 to 5.6% in 2010.
- Racial distribution in Burke County has changed very slightly from 2000 to 2010 with the percentage of white being 86% in 2000 and 84% in 2010 and other races total approximately 14% in 2000 and 15% in 2010.
- When compared to the average NC County, Burke County is higher in the population of 65 and older residents while the average NC County has a higher percentage in the younger population.
- The 60 and over residents continues to grow. This segment of the population grew by over 4,500 individuals from 2000 to 2010. In 2000, adults age 60 and over was 18% of the total population and grew to 23% in 2010.
- In 2010, Morganton was the largest township with 31% of the county's total population and Jonas Ridge township was the smallest with 0.7%. Morganton is the youngest township with a median age of 39 and Linville township is the oldest with a median age of 50.



## *Economic Climate*

The NC Department of Commerce annually ranks the 100 counties based on their economic status (per capita income, unemployment rate and population growth) and assigns a Tier designation. The 40 counties with the most distressed economy are given the Tier 1 status, the next 40 is Tier 2 and the 20 least distressed counties receive Tier 3 status.



From 2007 to 2011, Burke County has been designated as Tier 1 indicating a continued worsening local economy.

As of 2010, the per capita personal income in Burke county was almost \$2,700 lower when compared to a similar NC county. The median household income in Burke County is around \$38,100 which is lower than a similar NC county of around \$43,326, a difference of over \$5,000.

Between 2005 and 2010, Burke County experienced 4 years of large negative growth (job loss-

es) from -3.9 in 2007; -2.0 in 2008; -8.7 in 2009; and -0.8 in 2010. Net employment growth between 2007-2010 was -3.0 reflecting numerous job losses compared to -1.3 net employment growth at the state level for the same time period.

In 2010, an average 13.4% of the Burke County labor force was unemployed and has exceeded the comparable state rate since 2001. The NC Employment Security commission has reported 26 business closings and 20 layoffs affecting approximately 2,000 people from 2007-2010.

## *Poverty*

Since 2003, Burke County has seen a continual rise in the poverty rate and has exceeded the state poverty rate in seven of the last eight years.

In 2003, 13.6% of residents lived in poverty compared to 18.7% of residents in 2010.

Poverty rates in Burke County and North Carolina as a whole have been highest among the African American population but the percentage of white residents in poverty in

Burke County has exceeded the state rate in both 2000 and 2010.

**Annual Poverty Rate (2003-2010)**

County	2003	2004	2005	2006	2007	2008	2009	2010
<b>Burke</b>	13.6	14.0	14.6	16.9	16.0	15.5	17.4	18.7
<b>NC</b>	13.4	13.8	14.9	14.6	14.3	14.6	16.2	17.4

Burke County's third and eighth graders both scored "proficient" on the 2010 end of grade (EOG) math and reading tests but the average SAT score was 990 which was 11 points lower than the state average.

As of 2010 Census, Burke County had 13% fewer high school graduates and 95 fewer college graduates than the NC county average.

In the 2010-2011 school year,

reported acts of school violence was 57% lower than the state average.

The high school drop out rate in Burke County decreased by 64% overall between the 2004-2005 and 2009-2010 school years.

At the end of the above time period, the local drop out rate was 31% lower than the North

Carolina drop out rate.

According to local sources, the drop out rate fell to an all time low of 1.4 in 2008-2009.



## *Education Highlights*

## Pregnancy

The overall pregnancy rate in Burke County for the period of 2007 to 2009 was 68.2 which was 17% lower than the state rate of 82.5.

In 2008, Burke County had a higher percentage of live births to Medicaid, WIC and Health Department mothers when compared to the state.

In Burke County, females age 15-19 had a higher percentage of low birth weight, late/no prenatal care and mothers who smoked than the percentage of total pregnancies within the



county in that same time period.

For 2009, the teen pregnancy rate in Burke County among teens 15-19 years of age was 64.4 which was 8 teens higher than the state rate of 56.0.

The teen pregnancy rate rose from 59.0 per 100,000 births in 2003 to 64.4 per 100,000 in 2009.

The number of pregnancies for teens aged 10-14 has also increased from 2 to 6 from 2008 to 2009 respectively.

The percentage of high parity births among women aged <30 and those aged 30 and older were higher than the state rate by 2% or more.

The percentage of short interval births (less than 6 months between pregnancies) is 4% higher in Burke County than statewide.

Between 2005 and 2009, nearly 21% of babies in Burke County were born to mothers who smoked; a rate 47% higher than the state rate.



## Water Quality

The Catawba River basin is the eighth largest river basin in the state, covering all or part of 12 counties and encompassing 3,279 square miles in the south central portion of Western North Carolina.

The Catawba River basin includes several rivers, lakes, streams and creeks in the Unifour

region which includes Burke County.

Lake James historically has had the best water quality, but increasing residential development around the lake is becoming a growing concern along with increased nutrient and sediment growth from agricultural runoff from the

surrounding land.

Silver Creek received a good rating for its water and fish quality but in 2007 was noted to have severe bank erosion and lack of sufficient vegetated buffers.

Burke County residents and visitors has access to several beautiful lakes, rivers and streams for industrial and recreational use.

## Air Quality—Indoors and Outdoors

### OUTDOORS

Ozone is a gas that is formed from motor vehicle exhaust and industrial emissions, gasoline vapors and chemical solvents as well as natural sources.

Sunlight and hot weather cause ground level ozone to form in harmful concentrations in the air.

Ozone can harm people's lungs and is very concerning for those with respiratory is-

sues.

In 2004, the Unifour area (Burke, Caldwell, Catawba and Alexander counties) was designated as "non-attainment" indicating that the ozone levels were above the acceptable federal levels.

The counties within the area worked diligently to use reduction strategies and prevention education to decrease the ozone levels.

In 2008, the EPA declared the Unifour area to be officially in "attainment" status for its reduction of ozone levels to below federal levels.

### INDOORS

Exposure to environmental tobacco smoke (ETS, secondhand smoke) in NC presents a serious and substantial public health impact. Adults but especially children, exposed to ETS develop seri-

ous respiratory and ear infections due to the restriction of air flow within the nose, ears and bronchial tubes.

Parental smoking is also responsible for a 20% to 40% increased risk of middle ear disease in children.

Exposure to ETS has greatly improved with the policy change in restaurants and bars. With restaurants and bars being completely smoke free, patrons and employees are not routinely exposed to ETS anymore.

## *Burke County's Morbidity/Mortality Stats*

<b>Age-Adjusted Mortality Rates for the Leading Causes of Death in Burke County and North Carolina (2005-2009)</b>			
<b>Cause of Death</b>	<b>Burke County</b>		<b>North Carolina</b>
	<b>Number</b>	<b>Rate</b>	<b>Rate</b>
1. HEART DISEASE	1,043	<b>197.7</b>	191.7
2. TOTAL CANCER	1,013	<b>188.8</b>	185.6
3. CHRONIC LOWER RESPIRATORY DISEASE	261	<b>48.7</b>	47.0
4. CEREBROVASCULAR DISEASE	250	47.4	<b>50.5</b>
5. UNINTENTIONAL NON-MOTOR VEHICLE INJURIES	203	<b>43.8</b>	28.6

The top five leading causes of death claimed 2,770 Burke County lives from 2005 to 2009, Heart Disease, Cancer, Chronic Lower Respiratory Disease, Cerebrovascular Disease and Unintentional non-motor Vehicle injuries. These exact causes of death claimed 2,775 Burke County lives from 2000 to 2004. Alzheimer's Disease is the sixth leading cause of death that claimed 151 Burke County lives from 2005 to 2009. All leading causes of death were higher in males than females.



### **HEART DISEASE**

Together, heart disease and cerebrovascular diseases currently account for more hospitalizations than any other condition. Consequently, hospital costs attributable to these two conditions were greater than any other condition, together accounting for more than \$66.2 million in hospital charges in Burke County in 2009 compared with \$54 million in 2004.

In Burke County, minority males have a 5% higher mortality rate (238.8) due to heart disease than white males (251.9). Minority females in Burke County have a 17% higher mortality rate (221.2) due to heart disease than white females (184.2).

Gender disparities exist among both whites and minorities in Burke County. The mortality rate due to heart disease among white males is 41% higher than that of white females. The mortality rate among minority males is 37% higher than the rate among minority females.

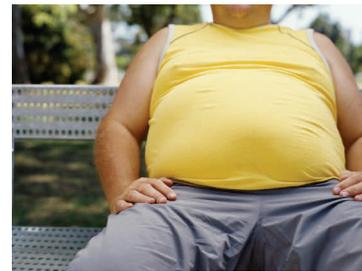
Heart disease mortality rate continues to be higher in Burke County than the state rate.

### **CEREBROVASCULAR DISEASE**

Stroke is the fourth leading cause of death in Burke County in the years from 2005 through 2009, over which period the deaths of 250 Burke County residents were attributable to stroke. The county mortality rate for stroke for that period 47.4 was lower than the state rate of 50.5.

Risk Factors for Heart Disease and Stroke:

- Age (65 or older for heart disease, 55 or older for stroke)
- Gender (male)
- Race (especially African American)
- Tobacco use
- High cholesterol
- High blood pressure
- Physical inactivity
- Obesity/overweight
- Diabetes
- Stress
- Alcohol abuse



## TOTAL CANCER

For all cancers combined, there were 2,590 newly diagnosed cases in Burke County between 2004 and 2008. The incidence rate for total cancer in Burke County (496.3) is 1.1% higher than the North Carolina rate.

Since 1995, the age-adjusted total cancer incidence rate in Burke County has remained below the North Carolina rate. Between 1996 and 2002, the rate decreased, but since the aggregate period of 1998 to 2002, the incidence rate spiked.

From 1999 through 2003, the cancer incidence rate was slightly lower in Burke County (436.6) than the state rate (446.5) by approximately 10%. But the data for 2004 through 2008 incidence rate shows an increase for both the county and state; however, Burke County (496.3) has increased above the state rate (495.2) for the first time since before 1995.



## UNINTENTIONAL NON-MOTOR VEHICLE INJURIES

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. Both non-motor vehicle and motor vehicle injuries are among the ten leading causes of death in Burke County. Unintentional injuries of all types are costly injuries and led to over \$30 million in hospital charges for Burke County residents in 2009, an increase of \$13 million from 2004.

Between the years 2005 and 2009, there were 203 deaths in Burke County due to unintentional non-motor vehicle injuries (boating accidents, falls, burns, animal bites, etc), making this category of injury the fifth leading cause of death in the county.

Unintentional non-motor vehicle injuries are also the leading cause of death for Burke County residents between the ages of 20 and 39. Since 1994, the Burke County rate has exceeded the NC rate and continued to rise to its current rate of 43.8.



## BURKE COUNTY

### DECREASE IN FUNDING

During 2011-2012 fiscal year, the Burke County Health Department did not receive continued monies for its Adolescent Parenting Program funded by the NC Division of Public Health for the past four years. This program provided educational and support services for teenage mothers in Burke County. Also eliminated by the NC Division of Public Health were the monies and offices of Healthy Carolinians/Health Education and Statewide Health Promotion. The Burke County Health Department continues to provide mandated activities with no state funding.

### THREE NEW GRANT FUNDED PROJECTS

The Center for Disease Control provided grant funding through the NC Division of Public Health for regionally based Community Transformation (CTG) priorities. Burke County is covered through Region 2 including Avery, Buncombe, Burke, Caldwell, Henderson, Madison, McDowell, Mitchell

Polk, Rutherford, and Yancey counties. CTG region counties wants to build strength to assure everyone has an opportunity to make the healthy choice because it is the easy choice. This project will engage communities by activating regional groups to determine which funded strategies are the priorities and plan the action for moving forward to support tobacco-free communities, active living, and healthy eating while promoting clinical community supports to reduce preventable chronic disease. As part of this regional effort, Burke County will be working on strategies including, 1) establishing formal joint use agreements with community agencies to promote active living, 2) decrease barriers and increase the number of certified farmers for approved lists of produce suppliers, 3) create a distribution network to make locally grown produce available in convenience stores, 4) build bridges with county and city planners to consider healthy impacts, both positive and negative in comprehensive land devel-

opment and design, and 5) market and publicize farmers markets, convenience stores offering healthy food options and signage for tobacco free recreation and government campuses.

Blue Ridge Health Care and several supporting community agencies wrote and received a Duke Endowment grant for Burke Health Solutions. Burke Health Solutions consists of a group of safety net providers and community partners working together to provide health care to the growing number of indigent, medically uninsured individuals in Burke County. The goals of the project are to provide an outside medical home for those indigent clients receiving care at the Good Samaritan Clinic (free clinic) and fostering chronic disease management through healthy education and continuity of care. The Burke County Health Department's Health Education department provides individual and group health education for the chronic disease clients. This collaborative project has only one year remaining within the grant period however, sustainable funding is being sought.

### BLUE RIDGE HEALTHCARE MEDICAL EDUCATION PROGRAM

Blue Ridge Healthcare began formally training medical students and resident physicians in June, 2011 in response to the shortage of physicians in Burke County and the surrounding counties in Western NC. The Graduate Medical Education program consists of training programs in Family Medicine, Internal Medicine, Gastroenterology and a rotating internship program. In addition, through an agreement with Virginia Tech, Virginia, Blue Ridge Healthcare trains ten third year medical students per year.

In conjunction with the medical education program, Blue Ridge Healthcare established a primary care, internal medicine clinic, called the Mountain Valley Health Center. This clinic is the main outpatient teaching site for internal medicine residents. The clinic is supervised by board certified internal medicine physicians. The clinic was partially funded through a grant received from the Golden Leaf Foundation. The intent of the grant was to establish medical homes for

underserved patients in Burke County. The clinic works in conjunction with the Good Samaritan Clinic, Access Care and local Social Services to identify and qualify patients for Medicaid services. The clinic also sees patients with limited or no ability to pay for medical services. Since being established in August, 2011, the clinic has become the primary site of medical care of approximately 500 patients with a target of 750 patients who are medically underserved.

The Graduate Medical Education program has significant short term and long term benefits to the community. In the short term, the program has established 22 resident physician jobs, 4 administrative jobs in the main office and 5 additional jobs at the Mountain Valley clinic. Additionally, the program has been able to secure approximately 1.8 million dollars in grant funding for its development. Over the next two to three years, the program is hoping to establish 25 additional jobs, provide much needed health care to over 2000 patients per year and graduate 20 new internal medicine and family physicians who will potentially establish a practice within our geographic service area.

### NEW COMMUNITY COLLABORATIVE

Burke Substance Abuse Network (BSAN) is a coalition of providers, support groups, stakeholders and community agencies working together to 1) network, 2) identify gaps in substance use/abuse services and 3) strategically plan responses to community needs within the goal of establishing a vibrant, recovery-oriented community of care in Burke County. BSAN members are assisting with creating a Recovery-Oriented Community of Care in Burke County by inviting resources to join the effort in increasing options for treatment and recovery support services for individuals and families in need. Substance use/abuse is creating a tremendous human and financial burden on all aspects of our community so the community is working together to make a difference in the lives of those in need.



## **NEW & EMERGING ISSUES FOR BURKE COUNTY**

- *Burke County has continued to see an increase in the abuse and/or use of substances particularly prescription medication abuse over the last ten years. From 2001 to 2010 within the Unifour area Burke County was the third highest county for annual number of deaths due to unintentional and undetermined intentional poisonings and the highest total number of deaths from unintentional and undetermined intent drug overdoses with 191 for the same time period. In 2011, Burke County had the highest rate of drug related emergency room visits at 1,150.7 than any other county in the Unifour. The community will continue to focus on this issue through coming and utilizing resources within the Burke Substance Abuse Network and Healthy Youth Task Force.*
- *Burke County's unemployment/underemployment continues to be an issue for the entire area. As of 2011, the annual average unemployment rate was 12.7 and even though the unemployment rate has decreased to 10.4 as of September, 2012, Burke County's economic climate is still distressed. According to the NC Employment Security Commission, in 2011, and part of 2012, Burke County has seen 9 additional business closings and 3 business layoffs affecting over 260 employees. The health and well being of Burke County's residents will continue to be affected by the distressed economic climate.*



## **TASK FORCE DEVELOPMENTS**

### **HEALTHY LIFESTYLE CHOICES TASK FORCE**

- Task force is working in collaboration with NC Prevention Partners and 25 local organizations to provide the Work Healthy America program. This program provides organizations with assessments, policies, etc. to improve the health of their workforce.
- Task force is working with local agencies to increase the percentage of adults getting the recommended amount of physical activity through increasing park usage by sponsoring events and awareness of the benefits of continual physical activity.

### **HEALTHY YOUTH TASK FORCE**

- Task force is beginning some membership development to increase their numbers.
- Task force also sponsored the annual Family Day event in September to focus on reduction of substance use/abuse and other high risk behaviors by encouraging families to eat more meals together. This event brought in over 700 individuals and/or families to participate in the resource fair and meal.
- Task force is working on the Keys to Life program with one local high school to reduce the incidence of driving while impaired during prom season.
- Task force is working replicating the Girls on the Run program for a mixed group at a couple of local high schools.

### **HEALTHY AGING TASK FORCE**

This is a newly formed task force created due to the growing aging population in Burke County.

This task force identified increasing access to nutritious meals for homebound adults as the priority area to address.

This group will identify resources within the county to increase the Meals on Wheels routes by two which will serve 20 individuals currently on a waiting list.