



Health Outcomes

Mortality and Morbidity (Death and Disease)

MATCH County Ranking Data (Mobilizing Action Toward Community Health)

MATCH - 2010 Snapshot of Health Outcomes

| MATCH - Buncombe County | Buncombe Value | NC Value | Target Value | |
|---|----------------|----------|--------------|---|
| Health Outcomes NC County Rank: 25th Healthiest | | | | |
| Mortality: NC County Rank: 25th Healthiest | | | | |
| <u>Premature death [1]</u> | 7,990 | 8,174 | 7,420 | ↓ |
| Morbidity: NC County Rank: 30th Healthiest | | | | |
| <u>Poor or fair health [2]</u> | 17.0% | 19.0% | 15.0% | ↓ |
| <u>Poor physical health days [3]</u> | 3.6 | 3.6 | 3.1 | ↓ |
| <u>Poor mental health days [4]</u> | 3.4 | 3.2 | 2.7 | ↓ |
| <u>Low birth weight [5]</u> | 9.1% | 9.0% | 7.7% | ↓ |

Source URL: <http://www.countyhealthrankings.org/north-carolina/buncombe>

About the Target Value

The arrows help us know whether we should be higher or lower than the targeted value in order to improve health. For example, when looking at Adult Smoking, the Buncombe Value is higher than the Target Value. We need to decrease ↓ the percentage of adults who smoke in order to meet or exceed the Target Value.

About the Buncombe Value

The Buncombe Value is calculated using multiple years of data to stabilize the data and offer a good “snapshot” of a particular health behavior. Health behaviors that are highlighted in **Red** are above ↑ the Target Value.

In this Section...

Find data from Local Health Survey and from other sources about health outcomes.

· Mortality

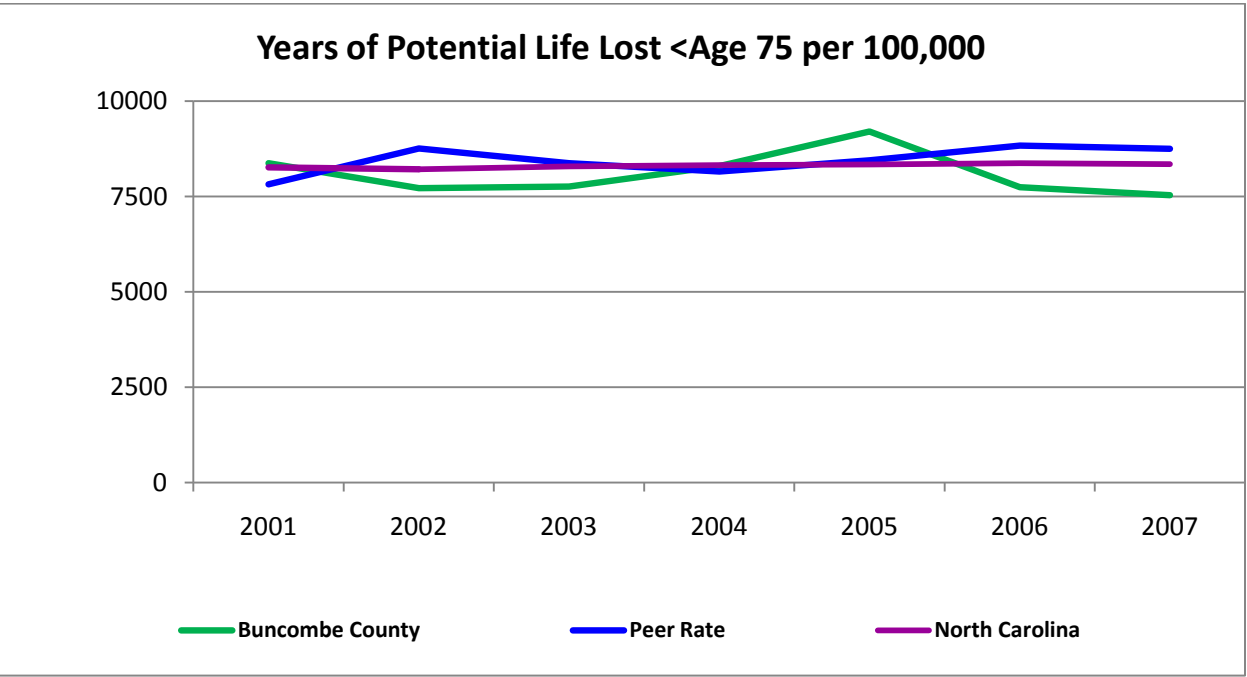
- Premature death
- Leading Causes of Death (by Race)
- Death disparity ratios
- Infant and Fetal Mortality

· Morbidity

- Health Status
- Low birth weight
- Communicable Disease Report



| | |
|-------------------------------|--|
| Category | Mortality (how long people are living) |
| Health Outcomes | |
| Indicators | Years of Potential Life Lost; Death disparity ratio |
| Why is this important? | <p>Premature death is a key measure of people dying too early. By knowing and comparing premature deaths, it helps our county focus on the deaths that can be prevented. We can target resources to high-risk areas and further investigate the causes of death.</p> <p>(MATCH – County Ranking Project)</p> |



Peer Counties: Burke, Davidson, Randolph

Source: NC CATCH

The concept behind Years of Potential Life Lost (YPLL) involves using the number of years of life (life-years) lost due to **premature death** to obtain a total sum of the life-years lost before age 75, for example. In contrast to crude death rates, YPLL **emphasizes the processes underlying premature mortality** in a population (MATCH). The YPLL measure allows you to focus not on how many people died, but **who died early**.

In 2007, Buncombe County had a combined total of over 7,500 years of life lost for every 100,000 residents. Those years include decades for each infant who died, many years of possibly productive work life for adults who died in middle-age, and numerous years for seniors who were then no longer able to donate their time, energy, and resources to improving our community.



Buncombe County Leading Causes of Death

2005-2009 Race-specific, age-adjusted death rates

Standard = Year 2000 Census US population, Rates per 100,000 population

| Buncombe County 2005-2009 Age-Adjusted Death Rates (per 100,000), Ranked by rates and percent of deaths by race | Overall | | | Minority | | | White | | |
|---|---------|-------|-------------|----------|-------|-------------|-------|-------|-------------|
| | Rank | Rate | % of deaths | Rank | Rate | % of deaths | Rank | Rate | % of deaths |
| Diseases of the Heart | 1 | 178.4 | 23.2% | 1 | 251.7 | 24.7% | 2 | 174.6 | 23.1% |
| Cancer | 2 | 177.5 | 22.4% | 2 | 228.3 | 22.2% | 1 | 175.7 | 22.4% |
| Chronic lower respiratory diseases | 3 | 53.0 | 6.8% | 4 | 37.0 | 3.6% | 3 | 54.3 | 7.1% |
| Cerebrovascular disease | 4 | 45.5 | 6.0% | 3 | 60.8 | 5.9% | 4 | 44.8 | 6.0% |
| Alzheimer's disease | 5 | 30.8 | 4.2% | | N/A | | 5 | 31.7 | 4.4% |
| All other unintentional injuries(no MV injuries) | 6 | 30.7 | 3.4% | 7 | N/A | 2.2% | 6 | 31.4 | 3.5% |
| Nephritis and kidney diseases | 7 | 17.3 | 3.4% | 5 | 49.4 | 4.8% | 8 | 15.3 | 2.0% |
| Pneumonia and influenza | 8 | 17.0 | 2.2% | 9 | N/A | 1.9% | 7 | 17.1 | 2.3% |
| Unintentional Motor Vehicle Injuries | 9 | 13.6 | 1.3% | | N/A | | 10 | 13.6 | 1.4% |
| Suicide | 10 | 13.3 | 1.4% | | N/A | | 9 | 13.8 | 1.4% |
| Diabetes Mellitus | | 12.9 | | 6 | 31.2 | 3.1% | | 11.5 | |
| Chronic liver disease and cirrhosis | | 10.9 | | | N/A | | | 10.7 | |
| Septicemia | | 8.3 | | | N/A | | | 8.3 | |
| Homicide | | 4.5 | | 10 | N/A | 1.4% | | 3.4 | |
| AIDS (Acquired Immune Deficiency Syndrome) | | 2.7 | | 8 | N/A | 1.9% | | N/A | |
| All other causes (that are not ranked) | | | 26.8% | | | 28.3% | | | 26.4% |

Source: NC State Center for Health Statistics, 2010 County Health Data Book

Note: 2005 – 2009 rates are used to stabilize the numbers by averaging a five year period of time. N/A is listed where rates have been suppressed due to small numbers. The data are age-adjusted deaths rates and ranked by rates of cause of death, except where N/A is listed. Ranking by percent of deaths was applied to those with N/A. Listed also are percent of number of deaths (by race) for each of the causes of death that are ranked, as well as the total of “all other causes” not ranked.

Heart disease, cancer, chronic lower respiratory disease (COPD), and stroke are leading causes of death among both white and minority populations. Regardless of race, over 5 out of 10 deaths are attributable to these leading causes of death.

Kidney disease, Diabetes, AIDS, and Homicide are leading causes of death for minorities but for whites, only kidney disease appears among the ten leading causes of death. More whites die from Chronic Lower Respiratory Disease, Alzheimer's disease, Suicide, and Motor vehicle injuries than minorities.



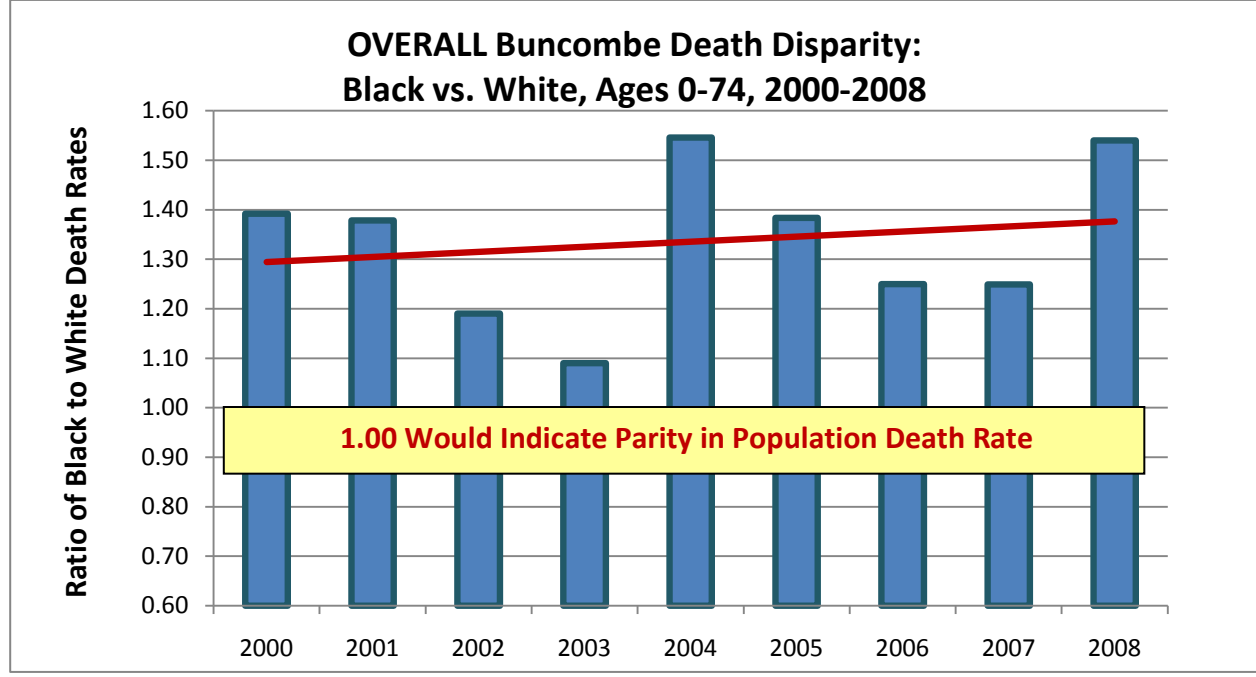
Mortality

| 2004 - 2008 Age-adjusted Death Rate | | |
|-------------------------------------|----------|-------|
| per 100,000 population | | |
| Selected Causes of Death | Buncombe | NC |
| Cardiovascular | 187.2 | 202.2 |
| Pneumonia & Influenza | 18.9 | 20.3 |
| Suicide | 13.8 | 11.9 |
| Unintentional Motor Vehicle | 14 | 18.6 |

Source: 2008 Vital Statistics, Vol.2

Healthy People 2020 at the state, national, and local levels compares selected causes of preventable death. This helps communities monitor how well we are addressing those health challenges that contribute to these causes of death.

When comparing Buncombe County age adjusted death rates for 2004-2008, we find that more Buncombe residents die from suicide than do North Carolinians on average.



Source: 2008 Vital Statistics, Vol.2

Using population based death rates, we can compare cause of death of whites and blacks by developing a ratio. The ratio tells us if one race is more likely to die from a specific cause than another race. If there were parity between races, meaning if blacks and whites had equal chances of dying, then the **death ratio** would be 1.0.

When looking at **overall death rate** for African Americans and Whites for 2000 – 2008, we find a general trend upward over these 9 years. **This indicates a broadening racial gap in likelihood to die.** In 2008, an African American resident under age 75 was 54% more likely to die than was a White resident.



Mortality

Racial Disparities among causes of death

| Cause of Death (under age 75) | Population-based death rate* | | Disparity Ratio |
|--|------------------------------|--------|-----------------|
| | Blacks | Whites | Black : White |
| Alzheimer's disease | 1.5 | 2.8 | 1 to 1.9 |
| Cancer - breast | 12.5 | 11.1 | 1.1 to 1 |
| Cancer - colorectal | 16.9 | 9.4 | 1.8 to 1 |
| Cancer - lung | 36 | 48.3 | 1 to 1.3 |
| Cancer - pancreas | 9.6 | 7.8 | 1.2 to 1 |
| Cancer - pancreas | 5.9 | 3.8 | 1.6 to 1 |
| Cerebrovascular disease | 24.3 | 15.6 | 1.6 to 1 |
| Chronic lower respiratory disease | 19.1 | 30.4 | 1 to 1.6 |
| Diabetes | 25.7 | 9.6 | 2.7 to 1 |
| Heart disease | 130.2 | 92.6 | 1.4 to 1 |
| HIV disease | 25.7 | 1.9 | 13.5 to 1 |
| Homicide | 22.8 | 3.7 | 6.2 to 1 |
| Kidney disease | 18.4 | 6.3 | 2.9 to 1 |
| Suicide | 5.2 | 15.1 | 1 to 2.9 |
| Unintentional injuries (other than MV) | 19.9 | 22.6 | 1 to 1.1 |
| * Number of deaths per 100,000 persons in the specified population | | | |

Source: NC State Center for Health Statistics, 2010 County Data Book

The data for cause of death includes the decedent’s race and age at the time of death. Using county population estimates by age and race, we can estimate and compare population based death rates by cause of death and by race, for 2000-2008.

Higher rates among African Americans

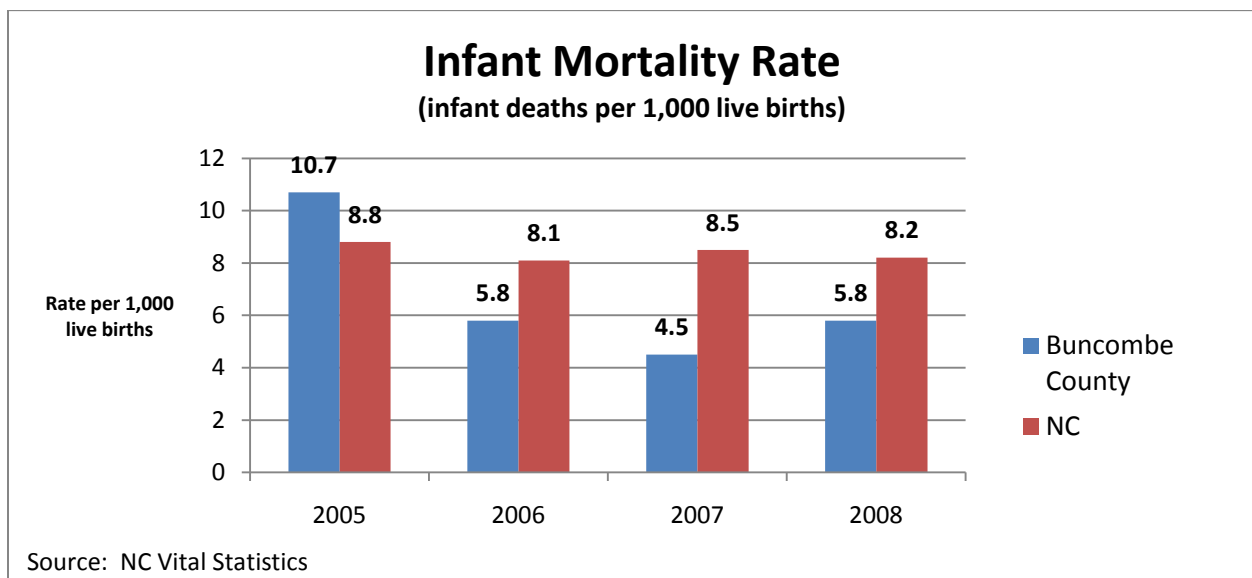
- **HIV disease** caused 4.3% of African American deaths among those who died under age 75. **Blacks were 13.5 times more likely to die of HIV/AIDS than were whites.**
- The **homicide** death rate was more than 6 times higher for African Americans. Murder accounted for nearly 4% of deaths for Blacks under age 75, less than 1% for Whites.
- The **colorectal cancer** death rate was 80% higher for African Americans than Whites.
- **Kidney disease** and diabetes were each almost 3 times more likely to be the cause of death for African Americans than for Whites.

Higher rates among Whites

- Whites were almost 3 times more likely to die of **suicide** than were African Americans.
- More than 1 out of 10 deaths for whites under age 75 was due to **lung cancer**. Whites were one-third more likely to die of lung cancer than were African Americans.
- **Chronic lower respiratory disease** accounted for an additional 6.8% of deaths before age 75 for Whites. They were 60% more likely to die from chronic respiratory disease than were African Americans.



| | |
|------------------------------------|---|
| Category Health OUTCOMES | Infant mortality |
| Indicators | Infant mortality rates (number of deaths before age 1 per every 1,000 babies born alive) |
| Why is this important? | The infant mortality rate is commonly used as the one health indicator that best describes the overall status of community-wide health. Those infant deaths caused by prematurity (rather than birth defects or SIDS) are often linked to the overall health of the mother before she became pregnant or very early in pregnancy. Improving health of women BEFORE they become pregnant (called preconception health) is a key national strategy to reduce infant mortality and improve both women’s and infant’s health overall. |



Variations in the infant death rate are common in communities where a fairly small number of deaths might sway the rate up or down significantly from one year to the next. For example, Buncombe County regularly has less than 15 infant deaths a year. With this relatively small number, the premature birth and subsequent death of two sets of twins, for example, could significantly increase the infant mortality rate even though only two additional pregnancies may have been impacted.

For decades, North Carolina has struggled with one of the highest infant mortality rates in the United States. Over half of infant deaths in NC can be attributed to medical issues of the mother, many of which existed before the pregnancy (NC Preconception Health Strategic Plan).

A significant racial disparity exists in Buncombe County Infant deaths. Black babies are almost twice as likely to die as are white babies. The 2004-2008 infant death rate for Buncombe County whites is 5.9 compared to 11.3 for blacks (NC Vital Statistics).



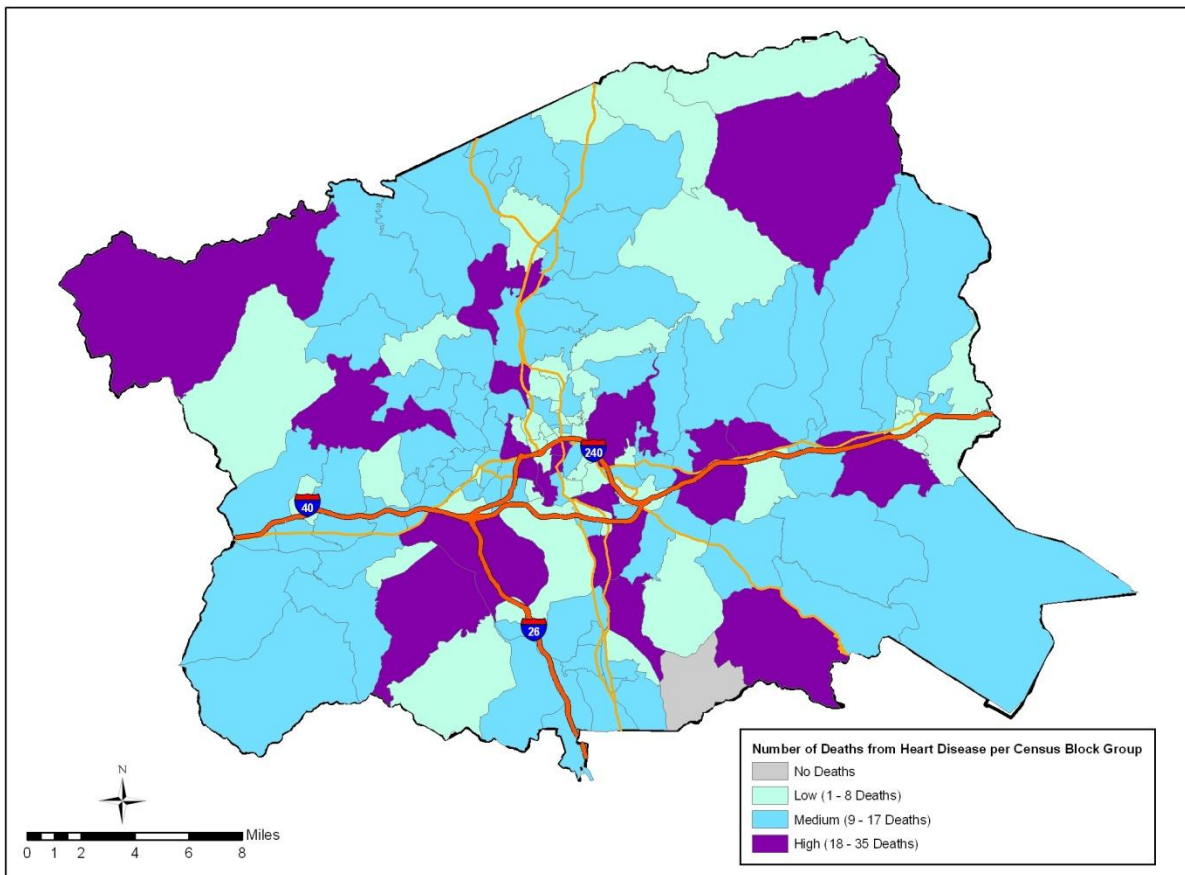
Mortality

The following maps indicate the raw number of Buncombe County resident under age 75 who died from specific causes of death according to where those residents lived. ***Focusing on deaths before age 75 allows us to use this data to target preventable deaths. All of us will die. The question for health advocates is which early deaths may have been prevented.***

Looking at deaths according to what area of the County residents had lived in provides information that can be used to target prevention services and focus the creation of additional opportunities for residents to make healthy choices. The following maps have been created from a compilation of all death certificates to Buncombe County residents from 2000-2008. Maps were generated by the Buncombe County Technology Department, GIS Unit.

Heart Disease

Deaths from Heart Disease of Buncombe County Residents 75 Years Old and Younger from 2000 -2008



Legend:

Light Aqua = 1-8 deaths

Turquoise = 9-17 deaths

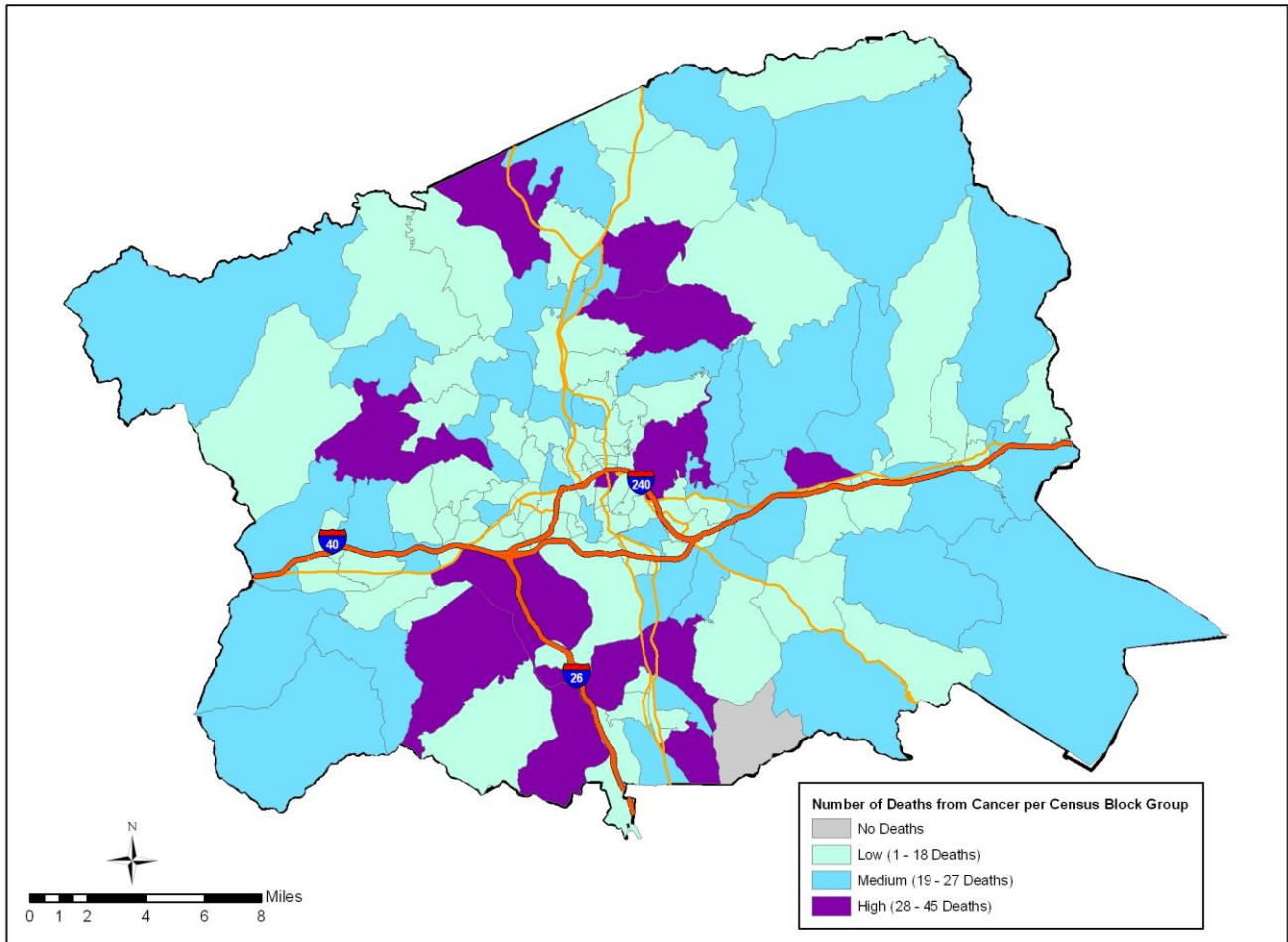
Purple = 18-35 deaths



Mortality

All Cancers

Deaths from Cancer of Buncombe County Residents 75 Years Old and Younger from 2000 -2008



Legend:

| | | |
|--------------------------|--------------------------|-----------------------|
| Light Aqua = 1-18 deaths | Turquoise = 19-27 deaths | Purple = 28-45 deaths |
|--------------------------|--------------------------|-----------------------|