Cancer of the lung and bronchus was the 2nd most frequently occurring and the leading cause of cancer death in North Carolina from 2004 to 2008. It is anticipated that 7,991 people (4,656 males and 3,335 females) in North Carolina will be diagnosed with and 5,934 people (3,530 males and 2,404 females) will die of cancer of the lung and bronchus in 2011.

Incidence
The percentage of cases of lung and bronchus cancer from 2004 to 2008 is displayed by age group in Figure 1. More than 57 percent of lung and bronchus cancer cases were diagnosed in people ages 65 to 84.

Between 2004 and 2008, the age-adjusted incidence rate for lung and bronchus cancer in North Carolina was 76.3 per 100,000 persons per year (Figure 2). In all non-Hispanic races, men were much more likely to be diagnosed with lung and bronchus cancer than women.

From 1995 to 2008, lung and bronchus cancer incidence rates have remained fairly stable for men and have increased slightly for women (Figure 3).
Stage at Diagnosis*
Figure 4 shows the stage distribution of lung and bronchus cancer cases diagnosed between 2004 and 2008. Almost half of lung and bronchus cancer cases were diagnosed at the distant stage.

The age-adjusted mortality rate of lung and bronchus cancer from 2004 to 2008 was 58.4 per 100,000 persons per year (Figure 6). In all non-Hispanic races, men were more likely to die from lung and bronchus cancer than women.

Mortality
Almost 60 percent of deaths occurred in people ages 65 to 84. Figure 5 shows the percentage of deaths that occurred between 2004 and 2008 displayed by age group.

From 1995 to 2008, lung and bronchus cancer mortality rates have decreased for men and have increased for women (Figure 7).

Data Sources and Methods
Data on North Carolina cases were obtained from the North Carolina Central Cancer Registry (CCR). Hospitals are the primary source of data. The CCR supplements hospital data with reports from physicians who diagnose cases in a non-hospital setting. The CCR also collects data from pathology laboratories and freestanding treatment centers. Data on cancer deaths were obtained from Statistical Services in the State Center for Health Statistics. Population data from the National Center for Health Statistics were used in the denominators of the rates, which are expressed per 100,000 persons. Rates were age-adjusted using the 2000 United States Census data. To examine trends, three-year overlapping rates were used to improve stability over time.

Stage at diagnosis was defined according to Surveillance Epidemiology and End Results Summary Stage guidelines as in situ, localized, regional, distant, and unknown/NA. For further information about the NC CCR, please visit www.schs.state.nc.us/SCHS/CCR.

* According to the National Cancer Institute (NCI), “many cancer registries, such as NCI’s Surveillance, Epidemiology, and End Results Program (SEER), use summary staging. This system is used for all types of cancer. It groups cancer cases into five main categories: In situ — Abnormal cells are present only in the layer of cells in which they developed. Localized — Cancer is limited to the organ in which it began, without evidence of spread. Regional — Cancer has spread beyond the primary site to nearby lymph nodes or organs and tissues. Distant — Cancer has spread from the primary site to distant organs or distant lymph nodes. Unknown — There is not enough information to determine the stage.” Additional information on staging can be found at www.cancer.gov/cancertopics/factsheet/detection/staging.