Cancer of the colon and rectum was the 4th most frequently occurring and the 2nd leading cause of cancer death in North Carolina from 2004 to 2008. It is anticipated that 4,858 people (2,567 males and 2,291 females) in North Carolina will be diagnosed with and 1,663 people (866 males and 797 females) will die of cancer of the colon and rectum in 2011.

Incidence
The percentage of cases of colon and rectum cancer from 2004 to 2008 is displayed by age group in Figure 1. Less than 6 percent of colon and rectum cancer cases were diagnosed in people younger than 45.

Between 2004 and 2008, the age-adjusted incidence rate for colon and rectum cancer in North Carolina was 46.8 per 100,000 persons per year (Figure 2). Men were more likely to be diagnosed with colon and rectum cancer than women. Non-Hispanic black men had the highest incidence rate.

From 1995 to 2008, colon and rectum cancer incidence rates have remained fairly stable for both men and women, with a slight decline in recent years (Figure 3).
**Stage at Diagnosis**

Figure 4 shows the stage distribution of colon and rectum cancer cases diagnosed between 2004 and 2008. More than half of colon and rectum cancer cases were diagnosed at the regional or distant stage.

![Figure 4. 2004–2008 Percent of Colon and Rectum Cancer Cases by Stage](image)

**Mortality**

People ages 65 to 84 accounted for over half the deaths. Figure 5 shows the percentage of deaths that occurred between 2004 and 2008 displayed by age group.

![Figure 5. 2004–2008 Percent of Colon and Rectum Cancer Deaths by Age Group](image)

The age-adjusted mortality rate of colon and rectum cancer from 2004 to 2008 was 16.8 per 100,000 persons per year (Figure 6). When comparing colon and rectum cancer rates by race and ethnicity, non-Hispanic blacks had the highest rate.

![Figure 6. 2004–2008 Colon and Rectum Cancer Mortality Rates by Race, Ethnicity, and Gender](image)

From 1995 to 2008, colon and rectum cancer mortality rates have decreased for both men and women (Figure 7).

![Figure 7. 1995–2008 Colon and Rectum Cancer Mortality Trends by Gender](image)

**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](http://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](http://www.cancer.gov/cancertopics/factsheet/detection/staging).