Cancer of the female breast was the most frequently occurring and the third leading cause of cancer death in North Carolina from 2010 to 2014. It is anticipated that 10,279 females in North Carolina will be diagnosed with and 1,428 females will die of breast cancer in 2017.

Incidence
The percentage of cases of female breast cancer from 2010 to 2014 is displayed by age group in Figure 1. Nearly half of breast cancer cases were diagnosed in females ages 45 to 64.

Between 2010 and 2014, the age-adjusted incidence rate for female breast cancer in North Carolina was 158.4 per 100,000 females per year. Hispanic women are much less likely to be diagnosed with breast cancer than women of other races and ethnicities (Figure 2).

From 2003 to 2014, breast cancer incidence rates have increased slightly for whites and minorities, with the increase seen more among minority women than white women. (Figure 3).
Stage at Diagnosis*
Figure 4 shows the stage distribution of female breast cancer cases diagnosed between 2010 and 2014. Over half of female breast cancer cases were diagnosed at the localized stage.

Mortality
Between 2010 and 2014, the percentage of female breast cancer deaths is displayed by age group in Figure 5. Almost 80 percent of deaths occurred in women ages 45 to 84.

The age-adjusted mortality rate of female breast cancer from 2010 to 2014 was 21.6 per 100,000 persons per year. Non-Hispanic black women are more likely to die from breast cancer than women of other races and ethnicities (Figure 6).

From 2003 to 2014, female breast cancer mortality rates have decreased for whites and minorities (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** — Abnormal cells are present only in the layer of cells in which they developed. **Localized** — Cancer is limited to the primary site by 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.

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* 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 method 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 primary site by 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).