Female Breast Cancer

A Fact Sheet from the North Carolina Central Cancer Registry, State Center for Health Statistics

June 2011

Cancer of the female breast was the most frequently occurring and the 3rd leading cause of cancer death in North Carolina from 2004 to 2008. It is anticipated that 8,507 females in North Carolina will be diagnosed with and 1,350 females will die of cancer of the breast in 2011.

Incidence
The percentage of cases of female breast cancer from 2004 to 2008 is displayed by age group in Figure 1. Nearly half of breast cancer cases were diagnosed in women ages 45 to 64.

Between 2004 and 2008, the age-adjusted incidence rate for female breast cancer in North Carolina was 151.9 per 100,000 females per year (Figure 2). Hispanic women were less likely to be diagnosed with breast cancer than women of other races and ethnicities.

From 1995 to 2008, breast cancer incidence rates have increased for minority women (Figure 3).
Stage at Diagnosis*
Figure 4 shows the stage distribution of female breast cancer cases diagnosed between 2004 and 2008. Nearly half of female breast cancer cases were diagnosed at the localized stage.

The age-adjusted mortality rate of female breast cancer from 2004 to 2008 was 24.3 per 100,000 persons per year (Figure 6). Non-Hispanic black women were more likely to die from breast cancer than women of other races and ethnicities.

Mortality
Almost 80 percent of deaths occurred in women ages 45 to 84. Figure 5 shows the percentage of deaths that occurred between 2004 and 2008 displayed by age group.

From 1995 to 2008, female breast cancer mortality rates have decreased for white and minority 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.