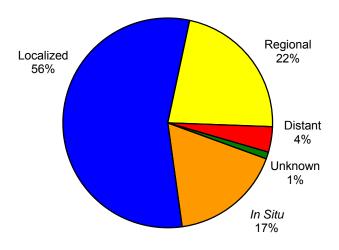
Table 13: Female Breast Incidence and Mortality Summary, 2013

| Female Breast Cancer |                 |                   | Incidence | Mortality |
|----------------------|-----------------|-------------------|-----------|-----------|
| South<br>Dakota      | Total           | # Cases / Deaths  | 715       | 108       |
|                      |                 | Age Adjusted Rate | 146.0     | 19.3      |
|                      | White           | # Cases / Deaths  | 669       | 106       |
|                      |                 | Age Adjusted Rate | 148.2     | 20.3      |
|                      | American Indian | # Cases / Deaths  | 35        | 2         |
|                      |                 | Age Adjusted Rate | 136.4     | 6.6       |
| United<br>States     | Total           | Age Adjusted Rate | 125.4     | 20.7      |
|                      | White           | Age Adjusted Rate | 127.8     | 20.3      |
|                      | American Indian | Age Adjusted Rate | 74.3      | 13.5      |

Rates per 100,000 age-adjusted to 2000 US standard population and 2013 SD estimated population. US rates <a href="https://www.seer.cancer.gov">www.seer.cancer.gov</a> Source: South Dakota Department of Health

Figure 19: Female Breast Cancer Stage at Diagnosis, South Dakota, 2013



Source: South Dakota Department of Health

## **Descriptive Epidemiology**

Stage at Diagnosis: Including in situ female breast cancer cases there were 864 cases diagnosed in 2013, of which 480 cases were diagnosed at localized stage. This represents 56% of all reported breast cancer cases. There were 192 cases that had progressed beyond the breast. There were 34 that were diagnosed as a distant stage and nine that were staged as unknown. The 149 in situ female breast cancer cases are reported but are not used in calculating incidence rates.

Incidence: Female breast cancer is the most common malignant tumor among women. The incidence rate increased from 1947-1990. The rates fell 3.5% per year from 2001-2005. This decrease may be in part due to the lower number of women using hormone replacement therapy. There were 715 cases of invasive female breast

cancer reported in 2013. In South Dakota, 16.2% of all invasive cancer cases reported in 2013 were female breast. Nationally, 14% of all cancer cases are female breast cancer. Breast cancer represented 32% of the cancer cases diagnosed for South Dakota women in 2013.

Mortality: Breast cancer is the fourth leading cause of death attributed to cancer in South Dakota. Nationwide, breast cancer mortality has been relatively stable overall since 1950. In cancers only of women, it is the second leading cause of cancer deaths. Although mortality has increased among women older than 55 years, it has decreased among women younger than 55 years of age. In 2013, there were 108 deaths. Of those deaths, 106 were white and two were American Indian.

Risk and Associated Factors: Among the known risk factors for breast cancer are early onset of menarche, late onset of menopause, never having been pregnant, first full term pregnancy after age 30 and fewer number of children. These factors increase the risk because of cumulative exposure of breast tissue to estrogen. Other risk factors include high fat diets, obesity, alcohol consumption, history of fibrocystic disease, having a mother or sister with breast cancer, a personal history of ovarian or endometrial cancer and specific tumor suppressor genes such as BRCA1 and BRCA2.

**Prevention and Early Detection:** Prevention and early detection is the key to survival of breast cancer. Breast cancers found during screening exams are more likely to be smaller and still confined to the breast. Women should talk to their doctor for individualized screening recommendations.

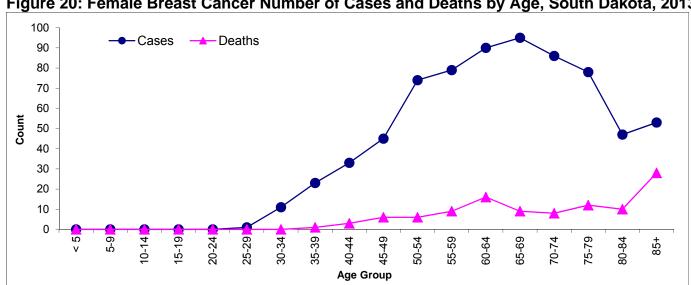


Figure 20: Female Breast Cancer Number of Cases and Deaths by Age, South Dakota, 2013

Source: South Dakota Department of Health

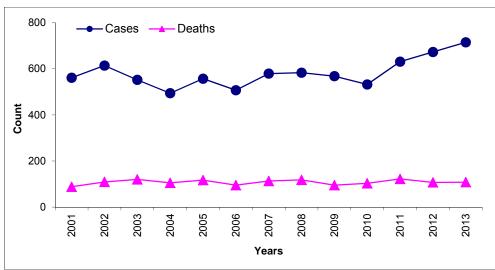


Figure 21: Female Breast **Cancer Cases and Deaths** by Year, South Dakota, 2001 - 2013

The incidence for female breast cancer was at an alltime high in 2013.

Source: South Dakota Department of Health

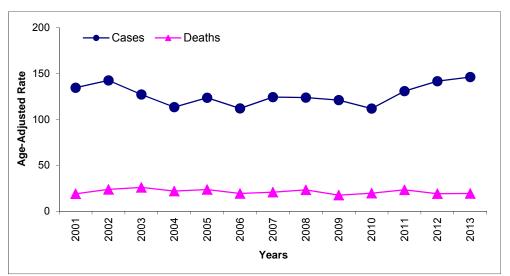


Figure 22: Female Breast Cancer Age-Adjusted Rates, Cases, and Deaths by Year, South Dakota, 2001 - 2013

Rates per 100,000 age-adjusted to 2000 US standard population and SD estimated populations. Source: South Dakota Department of Health