Breast Cancer in South Dakota

Published October 2014
Breast Cancer Estimates for 2011
South Dakota expected 590 new cases of female breast cancer and 100 deaths due to this cancer in 2011. Excluding cancers of the skin, breast cancer is the most frequently diagnosed cancer and the second leading cause of cancer death for South Dakota women.

Incidence and Mortality
From 2007 to 2011 there was an average of 575 new cases of invasive breast cancer cases diagnosed among South Dakota female residents each year. Of those cases, 542 were white and 29 were American Indian.

An average of 110 female residents died from breast cancer annually from 2007 to 2011. Of that number, 105 were white and 5 were American Indian.

<table>
<thead>
<tr>
<th>Incidence 2011</th>
<th>Mortality 2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of cases</td>
<td>Number of deaths</td>
</tr>
<tr>
<td>Total</td>
<td>Total</td>
</tr>
<tr>
<td>White</td>
<td>White</td>
</tr>
<tr>
<td>American Indian</td>
<td>American Indian</td>
</tr>
<tr>
<td>Median age at diagnosis</td>
<td>Median age at death</td>
</tr>
<tr>
<td>64 yrs</td>
<td>72 yrs</td>
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<tr>
<td>Mode</td>
<td>Mode</td>
</tr>
<tr>
<td>65 yrs</td>
<td>79 yrs</td>
</tr>
<tr>
<td>Age range at diagnosis</td>
<td>Age range at death</td>
</tr>
<tr>
<td>22-95 yrs</td>
<td>37-97 yrs</td>
</tr>
<tr>
<td>SD age-adjusted incidence rate</td>
<td>SD age-adjusted death rate</td>
</tr>
<tr>
<td>126.7</td>
<td>23.3</td>
</tr>
<tr>
<td>US SEER age-adjusted incidence rate</td>
<td>US SEER age-adjusted death rate</td>
</tr>
<tr>
<td>124.3</td>
<td>21.5</td>
</tr>
</tbody>
</table>

Rates per 100,000 US 2000 standard population and SD 2011 Estimated Population
Source: South Dakota Department of Health

Figure 1
SEER Summary Stage
Female breast cancer stage at diagnosis, South Dakota, 2011

Mammography can detect breast cancer at an early stage when treatment may be more effective and survival is more likely.

Source: South Dakota Department of Health

1Cancer Facts and Figures 2011, American Cancer Society
Figure 2
Age-adjusted Breast Cancer Rate
Age-adjusted incidence rate for female breast cancer cases at stage of diagnosis by race, South Dakota, 2007-2011.

The 5-year survival rate is 98 percent for breast cancers diagnosed at the in situ or localized stages.

Figure 3
Age-adjusted Breast Cancer Rate
Age-adjusted incidence rate for female breast cancer cases by United States and South Dakota, 2001-2011.

Breast cancer is the most common cancer for South Dakota women.

Figure 4
Breast Cancer Cases and Deaths
Breast cancer cases and deaths by age, South Dakota, 2011.

Early detection saves lives and increases treatment options.

Figure 5
Breast Cancer Cases and Deaths
Breast cancer cases and deaths by age, South Dakota, 2007-2011.

Breastfeeding, moderate or vigorous physical activity, and maintaining a healthy body weight are associated with a lower risk of breast cancer.
Figure 6
Female Breast Cancer Mortality Rates, United States and South Dakota, 2007-2011

Cancer is the leading cause of death in South Dakota and breast cancer is the second leading cause of cancer deaths in South Dakota women.

Risk Factors
The following risk factors may increase the chance of developing breast cancer:
- Increasing age
- Young age at first menstrual period (before age 12)
- Older (after age 35) at first child’s birth
- Use of exogenous estrogens, sometimes in the form of hormone replacement therapy (HRT)
- Breast cancer family history – having first degree relatives (sisters, mothers, daughters) diagnosed
- White race

Prevention
Steps to lower breast cancer risk:
- Don’t smoke
- Control weight and exercise
- Know family history of breast cancer
- Find out the risks and benefits of hormone replacement therapy
- Limit the amount of alcohol consumed
- Get screened for breast cancer regularly

Symptoms
Breast cancer symptoms vary widely and many breast cancers have no obvious symptoms at all. Symptoms that are similar to those of breast cancer may be the result of non-cancerous conditions like infection or a cyst. Warning signs of breast cancer may include:
- New lump in the breast or underarm (armpit)
- Thickening or swelling in any part of the breast
- Irritation or dimpling of breast skin
- Redness or flaky skin in the nipple area or the breast
- Pulling-in of the nipple or pain in the nipple area
- Nipple discharge other than breast milk, including blood
- Any change in the size or the shape of the breast
- Pain in any area of the breast

Breast Cancer Screening
The Healthy People 2020 Objective C-17 is to increase the proportion of women who receive a breast cancer screening based on the most recent guidelines. The United States Preventative Services Task Force guideline recommends mammography for women age 50 to 74 years every 2 years with additional recommendations that before age 50 should be an individual decision.

Figure 7 Healthy People 2020 Mammograms Recommendation Target

Publication funded by the South Dakota Cancer Registry with a grant from the Centers for Disease Control and Prevention – grant number US8/DP003943. For more information or additional copies, contact the South Dakota Department of Health at 605.773.3361 or see the South Dakota Cancer Registry website at http://getscreened.sd.gov/registry/.

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