

### What Is Breast Cancer?<sup>1</sup>

Breast cancer is a malignant tumor that starts from cells in the breast. It mainly occurs in women, but some men do get breast cancer.

### Breast Cancer in the United States<sup>2</sup>

- ❖ Breast cancer is the most common cancer in women.
- ❖ It is the second leading cause of cancer-related deaths in women.
- ❖ An estimated 213,000 new cases of invasive breast cancer will be diagnosed among women in 2006.
- ❖ An estimated 41,000 breast cancer deaths will occur among women in 2006.
- ❖ Currently, about 2 million women have been treated for breast cancer.
- ❖ One in eight women will develop invasive breast cancer in her lifetime.
- ❖ One in 33 women will die from invasive breast cancer.
- ❖ Breast cancer deaths are decreasing due in part to early detection and better treatments (Figure 1).

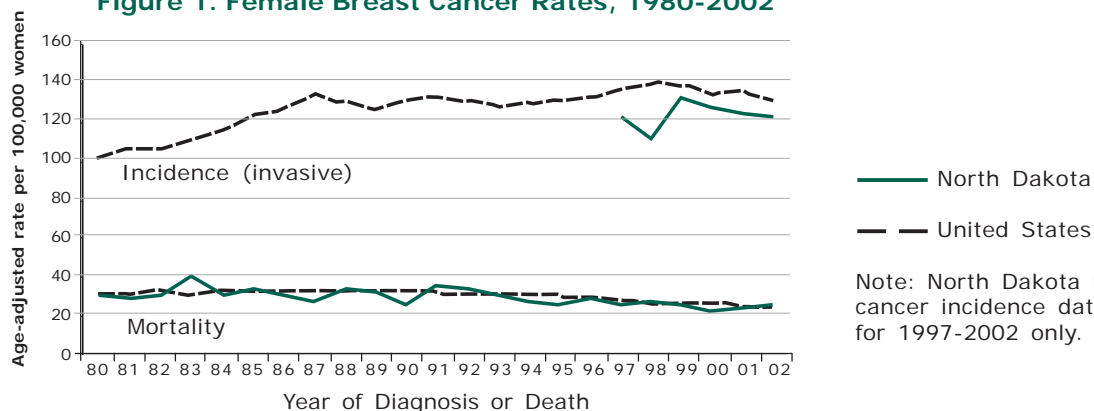
### Risk Factors<sup>1</sup>

- ❖ Advanced age
- ❖ Inherited genetic mutations
- ❖ Personal or family history of breast cancer
- ❖ High breast tissue density
- ❖ Starting menstruation early (before age 12) and/or ending late in life (after age 50)
- ❖ Obesity
- ❖ Recent use of oral contraceptives
- ❖ Post menopausal hormone therapy
- ❖ Never having children or having children after the age of 30
- ❖ Consumption of one or more alcoholic beverages a day

### Breast Cancer in North Dakota<sup>3</sup>

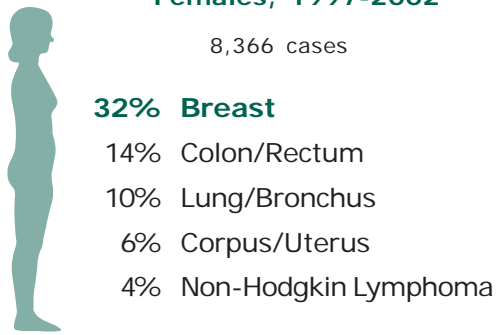
- ❖ Breast cancer is the most commonly diagnosed cancer in women (about 450 new cases per year).
- ❖ It is the second leading cancer-related cause of death (Figure 3).
- ❖ In 2000, there were approximately 5,000 women living with breast cancer.
- ❖ North Dakota incidence rates are slightly lower, but mortality rates are comparable to national rates (Figure 1).

**Figure 1. Female Breast Cancer Rates, 1980-2002**

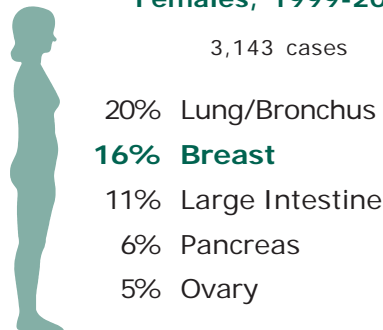


Note: North Dakota has cancer incidence data for 1997-2002 only.

**Figure 2. North Dakota Cancer Cases, Females, 1997-2002**



**Figure 3. North Dakota Cancer Deaths, Females, 1999-2003**



## Signs and Symptoms<sup>1</sup>

The earliest sign of breast cancer is usually an abnormality that is detected on a mammogram before any physical symptoms arise. When physical symptoms do arise, they may include:

- ❖ A breast lump.
- ❖ Redness or scaliness of the nipple or breast skin.
- ❖ Swelling of part of the breast.
- ❖ Skin irritation or dimpling.
- ❖ Nipple pain or nipple turning inward.
- ❖ Nipple discharge other than breast milk.

## Treatment<sup>1</sup>

- ❖ Surgery
- ❖ Chemotherapy
- ❖ Radiation
- ❖ Hormone therapy

## Prevention<sup>1</sup>

- ❖ Get yearly mammograms and clinical breast exams (CBE) after age 40.
- ❖ Women in their 20s and 30s should get a CBE every three years.

- ❖ Practice monthly breast self-exams starting at age 20.
- ❖ Medicine – In clinical studies involving women with increased risk for breast cancer, tamoxifen has been found to reduce the risk of recurrence in localized breast cancer.

## References

- <sup>1</sup> American Cancer Society. (2006). *Detailed Guide: Breast Cancer*. [http://www.cancer.org/docroot/CRI/CRI\\_2\\_3x.asp?dt=5](http://www.cancer.org/docroot/CRI/CRI_2_3x.asp?dt=5)
- <sup>2</sup> American Cancer Society. (2006). *Cancer Facts and Figures 2006*. Atlanta: American Cancer Society.
- <sup>3</sup> North Dakota Cancer Registry. (2004). Bismarck, ND: Division of Cancer Prevention and Control, North Dakota Department of Health.

The Center for Rural Health at the University of North Dakota School of Medicine and Health Sciences is assisting the North Dakota Department of Health in studying the burden of cancer upon North Dakotans. Results of this research are being used by the state Cancer Planning Committee to develop a plan for reducing the adverse impact of this disease on the lives and families of North Dakota residents.

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