

The Critical Facts

There is no prevention. There is no cure. Breast cancer knows no boundaries of race or class.

Number of Breast Cancer Cases in the United States

Breast cancer is the most common cancer among women, excluding cancers of the skin. More than 2 million women are living with the disease.¹ In 2006, breast cancer will account for nearly one out of every three cancer diagnoses in women.²

An estimated 212,920 women will be diagnosed with invasive breast cancer in 2006. This number does not include cases of carcinoma in situ. An estimated 61,980 new cases of breast carcinoma in situ will be diagnosed in 2006. Of these, 85% will be ductal carcinoma in situ (DCIS).³

If every woman lived to age 85, one out of seven women in the United States would develop breast cancer by that time—a “lifetime” risk that was one out of 14 in 1980.⁴ A new breast cancer case is diagnosed every 1.9 minutes.⁵

Men develop breast cancer, too, although they account for less than 1% of cases. In 2006 an estimated 1,720 cases were diagnosed among men.⁶

Breast Cancer Risk

Breast cancer knows no racial boundaries. Overall, white women are most likely to be diagnosed with breast cancer, while black women are more likely to die from the disease.⁷ For women under age 35, black women have a higher incidence than white women.⁸

Risk increases with age. The chance of a woman under the age of 30 developing breast cancer is 1 in 1,985. From ages 30-39, a woman’s chance of developing breast cancer is 1 in 229, from ages 40-49 it is 1 in 68, from ages 50-59 it is 1 in 37, from ages 60-69 it is 1 in 26 and from ages 70-79 it is 1 in 24.⁹

Every woman is at risk for breast cancer. Up to 70%

of breast cancers occur in women who have no identifiable risk factors other than age.¹⁰ Only 5 to 10% of breast cancers are linked to inherited mutations in BRCA1 and BRCA 2 genes.¹¹

Mortality Rates

Cancer accounts for 1 in every 4 deaths in the U.S. and kills more people than any other cause, except for heart disease.^{12,13}

In the U.S., breast cancer is the second leading cause of cancer death among women as a whole (lung cancer is the first).¹⁴ In 2006, an estimated 41,430 deaths will be attributed to breast cancer (40,970 women, 460 men).¹⁵ A woman dies from breast cancer every 13 minutes.¹⁶

Black women with breast cancer are dying younger than other women with breast cancer. The median age at death for white breast cancer patients is 70 years; for black breast cancer patients it is 61 years.¹⁷

Survival Rates

88% of women diagnosed with breast cancer 5 years ago are still alive. Of those diagnosed 10 years ago, 80% are still alive; of those diagnosed 20 years ago, 63% are still alive.¹⁸

According to the most recent cancer statistics review, black women are less likely than white women to survive 5 years after a breast cancer diagnosis: 77.3% versus 89.7% respectively.¹⁹

Five-year survival rates also vary according to age of diagnosis: 83% for women under age 45, 87% for women aged 45-54, and just over 88% for women age 55 and older.²⁰

Mammography

Mammograms do not prevent breast cancer. They detect tumors, but can miss more than a 1/4 of all breast cancers.²¹ Additionally, mammograms can cause “false positive” results when a mammogram finds something in the breast that, on biopsy, proves not to be cancer. As many as 3/4 of all post-mammogram

biopsy results turn out to be benign lesions.²²

Mammography may not be effective in detecting breast cancer for women who are pre-menopausal. Although 50 is often used as the estimated age for women to begin menopause, it is not an accurate indicator of menopausal status. Because the breast tissue of pre-menopausal women tends to be denser than that of post-menopausal women, mammograms of younger women may be more difficult to read.²³

Income

A lack of medical insurance and poor access to screening and treatment decrease survival. Low-income breast cancer patients have 5-year relative survival rates that are 9% lower than higher-income patients. Low-income African American women are three times more likely than higher-income African American women to be diagnosed with advanced disease.²⁴

Insurance

In 2004, only 40% of uninsured women reported having had a mammogram in the past two years, compared with 74% of insured women.²⁵

Uninsured women and women on Medicaid are more likely to be diagnosed at a later stage of breast cancer and are 30-50% more likely to die than women with private health insurance.²⁶

Approximately 48 million people in the United States had no health insurance coverage in 2005.²⁷

The Environment

In 2004, U.S. industries reported the release of 4.24 billion pounds of toxic chemicals.²⁸ This number is lower than in 2000 due in part to an EPA reporting exemption for coal extraction activities.²⁹ In general, this represents only a portion of all toxic chemical releases nationwide because not all facilities, and not all toxic chemicals, are required to be reported. Additionally, TRI data reflect disposal or other releases and other waste management of chemicals, and not exposures of the public to those chemicals.³¹

Of the 100,000 chemicals in commercial use today, 90% have never been tested for human health effects.^{30,31} Complete toxicological screening data exists for only 7%.³²

Environmental estrogens, chemicals foreign to the body that mimic estrogen (which controls the growth of breast cells) are found in what we eat, drink, breathe, and in compounds we use at work, home, and in the garden. So far, 100 chemicals have been found to be estrogenic.³³

Forty-eight chemicals in use today are known to induce mammary tumors in laboratory animals.³⁴

1 Ries LAG, et al. *SEER Cancer Statistics Review, 1975-2003*. Retrieved June 2006 from the National Cancer Institute website http://seer.cancer.gov/csr/1975_2003/

Based on November 2005 SEER data submission, posted to the SEER web site 2006. On January 1, 2003, there were approximately 2,356,795 women alive who had a history of breast cancer.

2 American Cancer Society. *Cancer Facts & Figures 2006*.

Breast cancer represents approximately 31% of total cancer cases in women.

3 American Cancer Society. *Cancer Facts & Figures 2006*.

4 American Cancer Society. *Breast Cancer Facts & Figures 2005-2006*.

A woman's lifetime risk is 13.22%, or 1 in 7.56. This number is commonly rounded up to 1 in 8 which underestimates a woman's lifetime risk of developing breast cancer.

5 The following calculations were used for this statistic and include cases of carcinoma in situ:
 $365 \text{ days} \times 24 \text{ hours/day} \times 60 \text{ minutes/hour} = 525,600 \text{ minutes/year}$
 $525,600 \text{ minutes/year} / 274,900 \text{ cases/year} = 1.9 \text{ minutes/case}$

6 American Cancer Society. *Cancer Facts & Figures 2006*.

7 National Cancer Institute, Surveillance Epidemiology and End Results program (NCI SEER). *Cancer Stat Fact Sheets*. Retrieved June 2006 from the National Cancer Institute Website <http://seer.cancer.gov/statfacts>

SEER statistics are based on data collected at cancer registries in various areas of the country and are always a few years behind. These rates are based on cases diagnosed in 2000-2003. Incidence for white women is 134.0 per 100,000 vs. 118.0 for black women; mortality is 25.3 per 100,000 for white women versus 34.3 per 100,000 for black women.

8 American Cancer Society, *Breast Cancer Facts & Figures 2005-2006*.

9 American Cancer Society, *Breast Cancer Facts & Figures 2005-2006*.

10 U.S. General Accounting Office. Breast Cancer, 1971-1991: Prevention, Treatment and Research. GAO/PEMD-92-12; 1991.

States that all the known risk factors account for only 20-30% of all breast cancer cases.

Silent Spring Institute. *Frequently Asked Questions: Risk Factors*. Retrieved July 2006 at http://www.silentsspring.org/newweb/about/faqs_4risk.html.

States that less than half of breast cancer risk is explained by the known risk factors.

- 11 American Cancer Society, *Breast Cancer Facts & Figures 2005-2006*.
- 12 American Cancer Society, *Cancer Facts & Figures 2006*.
- 13 Centers for Disease Control and Prevention/National Center for Health Statistics, National Vital Statistics System. *Profiling the Leading Causes of Death in the United States*. November 30, 2005.
- 14 American Cancer Society, *Breast Cancer Facts & Figures 2005-2006*.
- 15 American Cancer Society, *Cancer Facts & Figures 2006*.
- 16 The following calculations were used for this statistic:
 $365 \text{ days} \times 24 \text{ hours/day} \times 60 \text{ minutes/hour} = 525,600 \text{ minutes/year}$
 $525,600 \text{ minutes/year} / 41,430 \text{ deaths/year} = 13.00 \text{ minutes/deaths}$
- 17 NCI SEER CSR 1975-2003; Breast Cancer, Table I-13. Retrieved June 2006 from the National Cancer Institute Website http://seer.cancer.gov/csr/1975_2003/sections.html
- 18 American Cancer Society, *Breast Cancer Facts & Figures 2005-2006*.
- 19 Ries LAG, et al. *SEER Cancer Statistics Review, 1975-2003*. Retrieved 2006 from the National Cancer Institute Website http://seer.cancer.gov/csr/1975_2003/

Based on November 2005 SEER data submission, posted to the SEER web site, 2006.
- 20 Surveillance, Epidemiology, and End Results (SEER) Program (www.seer.cancer.gov) SEER*Stat Database: Incidence - SEER 9 Regs Public-Use, Nov 2004 Sub (1973-2002), National Cancer Institute, DCCPS, Surveillance Research Program, Cancer Statistics Branch, released April 2005, based on the November 2004 submission.
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<http://www.kff.org/womenshealth/7336.cfm>
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- 34 National Toxicology Program (2006). *Chemicals associated with site-specific tumor induction in mammary gland*. Retrieved June 13, 2006 from the National Institute of Environmental Health Sciences Website <http://ntp.niehs.nih.gov/index.cfm?objectid=0723C503-E864-262E-EE6B8B34B6F0C5D1>

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