

BREAST CANCER FACTS AND FIGURES¹ - YEAR 2008

- A woman living in the United States has a 12.28% or 1 in 8 probability of developing invasive breast cancer sometime during her lifetime.
Aside from being female, age is the most important factor affecting breast cancer risk. About 2 out of 3 women with invasive breast cancer are age 55 or older when the cancer is found.
- Excluding cancer of the skin, breast cancer is the most frequently diagnosed cancer in women.
- Breast cancer ranks second as a cause of cancer death in women (after lung cancer.)
- An estimated 182,460 new cases of invasive breast cancer will be diagnosed among women. In addition, an estimated 67,770 new cases of in situ breast cancer will be diagnosed.
- An estimated 1990 new cases of breast cancer are expected in men.
- An estimated 40,930 deaths (40,480 women and 450 men) are expected this year.
- Death rates from breast cancer have steadily decreased in women since 1990, with larger decreases in women younger than 50 (a decrease of 3.3% per year), than in those 50 years and older (a decrease of 2% per year). The decrease in breast cancer death rates represents progress in both earlier detection and improved treatment. Mammography can detect breast cancer at an early stage when treatment may be more effective and survival is more likely. Numerous studies have shown that early detection saves lives and increases treatment options.
- No one knows the exact causes of breast cancer, but research has shown that women with certain risk factors are more likely than others to develop the disease. However, it is important to keep in mind that most women who have known risk factors do not get breast cancer.
- Only about 5% to 10% of breast cancers are thought to be linked to genetic risk factors (mutations in certain genes.)
- Most women with breast cancer do not have a family history of the disease. In fact, except for growing older, most women with breast cancer have no clear risk factors.

In Florida:

- An estimated 11,850 new cases of breast cancer in women will be diagnosed and 2,760 will die from this disease.
- Average annual age-adjusted rates for breast cancer in Florida per 100,000 persons:
 - Incidence rate: 119.7 - National average: 125.3
 - Mortality rate: 23.5- National average: 25.5

RACE / ETHNICITY

Cancer occurrence and survival is influenced by economic, social, and cultural factors, as well as biological and inherited differences.

Incidence and death rates from breast cancer are lower among women of other racial and ethnic groups than among white and African American women.

The following figures show the female breast cancer incidence and mortality rates by race and ethnicity, age-adjusted per 100,000 persons:

	<u>White</u>	<u>African American</u>	<u>Hispanic</u>	<u>American Indian and Alaska Native</u>	<u>Asian American and Pacific Islander</u>
<u>Incidence:</u>	132.5	118.3	89.3	69.8	89.0
<u>Mortality:</u>	25.0	33.8	16.1	16.1	12.6

African American

- Breast cancer is the most common cancer diagnosed among African American women.
- Breast cancer is the second most common cause of cancer death among African American women, surpassed only by lung cancer.
- The incidence of breast cancer is lower in African American women than in white women. Nevertheless, the mortality rate is higher compared to white women.
- Factors that contribute to the higher death rates among African American women include differences in access to and utilization of early detection and treatment, risk factors that are differentially distributed by race or socioeconomic status, or biologic differences associated with race. In addition, there is evidence that aggressive tumor characteristics are more common in African American women than in white women.
- Breast cancer death rates among African American women declined after 1991. However, the decrease was larger in women under age 50 than in women 50 and older. The steady decline in female breast cancer mortality has been attributed to improvements in both early detection and treatment.
- An estimated 19,010 new cases of breast cancer are expected to occur among African American women.
- An estimated 5,830 deaths from breast cancer are expected to occur among African American women.

Hispanics

- A Hispanic woman living in the United States has a 9.23% or 1 in 11 probability of developing invasive breast cancer sometime during her life.
- Breast cancer is the most commonly diagnosed cancer among Hispanic women.
- Breast cancer is the leading cause of cancer death among Hispanic women. In contrast, the leading cause of cancer death in non-Hispanic women is lung cancer.
- Breast cancer death rates among Hispanic women have declined, similar to the decrease seen in non-Hispanic white women.
- The breast cancer incidence rate in Hispanic women is about 40% lower than that of non-Hispanic white women. Nevertheless, Hispanic women are about 20% more likely to die of breast cancer than non-Hispanic white women diagnosed at similar age and stage. Hispanic women are more likely to be diagnosed with larger breast tumors than non-Hispanic white women. Differences in mammography utilization and delayed follow-up of abnormal screening results may contribute to this difference.
- An estimated 14,300 Hispanic women are expected to be diagnosed with breast cancer.
- An estimated 1,740 deaths from breast cancer are expected to occur among Hispanic women.

NOTES

Cost of cancer

It is estimated by the National Cancer Institute that approximately \$8.1 billion is spent in the United States each year on treatment of breast cancer.

The National Institutes of Health (NIH) estimate overall costs for all cancers in 2007 at \$219.2 billion: \$89.0 billion for direct medical costs and \$130.2 billion for lost productivity due to illness and premature death.

NIH's total funding for all cancer research in FY 2007 was \$5,643 million.

Funding for breast cancer research was \$707 million (a decrease of \$11 million over last FY.)

NIH's funding in FY 2007 for the four most common types of cancer, compared to the respective mortality rate:

	<u>Appropriation</u>	<u>Estimated deaths</u>
Lung	\$249 million	161,840
Colo-Rectal	\$282 “	49,960
Breast	\$707 “	40,930
Prostate	\$345 “	28,660

ACS Breast Screening Guidelines

- Yearly mammograms are recommended starting at age 40. The age at which screening should be stopped should be individualized by considering the potential risks and benefits of screening in the context of overall health status and longevity.

- Clinical breast exam should be part of a periodic health exam about every 3 years for women in their 20s and 30s, and every year for women 40 and older.

- Women should know how their breasts normally look and feel and report any breast change promptly to their health care providers. Breast self-exam* is an option for women starting in their 20s.

- Women at increased risk (e.g., family history, genetic tendency, past breast cancer) should talk to their doctors about the benefits and limitations of starting mammography screening earlier, having additional tests (i.e., breast ultrasound and MRI), or having more frequent exams.

- Screening MRI is recommended for women with an approximately 20%-25% or greater lifetime risk of breast cancer, including women with a strong family history of breast or ovarian cancer and women who are treated for Hodgkin disease.

*** In 2003 the American Cancer Society dropped its recommendation that all women perform breast self-exams (BSE) monthly. The reason for this change is that research has shown that a structured BSE is less important than self awareness. The Society still recommends that women be told of the potential benefits and limitations of BSE, and those women who wish to do it should receive instruction from the health care providers.**

2005 U.S. Breast Cancer Fact Sheet

- ◆ An estimated 211,240 new cases of invasive breast cancer are expected to occur among women in the United States during 2005.
- ◆ In addition to invasive breast cancer, 58,490 new cases of in situ breast cancer are expected to occur among women during 2005.
- ◆ Lobular carcinoma in situ (LCIS) accounted for 12 percent of in situ breast cancers diagnosed from 1998-2002.
- ◆ Excluding skin cancers, breast cancer is the most common cancer among women, accounting for nearly 1 in 3 cancers diagnosed in US women.
- ◆ An estimated 40,410 women will die from breast cancer in 2005.
- ◆ Breast cancer is second only to lung cancer in cancer deaths.
- ◆ One woman is diagnosed with breast cancer every three minutes, and one woman will die of breast cancer every 13 minutes in the United States.

One every three minutes is derived from the following equation:

$$\begin{aligned} &365 \text{ days/yr} \times 24 \text{ hr/day} \times 60 \text{ min/hr} = 525,600 \text{ minutes in each year} \\ &525,600 / 215,990 \text{ women diagnosed/yr} = 2.43 = 3 \\ &\text{One woman every three minutes is diagnosed with breast cancer.} \end{aligned}$$

One every thirteen minutes is derived from the following equation:

$$\begin{aligned} &365 \text{ days/yr} \times 24 \text{ hr/day} \times 60 \text{ min/hr} = 525,600 \text{ minutes in each year} \\ &525,600 / 40,110 \text{ women diagnosed/yr} = 13.10 = 13 \\ &\text{One woman every 13 minutes dies from breast cancer.} \end{aligned}$$

- ◆ An estimated 1,690 new cases of breast cancer will be diagnosed in men in 2005.
- ◆ Between 1975-2002, the incidence rate among men increased 1.1 percent per year.
- ◆ An estimated 460 men will die from breast cancer in 2005.
- ◆ The relative survival rates for women diagnosed with breast cancer are:
 - 88 percent at 5 years after diagnosis
 - 80 percent after 10 years
 - 71 percent after 15 years
 - 63 percent after 20 years

- ◆ The 5-year relative survival rate for women with localized breast cancer (cancer that has not spread to lymph nodes or other locations outside the breast) has increased from 72 percent in the 1940s to over 95 percent in 2005.
- ◆ The five-year survival rate for regional disease is 81 percent and 26 percent for distant-stage disease.
- ◆ The relative survival rates for women diagnosed with breast cancer before age 40 are slightly lower.
 - 82 percent for women younger than 40
 - 89 percent for women aged 40-74
 - 88 percent for women aged 75 and older
- ◆ African American women are less likely to survive five years than white women, 76 percent vs. 90 percent respectively.
- ◆ The most proven and significant risk factors for getting breast cancer are being female and getting older.
- ◆ Approximately five to ten percent of breast cancers are due to heredity. The majority of women with breast cancer have no known significant family history or other known risk factors.
- ◆ A woman's chance of developing breast cancer increases with age. In the United States, a woman has about a 13.2 percent, or 1 in 8, lifetime risk of developing breast cancer.
- ◆ Incidence trends of breast cancer for all races are as follows:
 - 1975-1980: Incidence was essentially constant
 - 1980-1987: Incidence increased by almost 4 percent per year
 - 1987-2002: Incidence rates increased by 0.3 percent per year
- ◆ For the period 1998-2002, women ages 20-24 have the lowest incidence rate (1.3 cases per 100,000 population); women ages 75-79 have the highest incidence rate (496.6 cases per 100,000).
- ◆ During 1998-2002, the median age at the time of breast cancer diagnosis was 61 years old.
- ◆ From 1980-1987, incidence rates of invasive breast cancer increased among women aged 40-29 and 50 and older (3.5 percent and 4.2 percent per year respectively). Since then, breast cancer incidence rates have increased among women aged 50 and older, though at a slower rate. Incidence rates have declined slightly among women aged 40-49 and little change among women younger than 40.

- ◆ Rapid incidence increase between 1980 and 1987 is due largely to greater use of mammography screening and increased detection of breast cancers.
- ◆ During 1980-1987, incidence rates of smaller tumors ≤ 2.0 cm more than doubled. Rates of larger tumors (3.0 cm or more) decreased 27 percent.
- ◆ During 1988-1999, the trend in diagnosis of smaller tumors ≤ 2.0 cm increased by 2.1 percent per year and has stabilized since.
- ◆ During 1992-2000, African American women were less likely to be diagnosed with smaller tumors (≤ 2.0 cm) and more likely to be diagnosed with larger tumors (2.1-5.0 and >5.0 cm) than white women.
- ◆ White women have a higher incidence of breast cancer than African American after age 35. However, African American women have a slightly higher incidence rate before age 35 and are more likely to die from breast cancer at every age.
- ◆ During 1992-2002, overall incidence rates increased in Asian Americans and Pacific Islanders (1.5 percent per year), decreased in American Indian/Alaska Natives (3.5 percent per year) and did not change significantly for Caucasians, African Americans or Hispanics/Latinas.
- ◆ Mortality trends of breast cancer for all races are as follows:
 - 1975-1990: Mortality rate increased by 0.4 percent per year
 - 1990-2002: Mortality rate decreased by 2.3 percent per year
- ◆ From 1990-2002, death rates decreased by 3.3 percent per year among women younger than 50 and by 2.0 percent per year among women 50 and older.
- ◆ From 1990-2002, breast cancer death rates declined by 2.4 percent per year in whites, 1.8 percent in Hispanics/Latinas, 1.0 percent in African Americans and Asian Americans and Pacific Islanders and did not decline in American Indian/Alaska Natives.
- ◆ African Americans have the highest death rate from breast cancer of any racial/ethnic group in the United States.
- ◆ Since 2002, death rates have been 37 percent higher in African Americans than in white women.
- ◆ The chance of a woman dying from breast cancer is about 1 in 33 (3 percent).
- ◆ Ninety-five percent of new cases and 97 percent of breast cancer deaths reported during 1996-2002 occurred in women ages 40 and older.

Breast Cancer Facts and Figures 2005-2006, ACS

- ◆ In the United States today, there are more than two million breast cancer survivors.

Derived from the following equation:

Estimated number of persons alive in the United States diagnosed with female breast cancer: 22 percent

Invasive /1st Primary Cases Only (N = 9.6 Million)¹ $9.6 \text{ Million} \times 22\% = 2,112,000$

Data Sources: ¹Prevalence proportions are based on the standard SEER 9 registries. Complete Prevalence was estimated using the completeness index method (Capocaccia et. al. 1997, Merrill et. al. 2000). U.S. prevalence counts were estimated by applying SEER prevalence proportions to U.S. populations.

<http://cancercontrol.cancer.gov/ocs/prevalence/prevalence.html#survivor>.

National Cancer Institute.

American Cancer Society, Surveillance Research, 2003.