

## BREAST HEALTH FACT SHEET

The statistics provided have been provided through reports from the Surveillance, Epidemiology, and End Results (SEER) program at the National Cancer Institute and the National Center for Health Statistics (NCHS) at the Centers for Disease Control and Prevention.

### Screening and Prevention

- Women should perform a breast self-examination (BSE) at least once a month.
- The best method for early detection of breast cancer is mammography, x-rays, or ultrasound scans of both breasts.
- Fewer than one third of American women follow recommended guidelines for breast cancer screening mammography.
- Women should have their first mammogram at about age 40, then once every year thereafter.
- Approximately 4.9 million breast biopsies are performed worldwide each year. Approximately 1.1 million are performed in the United States alone.

### Prevalence (occurrence of breast cancer)

- Breast cancer is the second most common cancer among women (after skin cancers).
- 1 out of every 3 cancer diagnoses in the United States is for breast cancer. In 1997, approximately 180,200 new breast cancer cases were diagnosed.<sup>1</sup>
- Approximately 80% of breast biopsies are benign.
- Breast cancer is the most common form of cancer in American women, accounting for one out of three diagnoses.
- One out of eight women in the United States will develop breast cancer in her lifetime.
- The majority of all breast cancer diagnoses are in women over age 50.

### Demographics (profile or characteristics of breast cancer patients)

#### Age:

The incidence and mortality of breast cancer increases with age.<sup>2</sup>

- Over 76% of women with new diagnoses of breast cancer are over the age of 50
- In women aged 20-24, the incidence rate is only 1 case per 100,000
- In women aged 30-34, the incidence rate is 25 cases per 100,000
- In women aged 40-44, the incidence rate is 122 cases per 100,000
- In women aged 50-54, the incidence rate is 245 cases per 100,000

#### Race:

White women are more likely to develop breast cancer than African-American women.<sup>2</sup> In 1994:

- The incidence rate for white women was 113 cases per 100,000<sup>3</sup>
- The incidence rate for African-American women was 100 cases per 100,000<sup>3</sup>

Among women younger than 50, African-American women are more likely to develop breast cancer than white women.

Breast cancer incidence varies among racial and ethnic groups, as well. White, African-American, and Hawaiian women have the highest rates of breast cancer incidence and mortality.<sup>4</sup>

#### Gender:

There were an estimated 1,400 cases of breast cancer and 290 deaths in men in 1997.<sup>1</sup> Male breast cancer accounts for less than 1% of the overall incidence and mortality of this disease. Men should be aware of risk factors, especially a family history of male breast cancer, and report any change in their breasts to a physician.

## People with Increased Risk

### Family history of breast cancer

- Breast cancer history in a mother, sister, or daughter is associated with the highest risk, especially when the relative is diagnosed at an early age.<sup>5</sup>
- Hereditary factors such as "breast cancer genes" also contributes to an increased risk.<sup>6</sup> Approximately 5% to 10% of breast cancers are believed to be inherited. In 1994, researchers isolated two breast cancer susceptibility genes—BRCA1 and BRCA2—which together are estimated to account for 40%-50% of all hereditary breast cancers.<sup>7</sup> Today, it is impossible to predict the percentage of carriers who will develop breast cancer or a woman's risk. Prevalence estimates of BRCA1 in the general population range from .04% to .2%, and prevalence of BRCA2 is less common.<sup>8</sup> The prevalence of BRCA1 and BRCA2 mutations among women of Ashkenazi Jewish descent is estimated to be more than 2%.<sup>9</sup>

Commercial screening tests to detect BRCA1 and BRCA2 mutations may be negative 90% of the time, even among women with breast cancer in their families (unless a mutation has been previously identified in the family).<sup>10</sup> For women who do test positive, the Cancer Genetics Studies Consortium recommends follow-up counseling and early breast cancer screening, including annual mammography and clinical breast examination beginning at age 25 to 35 years of age, and monthly breast self-examinations beginning at age 18 to 21 years of age.<sup>11</sup>

The Consortium determined that there was insufficient evidence to recommend for or against prophylactic mastectomy.<sup>11</sup>

### A personal history of breast cancer

People with a personal history of breast cancer have an increased risk of developing a new breast cancer in any remaining breast tissue in either breast by .5% to 1.0% per year.<sup>5</sup>

### Hormonal factors

Factors that influence a woman's lifetime exposure to hormones may pose an increased risk of breast cancer. Some of these factors include: menarche at a young age, menopause at an older age, and a first live birth at an older age. Long-term (10-15 years) estrogen replacement therapy (ERT) may also increase risk, although recent studies debate this finding.<sup>12</sup>

### Race and other factors

Studies have also found that white race, high socioeconomic status, and exposure to high amounts of ionizing radiation also increase the risk for breast cancer.<sup>5</sup>

## Incidence Trends (rate of occurrence of breast cancer)

### The incidence of breast cancer over the past 50 years

- Between 1940 and 1982, there was a steady, annual rate of increase of about 1% per year.<sup>3</sup>
- Between 1982 and 1987, the increase was about 4% per year.<sup>3</sup>
- Between 1990 and 1994, the incidence of developing breast cancer appeared to stabilize at approximately 110 cases per 100,000 women.<sup>2</sup>

### More recent trends

- Between 1983 and 1993, in situ breast cancer (tumors that have not grown beyond their site of origin and invaded neighboring tissue)<sup>14</sup> rates increased from 2 to 6 per 100,000 among women under age 50, and from 14 to 55 per 100,000 among women aged 50 and older.<sup>2</sup>

- Between 1973 and 1992, the incidence of ductal carcinoma in situ (DCIS) has increased markedly from 2 per 100,000 to 16 per 100,000. The increased use of mammography screening is partly attributed for this increase.<sup>13</sup>
- Between 1973 and 1994, the incidence of breast cancer has increased for white and African-American women; from 84 to 113 per 100,000 for white women and from 69 to 101 per 100,000 for African-American women.<sup>2</sup>
- Increases in breast cancer incidence in women aged 50 and older were greater than for younger women. Between 1973 and 1994, rates increased in white women aged 50 and older from 254 to 365 per 100,000. During this time among African-American women of the same ages, rates increased from 201 to 304 per 100,000.<sup>2</sup>
- Between 1973 and 1994, incidence rates in white women younger than age 50 increased slightly from 29 to 31 per 100,000. During this time among African-American women of the same ages, rates increased from 26 to 35 per 100,000.<sup>2</sup>

These increasing rates have been described by some as an epidemic. Technically, the increases in breast cancer incidence rates during the 1980s are mostly related to increases in the use of mammography. Increasing incidence also reflects the aging of the US population. From 1970 to 1990, the number of women ages 20-39 increased substantially, leading to an increase in the number of diagnosed breast cancers.

### **Mortality trends**

Breast cancer mortality was relatively stable between 1950 and the late 1980s. Between 1990 and 1994, breast cancer mortality declined almost 6%, the largest short-term decline in over 40 years.<sup>2</sup>

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