



Introduction

This National Cancer Institute (NCI) booklet (NIH Publication No. 05-1556) has important information about breast cancer. Breast cancer is the most common type of cancer among women in this country (other than skin cancer). Each year, more than 211,000 American women learn they have this disease. You will read about possible causes, screening, symptoms, diagnosis, treatment, and supportive care. You will also find ideas about how to cope with the disease.

Breast Cancer in Men

Each year, about 1,700 men in this country learn they have breast cancer. Specific information about breast cancer in men is available on NCI's Web site at <http://www.cancer.gov> and from NCI's Cancer Information Service at 1-800-4-CANCER.

Scientists are studying breast cancer to find out more about its causes. And they are looking for better ways to prevent, find, and treat it. NCI provides information about cancer, including the publications mentioned in this booklet. You can order these materials by telephone or on the Internet. You can also read them online and print your own copy.

- **Telephone (1-800-4-CANCER):** Information Specialists at NCI's Cancer Information Service can answer your questions about cancer. They also can send NCI booklets, fact sheets, and other materials.
- **Internet (<http://www.cancer.gov>):** You can use NCI's Web site to find a wide range of up-to-date information. For example, you can find many NCI booklets and fact sheets at <http://www.cancer.gov/publications>. People in the United States and its territories may use this Web site to order printed copies. This Web site also explains how people outside the United States can mail or fax their requests for NCI booklets. You can ask questions online and get help right away from Information Specialists through **LiveHelp** at <http://www.cancer.gov/cis>.

Risk Factors

No one knows the exact causes of breast cancer. Doctors often cannot explain why one woman develops breast cancer and another does not. They do know that bumping, bruising, or touching the breast does not cause cancer. And breast cancer is not contagious. You cannot "catch" it from another person.

Research has shown that women with certain risk factors are more likely than others to develop breast cancer. A risk factor is something that may increase the chance of developing a disease.

Studies have found the following risk factors for breast cancer:

- **Age:** The chance of getting breast cancer goes up as a woman gets older. Most cases of breast cancer occur in women over 60. This disease is not common before menopause.
- **Personal history of breast cancer:** A woman who had breast cancer in one breast has an increased risk of getting cancer in her other breast.
- **Family history:** A woman's risk of breast cancer is higher if her mother, sister, or daughter had breast cancer. The risk is higher if her family member got breast cancer before age 40. Having other relatives with breast cancer (in either her mother's or father's family) may also increase a woman's risk.
- **Certain breast changes:** Some women have cells in the breast that look abnormal under a microscope. Having certain types of abnormal cells (atypical hyperplasia and lobular carcinoma in situ [LCIS]) increases the risk of breast cancer.
- **Gene changes:** Changes in certain genes increase the risk of breast cancer. These genes include BRCA1, BRCA2, and others. Tests can sometimes show the presence of specific gene changes in families with many women who have had breast cancer. Health care providers may suggest ways to try to reduce the risk of breast cancer, or to improve the detection of this disease in women who have these changes in their genes. NCI offers publications on gene testing.
- **Reproductive and menstrual history:** The older a woman is when she has her first child, the greater her chance of breast cancer. Women who had their first menstrual period before age 12 are at an

increased risk of breast cancer. Women who went through menopause after age 55 are at an increased risk of breast cancer. Women who never had children are at an increased risk of breast cancer. Women who take menopausal hormone therapy with estrogen plus progestin after menopause also appear to have an increased risk of breast cancer. Large, well-designed studies have shown no link between abortion or miscarriage and breast cancer.

- **Race:** Breast cancer is diagnosed more often in white women than Latina, Asian, or African American women.
- **Radiation therapy to the chest:** Women who had radiation therapy to the chest (including breasts) before age 30 are at an increased risk of breast cancer. This includes women treated with radiation for Hodgkin's lymphoma. Studies show that the younger a woman was when she received radiation treatment, the higher her risk of breast cancer later in life.
- **Breast density:** Breast tissue may be dense or fatty. Older women whose mammograms (breast x-rays) show more dense tissue are at increased risk of breast cancer.
- **Taking DES (diethylstilbestrol):** DES was given to some pregnant women in the United States between about 1940 and 1971. (It is no longer given to pregnant women.) Women who took DES during pregnancy may have a slightly increased risk of breast cancer. The possible effects on their daughters are under study.
- **Being overweight or obese after menopause:** The chance of getting breast cancer after menopause is higher in women who are overweight or obese.
- **Lack of physical activity:** Women who are physically inactive throughout life may have an increased risk of breast cancer. Being active may help reduce risk by preventing weight gain and obesity.
- **Drinking alcohol:** Studies suggest that the more alcohol a woman drinks, the greater her risk of breast cancer.

Other possible risk factors are under study. Researchers are studying the effect of diet, physical activity, and genetics on breast cancer risk. They are also studying whether certain substances in the environment can increase the risk of breast cancer.

Many risk factors can be avoided. Others, such as family history, cannot be avoided. Women can help protect themselves by staying away from known risk factors whenever possible. But it is also important to keep in mind that most women who have known risk factors do not get breast cancer. Also, 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. If you think you may be at risk, you should discuss this concern with your doctor. Your doctor may be able to suggest ways to reduce your risk and can plan a schedule for checkups.

Symptoms

Common symptoms of breast cancer include:

- **A change in how the breast or nipple feels**
A lump or thickening in or near the breast or in the underarm area
Nipple tenderness
- **A change in how the breast or nipple looks**
A change in the size or shape of the breast
A nipple turned inward into the breast
The skin of the breast, areola, or nipple may be scaly, red, or swollen. It may have ridges or pitting so that it looks like the skin of an orange.
- **Nipple discharge** (fluid)

Early breast cancer usually does not cause pain. Still, a woman should see her health care provider about breast pain or any other symptom that does not go away. Most often, these symptoms are not due to cancer. Other health problems may also cause them. Any woman with these symptoms should tell her doctor so that problems can be diagnosed and treated as early as possible.

