BREAST CANCER ACTION

The Facts and Nothing But the Facts

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For far too long, breast cancer awareness has been the dominant message of the breast cancer movement. Breast Cancer Action feels this message oversimplifies the issue and deflects attention from breast cancer prevention. This factsheet provides clarification about the incidence and mortality rates of breast cancer as well as serving to correct some common misperceptions on topics that Breast Cancer Action sees as the most pressing. In order for real change to happen, issues such as environmental exposures to toxins, eliminating inequities and better screening need to be addressed.

Number of Breast Cancer Cases in the U.S.

Breast cancer is the most common cancer among women, excluding cancers of the skin.[i] In this decade, new data suggests that breast cancer is not a single disease – it is a term to describe a collection of diseases, each with distinct characteristics and outcomes.[ii] More than 2.9 million women are living with the disease.[iii]

The American Cancer Society (ACS) predicted that in 2013, an estimated 232,340 women would be diagnosed with invasive breast cancer, a cancer which has invaded nearby cells.[iv]

The ACS also estimated that an additional 64,640 women would be diagnosed with non-invasive breast cancer in which the abnormal cells are confined to lobules (LCIS) or milk ducts (DCIS) only. Eighty-three percent of non-invasive breast cancers will be diagnosed as DCIS. DCIS may be a precursor to breast cancer, but because the cells have not spread the prognosis is positive – some proportion of the women will never develop breast cancer.[v]

A new breast cancer case is diagnosed every 2 minutes in the U.S.[vi]

Men develop breast cancer too. In 2013, an estimated 2,240 new cases were expected among men.[vii]

In 2013, 39,620 women and 410 men are expected to die from breast cancer.[viii]

Living with Breast Cancer

On average, long-term survival rates for women with breast cancer are: 89% at 5 years, 83% at 10 years and 78% at 15 years, which also depends on the kind of breast cancer.[ix] Long-term survival rates are not a cure. A person is cured if, following a breast cancer diagnosis, s/he lives out her/his normal life span and dies of something else that has not been caused by her/his breast cancer treatment.

Breast Cancer Risk

Women in the U.S. have a 1 in 8 chance of developing breast cancer during their lifetime. On the other hand, 7 out of 8 women will not get breast cancer during their lifetime.

This means that if every woman lived to age 85, 1 in 8 in the U.S. would be diagnosed with breast cancer – a lifetime risk that has been on the rise since post-World War II, when her chances were 1 in 20 in 1940.[x] It is notable that in the first half of the 20th century, chemicals developed for World War II started making their way into everyday use.[xi]

Known breast cancer risk factors include family history (which only accounts for at most 10% of cases), early menstruation or late menopause, late first childbirth or no childbirth, hormone replacement, alcohol consumption, and ionizing radiation. These risks, however, only account for 30-50% of the disease, leaving us with a lot we have yet to understand about breast cancer.[xii] Despite decades of intensive research, the biology and causes of a majority of breast cancer remain largely unexplained.[xiii]

Environmental Contributors to Increased Risk

As we see a rise in unexplained breast cancer cases in the last few decades, there is increasing scientific evidence that involuntary environmental exposures may play a role in the increased incidence of breast cancer.

Since the post–World War II industrial boom, production of synthetic materials has increased approximately 350 times.[xiv] The use of chemicals in the United States continues to rise by 3.3% every year.[xv]

Of the more than 84,000 chemicals in commercial use in the U.S. today[xvi], more than 90% have never been tested for human health effects. Approximately 2,500 new chemicals are submitted to the U.S. Environmental Protection Agency each year for approval.[xvii]

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Industrial chemical products and emissions historically have not routinely been screened for health effects despite widespread exposures.

Non-industrialized countries have lower breast cancer incidence rates than industrialized countries. Migrant women from countries with low incidence rates who move to industrialized nations soon acquire the higher breast cancer risk of the new country.[xviii]

Breast Cancer Inequities

Incidence and mortality rates of breast cancer differ by race and ethnicity.[xix] Asian American/Pacific Islander and American Indian/Alaska Native women have the lowest incidence and mortality rates of all. These classifications are not homogenous groups and we see examples in sub-populations, such as in Southeast Asian and Samoan women, of having increasing rates of breast cancer.[xx,xxi]

Although breast cancer rates are highest among Caucasian women, their mortality rates are lower than among African American women.[xxii]

Although the incidence of breast cancer among Hispanic women is overall 26% lower than in Caucasian women, they are 20% more likely to die from the disease when diagnosed at a similar age and stage.[xxiii]

Poorer survival rates among African American and Hispanic women may be attributed to later stage at diagnosis and barriers to receiving timely and appropriate treatment such as language barriers, racism/discrimination and a long history of medical mistreatment.[xxiv] Researchers have been studying biological, environmental, and socioeconomic factors, but the underlying causes of this inequity remain largely unexplained.[xxv]

Poverty & Income

For most diseases, risk is inversely related to socioeconomic status in that higher income populations have lower disease risk. With breast cancer, we see that higher income populations are more likely to be diagnosed with breast cancer while lower income populations, who have lower rates of breast cancer, are more likely to die from the disease. As an example, research shows that 10% of whites as compared to 28% of African Americans live below the federal poverty threshold.[xxvi] In addition, 20% of African Americans lack health insurance compared to 11% of whites.[xxvii] These differences may be tied to the racial inequities in breast cancer morbidity.

Low-income breast cancer patients have 5-year relative survival rates that are 9% lower than higher income patients.[xxviii] For example, low-income African American women are 3 times more likely than higher income African American women to be diagnosed with advanced disease.[xxix]

Mammography & Screening

Mammograms do not prevent breast cancer. They detect tumors, but they do not prevent you from getting tumors. Mammograms can miss more than 25% of all breast cancers,[xxx] known as "false negatives." Additionally, "false positive" results can occur when a mammogram finds something in the breast that, on biopsy, proves not to be cancer. Research has shown that as many as 75% of all post-mammogram biopsy results turn out to be benign lesions.[xxxi]

Mammography screening initiated in the 1980s accounted for much of the increase in breast cancer diagnosis in the immediate years following. But what we now know is that early detection does not guarantee protection, and over-identifying problems that don't need to be treated can lead to unnecessary biopsies and other invasive procedures.

Mammography is also not as effective in detecting breast cancer in younger, pre-menopausal women. Their breast tissue tends to be denser than that of post-menopausal women and makes their mammography results more difficult to read.[xxxii]

It is important to understand what mammography can and cannot do and to have a discussion with your health care provider to come up with a plan that is best for you.

In conclusion, breast cancer is not a single disease with complex causes, and the majority of risk factors for the disease are largely unknown. For more information, please see BCAction's additional factsheets at: (www.bcaction.org/resources/breast-cancer-action-toolkits/).

Breast Cancer Action's mission is to achieve health justice for all women at risk of and living with breast cancer. We believe that breast cancer is a public health crisis and a social justice issue and we envision a world where lives and communities aren't threatened by breast cancer. For more information go to www.bcaction.org.

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[vi] The following calculations were used for this statistic and include cases of carcinoma in situ: 365 days x 24 hours/day x 60 minutes/hour = 525,600 minutes/year.
525,600 minutes/year ÷ 290,270 cases/year = 1.81 minutes/case
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