



RESEARCHING THE ENVIRONMENT AND WOMEN'S HEALTH

LGBTQ Communities and Breast Cancer Risk

*"We need to go beyond a cure. We need to stop people from ever getting breast cancer in the first place."
-Dr. Susan Love*

DID YOU KNOW?

- Breast cancer is the most common invasive cancer in women around the world, and the leading cause of death for US women in mid life.
- A woman's lifetime risk for breast cancer is 1 in 8.
- Less than 10% of breast cancers are due to high risk inherited genes.
- A large study of twins suggests inherited genes only explain about a quarter of breast cancers.
- Increased breast cancer risk among women who move from low-risk regions to high-risk regions, such as the United States, suggests that characteristics of industrial societies increase risk.

BREAST CANCER RISK FACTORS

A risk factor is something that is associated with an increased risk of getting a disease (but does not necessarily cause the disease). Known risk factors for breast cancer include:

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| <ul style="list-style-type: none"> • Being a woman • Increasing age • Inherited genes (BRCA1 and BRCA2) • Higher income, education • Reproductive factors (early puberty, late menopause, not having children or having them later in life, not breastfeeding or breastfeeding less) | <ul style="list-style-type: none"> • Being taller • Obesity or overweight after menopause • Lack of physical activity • Alcohol use • Ionizing radiation • Pharmaceutical hormones (hormone replacement therapy (HRT), oral contraceptives, DES) |
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Suspected risk factors include:

- Tobacco smoke
- Environmental chemicals
- Exposure to light at night

THE ENVIRONMENT—BREAST CANCER LINK

Many people diagnosed with breast cancer don't fit into a high-risk profile based on the known breast cancer risk factors. This means other factors—perhaps environmental—are at work. Mounting evidence from laboratory and limited human studies suggests environmental pollutants can contribute to breast cancer risk.

Because many established risk factors for breast cancer are related to lifetime exposure to estrogen and other hormones, scientists are studying chemicals in the environment that can interfere with the body's hormone system (called endocrine disrupting compounds, or EDCs). EDCs are found in pollution and everyday products including plastics, cleaning products, furnishings, cosmetics, and pesticides. In addition to breast cancer, EDCs may affect other hormonal cancers, reproduction, and child development.

Also of concern are chemicals that cause mammary gland tumors in animals. We know exposure to these chemicals is widespread since they are commonly found in people's bodies and the environment, including homes. Sources of mammary gland carcinogens include vehicle exhaust, tobacco smoke, pharmaceuticals, medical equipment sterilizers, solvents, and byproducts of drinking water chlorination. To learn more about environment-breast cancer links, visit the Silent Spring Institute website at www.silentspring.org.

Mounting evidence suggests environmental pollutants can contribute to breast cancer risk.

SHOULD LGBTQ PEOPLE BE CONCERNED?

Breast cancer occurs mainly in women, but men, too, can develop the disease. Some researchers think lesbians and bisexual women may be at greater risk for breast cancer because they may have a higher prevalence of some risk factors—including never having children, alcohol use, smoking, and obesity—compared to straight women. Possible reasons for higher rates of substance use include targeted advertising by tobacco and alcohol companies, lack of targeted prevention campaigns, and stress. Transgender people who have used hormone therapy also may have an increased risk for breast cancer. In addition, LGBTQ people are more likely to be uninsured and face other barriers to accessing screening, treatment, and appropriate information, including lack of trust in health care providers that results from discrimination and homophobia.

We do not know if LGBTQ people actually have higher rates of breast cancer because little research has focused on breast cancer risk in these communities and much existing research has limitations. Reasons for this information gap include discrimination in research and health care settings, and methodological challenges in studying LGBTQ health. For example, researchers haven't agreed on how to collect information on sexual orientation; studies often include too few LGBTQ people; researchers may group people of different sexual orientations for analysis; study participants may not be representative of LGBTQ communities; studies often lack information on non-white, lower income, and older women; and transgender people have been vastly understudied.

Identifying unique risks of LGBTQ communities could help guide prevention efforts and reduce disparities. Strategies for improving our understanding of LGBTQ people's risk include:

- Tackling discrimination and improving cultural competency in research, health care, and educational settings
- Increasing funding for research on LGBTQ health
- Developing improved and standardized methods for assessing sexual orientation and gender identity in studies
- Including a diversity of LGBTQ people in studies
- Collecting information on sexual orientation and gender identity in federal health surveys and cancer registries

WHAT YOU CAN DO

Because many breast cancer risk factors are not modifiable—such as reproductive history, education, and age—it makes sense to focus on the risk factors we can change, including environmental factors. For more information about how we can join together to take action to reduce our exposures to suspect chemicals, go to www.silent.spring.org/take-action.



Leaders of the Massachusetts Breast Cancer Coalition (MBCC) at the annual Against the Tide fundraising event on Cape Cod. MBCC is at the forefront of the environmental breast cancer movement. For more information, go to www.mbcc.org.

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