

# NBCC

## NATIONAL BREAST CANCER COALITION

*grassroots advocacy in action*

### **Priority #3: Enactment of the Breast Cancer and Environmental Research Act (S.757)**

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#### **Action Requested**

The Breast Cancer and Environmental Research Act (S.757) was introduced in the 109<sup>th</sup> Congress by Senators Chafee (R-RI) and Reid (D-NV), Clinton (D-NY), Talent (R-MO) and Hatch (R-UT). Representatives Lowey (D-NY), Myrick (R-NC), Bass (R-NH) and Capps (D-CA) will introduce the bill in the House of Representatives. NBCC urges Members of Congress to sign on as co-sponsors in support of this legislation. Please call Lindsey Brill with Senator Chafee at (202) 224-2921, Carolyn Gluck with Senator Reid at (202) 224-3542, Jean Doyle with Representative Lowey at (202) 225-6506 or Sarah Hale with Representative Myrick at (202) 225-1976 to co-sponsor and help enact this legislation.

#### **Background**

Breast cancer is a complex disease that occurs in an environmentally complex world. It is generally believed that the environment plays some role in the development of breast cancer, but the extent of that role is not understood. At a 1998 NBCC Environmental Policy Summit, more than 50 experts, including scientists, advocates, government officials, and policy-makers, were brought together to begin to develop a strategy for studying the links between breast cancer and the environment. Participants agreed that in order to truly understand what causes breast cancer, and how to prevent it, we must first focus on formulating the right questions. Summit participants emphasized the need to correct the persistent underfunding of research in this important area, while also increasing opportunities for innovative research. NBCC held a second summit in 2000, where more specific recommendations were made in order to accomplish this goal. The **Breast Cancer and Environmental Research Act**, establishing breast cancer and environmental research centers to carry out a national strategy for understanding the links that may exist between the environment and breast cancer, was developed in order to satisfy the recommendations and accomplish the goals set forth at both Summits. NBCC has endorsed this critical legislation again in the 109<sup>th</sup> Congress.

**The Breast Cancer and Environmental Research Act would** authorize the NIEHS to make grants for the development and operation of research centers to study environmental factors that may be related to the development of breast cancer. Specifically, \$30 million per year in Fiscal Years 2006-2011 would be authorized for this purpose. Under a competitive, peer-reviewed grant-making process that involves consumers in the decision making process, the NIEHS director could award grants to public or nonprofit entities for the development and operation of up to eight multi-institutional Centers to conduct multi-disciplinary research on environmental factors that may be related to breast cancer. The bill would require each Center to establish and maintain collaborations with community organizations in its area of influence, including those that represent women with breast cancer.

In 2003, in response to report language in the Labor-HHS Appropriations bill, NIEHS announced joint funding with NCI for four research Centers to study the prenatal-to-adult environmental exposures that may result in early puberty and predispose a woman to breast cancer. Funding for all the centers combined is \$5 million per year over seven years, for a total of \$35 million. The centers are a positive step in the right direction and show that NCI and NIEHS can work together on this important issue. It is important to note that these centers differ from the centers envisioned by the bill. They are single institution centers and all focus on one general question, as opposed to the multi-institutional, multi-disciplinary centers established by the bill. Further, the current centers do not create an overarching national research strategy to study any links between breast cancer and the environment.

## Issues Regarding Breast Cancer and the Environment

While a limited amount of research currently focuses on the relationship between breast cancer and environmental factors, there are still many issues that must be resolved to make this research more effective.

- The Causes of Breast Cancer Are Largely Unknown – While less than 30% of breast cancers are explained by known risk factors, there is little consensus in the scientific community on how the environment impacts breast cancer. Studies have explored the effect of isolated environmental factors such as diet, pesticides, and electromagnetic fields, but in most cases there is no conclusive evidence. Furthermore, there are many other factors that are suspected to play a role but have not been fully studied. These could provide valuable in understanding the causes of breast cancer and could lead to prevention strategies.
- Challenges in Conducting Environmental Research – Identifying links between environmental factors and breast cancer is difficult. Laboratory experiments and studies of cancer clusters have limitations that make it challenging to establish, with certainty, whether an environmental exposure increases a woman's risk of breast cancer. An added challenge is the measurement of exposures over a lifetime as exposures are intertwined and may be confounded by socioeconomic, occupational, and reproductive factors.

## Legislative History of the Breast Cancer and Environmental Research Act

The Breast Cancer and Environmental Research Act was first introduced in the 106<sup>th</sup> Congress. By the end of 2000, the proposed legislation had yielded 16 Senate cosponsors and 98 House cosponsors. Since then, NBCC has grown Congressional support for the bill significantly. By the close of the 108<sup>th</sup> Congress in 2004, there were 62 Senate cosponsors and 210 cosponsors in the House. Below are some of the significant events in the history of this bill.

- **In 2001**, NBCC advocate Gail Frankel testified at a Senate Environment and Public Works Field Hearing in Garden City, NY regarding the need for such legislation:

*“We all wonder what causes breast cancer. I, too, have questions about what caused my breast cancer. Diagnosed at 53, I was told that even though my mother died at age 48 from the disease, my breast cancer was unlikely to be due to an inherited genetic defect since inherited cancer usually shows up at an earlier age in offspring. No other high risk factors applied to me. Did my diagnosis have something to do with where I live? The sad truth is nobody knows; there is no conclusive evidence about what causes this disease.”*

- **In 2002**, NBCC was encouraged that the Senate Labor HHS Appropriations Subcommittee agreed that a strategic approach – like the one taken in this legislation – is needed to study breast cancer and the environment, and included the following language in their committee report:

*The Committee recognizes the serious lack of research on the relationship between the environment and breast cancer, and believes that it is essential for the Institute to support such research. The Committee understands that the Institute will establish a Breast Cancer and Environmental Research Advisory Board to make recommendations to the Director with regard to the development of Breast Cancer and Environmental Research Centers. The Committee is aware of the tremendous success of the DOD Breast Cancer Research Program and its grant process. The Committee expects the Advisory Board to integrate a peer review and planning process along the lines of the DOD integration panel. The Committee is pleased that the Advisory*

*Board will include representatives from the breast cancer community who have had breast cancer. The Committee further strongly urges the NIEHS to establish centers to conduct multi-disciplinary and multi-institution research on environmental factors that may be related to breast cancer.*

- **In 2003**, NBCC was further encouraged by the following FY03 Labor HHS Conference Report language:

*The conferees commend NIEHS for its recent efforts to bolster research initiatives on the environmental influences of breast cancer. The conferees recognize the serious lack of research on the relationship between the environment and breast cancer, and believe that it is important for the Institute to support such research. The conferees urge the Institute to establish a group of breast cancer and environmental research advisers to make recommendations to the Director with regard to the support of the breast cancer and environmental research, and to include in the group representatives from the breast cancer community who have had breast cancer. The conferees request an update at the fiscal year 2004 hearings on the progress in establishing an advisory group. The conferees encourage NIEHS to consider establishing centers to conduct multi-disciplinary and multi-institution research on environmental factors that may be related to breast cancer.*

- **In the fall of 2003**, in response to the conference report language, NIEHS announced a collaborative program with NCI to fund four research Centers. The major goal of these Centers is to define interactions between genetic and environmental factors that influence the development of the mammary gland and may increase a woman's risk of breast cancer. Funding for all the Centers combined is \$5 million per year over seven years, for a total of \$35 million. Specifically, the four Centers focus on two research questions: ascertaining the impact of a selected set of exposures on the development of the mammary gland; and determining the interaction of key environmental factors and genetic susceptibility on puberty. The Centers are a step in the right direction, but these centers differ from the centers envisioned by the bill. Further, they do not create the national research strategy to study any links between breast cancer and the environment that the bill establishes.
- **In 2004**, NBCC's vast grassroots network increased the number of Congressional cosponsors for the Breast Cancer Environmental Research Act to 62 in the Senate and 210 in the House. In the fall of 2004, NBCC advocates staged a final push to get S.983 passed in the Senate. NBCC advocates went to the Hill to demand that the House and Senate make the Breast Cancer and Environmental Research Act an end-of-Congress priority. Senator Reid, the Democrat sponsor of the bill, agreed to "hotline" the bill, which allowed the bill to circumvent the Health, Education, Labor and Pensions (HELP) Committee, where it was stalled, and be brought before the Senate where it needed unanimous consent vote. Unfortunately, the bill was held by one Senator and did not pass. Nonetheless, this was a strong show of force from NBCC, as many advocates and Senators rallied around the bill and built strong momentum for the 109<sup>th</sup> Congress.

For more information on this or NBCC's other legislative priorities, please contact NBCC's Government Relations Department at (202) 296-7477, or refer to the National Breast Cancer Coalition's website at [www.stopbreastcancer.org](http://www.stopbreastcancer.org).

**Breast Cancer Research Centers.** In the fall of 2003, in response to the conference report language, NIEHS announced joint funding with NCI for four research centers to define the effect of a set of specific environmental exposures in the development of the mammary gland and the onset of puberty. Funding for the all the Centers combined is \$5 million per year over seven years, for a total of \$35 million.

All the centers work with advocacy groups who add their insight and experience to the research effort. These breast cancer and other advocates also will play a part in outreach activities to translate the results of the research into improved understanding of environmental exposures in the early onset of puberty and possible increased risk for breast cancer. The four Centers interact and as a single NIEHS program, though there is some specialization at each center.

The four Centers are:

- **University of Cincinnati (Cincinnati, OH)** will explore the factors influencing the decline in age of onset of menstruation in the United States and identify improved early markers for cancer susceptibility. They will examine a population of white and African-American students to test the role of diet in the development of adipose tissue and in alteration of hormonal control of sexual maturation. The center will also carry out complementary studies in rodents.
- **Fox Chase Cancer Center (Philadelphia, PA)** investigators will study a series of rodent models of mammary gland development. In addition, the researchers will work to understand how environmental exposures may affect the development of puberty in young African-American and Latina girls in East Harlem, N.Y. Such changes in pubertal development may contribute to premenopausal breast cancer, which is more common in African-American women.
- **University of California, San Francisco (San Francisco, CA)** will study the impact of environmental agents on the interactions between epithelial and stromal (connective tissue) cells in normal and cancer-prone mice. An epidemiological study will follow a multiethnic group of seven- and eight- year-old girls through puberty.
- **Michigan State University (East Lansing, MI)** will examine environmental exposures that affect the expression and function of estrogen and progesterone receptors in mouse models.

The Centers are clearly a step in the right direction and demonstrate the feasibility of establishing a NIEHS-led research program to study links between environmental exposures and breast cancer. It is critical that this effort be enhanced and expanded with the multi-institutional and multi-disciplinary efforts on a broad research agenda under the Breast Cancer and Environmental Research Act.