

## LAY ABSTRACT

**TITLE:** Barriers and opportunities for breast cancer organizations to focus on environmental health and disease prevention: a mixed- methods approach using website analyses, interviews, and focus groups

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**Background:** Breast cancer is the most commonly diagnosed cancer among women worldwide and most cases are not primarily due to inherited genes. In response, breast cancer activists successfully advocated for research on environmental chemicals as a possible cause. Since then, new evidence suggests that common industrial and consumer chemicals are linked to the disease, and experts, including the President's Cancer Panel, recommend reducing exposures. We wanted to learn whether new research on environmental chemicals and breast cancer is translated back into the work of breast cancer organizations and to understand the barriers and opportunities for them to focus on environmental factors.

**Methods:** We used a computer language to count environmental terms on the websites of 81 breast cancer organizations, The National Cancer Institute, and The American Cancer Society. We conducted two focus groups and 20 interviews with leaders of breast cancer organizations.

**Results:** We found that 40% of breast cancer organizations include information on environmental chemicals on their websites, while 82% discuss other risk factors such as exercise, diet, family history, or genetics. The National Cancer Institute and American Cancer Society's breast cancer webpages also had a sparse discussion of environmental factors. Interview and focus group participants cited barriers to addressing environmental chemicals, including: 1) lack of time and financial support, 2) limited knowledge of the current research and lack of access to experts, 3) concern that cultural and economic factors make it difficult for individuals to reduce exposures, and 4) the downplaying of environmental risks by industry. Participants expressed the desire

for easy-to-adopt educational programs and increased federal funding for scientist-advocate research partnerships.

**Conclusion:** Our research underscores the need for environmental breast cancer experts and trusted cancer organizations to increase sharing of environmental research results so that breast cancer organizations can communicate new science on environmental factors in their online and in-person work.