

Breast Cancer Survivors' Beliefs about Environmental Risk Factors: Results from a National Cancer Survivor Registry

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Background

- Little is known about cancer survivors' beliefs about the environmental, non-hereditary factors associated with developing cancer and how those beliefs impact lifestyle choices and behaviors.
- In April 2007, leaders representing cancer education, advocacy & research convened at Commonweal, a nonprofit health and environmental research institute, to support education, research and public policy associated with cancer prevention.
- As an outgrowth of this meeting, Cancer Support Community (CSC), previously known as The Wellness Community (TWC), launched a survey in collaboration with the University of Massachusetts-Lowell, Commonweal, and the Collaborative on Health & the Environment to understand cancer survivors' beliefs about the environmental causes of cancer.



In 2012, CSC launched *The Cancer Survivor Registry: the Breast Cancer M.A.P. (Mind Affects the Physical) Project*, an online registry examining the psychosocial impact of breast cancer among survivors, with three main goals in mind:

- To better **understand** and **meet** the ongoing social and emotional needs of breast cancer survivors
- To develop and disseminate effective programs resulting in improved long-term quality of life
- To provide a vehicle for these survivor voices to be heard and positively impact health care policy through advocacy

To date, over 3,400 breast cancer survivors have joined the *Breast Cancer M.A.P. Project*.

To download the Annual Index, please visit:

www.cancersupportcommunity.org/BreastCancerMAP

To join the Cancer Survivor Registry, please visit:

<https://csc.breastcancerregistry.org/>

Purpose

- To explore breast cancer survivors' beliefs about environmental causes of cancer
- To understand and describe breast cancer survivors' prevention behaviors related to environmental risk
- To ascertain survivors' interest in learning more about environmental contributors to cancer

Methods

- Building on the previous survey conducted in 2007 in collaboration with TWC, Commonweal, U of MA, and the Collaborative on Health & the Environment, CSC generated a series of questions focusing on breast cancer and the environment.
- In Fall 2010, a subset of *M.A.P. Project* registrants (N= 825) responded to questions about:
 - factors they believe contributed to their cancer
 - self-reported behaviors related to their beliefs around environmental contributors to cancer
 - interest in learning about environmental contributors to cancer
- Questions and response options derived from:
 - The 2007 Commonweal Survey
 - Commonly known toxins as reported in "Toxic America" by Sanjay Gupta, MD in 2010
 - Free response options provided to ascertain additional perceptions of survivors

Sample Characteristics (N=825)

Characteristic	Proportion
Race	
Caucasian	88.3%
African-American	5.9%
Asian	1.2%
Sex	
Female	99.4%
Education	
Bachelors degree and above	72%
Total annual income	
Less than 40k	18%
Over 100k	38%
Breast Cancer Recurrence	
	13%
Mean	
Age	55 (SD=9.5)
Years since diagnosis	5.7 (SD= 5.4)

Results

Figure 1. Beliefs about Causes of Cancer

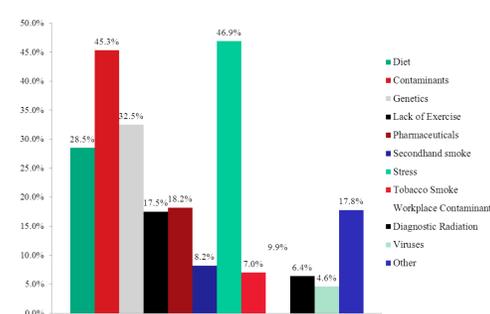


Figure 2. Interest in Information about Environmental Contaminants

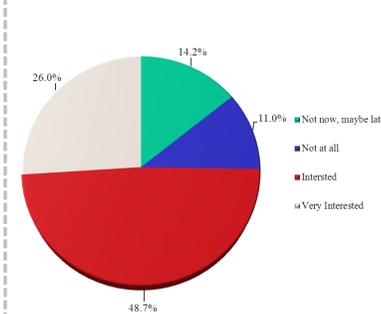
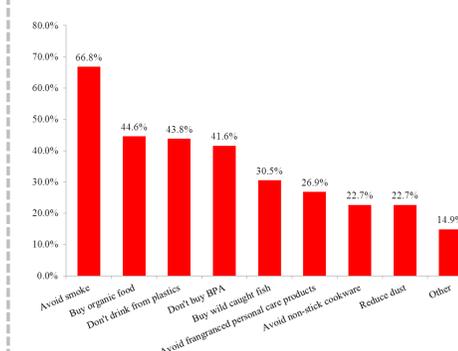


Figure 3. Preventative Actions Reported By Participants



Summary of Results

- Top 3 reasons reported for engaging in perceived preventative behaviors:
 - Prevent Recurrence (81.9%)
 - Prevent Cancer in Society (79.5%)
 - Prevent Cancer Among my Family (76.2%)
- Registrants reported a variety of factors that they believe contributed to their cancer.
 - 45.3% of breast cancer survivors believe that their cancer was caused by environmental contaminants while
 - 42.9% report that they are unsure whether they got cancer because of environmental contaminants
- Most registrants (73.9%) expressed interest in learning how environmental contaminants can affect cancer
- More than half (54.9%) expressed interest in participating in educational workshops concerning prevention policies and environmental contaminants.
- Breast cancer survivors endorse taking preventative action against known environmental toxins.
 - Over half report buying organic foods, refraining from drinking from plastics or buying BPA plastics, and 80% avoid smoke.

Conclusion

- These data indicate that the majority of breast cancer survivors:
 - believe environmental factors are important in cancer development and recurrence
 - have taken action based on these beliefs
 - would like more information about potential environmental contaminants
- While there is little information available about the environmental causes of cancer, some individuals are motivated to make lifestyle changes based on their beliefs.
- These results support the need for the development of evidence-based information and educational materials and programs for survivors around cancer and the environment.

Future Directions

- More research on the beliefs and knowledge of cancer survivors' understanding of the environmental causes of cancer with a greater focus on understudied, diverse communities
- Support additional public policy discussion about cancer and the environment
- The development of cancer advocate training, and evidence-based educational materials and programs for cancer survivors
- Research that focuses on physician attitudes and understanding of the environmental causes of cancer and what they communicate to their patients about prevention

Acknowledgement of Funding

