

Background:

The Chemicals Education for Cancer Prevention project was part of the Breast Cancer Coalition of Rochester's efforts to eradicate breast cancer through education and advocacy by raising awareness of potentially hazardous environmental exposures. Exposure to chemicals such as phthalates has been shown to disrupt the endocrine system and may be a possible breast cancer carcinogen. Despite no established causal link between breast cancer and these chemicals, a national effort is underway to educate the public - particularly those at highest risk - about the potential connections and how to reduce exposure to such chemicals (www.bcerp.org).

The primary goal of the Breast Cancer and the Environment Research Program (BCERP) survey evaluation project is to distribute BCERP materials to the Rochester target audience and gauge response to materials. The Breast Cancer and the Environment Research Program (BCERP) developed community outreach and educational materials to be nationally distributed and these materials have been adopted by the Breast Cancer Coalition of Rochester. Since the BCERP brochure is produced at national levels, there may be cultural or comprehension differences in different pockets of the U.S. that affect the comprehension of the brochure. If differences existed, the brochure would need to be adjusted to be adapted for the Rochester community.

Project Summary:

The study team used the BCERP "Your Daughter and Breast Cancer: Reducing her risk now" brochure on phthalate and BPA exposure and distributed the brochure at BCCR events, healthcare and community fairs. A brief survey was developed and administered to willing participants to test the relevance of the brochure information to the Rochester audience, defined as the Rochester Metropolitan Area or Monroe, Genesee, Livingston, Ontario, Orleans, or Wayne County. The survey recorded demographic information and contained a short collection of Likert scale questions designed to measure the participant's perception of chemicals exposure and cancer risk. The study team also conducted two training sessions for public health professionals on the materials provided by BCERP.

The main target population was women of child-bearing age (women ages 15-49, following the WHO definition). Six Likert scale questions were designed to address the previous, current, and future perception of breast cancer risk and chemical exposures. The answers ranged from "1 Strongly Agree" to "5 Strongly Disagree" for each question. The questions were formulated in this order to measure if the reader had processed the brochure information. Over 1018 brochures were distributed and 162 surveys were completed during the study period. There was positive response from the audience. The mode for Questions 1, 2, 3, and 4 was "2 Agree" and for Questions 5 and 6, "1 Strongly Agree" on the Likert Scale questions, suggesting that the participants agreed with the brochure information and were open to change.

The study team found that supplementing the BCERP brochure with handouts explaining what phthalates and other related chemicals was useful when conversing with participants at healthcare and community fairs. The study team faced time limitations at fairs and supplemental information helped convey the message quicker. Many participants we encountered did not know what BPA or phthalates were and providing extra materials can help increase awareness. The study team suggests that supplemental materials continue to be included in the outreach process.

The BCCR staff developed a fun fact game called 'Truth or Tale' of true or false chemicals exposure and breast cancer trivia for participants at health care and community fairs. The game consists of facts from the BCERP website, cancer websites, and the Environmental Working Group (EWG) website. There has

been positive feedback from participants and the game is used to facilitate involvement at community events.

A Spanish translation of the brochure available online would greatly certain areas in Rochester. The study team encountered high concentrations of Spanish speakers in the northern region of the city during their community visits.

Two training sessions were held, one at the Highland Family Medicine Center and another Health Professional Breakfast Workshop at the BCCR. Participants received handouts and factsheets for healthcare professionals on chemicals exposure, available at www.info.bcerp.org. Participants saw the outreach materials as important in helping translate chemicals exposure knowledge to patients to help 'make it real' and relevant to patients. They suggested making formatting changes such as making the text clearer and including a list of product names that contain phthalates and BPA. Overall the participants found the information useful and a good vector for conveying chemicals education to their patients.

Several suggestions have been made but ultimately the BCERP brochure appears to be suitable for the Rochester population. Participants marked that they will attempt to change behaviors after the reading of the brochure. This brochure is an important public health tool and is the primary step in raising awareness of chemicals exposure. The next step is to construct sustainable programs and structures.