

Fact Sheet: What Can Be Done Now



General Facts

- Accumulating evidence suggests that interactions between genetic and environmental factors may play a part in who gets breast cancer and who does not.¹
 - For the purposes of this fact sheet, “environmental factors” include the air we breathe, the food we eat, the water we drink, and things we touch and put on our skin.
- There is evidence that exposure to endocrine disruptors such as phthalates (*THAL-ates*) or bisphenol A (*bis-FEE-nawl A*) (BPA) may affect when a girl develops breasts or gets her first period.²
- Girls with a higher body mass index (BMI) are more likely to have an early first period.
- Other studies have shown that girls who enter puberty early may be at a greater risk for developing breast cancer later in life.³

What the Community Can Do

- Raise awareness among community leaders about the risks associated with using products that contain endocrine disrupting chemicals, such as phthalates and BPA, and the advantages of using products without these chemicals.
- Encourage healthy lifestyle choices, such as eating healthy and participating in physical activity, for all community members.
- Help community leaders to:
 - Learn about the environmental exposures that may impact your community’s health;
 - Understand the need for more scientific research related to environmental exposures and cancer risk, especially during windows of susceptibility in humans, and their potential impact on health later in life;
 - Promote awareness of precautionary steps that may lead to reduced breast cancer risk for women in your community, in the United States, and worldwide.

Fact Sheet: What Can Be Done Now (page 2)

What Health Professionals Can Do

- Health professionals should communicate with parents and caregivers about the importance of adopting a healthy lifestyle for the entire family.
- Health professionals should provide parents and caregivers with information about environmental exposures that may affect girls' risk of developing breast cancer later in life.
- The Centers for Disease Control and Prevention⁴ and the American Academy of Pediatrics⁵ recommend using body mass index (BMI) to screen for overweight and obesity beginning at two years of age and plot weight-for-height values at least once a year.
- A young girl who is suspected of entering puberty unusually early should be evaluated by her family physician or pediatrician, who may refer her to a pediatric endocrinologist or other specialist for further evaluation.
- Health professionals can learn more about the relationship between environmental exposures, pubertal development, and risk of breast cancer later in life by studying "An Overview of Recent Research Findings Applicable to Health Professionals" and other information available at www.info.bcerp.org. Educational materials for parents can also be downloaded from this site.

What Parents and Caregivers Can Do

- Parents and caregivers may wish to limit a girl's exposure to endocrine disrupting chemicals, such as BPA and phthalates, before puberty.
- Parents and caregivers should help girls maintain a healthy lifestyle before puberty and throughout their lives.
- Parents are encouraged to lead a healthy lifestyle as an example for their children, by choosing healthy foods and being physically active themselves. More information is available on "The Lifestyle Connection" fact sheet.
- Parents and caregivers should talk to children's health professionals for suggestions to help them grow up as healthy as possible.
- Parents or caregivers who suspect that a girl may be entering puberty early should talk to her family physician or pediatrician, who may refer her to a pediatric endocrinologist or other specialist for further evaluation.

Fact Sheet: What Can Be Done Now (page 3)

What Pregnant and Breastfeeding Women Can Do

- When a woman is pregnant, what she eats, breathes, drinks, or even puts on her skin can affect her baby. The same is true when she is breastfeeding.
 - Limit exposure to endocrine disrupting chemicals such as BPA and phthalates while pregnant or breastfeeding.
 - Wash hands after handling cash register receipts or ask to receive receipts by e-mail, if possible.

How Exposure to Endocrine Disrupting Chemicals Can Be Reduced

- Plastic food and drink containers, and plastic or vinyl toys, with the number 3 in the recycling triangle contain phthalates. To reduce exposure to phthalates:
 - Reduce use of vinyl and PVC products as much as possible;
 - Opt for products made of cloth, porcelain or ceramic, metal, and glass;⁶
 - When possible, choose products like fragrances, nail polish, deodorant, hair care products, body lotion, cosmetics, detergents, and soap that say “phthalate free” or do not have the word “phthalate” anywhere in the list of ingredients (this includes ingredients like “di-n-butyl phthalate” or “diethyl phthalate” or “benzylbutyl phthalate”);
 - Consider buying fragrance-free products. Phthalates may not always be listed separately on product labels and may instead be part of what is listed simply as “fragrance” in the ingredients (if the words “phthalate free” are not on the label of a personal care product, a consumer may wish to buy a fragrance-free version if there is a choice);
 - Reduce use of plastic food and beverage containers, and plastic or vinyl toys with the number 3 in the recycling triangle.
- Plastic food and drink containers with the number 7 in the recycling triangle often contain BPA. To reduce exposure to BPA:
 - Microwave food in glass containers (heating food in containers made with BPA releases BPA into the food);
 - Avoid plastic containers with the number 7 in the recycling triangle on the bottom of the container;



Cetyl Alcohol, Synthetic Beeswax,
Stearyl Alcohol, Benzyl Alcohol,
DEP (diethyl phthalate)
Methylparaben, Propylparaben,
Butylparaben, BHT, Sodium



Fact Sheet: What Can Be Done Now (page 4)

- Do not wash plastic containers in the dishwasher (BPA can leach out of these products when they are heated at high temperatures);⁷
- Reduce use of canned foods. Eat fresh or frozen foods whenever possible;
- When possible, opt for glass, porcelain or ceramic, or stainless steel containers, particularly for hot food or liquids;
- Use infant formula bottles that are BPA free and look for plastic or vinyl toys that are labeled “BPA free”;⁷
- Wash hands after handling cash register receipts or ask to receive receipts by e-mail, if possible.

To Live a Healthy Lifestyle

- Both healthy eating and being active can help people maintain a healthy weight and body fat level, and may help to reduce the risk of developing breast cancer later in life.
- Healthy eating guidelines include:⁸
 - Emphasizing fruits, vegetables, whole grains, and fat-free or low-fat milk and milk products;
 - Including lean meats, poultry, fish, beans (including soy), eggs, and nuts;
 - Choosing foods that are low in animal fats, cholesterol, salt (sodium), and added sugars.
- Some studies in humans have indicated that breast cancer risk is lower among women whose dietary intake was higher in soy during puberty and adolescence.
- Regular physical activity can help people of all ages, shapes, sizes, and abilities stay healthy.⁹
 - It is recommended that children from 6 to 17 engage in physical activity for periods of time that add up to about an hour each day.
 - People who have disabilities or special conditions (pregnancy, chronic medical conditions) should discuss with their healthcare provider what types and amounts of physical activities are appropriate for them.
- Parents are encouraged to lead a healthy lifestyle as an example for their children, by choosing healthy foods and being physically active themselves.

Fact Sheet: What Can Be Done Now (page 5)

To learn more, visit www.info.bcerp.org

- ¹ Claudio, L. (2004). Translation: Breast Cancer Takes Center Stage. *Environmental Health Perspectives*, 112 (2), A92-94.
- ² Biro, F. M., Greenspan, L. C., & Galvez, M. P. (2012). Puberty in girls of the 21st century. *Journal of Pediatric and Adolescent Gynecology*, 25 (5), 289–294. doi: 10.1016/j.jpog.2012.05.009
- ³ Claudio, L. (2007). Centered on Breast Cancer. *Environmental Health Perspectives*, 115 (3), A132-133.
- ⁴ Centers for Disease Control and Prevention. (2012). *Growth Chart Training*. Retrieved September 16, 2012, from the Centers for Disease Control and Prevention Web site: <http://www.cdc.gov/nccdphp/dnpao/growthcharts/index.htm>
- ⁵ American Academy of Pediatrics. (2008). *Bright Futures: Guidelines for Health Supervision of Infants, Children, and Adolescents, Pocket Guide* (Third ed.). (J. F. Hagan, J. S. Shaw, & P. M. Duncan, Eds.) Elk Grove Village, IL: American Academy of Pediatrics.
- ⁶ Mount Sinai School of Medicine. (n.d.). *Phthalates (MSSM)*. Retrieved September 17, 2012, from the Breast Cancer and the Environment Research Program Web site: <http://www.bcerp.org/cotcpubs.htm>
- ⁷ National Toxicology Program. (2010, August). *Bisphenol A (BPA) Fact Sheet*. Retrieved September 16, 2012, from the National Toxicology Program Web site: <http://ntp.niehs.nih.gov/index.cfm?objectid=EF1E5313-F1F6-975E-73B55D30B2966A5A>
- ⁸ U.S. Department of Agriculture and U.S. Department of Health and Human Services. (2010). *Dietary Guidelines for Americans, 2010* (7th ed.). U.S. Government Printing Office.
- ⁹ U.S. Department of Health and Human Services. (2008). *2008 Physical Activity Guidelines for Americans* (ODPHP Publication No. U0036 ed.).

Made possible by the Breast Cancer and the Environment Research Program (BCERP) grants U01 ES012770, U01 ES012771, U01 ES012800, U01 ES012801, U01 ES019453, U01 ES019435, U01 ES019454, U01 ES019457, U01 ES019471, U01 ES019466, U01 ES019434, U01 ES019480, U01 ES019482, U01 ES019459, U01 ES019472, and U01 ES019458 from the National Institute of Environmental Health Sciences (NIEHS) and the National Cancer Institute (NCI), NIH, DHHS.