Let's Talk Prevention: Reducing Toxic Exposures

Know these common chemicals of concern...

BPA (Bisphenol A) in food can linings, store receipts, and plastic products like water bottles, food containers, and toys. Use fresh or frozen foods instead of canned and avoid microwaving plastic containers.

Flame Retardants such as PBDEs, BFRs, and OPFRs in electronics, furniture, and children's pajamas. These chemicals can end up in house dust so keep dust levels low (see "Keep air fresh" on page 2). Also, choose children's pajamas without "flame resistant" labeling.

Polycyclic Aromatic Hydrocarbons (PAHs) in charred meats, tobacco smoke, and car exhaust. Minimize char when grilling by using marinades, reducing heat levels, and avoiding prolonged cooking times. Avoid idling your car while waiting.

Parabens in toiletries and cosmetics. Check for products without parabens as an ingredient or those labeled "Paraben-free."

Per- and Polyfluoroalkyl Substances (PFAS) in stain-resistant textiles, waterproof clothing, and nonstick cookware. Use cast iron, steel clad or ceramic pots and pans instead of nonstick/Teflon cookware. Try to avoid clothing labeled "stain-resistant" or "water resistant".

Pesticides including weed and insect killers used in the home and garden or nearby in agriculture. Store food tightly, wipe up crumbs, and seal cracks in windows and doors to deter pests. Purchase organic produce when possible.

Phthalates in soft plastics like shower curtain linings, fragrances, toiletries, cosmetics, and food packaging. Choose products labeled "phthalate-free" and opt for cloth shower curtains instead of vinyl.

Triclosan in toiletries and cosmetics such as antibacterial soap and toothpaste. Check labels for products without triclosan.

Take time to read product labels

Some products may contain chemicals that are not listed on the label. For example, the ingredient **"fragrance"** or **"parfum"** can represent large mixtures of potentially harmful chemicals.

Choose cleaning products, toiletries, and cosmetics labeled **"Fragrance-free."**

Look for **"flame retardant-free"** or **"TB 117-2013,"** not **"flame resistant"** or **"TB 117 compliant,"** on children's pajamas, furniture, and bedding.

WHY REDUCE EXPOSURE?

Most chemicals have not been tested for safety >>>

There are more than 86,000 chemicals registered for use under the Toxic Substances Control Act (TSCA), many with known or suspected health effects. Historically, the Environmental Protection Agency (EPA) was not required by Congress to conduct comprehensive testing on toxics. Only in 2016 did Congress amend TSCA to require specific evaluations of new and existing chemicals. Still, the process of regulating chemicals is fraught with delays and market barriers.

We are exposed to unknown mixtures of synthetic chemicals daily >>>

We are exposed to hundreds of synthetic chemicals every day. Scientists are just beginning to study the health implications of being exposed to many chemicals in combination and how exposures add up over a lifetime. In the meantime, there are ways to reduce common chemical exposures that are suspected of causing health problems (see page 2).

Infants, children, and young adults are most vulnerable >>>

The human body is more vulnerable during certain sensitive periods of development, or "windows of susceptibility." For example, early life exposures in the womb, throughout infancy and childhood, and during puberty could lead to negative heath effects later in life.

SEE PAGE 2 FOR MORE INFORMATION >>>

SEVEN BASIC STEPS TO REDUCE EXPOSURE...

Here are seven of the easiest steps you can take to reduce exposure for yourself and your family. Don't become overwhelmed – start with small steps to reduce exposure and build from there!

Wash your hands >>>

Wash your hands frequently, especially before eating and after handling products with harsh chemicals, including cleaning products. Use soap without parabens and triclosan (see page 1).

Take off your shoes >>>

Leave shoes at the door to avoid tracking pesticides and other chemicals inside. Ask guests to do the same. Chemicals tracked into your home can build up inside your house carpeting and pose health risks, especially to infants, young children, and pets.

Shorten showers >>>

Take shorter showers to limit inhalation of airborne chemicals and reduce skin absorption of chemicals from water and shower products.

Store food safely >>>

Transfer food and left-overs into an airtight glass, stainless steel, or ceramic container. Try not to use plastic food or beverage containers for cooking or storage. Chemicals like BPA and phthalates (see page 1) can move from plastic into food, especially when heated, so avoid microwaving plastic.

Keep air fresh >>>

Open windows every so often to ventilate indoor air. Don't allow smoking inside and avoid using commercial air fresheners, which can contain unsafe fragrance chemicals. Toxic chemicals, such as flame retardants (see page 1), end up in house dust so keep dust levels low by using a vacuum with a HEPA filter and cleaning with a microfiber cloth, all of which can trap dust without using harsh cleaning products.

Buy fresh & organic >>>

Buy organic produce as often as possible. Fresh is best but go for dried or frozen instead of canned. This will reduce exposure to pesticide residues on produce and BPA and phthalates (see page 1) in food packaging and cans.

Educate >>>

Educate yourself and your family about the dangers of toxic chemicals. Investigate safer alternatives to products you use often, such as cleaning products, toiletries, cosmetics, lawn care products, etc. If you have any buying power in the workplace or community, consider less toxic products when making decisions about procurement.

LET US INTRODUCE OURSELVES!

The **Massachusetts Breast Cancer Coalition** (MBCC) is dedicated to preventing environmental causes of breast cancer through community education, research advocacy, and changes to public policy.

Many chemicals of concern are synthetic chemicals that don't stay isolated inside factories. Studies have found hundreds of man-made toxic chemicals in our air, water, food, consumer products, as well as in samples of human blood and urine.

Let's Talk Prevention: Reducing Toxic Exposures is a project to prevent diseases, like breast cancer, by describing ways to avoid harmful chemicals. As part of that project, this handout provides basic steps to reduce toxic exposures in the home and choose safer alternatives to harmful products used daily.

CONTACT US

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www.facebook.com/mbccorg
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www.youtube.com/mbccorg
www.instagram.com/mbccorg

For More Information >>>

Massachusetts Breast Cancer Coalition, www.mbcc.org

Silent Spring Institute, a research non-profit founded by the Massachusetts Breast Cancer Coalition to investigate the link between the environment and health, especially breast cancer, **www.silentspring.org**

"Breast Cancer and the Environment: Prioritizing Prevention" Interagency Breast Cancer and Environmental Research Coordinating Committee available at **https://www.niehs.nih.gov/about/assets/docs/breast_cancer_and_the_environment_prioritizing_prevention_508.pdf**

"Reducing Environmental Cancer Risk: What we can do now" a 2008-2009 annual report of the President's Cancer Panel, available at **https://deainfo.nci.nih.gov/advisory/pcp/annualreports/pcp08-09rpt/pcp_report_08-09_508.pdf**