

## Children's Environmental Health

**K**eeping children healthy includes understanding how the environment around a child's home and community affects health. Environmental effects on health are particularly important for children:

- Children's tissues and organs are growing and developing, so they are at greater risk of harm if they are exposed to a toxin in the environment.
- Children can have a higher exposure to a toxic chemical after touching it because they frequently put their hands, or other objects, in their mouths.

Chemicals (one of the many types of environmental toxins) are used to make things that we use every day. There are now more than 84 000 different chemicals used in making products such as food, clothes, and toys. Many of these chemicals have been created to help us store and use food, such as plastics. Others were developed to improve safety, such as flame retardants. Others were developed to improve quality of life, such as pesticides.

Despite the improvements that these chemicals can bring to our daily lives, there are concerns about children being exposed to harmful chemicals in multiple ways, such as through food, drinking water, air, soil, and even house dust.

Some pediatricians work on researching possible environmental causes of children's illnesses and disorders. A recent article in the *Archives* described several common chemicals and the current research about whether they could cause harm to children. Common environmental toxins discussed in that article include the following:

- **Phthalates** are a type of industrial chemical that is widely used in many ways. One example is to help make plastics more flexible. Some research that has been done found that high levels of phthalates have been related to decreased hormone levels and possibly breast cancer in adults.
- **Bisphenol A**, also called BPA, is a chemical used to make certain plastics, such as water bottles. Some research has found that high levels of BPA can negatively affect hormones and the cardiovascular system.
- **Pesticides** are used to keep insects off of fruits and vegetables so they can grow. Some research has shown that pesticides within homes, such as on the vegetables you get from the store, can persist for a long time. Pesticides have many negative health effects, especially on the brain.

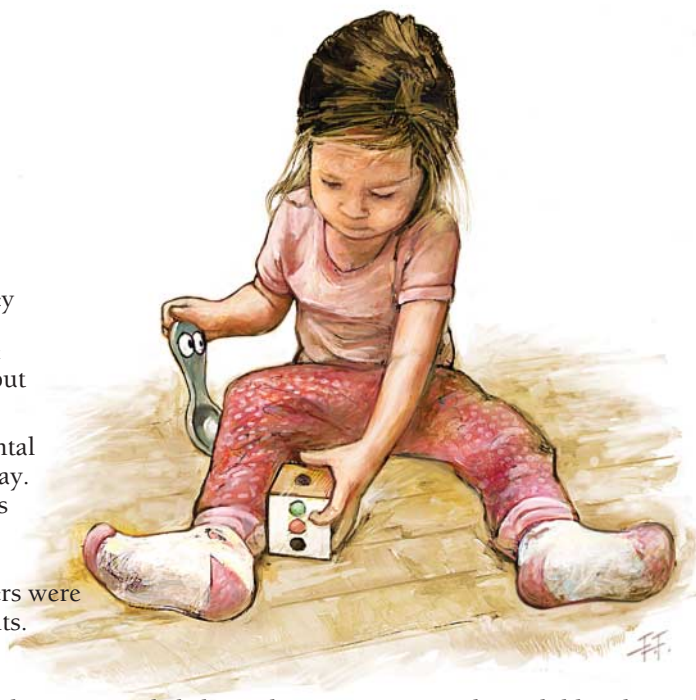
### WHAT SHOULD I DO AS A PARENT?

- Talk to your pediatrician if you are concerned that your child has been in a "highly exposed" environment, such as a hobby shop or workplace that uses chemicals.
- Take steps to reduce exposure to chemical toxins. There are now many products that are labeled "phthalate-free" or "BPA-free." Microwave foods in glass rather than plastic containers.
- Consider buying organic produce to reduce exposure to pesticides.
- If you live near polluted waters, be aware of and follow fishing advisories.
- Reduce indoor dust exposure by cleaning carpets and dusty surfaces regularly using a vacuum cleaner with a high-efficiency particulate air filter.

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### FOR MORE INFORMATION

Children's Health, National Institute of Environmental Health Sciences and National Institutes of Health  
<http://www.niehs.nih.gov/health/topics/population/children/index.cfm>

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Source: National Institute of Environmental Health Sciences and National Institutes of Health

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