



Fact Sheet

South Carolina Department of Health and Environmental Control • www.scdhec.gov

Page 1 of 2

Children's Health and the Environment

Our children come in contact with a wide variety of environmental hazards every day. The dangers lurk in the foods they eat, the water they drink and the air they breathe. Substances like mercury, lead and some pesticides and solvents can damage a child's nervous system. PCBs and dioxin can disrupt a child's hormones. Radiation, asbestos, arsenic and dioxin can cause cancer in children. Sulfur dioxide and ozone can harm a child's respiratory system.

Why are children at greater risk from toxic chemicals?

Children are not just "little adults." Pound for pound, children are exposed to greater amounts of toxic chemicals because they eat, drink, and breathe more for their size than adults.¹

Children live closer to the ground, playing on floors or rolling on the grass or dirt. So, they tend to come in contact with dust, household cleaners, paint, plastic, and other items that contain toxins. Children may also be exposed to chemicals tracked in from outdoors, such as pesticides. In addition, children put their hands and objects into their mouths all the time. This increases their exposure to toxic substances.

Another reason children are at higher risk from environmental toxins is that their bodies are growing rapidly. Even small amounts of toxic exposures during critical developmental periods can harm a child's health, sometimes for life. These exposures can potentially contribute to learning, behavioral and developmental disabilities.²

How can these harmful exposures be prevented?

You can help protect your current and future children by taking simple steps in your home and garden to reduce everyday exposures to harmful chemicals.

1. Shop smart.

- Because so much of our food is treated with pesticides, there's always a chance that pesticide residues remain on it — even though we can't see them. To be on the safe side, wash and peel your fruits and vegetables.

2. Ventilate.

- Many household items give off fumes that contain chemicals. Cleaners, insect sprays, carpets, wet paints and finishes, air fresheners, candles and incense, art supplies, fires, new furniture, and gas appliances all give off chemical fumes.
- These chemicals don't simply disappear. Without an escape route, they attach themselves to the dust particles on the floor and to fibers in your carpets, curtains and upholstered furniture. Your child can easily pick up these chemicals while playing.
- The easy solution is ventilation. Open your windows or use exhaust fans. Fresh air dilutes chemical fumes, and open windows allow chemicals to escape instead of remaining inside.

3. Clean with Care.

- Cleaners are full of chemicals that give off unhealthy fumes that can irritate a child's eyes, nose and lungs. Some cleaners are corrosive and can harm a child's delicate skin. Some cleaners even contain ingredients that are believed to cause cancer.
- Cleaners can also have other hidden dangers. They can leave behind chemical residues. Children may be putting chemicals in their mouths along with their toys and food. Small amounts may not be immediately harmful, but a build-up of chemicals can cause health problems over time.
- Avoid extra-strength cleaners, which may contain dangerous solvents, acids and other corrosive chemicals. Use mild cleaners, such as unscented general purpose soaps and detergents, or try homemade cleaners, such as baking soda and club soda. Milder cleaners are healthier for you too.
- Remember, don't mix cleaners. The ingredients can combine to form more dangerous gases.

4. Renovate right.

- No matter when you remodel or redecorate, it's important to remember that homes built before 1978 may contain lead paint. Sanding or demolishing walls covered with lead paint, even if the paint is buried under layers of newer paint, will result in lead dust. This dust can spread throughout the house or land on the soil outside.
- Children are vulnerable to lead. In fact, lead poisoning continues to be the number one children's environmental health problem in the United States. Always test the paint for lead before painting and renovating if you live in a pre-1978 home. You should also check to see if your paint is chipping or deteriorating in any way.
- Other decorating tips:
 - Use the least toxic supplies you can find to avoid subjecting your family to chemical fumes.
 - Avoid pressure-treated wood, which can contain arsenic, and particleboard, which gives off formaldehyde fumes.
 - Clean up well. Leave no dust behind!
 - Pregnant women and children should not be allowed on the scene!

5. Keep it out.

- Avoid pesticides.
- When we walk, our shoes collect these pollutants and carry them inside, where they stay in carpets until cleaned.
- The easy way to avoid exposure is to always wipe your feet on a doormat or leave your shoes at the door.

6. Clean Water.

- If you get your drinking or bathing water from a private well, you should test your water regularly.
- If you think your public drinking water could be contaminated, contact your public utility.

For More Information

Children's Health Environmental Coalition
<http://www.chechnet.org>

Footnotes

1. Landrigan PJ, Carlson, LE Environmental Policy and Children's Health. The Future of Children. 1995 Summer/Fall; 5:34-52.
2. National Academy of Sciences. Pesticides in the Diets of Infants and Children. Washington, DC: National Academy Press, 1993.



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