

# Toxic Chemicals in the Home

Chemicals play a major role in our everyday lives. They are part of what we eat, where we work, and how we live. Despite their prevalence in our lives, many chemicals are hazardous, or toxic. Toxic chemicals can be found in our soil, water, air, and bodies. This contamination has seriously affected the health of humans and wildlife everywhere.

Children are often more vulnerable than adults to the harmful effects of chemical pollutants because they are growing and developing rapidly. In addition, children's behavior, including increased hand to mouth activity, a tendency to crawl and play in spaces that could be contaminated, and a lack of awareness about proper safety and sanitary habits, all put children at a higher risk. In some cases, childhood exposure to toxins can cause serious health damage to an individual later on in life.

Our built environments, including child care settings, schools, and neighborhoods, can be sites of harmful chemical contamination. In fact, many toxic chemicals can be found in places where children spend time--home, child care, and school.

Many resources exist to help you understand how children may be exposed, what may be the impact on a child's health and development, and what you can do to create healthier environments. The next few pages provide more information and point you to science-based and free resources.

- Household products such as detergent, floor and furniture polish, paints, and various cleaning products for glass, wood, metal, ovens, toilets, and drains may contain hazardous chemicals such as ammonia, sulfuric and phosphoric acids, lye, chlorine, formaldehyde, and phenol. Air fresheners can also contain chemicals that are harmful to health. Art supplies, such as markers, paint, and glue, may also contain toxic materials. When not properly handled, these products can make the home or care environment a dangerous place, especially for kids.
- Home furnishings, such as carpets, curtains, wall decorations, and some furniture, may be treated with chemicals and are potentially dangerous. It is important to note that a few days after installation, new carpets emit volatile organic compounds, which are chemicals associated with carpet manufacturing that can be harmful to humans and the environment. Gas and wood stoves and kerosene heaters may also release dangerous chemicals.
- Building materials such as particle board, insulation, asbestos, and treated wood (used for decks and outdoor furniture), can also pose health threats. Some play sets and toys, as well as outdoor swing sets and play grounds, may also be treated with toxic chemicals, made from toxic plastics, or include hazardous materials. The more time that children spend playing in such an environment, the higher their exposure to toxic chemicals, and the greater a risk to their health.

Various health effects can result from toxic chemical exposure, including allergic reactions, asthma, migraines, dizziness, nausea, eye, skin, and respiratory tract irritation, various forms of cancer, and even death. The health effects resulting from exposure depends upon many factors, including how toxic the chemical is and the degree of exposure.

You can help protect children from the hazards of toxic chemicals. The [Eco-Healthy Child Care® Program](#) (EHCC) provides free information and resources for anyone who cares for young children, including child care professionals, parents, and grandparents.

EHCC has [fact sheets](#) in 16 different areas as well as a [checklist](#) to help you undertake healthier practices. The topics include:

- Pesticides and Pest Prevention
- Air Quality
- Household Chemicals
- Lead
- Mercury
- Radon
- Art Supplies
- Furniture and Carpets
- Plastics and Plastic Toys
- Arsenic: Treated Wood and Water

Each fact sheet includes tips for free or low-cost steps you can take for healthier environments. EHCC also maintains a list of [additional resources](#).

The Children's Environmental Health Network (CEHN) also [advocates](#) for children's health and healthier environments with lawmakers and regulators.

### **Toxic Chemical Information Resources**

[www.epa.gov](http://www.epa.gov), website for the U.S. Environmental Protection Agency (EPA) which can be searched for a variety of information about toxic chemicals and pollutants and US regulations regarding such materials.

[www.atsdr.cdc.gov](http://www.atsdr.cdc.gov), website for the Agency for Toxic Substances and Disease Registry, a government agency that provides information about hazardous substances, the health effects of hazardous substances, and relevant news updates.

[www.nrdc.org/health](http://www.nrdc.org/health), website for the Natural Resources Defense Council which contains a variety of information including an article about toxic chemicals and health.

<http://chej.org/campaigns/cehp/>, the website for Children's Environmental Health Program, a locally based, grassroots effort coordinated by the Center for Health, Environment, and Justice (CHEJ), a national environmental organization dedicated to making the indoor and outdoor environment more safe for children. This site also provides many useful links to other organizations.