

# PRACTICE PREVENTION

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*“We know PESTICIDES kill tiny pests...so what can they do to tiny people?”*

- What human-made, toxic substances can be found lurking in our food, water, air, and carpets, as well as in our body tissues?
- Why are so many parents worldwide choosing to feed their kids only *organically grown* foods?

Two words: chemical pesticides!

## **Chemical Pesticides Threaten Children’s Health!**

Overwhelmingly, scientists agree that many synthetic pesticides can harm the health of humans, especially children. Enacted in 1996, the Food Quality Protection Act (FQPA) was the first law to acknowledge that infants and children need extra protection against pesticide exposures. “A toxin has much more devastating effects on a developing nervous system. The child’s brain, because it is still growing, is much more vulnerable than an adult’s brain,” says Herbert Needleman, M.D., a professor of pediatrics at the University of Pittsburgh Medical School. “And because children play on floors and on the ground, put their hands in their mouths, and eat more fruits and vegetables per pound of body weight, they receive a greater overall exposure to pesticides.”

Many common insecticides, such as Dursban™, contain potent neurotoxicants—i.e., they function by disrupting the organism’s nervous system, disabling the transmission of signals to and from the brain. Many studies have revealed clear links between the neurotoxic nature of these pesticides and harms to the healthy development of a child’s brain. Such harms can take the form of learning, behavioral, and developmental disabilities.

## **Where are pesticides used?**

- **On land:** Agricultural crop fields, golf courses, sports fields, playgrounds, roadsides, lawns, etc.
- **In the home:** professional exterminations, carpet pest treatments, inside schools and community buildings, flea sprays and “dips” for dogs and cats, CCA-treated lumber, etc.
- **On bodies:** head lice treatments, bug and tick repellants, etc.
- **On food:** sprayed on food during cultivation, as well as after harvesting to deter fungal growth prior to shipping.

## **How can we be exposed?**

**Hundreds of millions of people worldwide are significantly exposed to pesticides every day through farm and garden use, in residues in air, water, food, and within their homes.**

A World Resources Institute study estimates that only 0.1% of pesticides applied to crops reach the target pest. The rest “drifts,” going wherever the wind carries it, contaminating air and water supplies, and poisoning wildlife and accumulating in the bodies of larger organisms.

**In this way, fetuses and infants are exposed, via amniotic fluid and breast milk, to the pesticides that enter the mother’s body.** To their tiny bodies, the concentrations are far greater than what the mother encounters. These early exposures at vulnerable stages of development can result in life-long neurological and physical impairments.

## **Our homes may be sources of chronic exposure to pesticides.**

According to Environmental Protection Agency (EPA) sponsored studies, **pesticide levels were significantly higher inside residences than outside**, in both high and low pesticide use areas. Pesticides used indoors, as well as those that enter on people’s clothing, shoes, and in the air, often persist for years because they are not subject to outdoor breakdown factors like rain, sunlight, temperature extremes, and microbial action. Upholstered furniture, carpets, and especially the foam pads underneath carpets, work as long-term reservoirs that store pesticides and reintroduce them into the air in dust that can be inhaled. House dust is especially of concern

for young children, who frequently put hands and toys that may be covered in pesticide-laden dust into their mouths.

What YOU can do to reduce your child's exposure to pesticides:

- **Buy organic produce whenever possible**, prioritizing those foods most likely to contain chemical residues, such as peaches, apples, pears, winter squash, green beans, grapes, strawberries, raspberries, spinach, and potatoes.
- **Always wash (and peel, where possible) fruits and vegetables.** Pesticide residues tend to accumulate in the outermost skins. The pesticide DDT, banned in the U.S. in 1973, has been found in the skins of root vegetables grown more than 20 years later.
- **Wipe shoes on doormats and leave them at the door.** Pesticides and other toxins can be tracked in from outdoors onto the floors where children play.
- **Use damp dust rags.** Feather dusters simply stir up the dust and disperse it into the air, where it can be inhaled.
- **Vacuum regularly with an HEPA filter vacuum.** Old vacuums can blow contaminated dust from the carpet out into the air. Dust particles can be inhaled and ingested after settling on food, hands and furniture.
- **Avoid all use of lawn, garden, and household pesticides.** Explore the many effective, non-toxic methods of pest control.
- **Prevent household pests naturally by removing sources of food, water, and shelter.** Fix leaky plumbing; don't let water accumulate anywhere, such as in sinks or beneath plants; wipe up food residues on countertops; seal pet food containers; keep garbage sealed; rinse recyclable containers; remove woodpiles from around or inside your home; repair door and window screens; outdoors, remove diseased plants and fallen fruit that may attract pests to your garden.
- **Talk to neighbors, schools, businesses, and city officials about reducing pesticide use** (Note: There are safer alternatives for every use of chemical pesticides. Cities like Vancouver, B.C. maintain beautiful grounds without the use of chemicals!)
- **Urge the makers of your favorite food products to purchase ingredients from**

**organic farmers** . Make your consumer voice count in speaking out against the misuse of toxic chemicals.

- **Check out the book *Common Sense Pest Control: Least-toxic solutions for your home, garden, pets, and community*** (By Olkowski, Daar, and Olkowski, Taunton Press, 1991).

For more information on neurotoxicants and other threats to children's health, visit the INSTITUTE FOR CHILDREN'S ENVIRONMENTAL HEALTH at [www.iceh.org](http://www.iceh.org).