CHILDREN'S SUSCEPTIBILITY

The following, fully referenced statements come from “The Risks that Pesticides Pose to Children” by Becky Riley, October 2000. Report published by Northwest Coalition for Alternatives to Pesticides.

*Children’s brains and nervous systems are not completely developed, making them more susceptible to the effects of nerve poisons. Several major classes of insecticides are nerve poisons.

*Children’s livers and kidneys are unable to detoxify or filter and excrete certain chemicals as quickly as adults. This contributes to greater toxicity of some substances to infants and young children.

*Children are growing and their cells are dividing more quickly than those of adults, making them vulnerable to the effects of cancer-causing chemicals.

*Children’s immune systems are not fully developed until adolescence. This means they may be more susceptible to harm from exposure to foreign compounds such as pesticides.

*Children receive relatively greater doses than adults when exposed to pesticides in their environment, due to the fact that they breath in a greater volume of air and have a greater skin surface area relative to their smaller body weights.

*Children who eat a diet of organic food show a level of pesticides in their body that is six times lower than children who eat a diet of conventionally produced food.

RESOURCES

http://www.cehn.org
Children’s Environmental Health Network 1604 Solano Avenue Berkeley, California 94707 Phone: 510/526-0081

http://www.healthychild.org
Healthy Child Healthy World 12300 Wilshire Blvd, Suite 320, Los Angeles, CA 90025 310/820-2030 Their mission is to protect the health and well being of children from harmful environmental exposures.


http://www.rachel.org
Provides understandable scientific information about human health and the environment.

http://www.panna.org/panna/
Pesticide Action Network North America 49 Powell Street, Suite 500 San Francisco, CA 94102 415/981-1771 A comprehensive list of alternatives to pesticides for virtually every pest problem.

www.ehnca.org
EHN [of California] Environmental Health Network P.O. Box 1155, Larkspur, California, 94977-1155 415/541-5075

http://foodnews.org
Discover how many pesticides your child is consuming due to contaminated food supply; a good reason to choose organic.

www.healthandenvironment.org
Collaborative on Health & the Environment Research information source.
PROBLEMS

**STATEMENT:** Toxins can be absorbed from the air we breathe, through our skin and from the food we eat.

**PROBLEM:** An estimated 80% to 90% of all cancer in humans is caused by exposure to carcinogens found in the environment.

*Philip Landrigan, M.D. and Herbert Needleman, M.D., Raising Children Toxic Free 1996.*


**FACT:** Among children ages 1-14, cancer causes more deaths in the U.S. than any other disease. *American Cancer Society, Cancer Facts & Figures 1996.*

**FACT:** Asthma is now the leading cause of hospital admissions for children. *EPA News Release, September 11, 1996.*

**FACT:** 17% of American children (12 million) suffer from one or more, developmental, behavioral or learning disorders. *Report on Environment & Health presented at The National Academy of Sciences by Timothy Wirth, President, United Nations Foundation, June 2000.*

**FACT:** Learning disabilities alone may affect up to 10% of children in public schools.

**PROBLEM.** Scientists estimate that each year up to 7 million Americans become sick from contaminated tap water, which can also be lethal. *(NRDC)*

**FACT** Inspector general reported EPA data audits show that about 77% of known monitoring and reporting violations, and 35% of known health standard violations, are not included in EPA's compliance database so they lied about compliance gains in 2003-4.

**PROBLEM:** Pesticides are a major toxic contaminate found in fruits, dairy products, vegetables, meats and water.

**FACT:** Children in families that use pesticides are 6.5 times more likely to get childhood leukemia. *Lowengart, rl, et al, "Childhood Leukemia and parents' Occupational and Home Exposure, Journal of Pesticide Reform, Summer, 1986, pp. 2-3.*

**FACT:** 50% of an average one-year old’s top ten favorite foods (apple juice, grape juice, oats, bananas, milk, apples, orange juice, pears, wheat and peaches) will have some pesticide residue. *Mott, L., MS. Our Children at Risk, Natural Resources Defense Council, 1997, p. 65.*

**FACT:** The US government has not conducted even basic toxicity testing for up to 75% of the top-volume chemicals in commercial use today and up to 90% of the largest volume chemicals in respect for their toxicity to children. *Environmental Defense Fund, Toxic Ignorance: The Continuing Absence of Basic Health Testing for Top-Selling Chemicals in the United States, 1197, pp. 5.*

**PROBLEM:** Nitrate, a preservative found in approximately 7% of our food reacts with chemicals in food to make nitrosamine, one of the most potent known carcinogens. *Schoemacher. J.M., PhD and VataiE. C.Y., PhD, Healthy Homes, Healthy Kids, Island Press, 1991, p 126.*

**PROBLEM:** Excess use of fluoride in water & toothpaste has been shown to contribute to dental fluorosis and osteoporosis.

**FACT** Dental fluorosis is identified by mottled, white spots, which typically turn brown.

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**SOLUTION:** Be aware of what substances including cleaners, pesticides, lawn care products, personal care products & foods pose threats in your household. Replace toxic agents with non-toxic alternatives. See Resources.

**SOLUTION:** Eat organic foods. Not only will children avoid consuming pesticides; foods taste better and contain more vitamins & minerals. *Organic Retailers & Growers Association of Australia*

**SOLUTION:** Eat foods low in fat. Trim the fat from meat, fish and poultry - many toxins are stored in fat cells. Consider buying dairy and meat raised without bovine growth hormone (BGH). Choose foods without nitrate as a preservative.

**SOLUTION:** Thoroughly wash and peel your produce, especially if it is waxed & dyed, which tend to hold in pesticides. Discard outer leaves of lettuce. This reduces but does not completely remove pesticides.

**SOLUTION:** Drink filtered or R.O. water. *(Reverse Osmosis)*

**SOLUTION:** Inquire if your town water is up to standards. Test your well for:
- bacteriological quality
- physical characteristics
- chemical characteristics
- volatile organic chemicals
- insecticides:
  - carbaryl, chlordane, chlopypertos, DDT-DDE, diazinon, dicofol, isenphen fos, lindane, malathion, methoxychlor
- herbicides:
  - 2, 4-D, dicamba, dacontor, MCPA, MCPF, dacthal, trtfiuralin
- fungicides:
  - chloroth