

Pesticides and Risks to Children



 **Children are at high risk from exposure to pesticides and other toxic chemicals.**


They are more sensitive to exposure than adults, and they are more likely to be exposed because they play on the lawn and ground. Their bodies are rapidly growing and developing, which means any exposure has more severe consequences than it would in adults.

Pesticide poisoning is a potential problem, especially with small children. In 2005, poison centers in the United States responded to 101,745 poisoning incidents related to pesticides. Of those, 48 percent (49,232) involved children under the age of six.

Pesticides may be tracked into the home and lodge in carpets, where toddlers who play on the floor and put their hands in their mouths may be exposed. Researchers study collected samples of 2,4-D, a commonly used lawn herbicide, on indoor surfaces such as floors, tables and countertops. The herbicide was tracked into the home by the dog and the homeowner. Exposure levels for young children were 10 times higher after 2,4-D was applied to the lawn.

Researchers have found higher rates of cancer—such as leukemia, brain tumors and lymphoma—in children living in homes where pesticides are used in

the home and/or yard. Studies found that increased cancer risks were higher for children than for adults exposed to pesticides.

Locally, pesticides have been found in toddlers. University of Washington researchers tested 110 children, aged 2-5 years, for common garden insecticides. All but one of the children tested had pesticides in their urine. Children had significantly higher levels of pesticides if they lived in a home where garden pesticides were used. The researchers recommended that, where possible, use of these pesticides “should be avoided in areas where children are likely to play.” 

References

2005 annual report of the American Association of Poison Control Centers' National Poisoning and Exposure Database. www.aapcc.org.

Distribution of 2,4-D in air and on surfaces inside residences after lawn applications: Comparing exposure estimates from various media for young children. Nishioka, M. G., et al. *Environmental Health Perspectives* (2001): 1185. www.ehponline.org/members/2001/109p1185-1191nishioka/nishioka-full.html

Biological monitoring survey of organophosphorus pesticide exposure among pre-school children in the Seattle Metropolitan area. Lu, C., et al. *Environmental Health Perspectives* (2001): 109. www.ehponline.org/members/2001/109p299-303lu/lu-full.html

