Risks from Lawn-Care Pesticides

Summary of Findings

**PESTICIDE USE**

- EPA permits over 200 different pesticides to be used for lawn care, and these are often mixed together and sold as chemical combinations.

- Approximately 35 pesticides are used in over 90 percent of lawn treatments.¹

- Nearly 80 million pounds of pesticide active ingredients are used on U.S. lawns annually.²

- Lawns cover 30 million acres of the U.S. and the industry that has evolved to take care of lawns is now a multibillion-dollar business.³

- The U.S. Fish and Wildlife Service reported that “homeowners use up to 10 times more chemical pesticides per acre on their lawns than farmers use on crops.”⁴ Homeowners applying their own pesticides may be directly exposed to the chemicals through inhalation, dermal (skin) exposure, and/or ingestion.

- Statistics on the amount of lawn-care chemicals used in Connecticut are not available. Environment & Human Health, Inc. found in an earlier study that among homeowners interviewed, 72 percent used pesticides on their lawns and/or trees.⁵

**PESTICIDE HEALTH EFFECTS**

- Pesticides are intentionally toxic substances. Some chemicals commonly used on lawns and gardens have been associated with birth defects, mutations, adverse reproductive effects, and cancer in laboratory animals.

- Children, infants, and fetuses may be especially vulnerable to the health effects of pesticides before the age of five, when their cells are normally reproducing most rapidly.

“Homeowners use up to 10 times more chemical pesticides per acre on their lawns than farmers use on crops.”⁴

— U.S. Fish and Wildlife Service
• Children may be more susceptible to loss of brain function if exposed to neurotoxins, and may be more susceptible to damage to their reproductive systems.  

• Lawn-care pesticides are not tested for their chronic health effects, unless they are also licensed for food uses. The third most heavily used herbicide in the U. S., MCPP, has not been fully tested for chronic health effects since it is not allowed for use on foods. MCPP is commonly found in weed and feed products.

• EPA has tested only nine of 750 registered pesticides for their effects on the developing nervous system; six of the nine tested were more harmful to young animals than adults.

• Pesticides are composed of active ingredients and inert ingredients. Some inert ingredients may be more toxic than active ingredients and can comprise 90 to 95 percent of the product. Some inert ingredients are suspected carcinogens, while others have been linked to central nervous system disorders, liver and kidney damage, birth defects, and some short-term health effects.

• Increased odds of childhood leukemia, brain cancer and soft tissue sarcoma have been associated with children living in households where pesticides are used. Other childhood malignancies associated with pesticide exposures include neuroblastoma, Wilms’ tumor, Ewing’s sarcoma, non-Hodgkin’s lymphoma, and cancers of the brain, colorectum, and testes.

• Nearly 100,000 accidental pesticide exposures are reported to poison control centers each year. Many of these exposures involve children, providing clear evidence that current efforts to protect children by manufacturers and others are inadequate.

• By-products of the insecticide chlorpyrifos were found in 93 percent of urine samples taken from children ages three to 13. In a separate study, 99 percent of 110 Seattle area children ages two to five had detectable levels of organophosphate residues in their urine.