

# pesticides and human health

## What is a Pesticide?

A pesticide is a chemical or microbiological substance that is designed to kill pests. Pesticides are by definition toxic because they poison the pest. Pesticides include insecticides, herbicides, fungicides and rodenticides. Common examples are RoundUp, Killex, Weed and Feed, and 2,4-D. Remember lawn pesticides do not prevent pest problems, only try to control them once they are present.

## Children and Pesticides

In 2004, the Ontario College of Family Physicians released its finding on pesticides and the adverse risks they pose to human health. Their review of current scientific data shows consistent links to serious illnesses such as cancer, reproductive problems and neurological diseases.

Children are more exposed and vulnerable to the effects of pesticides than adults. They are smaller, their skin is more permeable, and their livers do not excrete as efficiently. Their hand-to-mouth behaviour increases the chance of ingestion, and they often play on exposed surfaces such as lawns and floors. This puts them at higher risk for disease, such as non-Hodgkin's lymphoma, kidney cancer, leukemia and a variety of tumours. People with asthma are especially sensitive to pesticides and at risk of attacks when exposed to even small amounts.

If you use pesticides in your yard, you may be placing your children in danger. The Saskatchewan Environmental Society encourages you to stop and think before using pesticides, and consider what price your family pays for your perfect lawn or garden. Pretty does not equal healthy when it comes to using pesticides.



“Epidemiologic studies suggest that children with asthma may breathe easier if they are exposed to fewer pesticides at home and at school. And parents and school administrators may breathe easier knowing that they are not harming the children's developing nervous systems.”

Dr. Ruth Etzel, MD, PhD, George Washington University School of Public Health and Health Services



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[www.environmentalsociety.ca](http://www.environmentalsociety.ca)  
[info@environmentalsociety.ca](mailto:info@environmentalsociety.ca)  
ph 306.665.1915  
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## Exposure

Pesticides are all around us. They are found in soil and air. They are found in food; a typical apple may be sprayed up to 19 times. They are even found in mother's breast milk. Did you know that if a pesticide is being applied to a lawn it can be detected 15 metres away? Anyone living in an urban area in Saskatchewan breathes air with measurable quantities of 15-19 herbicides in late spring. Pesticides are found in water; drinking water in six Saskatchewan communities was tested and was contaminated with an average of seven pesticides.



don't forget  
about  
fido

Our pets provide us with unconditional companionship and love. We, in turn, provide them with the basic necessities of their lives—food, play and a safe place to take a nap! But have you ever considered just how safe your home is for your pet?

## How to Protect Your Children

- Pesticides are toxic. Be aware when they are being sprayed in your neighbourhood.
- Do not use pesticides on your lawn and garden.
- Ensure items such as children's toys, pet's bowls, clothing, and food are put away before pesticides are applied by you, your neighbour, or a lawn care specialist.
- Keep kids and their toys indoors when pesticides are being applied and afterward, clean exposed surfaces.
- Reduce your exposure to pesticides. Ask questions and be informed regarding precautions, warnings, and wait times.
- Get involved! Work with community organizations to reduce pesticide use in your community.

Accidental exposure to pesticides can result in inactivity, refusal to eat or drink, vomiting or diarrhea, drooling, disorientation, and a lack of coordination and convulsions. Contact your doctor immediately if you suspect your child may be poisoned.

If you use pesticides in your yard, you may be placing your best friend in danger. Some pesticides are proven to cause liver and kidney damage, cancer, reproductive problems and skin irritation. Pets are more vulnerable to the ill effects because they are smaller, closer to the ground, and lick paws and fur and chew toys that may have been exposed to these toxic chemicals. In addition, parts of their bodies that have high chemical absorption rates, like their under arms and rear ends, are often directly exposed to pesticides.

## How to Protect Your Pets

- Don't use pesticides on your lawn and garden.
- Don't spray your pets with pesticides (e.g. flea powder).
- Don't let your pets on lawns that have been sprayed.
- Use traps and/or barriers (nets) to deal with mice, gophers and other pests.

**To learn more about pesticides and your health or alternatives to pesticides, please see:**

<http://www.ocfp.on.ca/docs/pesticides-paper/2012-systematic-review-of-pesticide.pdf>

[www.econet.sk.ca/issues/pesticides/use.html](http://www.econet.sk.ca/issues/pesticides/use.html)

<http://npic.orst.edu/>



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