

What are pesticides?

A pesticide is a chemical used to kill or keep away pests.

Pests can be:

- Insects/bugs, such as termites, mosquitoes, and ticks
- Weeds, such as dandelions, mushrooms, molds
- Mice, rats and other rodents
- Bacteria or viruses that can cause illness

Americans use more than a billion pounds of pesticides each year to fight pests on farm crops, in homes, businesses, schools, parks, hospitals, and other public places.

Pesticides include:

- Insect repellents, baits, and killers (cockroach, ants, etc)
- Flea and tick sprays, powders, and pet collars
- Mice, rat, and other rodent poisons
- Household cleaning products (disinfectants and sanitizers)
- Lawn and garden products, such as weed, insect, and fungus killers
- Swimming pool chemicals



Why be concerned about pesticides?

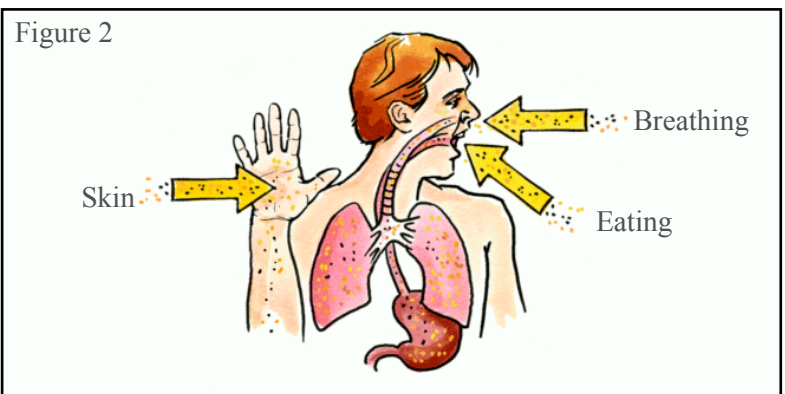
- Negative health effects of pesticides can range from mild symptoms of dizziness and nausea to more serious long-term neurological developmental and reproductive disorders.
- Breathing in pesticides is dangerous because the chemicals are quickly absorbed by the lungs and into the bloodstream causing cough, shortness of breath, and wheezing.
- Pesticides can cause damage to the nose, throat and lungs if enough is inhaled. Continued contact with pesticides can cause lung inflammation leading to long term lung damage such as stiff lungs and decreased ability to get oxygen to the body.

When are we exposed to pesticides?

Pesticides can enter the body through the skin, mouth and/or breathing into the lungs. (See figure 2.) Residues from using pesticides can stay in the home for weeks, months, or even years.

We are exposed to pesticides through:

- Our pets that wear pesticides to keep away fleas and ticks
- Spraying our lawns, trees, or homes to keep away bugs
- The food we eat



<http://npic.orst.edu/health/minexp.html>

Who is most at risk from exposure to pesticides?

Older adults can become increasingly sensitive to pesticides because of changes that occur with age limit the body's ability to handle and eliminate pesticides.

Children are at higher risk from health effects of pesticide exposure because their organs are still developing and their immune system may not be able to protect the child. Children can come into contact with pesticides through contaminated carpet, toys, food, and furniture.

Pregnant Women are at risk because during pregnancy, the baby's brain, nervous system, and organs are developing rapidly and can be more sensitive to the toxic effects of pesticides causing birth defects or behavioral problems. It is important to minimize exposure to pesticides during pregnancy.

People with lung disease such as asthma are at risk because inhaling pesticides can trigger asthma symptoms and bring on an attack.

If you have a question about pesticides, who do you ask?

If you swallow, breathe in, or notice skin burns or rash or feel you might be harmed by exposure to a pesticide, call the **Rocky Mountain Poison Control Center at 1-800-222-1222 or 911** in case of emergency.

- If someone is splashed in the eyes, rinse out the eyes for 15-20 minutes in the shower or under a faucet.
- If a chemical is on the skin, remove wet clothing and rinse the skin for 15-20 minutes.

Using pesticides properly.

- It is important to use pesticides properly, which means according to the directions on the label and your local community guidelines.
- Read the label to make sure the pesticide:
 - Kills the pest you want to get rid of
 - Is used in safe amounts
- **Never use outdoor sprays indoors!**
- Use tick and mosquito repellants to protect yourself against diseases they carry. Never use them around the mouth.

Take action to reduce your exposure to pesticides:

- Certain plants can be used to naturally repel insects in your garden.
- Avoid insect problems by making sure to clear debris around your home or garden.
- Store products out of reach of children and pets.
- Store products in their original containers so you can look at the label for directions.
- Dispose of pesticides properly. Many communities have waste collection programs for unwanted chemicals.
- Wash fruits and vegetables before you eat or prepare them, and consider buying organic produce.

Resources:

1. EPA. *What is a Pesticide?* <http://www.epa.gov/pesticides/kids/hometour/pest.htm>
2. EPA. *10+ Questions about Household Products.* <http://www.epa.gov/pesticides/kids/hometour/questions.htm#1>
3. National Pesticide Information Center. *Pesticides and Human Health.* <http://npic.orst.edu/health/humhealth.html>



The Denver Children's Environmental Health Center promotes collaboration among researchers and communities. Together they advance our understanding of the environment and how it affects our health.

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