



# COLORADO ENVIRONMENTAL PESTICIDE EDUCATION PROGRAM

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## WHAT ARE PESTICIDES?

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This fact sheet describes what pesticides are and defines common kinds of pesticides.

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## What are Pesticides?

People often think pesticide means “insecticide.” Actually, **pesticide** refers to many different kinds of chemicals that are intended to control, destroy, repel, or attract a pest. Pests can be animals (insects, mice, and deer), unwanted plants (weeds), or microorganisms (plant and human diseases). Many pesticides are found around the home. These include bleach, ammonia, and many household cleaners as well as ant and roach sprays and baits, no-pest strips, and mosquito repellent. We even use pesticides on our pets in the form of flea and tick collars, powders, and shampoos.

### Common Kinds of Pesticides

- Antimicrobials - kills microorganisms (such as bacteria and viruses)
- Algicides - controls algae in swimming pools, lakes, canals, and water used industrially or stored
- Attractant - attracts pests (i.e. insect or rodent trap)
- Bactericide – kills bacteria
- Defoliants - causes leaves or other foliage to drop from a plant
- Desiccants - promotes drying of living tissues
- Disinfectant – kills disease-producing microorganisms
- Fumigant – produces gas or vapor intended to destroy pests in buildings or soil
- Fungicide – kills fungi that affect plants and people
- Herbicide – kills unwanted plants
- Insecticide – kills insects
- Insect growth regulators - disrupts the molting and maturity of insects
- Microbials - microorganisms that kill, inhibit or out compete pest, including insects or other microorganisms
- Miticide – kills mites
- Nematicide – kills nematodes
- Pheromones - biochemicals used to disrupt the mating behavior of insects
- Piscicide - kills fish
- Plant growth regulators - substances (excluding fertilizers or other plant nutrients) that alter the expected growth, flowering, or reproduction rate of plants
- Repellents – repels pests like birds or mosquitoes



- Rodenticide – controls mice
- Sivicide - kills woody plants
- Thinners - thins blossoms and small fruits from trees
- Wood preservatives – protects wood

By their very nature, most pesticides create some risk of harm to humans, animals, or the environment because they are designed to kill or otherwise adversely affect living organisms. At the same time, pesticides are useful to society because of their ability to kill potential disease-causing organisms and control insects, weeds, and other pests. In the United States, the [Office of Pesticide Programs of the Environmental Protection Agency](#) (EPA) is chiefly responsible for regulating pesticides. Biologically-based pesticides, such as pheromones and microbial pesticides, are becoming increasingly popular and often are safer than traditional chemical pesticides.

### **What is NOT a pesticide?**

- Drugs used to control diseases of humans or animals (such as livestock and pets); such drugs are regulated by the [Food and Drug Administration](#) (FDA)
- Fertilizers, nutrients, and other substances used to promote plant survival and health are not considered plant growth regulators
- Biological control agents (such as birds and ladybugs), except for certain microorganisms, are exempted from regulation by EPA
- Products which contain certain low-risk ingredients, such as garlic and mint oil, have been exempted from Federal registration requirements, although State regulatory requirements may still apply (not exempt from registration in Colorado)

### **References and Resources**

*What is a Pesticide?*, 2001. U.S. Environmental Protection Agency, Office of Pesticide Programs, [http://www.epa.gov/pesticides/about/#what\\_pesticide](http://www.epa.gov/pesticides/about/#what_pesticide).

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