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# Home and garden pesticides

## General information

Home and garden pesticides are chemicals used to kill or repel pests. They include many common household products that you may not consider particularly hazardous, such as disinfectants and flea collars, and they are of five main types,

- herbicides, which kill plants,
- insecticides, which kill insects,
- fungicides, which kill fungi or mold,
- rat poisons, which kill rats, and
- disinfectants, which kill infectious microorganisms.

All home and garden pesticides are poisonous to some degree. Do not dispose of these toxic substances in the home drain or storm sewer. Share them with someone else who can use them, or save them for a household hazardous waste collection program.

All products included in this fact sheet pose a health hazard if misused, and if disposed of improperly can contaminate drinking water sources and pose a long-term health hazard. All pesticide labels include special signal words—such as “CAUTION,” “WARNING,” or “DANGER”—to alert you to the hazards of using the product. To reduce health hazards and environmental contamination associated with the use, storage, and disposal of home and garden pesticides, buy only as much as you need.

This publication describes the proper way to dispose of general-use pesticides, disinfectants, no-pest strips, moth flakes and mothballs, wood preservatives, pet flea and tick powders, pet collars, and pet shampoos. If you have questions about how to dispose of specific home and garden products not described in this fact sheet, please call your local or county public health department, solid waste department, or call the UW Extension Solid & Hazardous Waste Education Center. To learn about alternatives to pesticide use, contact your county agriculture extension agent.

**Please note:** Toxicity guidelines change rapidly, so do not rely entirely on this fact sheet for information about hazardous materials. For additional advice, contact your county extension office, the Pesticide Program within the Wisconsin Department of Agriculture, Trade and Consumer Protection, or the National Pesticide Information Center.

## Pesticide use categories

Pesticides are classified for “general use” or “restricted use” by the Environmental Protection Agency, according to provisions in the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA). These classifications have been developed to protect people and the environment from inappropriate use of pesticides. Pesticides that are classified as “general use” are relatively safe both for the user and the environment. Pesticides classified as “restricted use” include two groups of products, those that have been banned from use and those that may be used only by individuals who have received special training and certification. Pesticide ratings often change, so if you have old pesticides around the home, be aware that they may now be restricted or banned.

## General-use pesticides

General-use pesticides are products that are currently available to the general public at hardware, grocery, garden, and other community stores. They include rose dust, flea powder, home insect sprays, insect and rodent traps, and weed killers. Anyone can use general-use pesticides relatively safely if they follow the label instructions carefully and observe safety precautions.

## Restricted-use pesticides

Only certified applicators can purchase and apply pesticides in this category. Products containing these pesticides should not be in the home. Recently-manufactured products containing these pesticides include a label warning, "Restricted-Use Pesticide." However, you may have pesticides in storage that have had one or more of their uses cancelled or regulated and are now classified as restricted-use pesticides. For example, since 2005 both Dursban (clorpyrifos) and diazinon have been banned for residential use. Check with your county agriculture extension agent or the National Pesticide Information Center for information on the proper current classification of your pesticides.

## Banned pesticides

Technically, these pesticides fall into the restricted-use category. However, all uses of pesticides in this group have been cancelled according to FIFRA. You won't find these pesticides in recently-produced home products, though they may be present in the home if you have old products or products manufactured for commercial use.

For example, products containing chlordane, DDT, 2,4,5-T (i.e. silvex), or high percentages of arsenic or strychnine have been banned. In particular, check old dandelion and weed killer products for banned 2,4,5-T (silvex) ingredients.

## How to dispose of home and garden pesticides

### Disinfectants

Read the label, as the disposal technique depends on the main active ingredient.

### Old home products

Products labeled "germ proofing" or "germ proof," or products containing chlorophenol, should be carefully packaged in plastic and saved for a household hazardous waste collection program.

### Recently-purchased home disinfectants

Share these with a neighbor, friend, or civic group. If the product is a bathroom cleaner, small amounts can be flushed down the drain with plenty of water. Larger amounts should be saved for household hazardous waste collection.

### Industrial strength disinfectants

Share them, or package and save them for a household hazardous waste collection program.

### Mothballs and flakes

Share them, if practical. To dispose of them, wrap them in plastic and save them for a household hazardous waste collection program.

### No-pest strips

Share them, or wrap and save them for a household hazardous waste collection program. Fully used strips can be wrapped in newspaper and disposed of in municipal garbage collection.

### Pesticide containers

Rinse empty glass, plastic, or metal pesticide containers three times before disposing of them. Add the rinse water to your spray mixture and apply it to sites where it is needed. **Do not pour rinse water down drains or sewers.** Dispose of rinsed containers in the trash.

## Pesticides for general use

Use them up or share them. If you share general-use pesticides, they should be recently purchased and in their original containers with legible labels. If this is not possible, follow the recommended storage procedures and save them for a household hazardous waste collection program. Liquid pesticides that have separated over the winter can still be used after you remix them.

### Waste pesticide storage procedure

- **Carefully place the pesticide in a clear plastic bag or plastic container.**
- **Label the plastic container.**
- **Store it in a safe place, away from children or pets.**

### Disposal of products in aerosol cans (pressurized containers)

- **Do not puncture or incinerate the can.**
- **If the can is partially full, save it for household hazardous waste collection.**
- **If the can is empty, recycle it or place it in the trash.**

## Pet flea/tick collars, powders, and shampoos

Use them up, share them, or place them in clear plastic bags and save them for a household hazardous waste collection program. You may dispose of empty containers in the municipal garbage collection.

## Restricted or banned pesticides

Do not use or share these pesticides. Instead, package them and save them for a household hazardous waste collection program. Follow the waste pesticide storage procedures listed on the container.

## Wood preservatives

Wood preservatives are chemicals used to kill or repel the pests that cause wood decay, and therefore they are classified as pesticides. Read the label to verify the main ingredient and then, depending on the product description, follow the advice below.

**If the product contains metal-based ingredients (such as copper or zinc naphthenate),** use it up, share it with a neighbor, or save it for a household hazardous waste collection program. The impact of these preservatives on humans and the environment is not fully understood, but the product should be treated as a pesticide—in other words, as a hazard to human and environmental health.

### **Note: Pesticides contaminated with Dioxin**

Pesticides containing silvex (also called 2,4,5-T) and wood preservatives containing pentachlorophenol (PCP or penta) are contaminated with a form of dioxin that is a suspected cause of some cancers and birth defects. Package the material carefully and label it for proper disposal.

## For more information

Solid & Hazardous Waste Education Center  
[www4.uwm.edu/shwec/](http://www4.uwm.edu/shwec/)  
 715-346-2793

Wisconsin Department of Agriculture,  
 Trade and Consumer Protection  
[http://datcp.wi.gov/Environment/  
 Clean\\_Sweep/index.aspx](http://datcp.wi.gov/Environment/Clean_Sweep/index.aspx)  
 608-224-4545

National Pesticide Information Center  
<http://npic.orst.edu/>  
 800-858-7378

### **University of Wisconsin-Extension publications**

*Disposing of Hazardous Wastes from the Home: Paints, Solvents, and Other Home Improvement Products (G3454)*

*Disposing of Hazardous Wastes from the Home: Waste Oil and Other Automotive Products (G3456)*



## Household hazardous waste collection programs

Home and farm products that contain chemical hazards can be taken to county-run hazardous materials collection facilities operating Clean Sweep programs. Some counties have permanent collection facilities and others have facilities that operate intermittently. Contact your county office or the Wisconsin Department of Agriculture, Trade and Consumer Protection (608-224-4545) for collection schedules. Alternatively, contact private hazardous waste haulers who will make individual pickups for a fee.



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