

# PESTICIDE SAFETY GUIDE FOR HOMEOWNERS

Steps you can take to protect your family,  
pets, and the environment when using  
pesticides in and around your home

**m** DEPARTMENT OF  
AGRICULTURE



Pesticides are effective tools for controlling unwanted pests, such as insects, plant diseases, or weeds, in your home, garden, or yard. Pesticides, however, can cause serious harm if they are not handled or applied correctly. This guide is intended to help homeowners use pesticides responsibly and minimize risks to people, animals, and the environment.

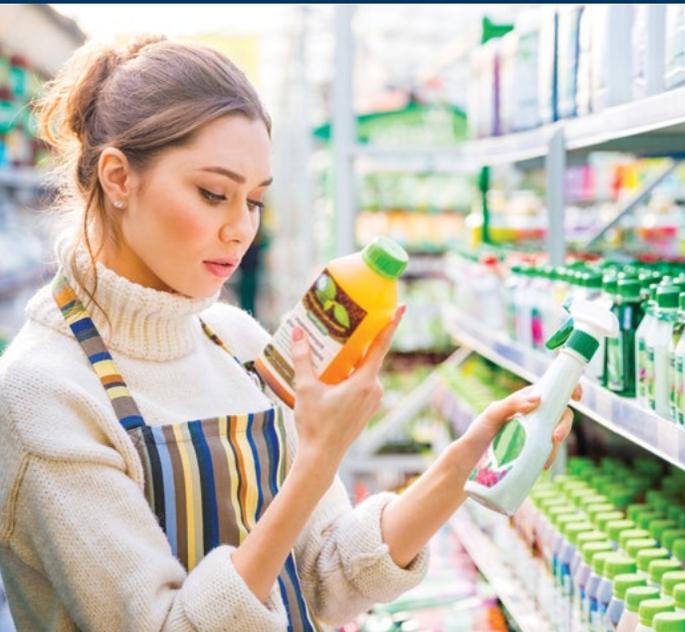


# DO YOU NEED A PESTICIDE?

Before heading to the store to purchase a pesticide, it is important to carefully evaluate your pest problem. First, you will need to identify the pest and determine whether the infestation and the potential damage justify treatment with a pesticide. For help with pest identification, visit the University of Minnesota Extension website (see Additional Resources on back page).

Depending on the pest and the size of the job, a pesticide may not be required. Alternatively, you may prefer to hire a licensed, professional applicator. If you decide to use a pesticide yourself, the next step is to select the right product to apply. See below for information on selecting pesticide products and the steps that follow.

## SELECTING PESTICIDE PRODUCTS



### Choose the right product for the job

It is important to select a product that matches your specific needs with regard to the pest, treatment site, and application timing (e.g., controlling actively growing dandelions in your lawn). Consult the pesticide labels to see what pests (e.g., specific weeds, diseases, or insects) the product is designed to treat, as well as when and where it can be applied. This information can be found under the headings “Uses” or “Kills/Controls.”

### Compare products to reduce risk

Often more than one pesticide product will meet your needs. Consider the toxicity and number of applications required for each product. The following signal words on the front of the label indicate the relative toxicity of a product: DANGER (highly toxic/ flammable/corrosive), WARNING (moderately toxic), or CAUTION (slightly toxic). Additionally, look for environmental impact statements under the “Environmental Hazards” heading to understand risks to pollinators, aquatic organisms, and sensitive plants.

### Buy the right size

Try to purchase pesticides in an amount that will meet your immediate needs. This will reduce the amount of pesticide you will need to store or dispose of.

# BEFORE APPLICATION



## Read the product label

By law, you are required to read and follow the label, and you assume all responsibility for the product's proper and safe use. If you have questions or do not understand any portion of label, call the hotline on the label or contact the University of Minnesota Extension at 612-624-1222 for assistance.

## Inspect your treatment site

Confirm that the site you plan to treat is included as an acceptable use location on the product label, and inspect the surrounding area for any water bodies, sensitive non-target plants, and pollinators.

## Review the Directions

Detailed directions on how to mix and apply the product can be found under the label heading "Directions for Use." Note application rates and the directed frequency and timing of use. Directions may also indicate temperature limits, setback distances from water, or other application restrictions. Following these instructions can help improve the product's effectiveness and prevent adverse environmental impacts.

## Review the environmental hazards

Information concerning the environmental hazards of a pesticide and how to reduce these risks can be found under "Precautionary Statements" on the label. For example, this section may warn you that the product is toxic to bees and should not be applied while bees are foraging. Carefully following the label directions will reduce the risk of injuring non-target plants or animals and polluting ground or surface water.



## Gather personal protective equipment (PPE)

A description of the required PPE can be found under the label heading "Precautionary Statements." For example, you may be instructed to wear a long-sleeved shirt and long pants, socks, shoes, gloves, or eye protection to minimize your exposure to the pesticide.

## Inspect application equipment

If you are using any additional equipment, such as a sprayer, carefully inspect it for any damage and ensure it is in good working order (no leaks, etc.) prior to use. Follow the manufacturer's directions for maintaining your sprayer or other application equipment.

## Do the math

If you are mixing a pesticide from a concentrate, be sure to carefully complete the necessary calculations before you begin. For instance, determine the amount of pesticide needed based on the size of the area to be treated. Applying pesticides at the proper rate is very important and helps ensure the application will be effective without adverse effects.

## Clear the treatment area

Check that bystanders and pets are clear of the area to be treated prior to application. In addition, remove any toys and pet dishes from the area.



## Check the weather

Check to ensure that all weather conditions specified on the label, such as temperature and wind speed, are within the acceptable range before beginning. Products may also indicate not to apply if rainfall is predicted within the next 24 hours.

## DURING APPLICATION



### Wear personal protective equipment

### Mix products according to directions

Follow label rates and only mix the amount of pesticide that will be needed for the job. Do not mix pesticides on hard, impervious surfaces or near storm drains.

### Leave an air gap when filling a sprayer

Do not place the end of the garden hose into the sprayer when filling with water. Leave an air gap between the hose and the pesticide mixture in the sprayer to prevent contamination of the hose and backflow into the water source.

### Follow all label application directions and restrictions

Remember – the label is the law!

### Be aware of your surroundings

Pay attention to changing weather conditions, as well as nearby people, pets, pollinators, sensitive plants, and water bodies.

## AFTER APPLICATION



### Clean equipment

Dispose of any remaining pesticide in the sprayer according to label directions before cleaning. Triple rinse all empty containers and equipment used to apply pesticides and apply the rinsing solution, or rinsate, to the target site (e.g., lawn). Take care not to exceed the maximum application rate for a site when applying rinsate.

### Remove any contaminated clothing and wash thoroughly

Consider all clothing worn during a pesticide application to be contaminated. Store and wash this clothing separately from your household laundry, use hot water and heavy-duty detergent, and rinse your machine afterwards to prevent contamination of the next load. Rinse boots worn during

application (ideally at the application site) and remove them before entering your home.

### Alert others of treatment

Let others (e.g., family, neighbors) know you have applied a pesticide, and post signs in the treated area.

### Follow set re-entry intervals

After a pesticide has been applied, there is often a continued risk for exposure to residues in the treated area. Pesticide labels may, therefore, specify a time interval before people or pets may safely enter the treated area. This information will be noted under “Directions for Use” on the label.

## Follow pre-harvest intervals for food

After a pesticide is applied, you must wait the amount of time specified on the label before you can harvest and eat food like fruits and vegetables. If you do not wait long enough prior to harvest, unsafe levels of pesticide residues may remain on your food. Intervals for specific foods can be found under “Directions for Use” on the label.

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## STORAGE AND DISPOSAL



### Follow label instructions

Information about storing and disposing of unused pesticides and empty containers can be found on the label under the heading “Storage and Disposal.”

### Store in original container with the label attached

### Store in temperature-controlled area to prevent heating or freezing

### Keep out of reach of children

Store pesticide products and equipment in an area out of reach of children and pets.

## Never pour unused pesticides down the drain – This includes both home and storm drains

### Safely dispose of pesticides through local waste collection programs

Homeowners can safely dispose of pesticides by contacting their county for dates, places, and times they can participate in a local household hazardous waste event near them. These collection events are typically free and provide an opportunity for homeowners to properly dispose of unused and unwanted pesticides. More information can be found at: [www.mda.state.mn.us/pesticide-fertilizer/waste-pesticide-collection-program](http://www.mda.state.mn.us/pesticide-fertilizer/waste-pesticide-collection-program)





## ACCIDENTAL EXPOSURE

While precautions should always be taken to prevent any harmful exposures to pesticides, it is critical to know what to do should an accident occur. Directions on how to handle an accidental exposure can be found under the “First Aid” heading on the label. This section may provide specific instructions (e.g., if in eyes, rinse for 15-20 minutes) and direct you to call a doctor or Poison Control Center. In case of emergency, call 911. Have the product label with you when calling poison control or your doctor, or when seeking medical treatment.

If a spill occurs, take actions to control, contain, and clean up the spill immediately while wearing the appropriate personal protective equipment. For example, liquid pesticide spills may be contained using absorbent materials, such as cat litter or newspaper, and dry pesticide spills may be swept up. For questions about spills or to report misuse of pesticide products, contact the MDA.

## ADDITIONAL RESOURCES

All resources listed below are available online.

[Yard and Garden Website](#) – University of Minnesota Extension

[Best Management Practices for Turfgrass Pesticides](#) – Minnesota Department of Agriculture

[Stewardship Guidelines and Best Management Practices for Home and Residential Use of Neonicotinoid Insecticides](#) – Minnesota Department of Agriculture

[Safe Use Practices for Pesticides](#) – National Pesticide Information Center

[Keep Safe: Read the Label First](#) – Environmental Protection Agency

[Tips for Proper Pesticide Application](#) (video) – The Pesticide Stewardship Alliance

Copies of this guide and all MDA best management practices are available at [www.mda.state.mn.us](http://www.mda.state.mn.us).

