

Pesticides - home safety issues

Pesticides are chemicals designed to kill or harm pests. They include insecticides used for insect control, herbicides used for weed control, fungicides used for fungi control and rodenticides used for rodent control.

Household pesticides can be purchased from supermarkets or hardware stores and are designed for use by householders around the home or garden. Household pests can include insects such as flies, cockroaches and mosquitoes or rodents like mice or rats.

Although household pesticides may easily be obtained, this does not mean that they are harmless. They are toxic and if used carelessly they may affect the health of the user, their family, pets or the environment. Always select pesticides that are designed for the pest you wish to treat, follow the label instructions carefully and use the least amount possible.

Choose pesticides wisely

Suggestions include:

- Think about whether your proposed use of pesticide is appropriate. For example, it may not be realistic to expect your property to be completely pest-free. It's possible that the repeated use of pesticides may be more dangerous in the long term than the pests themselves.
- Consider non-chemical pest control measures (see **Alternatives to pesticides** below).
- Make sure you identify the pest before you buy a pesticide. What you assume to be rats in your roof could be possums. If you are having trouble identifying the pest, Museum Victoria offers an identification service. They can be contacted on (03) 8341 7111. An alternative is to employ a licensed pest control operator trained in the identification and management of pests.
- Determine the most effective pesticide for your pest problem and make sure the pesticide you choose is designed for the pest you intend to use it on.
- Opt for the least toxic (or lowest schedule) household pesticide available (see **Pesticide toxicity**).
- Use the least amount of pesticide possible, as all pesticides are toxic and can cause harm if used incorrectly.

You may need professional help

Sometimes you might have a pest problem that is difficult to manage yourself. For these jobs, you should hire a professional licensed pest control operator.

Due to the potential risks involved in handling pesticides, anyone who uses pesticides as part of a pest control business in Victoria must have a pest control operator licence. The Department of Health Victoria issues this licence.

Although pesticides are toxic and there are risks associated with pesticide use, licensed pest control operators are trained to handle, store and apply these substances safely. If the appropriate precautions are taken to minimise exposure to pesticides, the risk to health is greatly reduced.

General pesticide safety

Suggestions when using pesticides at home include:

- Don't stock up on pesticides. Only buy as much as you need.

- Read the manufacturer’s instructions carefully and always use the product strictly as directed. Do not use more than the recommended amount and make sure that you follow all safety precautions.
- Do not mix pesticides. You risk an unexpected and potentially dangerous chemical reaction.
- Store the pesticide in its original container with the lid firmly sealed and keep out of the reach of children: for example, locked in a high cupboard in the garage. **Never** transfer pesticides into containers that children might mistake for food or drink.
- Do not set traps or place bait in areas that are accessible to children, pets or native animals.
- Wear the protective clothing suggested in the manufacturer’s instructions whenever you handle or use the pesticide: for example, rubber gloves.
- Do not eat, drink or smoke while using a pesticide.
- Wash your hands after use.

Safety suggestions – pesticides for indoor use

When you use pesticides indoors:

- Cover or remove bird cages and fish tanks and relocate other pets before using aerosol (spray) pesticides. Many pesticides are extremely toxic to birds and fish.
- Remove (or cover) food, cooking utensils and other personal items from the area to be treated. Thoroughly clean kitchen benches before preparing food.
- Do not apply surface sprays to areas commonly touched by family members, such as furniture. Only use surface sprays in out-of-the-way areas like along skirting boards.
- Leave the room while the pesticide (such as fly spray) is taking effect. When you come back, open the windows to clear the air.
- Ensure pesticides are used in the right place. For example, mice tend to run along skirting boards and under floors. If you put traps or baits out in the open, they may fail to attract the pest and may pose a health risk to family members or pets.
- Clear up any food debris or scraps if you use baits to ensure that the pest is drawn only to the bait. This means you will need less bait.

Safety suggestions – pesticides for outdoor use

When you use pesticides outdoors:

- Ensure all doors and windows are closed before using the pesticide.
- Do not use pesticide outdoors on rainy or windy days. The weather can influence the effectiveness of the pesticide and cause damage to other animals, people and the environment.
- Cover fish ponds, barbeques and vegetable gardens before using the pesticide. Relocate pets and remove their bedding, food and water bowls.
- Do not water your garden after using a pesticide. Check the manufacturer’s instructions for a guide to how long you should wait.
- Observe plants and birds for a few days afterwards to make sure that the pesticide isn’t causing unwanted harm.
- Advise your neighbours if you use any external pesticide treatments.
- If you have a rain water tank, take care to prevent overspray onto guttering and the roof area. If there is any risk of pesticide residue washing into the tank, the collection pipe should be diverted away from the rainwater tank until after the next rainfall.

Pesticide toxicity

Schedules are used to classify pesticides and to control the availability of a product to the general public. They take into account things like how toxic a substance is, how it will be used and what form it takes (whether it’s liquid or spray etc).

Pesticides are either unscheduled or they fall under schedules 5, 6 or 7. Each schedule has a warning, which appears in large contrasting lettering on the label.

Scheduled poison	Label warning	Toxicity level
Unscheduled	Some may display 'Keep out of reach of children'	Lowest (readily available)

Schedule 5	Caution	Slight
Schedule 6	Poison	Moderate
Schedule 7	Dangerous poison	High (even for small doses)

Household pesticide products should not be schedule 7. Always select the least toxic (or lowest schedule) household pesticide available.

Possible harm to the environment

Some pesticides, like space sprays, are fast acting. They knock down the pest then break down quickly. Other pesticides, like surface sprays and termite treatments, linger in the environment for days, weeks or even longer after application.

While most pesticides are designed to only affect the target pest, other insects or animals may sometimes be harmed. For example, a bird may be poisoned if it eats a spider killed by insecticide. That's why it's important to select pesticides that are designed for the pest you wish to treat, follow the label instructions carefully and use the least amount possible.

Alternatives to pesticides

It is important to consider alternative control methods to pesticide use. The key is to make your house and garden unattractive to pests. Some suggestions include:

- **Rodents** – don't put food scraps in the garden for birds or possums. Throw out food left in dog or cat bowls. If you have an aviary, keep birdseed in rodent-proof dispensers. Pick up and dispose of fallen fruit from any fruit trees. Regularly trim plants such as creepers. Keep potential nesting places, such as wood and rubbish piles, off the ground. Consider using traps, but do not lay traps in areas where children, pets or native fauna could be harmed.
- **Flies** – keep a tight lid on outdoor rubbish bins. Put garden compost in a well-sealed container. Flies don't like pyrethrum, which is a common ingredient in fly spray. Consider planting pyrethrum daisies near your front and back doors to repel flies and other insects. Hang flytraps or fly paper outside in areas where flies tend to gather.
- **Fleas** – wash pets, their blankets and other bedding regularly. See your veterinarian for treatment options for your pet.
- **Cockroaches** – remove any sources of water such as in the base of the shower, in sinks or in dishes left in the kitchen. Cockroaches need a daily source of water to survive. Don't leave food scraps on benches or in pet bowls. Keep rubbish in a bin with the lid on tightly. Don't keep piles of wood chips or mulch near the house. Seal cracks and crevices where cockroaches may get into your home.
- **Mosquitoes** – drain any collected puddles of water, as this is where mosquitoes breed. Change the water in birdbaths at least once a week. Run your swimming pool filter for a few hours each day. Regularly clear your gutters of leaves and other debris that may collect water. Keep larvae-eating fish in ornamental ponds – see an aquarium dealer for suggestions on appropriate fish.

How pesticides can affect your health

Pesticides can take the form of a solid, liquid, powder or spray. The form will influence the way in which the pesticide can enter your body and potentially affect your health. Pesticides can enter your body if you:

- Swallow pesticide, eat, drink or smoke after handling pesticide, or consume food or drink that was exposed to pesticide.
- Have skin contact with pesticide – directly, through pesticide soaked clothing, or by touching pesticide-treated surfaces.
- Inhale pesticide vapours, sprays or dust.
- Rub your eyes after handling pesticide or cause pesticide to come into direct contact with your eyes.

If you minimise your exposure and take care when you come into contact with pesticides, you will reduce the chance of damaging your health.

Pesticide poisoning

Poisoning, as a result of exposure to pesticides, may occur shortly after a single exposure (acute poisoning) or gradually after repeated exposures over a period of time (chronic poisoning).

Acute poisoning

Symptoms may begin shortly after exposure and may include:

- Headache
- Dizziness
- Nausea
- Vomiting
- Stomach cramps
- Diarrhoea
- Blurred vision
- Excessive eye watering
- Sweating
- Excess saliva.

More severe poisoning may also lead to changes in heart rate, chest tightness, muscle weakness and twitching, difficulty breathing and walking, constricted pupils and incontinence.

In very severe cases of poisoning, seizures and unconsciousness may occur.

Chronic poisoning

Symptoms may occur gradually, after repeated exposures over a period of time, and may include:

- Muscle weakness
- Fatigue
- Difficulty concentrating and remembering things
- Generally feeling unwell.

The type of symptoms you have, how long they last and how severe they are may vary depending on factors such as:

- The type and concentration of the pesticide used
- The degree of exposure
- The health and age of the person exposed.

Many of the potential symptoms are not specific to pesticide poisoning – they may be due to other conditions, such as illness or allergy. You should always consult your doctor for an accurate diagnosis of symptoms.

Some people are more likely to be affected

Although anyone may be affected by exposure to pesticides, certain groups are particularly susceptible including:

- Unborn babies and young children
- Pregnant and nursing women
- Elderly people.

Poisoning – first aid

If you, or anyone in your family, develop symptoms soon after exposure to pesticides:

- Contact a doctor immediately
- Call the Victorian Poisons Information Centre on 13 11 26.

Remember to provide details of the exposure including the product name if possible.

Where to get help

- Your doctor
- Emergency department of your nearest hospital
- In an emergency, call triple zero (000)
- Victorian Poisons Information Centre Tel. 13 11 26 – seven days a week, 24 hours a day – for advice about poisonings, suspected poisonings, bites and stings, mistakes with medicines and poisoning prevention advice.
- Department of Health Victoria Pest Control Program Tel. 1300 887 090
- Licensed pest control operator

Things to remember

- Consider alternative methods (other than pesticides) to make your house and garden unattractive to pests.
- Always select pesticides that are designed for the pest you wish to treat.
- Follow the label instructions carefully (especially the safety instructions) and use the least amount possible.
- Seek urgent medical attention if you suspect pesticide poisoning.

This page has been produced in consultation with, and approved by:

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