



**Safer and Healthier
Gardening**

Gardening is one of the most popular leisure activities in New Zealand. It lets people enjoy nature and grow their own produce.

However, despite its quiet, healthy image, there are some risks involved in gardening. This simple safety guide is designed to help you reduce these risks and get even more enjoyment from your garden.

Organisms in garden soil, mulches, compost or potting mix

Wash hands thoroughly after working with soil or handling soil-type products, mulches, compost or potting mix. Although soil is rich with many organisms that help the growth of healthy plants, there are also unwelcome organisms, such as tetanus and legionella. These can be found in garden soils and composted organic material, including commercially prepared products such as potting mix and soil conditioners. These products can be reinfected even after sterilisation.

Legionella

Legionellosis (or Legionnaires' disease) is a form of pneumonia. It's caused by a bacteria called legionella, an environmental organism that lives in moist conditions. You can catch the disease by inhaling airborne droplets or particles containing the bacteria. There has been no reported person-to-person spread of legionellosis.



The illness may be mild or severe and can sometimes be fatal. It is more common in older people, particularly if they smoke, have poor immunity or have a chronic illness, and those with compromised immune systems are at increased risk of infection. To reduce the risk of exposure to legionella:

- ✂ minimise the amount of dust when working in the garden
- ✂ water your garden and indoor plants using a gentle spray
- ✂ read the warning on bags of composted potting mixes
- ✂ wear gloves when handling soil, mulches, compost or potting mix
- ✂ wear a face mask when opening bags or using potting mix and compost to avoid inhaling dust
- ✂ open bags of soil products or composted potting mixes slowly and away from the face
- ✂ dampen potting mixes before use
- ✂ make sure the working area (glasshouse, potting shed) is well ventilated
- ✂ avoid touching your face when handling soil, compost or potting mix
- ✂ always wash your hands after handling soil, compost or potting mix, even if gloves have been worn.



See your doctor immediately if you develop a flu-like illness that is worsening. Antibiotics are effective against legionellosis if given early.



Tetanus

Tetanus is a serious illness at any age. Animal manures may contain this organism and it can be picked up through broken skin and puncture wounds.

- 🌿 Keep cuts, scratches and grazes covered while working in the garden. Make sure that any injury is immediately and thoroughly cleaned.
- 🌿 If you have sustained a dirty wound or soiled an existing one during gardening: contact your local general practice team or community pharmacist to see if you need to be vaccinated or receive treatment. If you have received 3 or more doses of tetanus-diphtheria vaccine and it has been more than 5 years since the last dose, a booster may be recommended. Further vaccination may also be recommended if there is any doubt about when you were vaccinated.
- 🌿 Tetanus vaccine has been given to children since 1960. If you have not had a course of three doses of tetanus and diphtheria vaccine as a child or adult, see your local general practice team. Adults need a booster of tetanus-diphtheria vaccine at ages 45 and 65.

Controlling pests and diseases

Sometimes gardeners use chemical or non-chemical mixes to control pests and diseases. These can be hazardous if used, stored or disposed of incorrectly. Insecticides, herbicides and fungicides can help keep your garden looking great, but there are other techniques you can use.

“Companion planting” works on the theory that certain kinds of plants grow best when planted together.



Some plants have a naturally deterrent effect on predators, and other plants attract helpful insects. For more information about these techniques, consult gardening books and magazines or contact your local gardening centre.

To reduce the risks from chemicals:

- ✂ Purchase only the quantity you need to do the job and avoid storing large quantities or mixtures of chemicals. Store incompatible chemicals separately.
- ✂ To avoid fires and adverse chemical reactions, keep oxidising agents, such as nitrate fertilisers and chlorine-based swimming pool chemicals, separate from flammable materials, such as methylated spirits and kerosene, and from certain fungicides (EDBC) which, when wet, will generate heat.
- ✂ Make sure that all chemicals are properly labelled and stored in their original containers, preferably with child-proof caps. Keep them well out of the reach of children and away from food.
- ✂ Follow the mixing and application instructions on the label. Wear protective clothing when advised and use any other necessary protective equipment, such as a respirator.
- ✂ Apply the spray when the air is still to avoid the chance of spray damage to other areas of the garden or neighbouring properties.
- ✂ Ask your local authority about the safest way to dispose of unused chemicals. They should not be poured into waste-water or stormwater drains.



Poisonous plants

Some common garden plants are poisonous. They can cause a variety of reactions, from mild skin irritation to a severe or even fatal response, although few people do die as a result of plant poisonings. Current medical treatment is highly successful as long as help is found quickly.

There is no simple way to identify poisonous plants. Some plants are entirely poisonous (or toxic), while other plants concentrate their poison in certain places, such as leaves or flowers. Some plants are toxic to animals but not to people. Small quantities of some plant toxins can have a severe effect, while others only irritate if eaten in very large quantities.

- 🌿 Children should be taught not to sample or play with leaves, berries, bulbs or flowers.
- 🌿 Store bulbs and seeds out of sight and out of reach of young children.
- 🌿 Keep the number of the National Poisons Centre – phone 0800 POISON (0800 764 766); this is a 24-hour service – in a place you can find in a hurry. It is also listed with Emergency Services in the telephone book.

Insect stings and bites

Bees and wasps

To avoid stings:

- 🌿 avoid wearing perfumed products in the garden (eg, aftershave, highly fragrant deodorants, hair and skin products)
- 🌿 cover yourself with appropriate clothing, including gloves and footwear.



If you are stung by a bee, try not to squeeze the venom bag at the outer end as you remove the sting. (A wasp does not leave its sting behind.)



For bee and wasp stings:

- 🌿 applying an ice pack to the area may help reduce pain and swelling
- 🌿 if any pain or irritation does not settle, or if the area is red and swollen, seek medical attention
- 🌿 if there is a severe reaction to the sting, such as a rash, extreme swelling or difficulty with breathing, see a doctor immediately or call for an ambulance
- 🌿 if you react badly to stings, discuss the problem and possible solutions with your doctor.

Spiders

Some spiders found in New Zealand gardens are poisonous.



- 🌿 Disturbing the black garden tunnel-web spider can result in a painful bite and localised swelling. Wear gloves when working around woodpiles and retaining walls, where you may see the spider's thick, white, sheet-like webs.
- 🌿 The poisonous katipō and redbacked spiders are very rare.

If you are bitten and suspect the spider may have been poisonous, call the National Poisons Centre – phone 0800 POISON (0800 764 766); this is a 24-hour service.

For more information, see *Spiders in New Zealand*, code HE1424



Garden machinery

While gardening can be a quiet and peaceful time, the equipment used in some gardening activities can damage hearing and cause other injuries. If used incorrectly or poorly maintained, lawnmowers, chainsaws, scrub cutters, trimmers, leaf shredders and wood chippers can all cause physical injury.

- ✔ Keep your machinery in good repair and pay particular attention to engine covers and exhaust systems. Make sure any guards provided for the blade are fitted correctly.
- ✔ When buying new garden equipment, choose machines with a low noise level and check that silencers and covers are fitted properly.
- ✔ Before you start, clear the working area (lawn, fence line, footpaths, and so on) of stones or other objects that may be thrown by the machinery.
- ✔ Wear protective equipment when using machinery (eg, an adequate grade of ear muffs or plugs, goggles and solid footwear, such as shoes or boots).
- ✔ Follow the operating instructions for any machinery you use. Make sure you have an isolating transformer for electrical garden equipment or machinery.
- ✔ When you hire equipment, the hirer is obliged to provide you with safety information and ensure that you are familiar with this safety information and any precautions that need to be taken.
- ✔ Avoid using noisy equipment at unsociable hours or for extended periods.

For more information, see *Noise around the Home*, code HE1122.





The burning question

Garden fires and incinerators can smoulder for long periods, giving off thick, smelly, unpleasant smoke. Plastics and treated timbers included in the fire can produce toxic fumes.

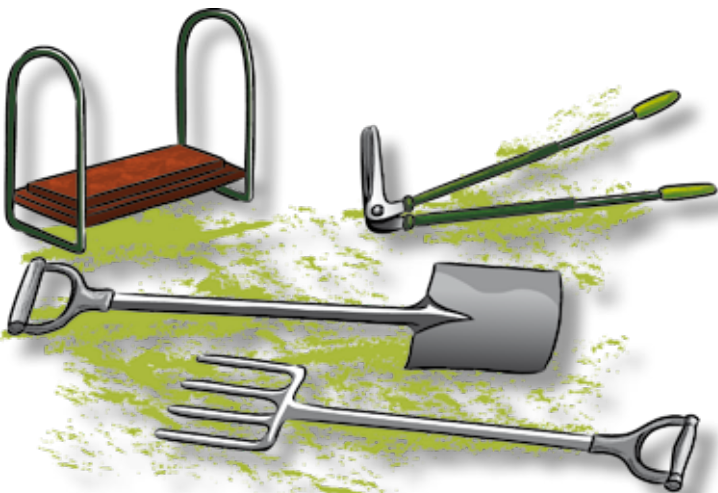
- 🌿 Minimise your need to burn by composting garden waste, recycling as many materials as possible and disposing of other rubbish at a landfill or tip.
- 🌿 Check whether your local authority has by-laws or rules in regional or district plans controlling the open burning or incineration of garden rubbish.

Avoiding injuries in the garden

Falls and sprains are common garden injuries. To help prevent these, wear non-slip footwear and keep paths free of moss, algae and fallen leaves.

Regular walking or swimming will usually keep you agile and fit enough to tackle most gardening jobs with little risk of injury or strain. Gardening activities alone can keep you fairly fit, but if you build up slowly to the bigger gardening tasks, you won't have so many aches and pains at the end of the day.





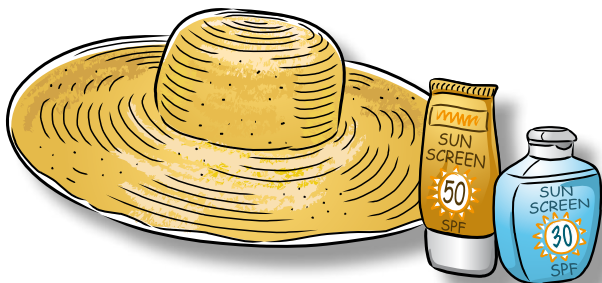
Protecting your back

Many gardening activities require lifting, kneeling or bending. To protect your back when you are working in the garden:

- 🌿 place your feet apart for good balance and make sure you have a sound grip and footing
- 🌿 bend your knees instead of your back, then lift gradually and smoothly by straightening your knees
- 🌿 keep the load as close to you as possible and turn by moving your feet, not twisting
- 🌿 use long-handled tools so you don't have to bend
- 🌿 work at ground level by resting on both knees and your free hand. Move frequently so that you don't have to stretch or reach.

Most garden centres stock a range of useful gadgets (eg, kneelers, long-handled tools) that make gardening easier for all ages and reduce the chance of injury.





Sunsmart

Melanoma is an increasing risk for New Zealanders who spend time in the sun. The critical period is from September to April between 10 am and 4 pm.

- 🌿 At these times, plan to work in shadier areas and stay out of the sun as much as you can.
- 🌿 Wear a wide-brimmed hat and a shirt with sleeves. Fifteen minutes before you go outdoors, apply a broad-spectrum SPF30+ (as a minimum) sunscreen to protect any exposed skin. Reapply the sunscreen every two hours as required.
- 🌿 Show your doctor any moles or coloured skin lesions that grow or change in size, shape or colour.

Gardening is a relaxing, healthy and creative activity that also reflects our concern for the environment. Your common sense and these simple steps will help you to enjoy its pleasures into the future.

This resource is available from www.healthed.govt.nz or your local Authorised Provider.

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Te Whatu Ora
Health New Zealand

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