Chemicals and spray drift
Summary

- If you use chemicals, think about the steps you can take to reduce the risk of chemical drift.
- Dispose of unwanted chemicals and chemical containers properly to avoid contaminating the environment.
- There are a number of agencies you can contact if you have concerns about sprayed chemicals.

Chemicals are sprayed to control pests and diseases on farms, around the home and in gardens, parks and reserves. When chemicals are used, droplets are produced that can remain suspended in air and may be carried by wind away from the target area. This is known as ‘spray drift’.

Chemical spray drift cannot always be contained or controlled completely, despite correct application. Chemical sprays may drift over neighbouring properties or waterways and can affect human health, animals or the environment. Spray drift can affect household and farm water supplies, including tank water.

If you are concerned that you or those around you may have been exposed to chemical spray drift, there are a number of agencies you can contact for help. Their numbers are listed in the Where to get help section of this fact sheet.

In an emergency, dial triple zero (000) to contact police, fire and ambulance emergency services.

Causes of chemical spray drift

Activities that can result in chemical spray drift include:

- spraying agricultural chemicals – such as pesticides on farms, gardens and roadside reserves using tractors, boom sprayers or by aerial spraying
- disinfecting animal houses – such as poultry sheds. Speak with your local fumigation expert
- Fumigating warehouses – for example, grain stores.

Public health concerns and chemicals

Drifting chemicals can affect the public by causing:

- Actual health effects although these are usually short term and happen rarely
- Stress or anxiety about possible longer-term health effects
- Concerns about the odour or general air pollution.

Health impacts of exposure to chemicals

The potential health impacts of exposure to chemical spray drift depend on:

- how close the person is to the application of the chemical
- the amount of drift
- the toxicity of the chemical
- the nature and extent of exposure through inhalation or skin
- the duration of exposure.

After contact with chemical sprays

If you come into contact with chemical sprays:

- Wash off any spray that has landed on your skin.
- Change into clean clothes.
- Contact the Victorian Poisons Information Centre on 13 11 26 for urgent advice about treating any symptoms of poisoning.
- Contact your local doctor if you are concerned about any effects on your health.
- Contact your local council’s environmental health officer for assistance with any further actions.
- If the chemical contact occurred at your workplace, contact your local office of WorkSafe Victoria.
- If you know which chemical you were exposed to, contact the manufacturer or supplier for advice. Ask them for a copy of the Material Safety Data Sheet (MSDS) for that chemical.

Organisations to contact about spray drift

If you are concerned that chemical sprays may be affecting public health, animals or the environment, you can get further information and assistance from:
• your local council’s environmental health officer – if you are concerned that the sprays may affect public health. This would include people being directly exposed to spray drift or concern about spray drift affecting private drinking water or vegetable gardens
• Department of Primary Industries, Customer Service Centre – if you are concerned that the sprays may affect livestock or agricultural crops. This may include concerns about spray drift affecting your commercial produce
• WorkSafe Victoria – if you are concerned about workplace practices that may affect the health of workers or the public onsite or on adjoining properties. WorkSafe Victoria has the power to investigate occupational health issues that occur as a result of work activities
• Environment Protection Authority (EPA) – if you are concerned that sprays may cause pollution of waterways, air or land
• ChemClear – for the management of unwanted rural or veterinary chemicals
• Sustainability Victoria, Detox Your Home – for information on detoxing your home
• Poisons Information Centre – for advice about personal exposure and appropriate first aid
• Department of Health Environmental Health Unit – for general information about chemicals.

Chemical sprays and tank water

If you use tank water and chemical spray lands on your roof, disconnect the collection pipe from your rainwater tank to prevent any chemicals from entering the tank. Divert water away from the tank until it has rained or until the roof has been cleaned.

If you think your tank has been contaminated, contact your local council’s environmental health officer for advice.

Standards for chemical sprays

If you use chemical sprays, you should be familiar with the Guide to using agricultural chemicals in Victoria. Contact the Department of Primary Industries (DPI) Customer Service Centre or DPI Chemical Standards Officer for information about agricultural spray application methods.

Things to consider when spraying chemicals

Before you spray chemicals, you are required to consider:

• how close you are to sensitive areas such as schools, hospitals, sensitive crops, waterways, livestock, organic farms and bee foraging areas
• providing prior notification to dwellings adjoining the property being sprayed to enable neighbours to take preventative measures. The notification should include the type of chemical being used, when (date and appropriate time), steps taken to avoid spray drift and a contact number
• the correct application as chemicals must be applied in accordance with labelling directions
• the toxicity of the chemical you intend to use
• the weather conditions, for example don’t spray if it’s too windy or if it’s completely still
• the size of the chemical droplets; how far will they drift?
• whether your application equipment is in good condition and is appropriate for local conditions
• whether it is the ideal season to spray. Some pests are resistant to chemicals at certain times of the year.

Disposing of chemical containers

Environmental contamination can occur if containers are not stored or disposed of correctly. When disposing of chemical containers, contact:

• your local council for information about chemical collection days
• the chemical supplier
• ChemClear for the management of unwanted agricultural or veterinary chemicals.

Where to get help

• In an emergency, call triple zero (000)
• Your local council’s environmental health officer
• Department of Primary Industries Customer Service Centre Tel. 136 186
• WorkSafe Victoria
  – Advisory Service Tel. 1800 136 089 or (03) 9641 1444
  – Emergency Response Line Tel. 132 360 (24 hours, 7 days)
• Environment Protection Authority Tel. 1300 EPA VIC (372 842) or (03) 9695 2777 (24 hours, 7 days)
• ChemClear Tel. (02) 6230 4799
• Sustainability Victoria, Detox Your Home Tel. 1800 353 233
• Victorian Poisons Information Centre Tel. 13 11 26 (24 hours, 7 days) – for advice about poisonings, suspected poisonings, bites and stings, mistakes with medicines and poisoning prevention advice
• Department of Health Environmental Health Unit Tel. 1300 761 874

Things to remember

• If you use chemicals, think about the steps you can take to reduce the risk of chemical drift.
• Dispose of unwanted chemicals and chemical containers properly to avoid contaminating the environment.
• There are a number of agencies you can contact if you have concerns about sprayed chemicals.

Send us your feedback

• Rate this website
• Your comments
• Questions
• Your details
Environmental health basics

- After a flood – animal and insect related hazards
  When returning to a flood-affected area, remember that wild animals, including rats, mice, snakes or spiders, may be trapped in your home, shed or garden...

- After a flood – returning home safely
  When returning to your home after a flood, take precautions to reduce the possibility of injury, illness or disease...

- Air pollution
  Around 75 per cent of Melbourne’s air pollution is caused by vehicle emissions...

- Allergies explained
  Allergy occurs when the body overreacts to a ‘trigger’ that is harmless to most people...

- Disease clusters
  Disease clusters are rare but can cause community concern about the possible effects of exposure to environmental hazards...

- Emergencies - floods
  You and your family should work out an emergency plan in case of flood...

- Food safety and storage
  High-risk food should be kept at 5 °C or below, and above 60 °C to avoid the temperature danger zone and food poisoning...

- Hazardous waste
  It can be dangerous to dispose of hazardous wastes through regular rubbish collections...

House and garden

- Asbestos and your health
  When asbestos fibres become airborne, people working with asbestos may inhale particles which remain in their lungs...

- Asbestos in the home
  Asbestos fibres breathed into the lungs can cause a range of health problems including lung cancer and mesothelioma...

- Bedbugs
  Bedbugs have highly developed mouth parts that can pierce skin...

- Edible gardens - saving water
  Saving water in the garden not only saves money, but also helps protect the environment...

- Gardening safety
  Gardening is an enjoyable form of exercise, but you need to take care...

- Gas heating - health and safety issues
  If you service your gas heater regularly and use it correctly, it will be safe and economical to use...

- Greywater - recycling water at home
  When handled properly, greywater can be safely reused for the garden...
**Hazardous waste**
It can be dangerous to dispose of hazardous wastes through regular rubbish collections.

**Mosquitoes - protect your home a checklist**
Use this simple checklist and take action to prevent mosquitoes from entering your home. The best protection from mosquito-borne diseases is to avoid mosquito bites.

**Mould and your health**
The way to control indoor mould growth is to control the source of moisture.

**Passive smoking**
Passive smoking means breathing other people's second-hand tobacco smoke. Passive smoking increases the risk of serious illness in both children and adults.

**Pest control in the home**
If you use pesticides to control pests around the house, make sure you use as little as possible.

**Pest control services**
If you have pest problems that you cannot manage yourself, you may need to hire an authorised pest control operator.

**Sewage overflows at home**
Sewage contains harmful microorganisms such as bacteria, viruses and protozoa.

**Wood fires and breathing problems**
The smoke from wood fires can affect air quality and may affect people's health.

### Chemical and metal pollutants

- **Hazardous waste**
  It can be dangerous to dispose of hazardous wastes through regular rubbish collections.

- **Arsenic mine tailings and health**
  Mine tailings near goldmines may contain high levels of arsenic.

- **Cadmium**
  Low-level exposure to cadmium over a long period of time may cause health effects because cadmium can accumulate in the body.

- **Chemicals and spray drift**
  Sprayed chemicals can drift over neighbouring properties or water sources, and can affect human health, animals or the environment.

- **Copper chrome arsenic (CCA) treated timber**
  CCA treated timber should not be used to build children's play equipment, patios, new garden furniture, decking or handrails.

- **Farm safety and handling agrochemicals**
  To reduce risks on the farm, use hazardous chemicals according to manufacturer guidelines or replace them with less dangerous options.

- **Lead exposure and your health**
  Long-term exposure to low levels of lead may produce symptoms including irritability, lack of energy and loss of appetite.

- **Look after your health at harvest time**
  Farmer health, wellbeing and safety are often neglected when facing the pressures of harvest. Simple safety measures can dramatically reduce the risk of injury and illness.

- **Mercury exposure and poisoning**
  Preventing or minimising exposure to mercury in your environment is the best way to reduce the risk of mercury poisoning.

- **Mercury in fish**
  Pregnant women and young children should limit consumption of fish that contain high levels of mercury.

- **Pest control in the home**
  If you use pesticides to control pests around the house, make sure you use as little as possible.

- **Pest control services**

---

betterhealth.vic.gov.au
If you have pest problems that you cannot manage yourself, you may need to hire an authorised pest control operator.

Air and water quality

- **Air pollution**
  
  Around 75 per cent of Melbourne's air pollution is caused by vehicle emissions.

- **Beaches and water quality**
  
  Water quality of natural water sources, such as beaches and rivers, can vary greatly. Keeping a lookout for poor water quality (such as water that is discoloured, murky or smells unpleasant) will help.

- **Cleaning up ash after a fire**
  
  After a fire, many homes may be affected by ash residue from smoke. This ash can be harmful, particularly for children or people with heart or lung conditions. This factsheet has tips and advice for.

- **Dental care - fluoride**
  
  Fluoride in your drinking water is like a constant 'repair kit' for your teeth.

- **Greywater - recycling water at home**
  
  When handled properly, greywater can be safely reused for the garden.

- **Harmful algal blooms**
  
  Some types of blue-green algae produce toxins that can harm humans and animals when swallowed, inhaled or touched. People and pets should not enter the water at locations affected by blue-green algae.

- **Healthy swimming (video)**
  
  We can keep our pools safe, healthy, and most importantly fun.

- **Legionnaires' disease**
  
  Legionnaires' disease is a rare form of pneumonia.

- **Look after your health at harvest time**
  
  Farmer health, wellbeing and safety are often neglected when facing the pressures of harvest. Simple safety measures can dramatically reduce the risk of injury and illness.

- **Passive smoking**
  
  Passive smoking means breathing other people's second-hand tobacco smoke. Passive smoking increases the risk of serious illness in both children and adults.

- **Smoke and your health - protect your health (video)**
  
  Smoke and your health - science summary (video)

- **Swimming - keeping the water clean**
  
  There are simple steps for all visitors to follow to keep pool water clean for healthy swimming.

- **Water from natural resources**
  
  Drinking untreated water, such as creek water, bore water and sometimes even rainwater can lead to illnesses including gastroenteritis.

- **Water quality in tanks, bores and dams**
  
  Make sure your private drinking water supply is safe.

- **Wood fires and breathing problems**
  
  The smoke from wood fires can affect air quality and may affect people's health.

Food quality and safety

- **Avoid food poisoning - Cook Safe (video)**
  
  Learn how to prepare and cook food safely at home.

- **Avoid food poisoning - Store Safe (video)**
  
  Learn how to store food safely in your fridge at home.

- **Eggs**
  
  The humble egg is a powerhouse of nutritional goodness. Eggs are full of things your body needs. They are a great source of protein, antioxidants, vitamins and...
minerals (such as vitamin A, vitamin D...

- **Fishing - eat your catch with care**
  
  People who fish in the Lower Yarra and Maribyrnong rivers need to be careful about eating their catch because of the risk of chemical exposure.

- **Food allergy and intolerance**
  
  Food allergy is an immune response, while food intolerance is a chemical reaction.

- **Food - pesticides and other chemicals**
  
  Chemicals such as pesticides, antibiotics and hormones are used to boost food production and ensure adequate food supply.

- **Food poisoning - prevention**
  
  You can minimise the risk of food poisoning by taking simple precautions.

- **Food safety and storage**
  
  High-risk food should be kept at 5 °C or below, and above 60 °C to avoid the temperature danger zone and food poisoning.

- **Travel health and safety tips (slideshow)**
  
  We all love travelling to new and exotic places, but unfortunately illnesses and unforeseen events can ruin the trip of a lifetime. With a little effort, take a few of these simple precautions to make...

### Technology and man-made risks

- **Asbestos and your health**
  
  When asbestos fibres become airborne, people working with asbestos may inhale particles which remain in their lungs.

- **Cancer and asbestos**
  
  Long-term exposure to asbestos is a cause of lung cancer and other serious illnesses.

- **Electromagnetic fields (EMF) and health issues**
  
  The effect of electromagnetic fields (EMF) from power lines and other sources is a controversial issue.

- **Legionnaires' disease**
  
  Legionnaires' disease is a rare form of pneumonia.

- **Mobile phones and your health**
  
  Using a mobile phone while driving greatly increases the risk of traffic accidents.

### Bushfires, floods and extreme weather

- **After a flood – animal and insect related hazards**
  
  When returning to a flood-affected area, remember that wild animals, including rats, mice, snakes or spiders, may be trapped in your home, shed or garden.

- **After a flood – returning home safely**
  
  When returning to your home after a flood, take precautions to reduce the possibility of injury, illness or disease.

- **Bushfire aftermath - safety tips**
  
  Houses, sheds and other buildings or structures burnt in a bushfire can leave potential health hazards.

- **Bushfire preparation advice**
  
  Being prepared for a bushfire helps you cope better in an emergency.

- **Bushfires and water tanks**
  
  Debris, smoke, ash and dead animals from a bushfire can contaminate water tanks.

- **Bushfire smoke**
  
  Bushfire smoke can reduce air quality in rural and urban areas, and may affect people's health.

- **Cleaning up ash after a fire**
  
  After a fire, many homes may be affected by ash residue from smoke. This ash can be harmful, particularly for children or people with heart or lung conditions. This factsheet has tips and advice for...

- **Emergencies - floods**
You and your family should work out an emergency plan in case of flood...

- **Extreme heat (video)**
  Extreme heat can affect anyone, including the young and healthy.

- **Heat stress and heat-related illness**
  Heat kills more Australians than any natural disaster. Find out how you can treat and prevent heat-related illness.

- **How to cope and stay safe in extreme heat**
  Know the effects of extreme heat, who is at risk and how you can prepare yourself and others.

- **Mould and your health**
  The way to control indoor mould growth is to control the source of moisture.

- **Sewage overflows at home**
  Sewage contains harmful microorganisms such as bacteria, viruses and protozoa.

- **Smoke from planned burns**
  Bushfire smoke can reduce air quality in rural and urban areas, and may affect people’s health. Planned burns are an important part of reducing the risk of bushfires.

- **Survive the heat**
  How to cope and stay safe in extreme heat.

**Climate change**

- **Beaches and water quality**
  Water quality of natural water sources, such as beaches and rivers, can vary greatly. Keeping a lookout for poor water quality (such as water that is discoloured, murky or smells unpleasant) will help.

- **Climate change and health**
  The effects of climate change will have a serious impact on the physical and mental health of people around the world.

- **Edible gardens - saving water**
  Saving water in the garden not only saves money, but also helps protect the environment.

- **Urban flash floods - FAQs**
  Urban flash flooding can happen quickly and without warning. Heavy rain causes runoff to collect in dips, car parks and roads, and there is a risk of contamination, injury and disease.

**Public health and disease control**

- **Disease clusters**
  Disease clusters are rare but can cause community concern about the possible effects of exposure to environmental hazards.

- **Harmful algal blooms**
  Some types of blue-green algae produce toxins that can harm humans and animals when swallowed, inhaled or touched. People and pets should not enter the water at locations affected by blue-green algae.

- **Healthy swimming (video)**
  We can keep our pools safe, healthy, and most importantly fun.

- **Mosquitoes can carry diseases**
  You can reduce the risk of mosquito bites if you get rid of potential mosquito breeding sites around your home.

- **Mosquitoes - mozzie-proof your holiday a checklist**
  Use this simple checklist and take action to prevent mosquitoes from spoiling your holiday. Mosquitoes can carry diseases be prepared and avoid mosquito bites.

- **Mosquitoes - protect your home a checklist**
  Use this simple checklist and take action to prevent mosquitoes from entering your home. The best protection from mosquito-borne diseases is to avoid mosquito bites.

- **Needlestick injury**
A needlestick injury means the skin is accidentally punctured by a used needle. Diseases that could be transmitted by a needle or needlestick injury include human immunodeficiency virus (HIV).

- Travel health and safety tips (slide show)

We all love travelling to new and exotic places, but unfortunately illnesses and unforeseen events can ruin the trip of a lifetime. With a little effort, take a few of these simple precautions to make...

Related Information

- Farm safety and handling agrichemicals
  To reduce risks on the farm, use hazardous chemicals according to manufacturer guidelines or replace them with less dangerous options...

- Cadmium
  Low-level exposure to cadmium over a long period of time may cause health effects because cadmium can accumulate in the body...

- Pest control in the home
  If you use pesticides to control pests around the house, make sure you use as little as possible...

- Arsenic mine tailings and health
  Mine tailings near goldmines may contain high levels of arsenic...

- Copper chrome arsenic (CCA) treated timber
  CCA treated timber should not be used to build children's play equipment, patios, new garden furniture, decking or handrails...

Home

Related information on other websites

- Australian Pesticides and Veterinary Medicines Authority.
- National Centre for Farmer Health.
- Victorian Department of Primary Industries - Australian Plague Locust Control.
- Victorian Department of Primary Industries, Chemical Standards Branch.

Content Partner

This page has been produced in consultation with and approved by: Department of Health and Human Services - RHP&R - Health Protection - Environmental Health Unit

Last updated: August 2014

Page content currently being reviewed.

Content on this website is provided for information purposes only. Information about a therapy, service, product or treatment does not in any way endorse or support such therapy, service, product or treatment and is not intended to replace advice from your doctor or other registered health professional. The information and materials contained on this website are not intended to constitute a comprehensive guide concerning all aspects of the therapy, product or treatment described on the website. All users are urged to always seek advice from a registered health care professional for diagnosis and answers to their medical questions and to ascertain whether the particular therapy, service, product or treatment described on the website is suitable in their circumstances. The State of Victoria and the Department of Health & Human Services shall not bear any liability for reliance by any user on the materials contained on this website.