

## Fungi poisoning

Mushrooms are a type of fungus. Australia has many varieties of wild-growing fungi, many of which are edible. However, a few types are poisonous or even deadly. Contrary to popular belief, there is no home test that can distinguish between edible and poisonous varieties.

The only way to tell whether a wild mushroom is safe to eat or not is to have it identified by a mushroom expert (mycologist). If you are unsure, don't eat it. It is recommended that you eat mushrooms that you have purchased from the supermarket, greengrocer or other reputable source.

### Treatment for fungi poisoning

**If you suspect you or your child may have eaten a poisonous mushroom do not wait for symptoms to occur, contact the Victorian Poisons Information Centre (Tel 13 11 26).**

The centre will take a brief history from you and give you the appropriate advice. It may be necessary for you to seek treatment through your doctor or the emergency department of your nearest hospital. It helps to have a sample of the mushroom so medical staff can work out which species you ate.

**If the child has collapsed, stopped breathing, is having a fit or is suffering an anaphylactic reaction, immediately ring triple zero (000) for an ambulance.**

Do not ring the Victorian Poisons Information Centre in an emergency.

### Effects of poisonous mushrooms

The three main effects of poisonous mushrooms are:

- **Hallucinations** – some mushroom species contain toxins that cause hallucinations. These psychotropic types are commonly referred to as 'magic mushrooms'. One of the better known species is the Golden Top (*Psilocybe subaeruginosa*). Apart from hallucinations, other effects include confusion, muscle weakness, agitation, rapid heart rate and headache. Unfortunately for some trip-seekers, the Golden Top looks very similar to some varieties of *Galerina* mushroom, which are potentially deadly.
- **Gastrointestinal illness** – many poisonous mushrooms cause gastrointestinal illness, such as nausea, vomiting, stomach cramps and diarrhoea.
- **Liver failure and death** – about nine out of 10 fungi-related deaths are attributable to the Death Cap (*Amanita phalloides*). Symptoms occur 6 to 24 hours after eating and include nausea, stomach cramps, vomiting and diarrhoea. The toxin can fatally harm the liver and kidneys, and death can occur within 48 hours. Other mushrooms that have a similar effect to the Death Cap include some species of *Galerina*, *Lepiota* and *Conocybe*.

### Description of Yellow Stainer poisonous mushroom

**The Yellow Stainer (*Agaricus xanthodermus*) is the most commonly ingested poisonous mushroom. This species commonly grows wild in lawns and gardens, and looks very similar to edible mushrooms. Characteristics include:**

- **Mushrooms grow on the ground in clusters, often clumped or in fairy rings**
- **Mushrooms range from 50–200mm in diameter.**
- **The cap is usually white, but can become brown with age.**
- **The cap of young mushrooms looks a little square.**

- **When damaged, the cap and stem stain yellow, fading later to a dirty brown.**
- **The mushroom gives off a chemical odour, like disinfectant, iodine or kerosene. The odour is more intense on cooking.**
- **If eaten, symptoms include abdominal cramps, nausea, vomiting and diarrhoea (usually within 30 minutes to 2 hours of consumption). Less common symptoms include headache, dizziness, sweating and drowsiness.**

### **Description of Death Cap poisonous mushroom.**

The Death Cap (*Amanita phalloides*) is potentially fatal if eaten. Characteristics include:

- Mushrooms grow under oak trees.
- Mushrooms are 40–160mm in diameter.
- The cap ranges in colour from pale yellow to green to olive brown.
- The gills (ridges on the underside of the cap) are white.
- The base of the stem has a membranous 'cup'.
- Onset of symptoms is anywhere from 6 to 24 hours after ingestion.
- Death may occur from liver and kidney damage.
- One mushroom can contain enough poison to kill an average-sized adult.
- The toxin isn't neutralised by cooking of any kind, including soaking or drying.

### **Facts about fungi poisoning**

A study undertaken by Victorian Poisons Information Centre (VPIC) and the Royal Botanic Gardens Melbourne provided information about fungi poisoning in Victoria. Selected findings include:

- Most poisonous fungi are eaten during autumn.
- The most commonly ingested poisonous mushroom was the Yellow Stainer (*Agaricus xanthodermus*), because it looks very similar to the Field Mushroom (*Agaricus campestris*) and the Cultivated Mushroom (*Agaricus bisporus*).
- Two-thirds of reported cases were in children under five years of age. In 86 per cent of these cases, the children ate mushrooms growing in their gardens at home.
- People who deliberately ate wild mushrooms in the hope of experiencing a drug-related hallucination were extremely likely to get sick.
- The most common symptoms of fungi poisoning were gastrointestinal upsets such as vomiting, diarrhoea and abdominal pains.

### **Protect your children from fungi poisoning**

Many varieties of poisonous mushroom grow wild in Victoria. Most young children who eat poisonous mushrooms find them in the garden at home. Children aged under five years of age have a natural inclination to put things in their mouths. If you have a toddler, you should regularly check your garden for mushrooms to reduce the risk of accidental poisoning.

### **Where to get help**

- 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
- Your doctor
- Emergency department of your nearest hospital.

### **Things to remember**

- Contrary to popular belief, there is no home test that can distinguish between edible and poisonous mushrooms.
- It is recommended that you eat mushrooms that you purchase from the supermarket, greengrocer or reputable source.

- The Yellow Stainer (*Agaricus xanthodermus*) is the most commonly ingested poisonous mushroom.
- Symptoms include gastrointestinal upsets such as abdominal pain, nausea, vomiting and diarrhoea.
- The Death Cap (*Amanita phalloides*) is potentially fatal if ingested.
- If you suspect you may have eaten a poisonous mushroom, don't wait for symptoms to occur. Contact Victorian Poisons Information Centre for advice (Tel 13 11 26).

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

Austin Health - Victorian Poisons Information Centre

Content on this website is provided for education and information purposes only. Information about a therapy, service, product or treatment does not imply endorsement and is not intended to replace advice from your doctor or other registered health professional. Content has been prepared for Victorian residents and wider Australian audiences, and was accurate at the time of publication. Readers should note that, over time, currency and completeness of the information may change. All users are urged to always seek advice from a registered health care professional for diagnosis and answers to their medical questions.

For the latest updates and more information, visit [www.betterhealth.vic.gov.au](http://www.betterhealth.vic.gov.au)

**Copyright** © 1999/2012 State of Victoria. Reproduced from the Better Health Channel ([www.betterhealth.vic.gov.au](http://www.betterhealth.vic.gov.au)) at no cost with permission of the Victorian Minister for Health. Unauthorised reproduction and other uses comprised in the copyright are prohibited without permission.