
Harmful algal blooms

Summary

- Most algae are harmless and an important part of the natural ecosystem.
 - Some types of algae produce toxins that can be harmful to people and animals.
 - Where these harmful algae grow rapidly and accumulate in a water environment, it is known as a harmful algal bloom.
 - It is difficult to tell the difference between a harmful algal bloom and non-harmful algal bloom.
 - To be safe, people and pets should avoid water affected by algae.
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What is an algal bloom?

An algal bloom is the accumulation or rapid increase in the number of algae in a water body. Algal blooms are usually visible as brightly coloured water or colourful scum on the water's surface, but some algal blooms are not visible.

Algal blooms occur when conditions for growth are ideal for algae, for example when:

- the weather is warm and sunny
- the water is not flowing or moving, or is doing so slowly
- the water is nutrient-rich (for example, due to runoff containing fertilisers and sewage).

What are harmful algae?

Some kinds of algae produce harmful toxins (poisons). An accumulation of these algae is known as a harmful algal bloom.

Harmful algae can be found in both marine and freshwater environments.

Toxins produced by harmful algal blooms in a marine environment can impact human health as well as seafood harvested from algae-affected water.

Blue-green algae, or cyanobacteria, are harmful algae that can be found in almost all freshwater systems. They can be found in creeks, rivers, lakes and wetlands, and can appear individually or in a group.

Blue-green algae can multiply rapidly in warm and slow-moving water, which is most common in summer and autumn. In these conditions, blooms (or 'scums') may form on the surface of the water. Blooms can range in colour from dark green to yellowish brown or red, though they may not be immediately visible.

What are the health impacts of harmful algae?

The health impacts of harmful algae can vary depending on the type of algal toxin present, and the type of exposure.

Direct skin contact with algal toxins can cause skin and eye irritation.

Inhalation of fine spray or droplets from algae-affected water can cause mild respiratory effects and symptoms similar to **hay fever**. This most commonly occurs during recreational water-contact activities that create fine spray or droplets like swimming, water-skiing, jet-skiing and boating.

Drinking algae-affected water or consuming food (such as fish or shellfish) containing toxins can lead to **gastroenteritis**, which can induce vomiting, **diarrhoea**, **fevers** and **headaches**. These toxins may also affect the **liver** or **nervous system**.

If you are concerned for your health, consult your GP immediately.

Pets and livestock can also be affected by harmful algae. If you think that your animals are unwell, consult your vet.

Why are children more susceptible to harmful algae?

Children tend to have more sensitive skin than adults, and are more likely to accidentally swallow or inhale affected water. This makes them more susceptible to algae-related poisoning.

Do not allow children to touch, swallow or swim in algae-affected water (and always supervise children when swimming).

As much as possible, make sure children in your care are aware of the dangers of harmful algae.

How can I avoid exposure to algal toxins?

Avoid contact with algae-affected water, especially where discoloured water and visible scums are present. These scums are a build-up of algae that settles along the edge of the water, where you are more likely to make contact.

Follow advice on any harmful algae information signs present, and avoid contact with the water until authorities advise there is no longer a risk.

If you suspect that your local waterway is affected by harmful algae, contact the local waterway manager for further advice.

You can find out more about affected waterways via [Emergency Victoria](#).

What should I do if I contact algae-affected water?

If you make contact with affected water, immediately leave the water. Remove any traces of algae by thoroughly washing and rinsing your skin and hair, contaminated clothes and wetsuits in clean water.

Can I swim and play other water sports in algae-affected water?

It is best to avoid direct contact with affected water including swimming and any other water sports.

How do I keep animals safe from harmful algae?

Pets can be poisoned from contact with or ingestion of harmful algae. Do not let your animals swim in algae-affected areas, walk along banks where scums have accumulated or drink algae-affected water.

If your pet does come into contact with affected water or scums, wash them thoroughly with fresh water before drying so they do not swallow algae while grooming their fur.

If you are concerned about your pet's health, consult your vet as soon as possible.

If you are a livestock owner, continuously check water supplies for harmful algae, and keep livestock away from algal blooms.

Can I eat fish caught in waters affected by harmful algae?

Any fish caught from algae-affected waters should be washed in clean water, gilled and gutted. Put internal organs in the rubbish – it is likely that the fish has swallowed algal toxins, so don't feed the leftovers to animals.

Do not eat any shellfish such as pipis, mussels, oysters, yabbies or crayfish from algae-affected water, as they are more likely to accumulate dangerous levels of algal toxins.

When algal blooms die and start to break down they use up oxygen in the water, which creates an environment that can suffocate fish. If you see fish that are dead, dying or swimming erratically, do not touch or eat them.

You can report this to the EPA on 1300 [EPA VIC](#) (1300 372 842).

Can harmful algae affect my drinking water?

Yes. Algae can impact the smell and taste of water supplies.

If your local water business supplies your drinking water, they will manage any algae risks. If you have any concerns about the quality of your drinking water supply, contact your local water business.

If you use a private drinking water supply, you can prevent algae growing by sealing your water tank and ensuring the pipes or fittings do not receive sunlight.

Further information on private drinking water supplies can be found on the [Victorian Department of Health and Human Services website](#).

Is it safe to use untreated algae-affected water from a lake, dam or stream?

No. Do not use untreated algae-affected water for drinking, showering or washing. Boiling algae-affected water does not remove toxins.

Information related to irrigation and livestock can be found on the [Agriculture Victoria website](#).

Can I water my garden with water affected by harmful algae?

Avoid using affected water on your lawn and garden beds. It may affect the growth of plants, and poses a risk to anything that might contact the wet surface. Spray irrigation can also produce aerosols (very fine, airborne water droplets) which can lead to toxins being inhaled.

If there is no other water source, minimise aerosol spray by using drip irrigation, soaker hoses or a watering can to water your garden and avoid directly watering the edible portion of any plant.

Do harmful algae cause motor neurone disease?

There is no consistent evidence that exposure to harmful algae causes **motor neurone disease** in humans. Likewise, there is no evidence that people living in the vicinity of algae-affected water are at increased risk of developing the disease.

How long do algal blooms last?

Harmful algal blooms will remain as long as there are favourable conditions, including warmth, sunlight and low flow rates. Blooms can last from weeks to months and it is difficult to predict when they will clear.

Cooler, windy weather or increased water flow may reduce or stop algal blooms.

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

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