



Cyanobacteria - Frequently asked questions

What is cyanobacteria?

Cyanobacteria is a group of photosynthetic, nitrogen fixing bacteria that live in a wide variety of habitats such as moist soils and in water and is widespread throughout the lakes and rivers of New Zealand.

What types of algae do we have in Northland?

The two main types we see are, planktonic, which floats in the water column and a benthic variety called phormidium which grows on the beds of rivers and streams. Typically, we see planktonic blooms and most occurrences have been reported in lakes and farm ponds. However, phormidium mats also occur in some rivers and can pose a risk to dogs in particular.

Is cyanobacteria toxic?

Some species of algae are capable of producing toxins. We can monitor for these species and we also monitor for toxins when a bloom occurs.

What does cyanobacteria look like?

Planktonic blooms turn the water a bright blue green and most commonly occur in lakes and ponds.



Aerial view of a planktonic cyanobacteria bloom in Lake Omapere.

Benthic cyanobacteria (phormidium) forms dense black shiny mats, typically on rocks in stony river beds but can also grow on sandy substrates.



Benthic cyanobacteria (phormidium) growing on a rock.

Is Cyanobacteria toxic?

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What is the risk to health?

Sometimes cyanobacteria produce toxins which can affect dogs, livestock and people. Contact with toxic cyanobacteria can cause reactions such as skin irritation, numbness and tingling as well as stomach upsets and trouble breathing. Benthic cyanobacteria (phormidium) is a particular concern for dogs. Where there is a significant bloom mats can come loose and settle on the river bank where animals can consume it. Dogs in particular are attracted to its musty smell and if they eat it can become fatally ill. If your dog shows signs of lethargy, muscle tremors, fast breathing, paralysis or convulsions contact your vet immediately.

Has toxic algae been detected in any Northland waterbodies?

We have had positive results for toxins, but nothing recently that has exceeded national guidelines.

How long does it take before results are known?

Cyanobacteria can form or concentrate in areas over a matter of days or hours depending on climatic conditions. Monitoring programmes may not be responsive enough to detect rapidly changing blooms as they occur. Once a sample is collected, the results take 1 to 2 working days to determine if cyanobacteria levels are elevated, a further 3-10 working days is required to determine if toxins are present.

How long will algae stay in a waterbody for?

Blue-green algae will stay in a waterbody for as long as the conditions are favourable. It was previously thought that they would only survive during the warmer months, however some waterbodies have experienced algal blooms throughout the colder winter months in recent years.

Can I swim in a waterbody when there is a bloom?

It is generally advised not to swim in a river or lake when that waterbody is experiencing a bloom. If a health warning has been issued, then it is deemed by the Medical Officer of Health as not safe to do so.

Can I still go boating on a lake when there is a bloom?

It is advisable to avoid skin contact when there is a bloom present. If there are cyanobacteria signs erected at the waterbody, phone the contact phone number to check the restrictions that have been placed at that waterbody.

Can my dog swim in a lake when there's a bloom?

Dogs are very susceptible to becoming ill (sometimes fatally ill) when in contact with cyanobacteria. It is advisable to keep dogs out of the water and on a lead to ensure they stay away from the water. Where a bloom is occurring.

Who should I call if I see algae in the water?

If information signs have been erected, you can phone the contact phone number listed for more information. If no signs have been erected, please phone NRC hotline to report 0800 504 639.

Can I drink the water?

It is not advisable to drink the water when cyanobacteria is present. Please check updates on our website: www.nrc.govt.nz for any warnings regarding stock drinking.