

Cyanobacteria Facts:

Cyanobacteria are photosynthetic bacteria that live naturally – but at low concentrations – in all lakes. Cyanobacteria or blue-green algae occur worldwide especially in calm, nutrient-rich waters. Some species of cyanobacteria produce toxins that affect animals and humans. People may be exposed to cyanobacterial toxins by drinking or bathing in contaminated water.

They are common in Ontario waters but being common does not mean that we should not be concerned. They often release toxins in the water that make the water unsafe to drink and unpleasant as well.

The risk to health is dependant on exposure to the cyanobacteria toxins.

- ✓ itchy, irritated eyes and skin that may result from direct external contact through recreational activities, such as swimming and water skiing; and
- ✓ if the toxins are swallowed, symptoms such as headaches, fever, diarrhea, abdominal pain, nausea and vomiting.

Too much phosphate is the likely cause.

There are different kinds and some are just annoying (*Anabaena*)
But others are a bit more worrisome (*Microcystis*)

Deal with source of phosphate additions.

Watch for phosphate-free detergents (dishwashers are a big concern)
Use barley bales if run-off into lake is constant.

What to do if you have them in your lake?

- ✓ Restrict swimming (skin rashes) and direct drinking.
- ✓ Seek alternative supplies of safe drinking water until there is no longer a visible bloom;
- ✓ additional granular activated carbon filtration or ozonation. It should be pointed out that boiling is not effective in reducing or removing these toxins, although some point-of-use devices may be effective.

Anabaena



thick bloom



Microcystis

