

# Blue-Green Algae and Drinking Water

Cyanobacteria (also known as **blue-green algae**) are bacteria that live in freshwater environments. Some types of cyanobacteria produce a toxin within their cells, that is released when the cells die. An algal bloom occurs when conditions are favourable for algae growth; typically this is in warm, slow moving water with excess nutrients like phosphorus. Blue-green algae grows quickly and forms large mats that float on the water's surface; new blooms usually have a grassy smell, while older blooms may smell like rotting garbage.

Suspected blue-green algal blooms can be reported to the Health Protection Division at Public Health Sudbury & Districts.

The Ministry of the Environment, Conservation and Parks collects algae samples from suspected blooms and reports results to Public Health Sudbury & Districts. These results are available on the health unit [website](#).



## Source Protection and Blue-Green Algae

- Due to historical and recent blue-green algal blooms on Ramsey Lake, the Sudbury Source Protection Committee included Microcystin LR (the blue-green algae toxin) as a drinking water issue
- Since phosphorus contributes to blue-green algal blooms and Microcystin LR, activities that could contribute phosphorus to Ramsey Lake are managed through source protection policies
- These policies include: application of commercial fertilizer, operating sewage disposal systems, and agricultural activities such as keeping livestock or storing agricultural materials
- The City of Greater Sudbury conducts weekly monitoring of Ramsey Lake in the summer to determine phosphorus levels and detect blue-green algal blooms. When blooms are detected close to the drinking water intake, specific operating procedures are implemented to ensure the ongoing safety of the drinking water