Fish Consumption

While it is known that fish do store toxins in their liver, more research regarding the accumulation of toxins in the flesh is needed. Fish caught from algae affected water should not be eaten.

Prevention of Algae Growth

Good watershed management is the key to limiting the potential for algal growth. The major factor in controlling algae in natural waters is to limit the input of nutrients into the waterbody (e.g. wastewater effluent, agriculture runoff). Residents should take action to limit nutrient additions into their lakes by avoiding lawn fertilizers and by properly maintaining their private sewage systems.

Precautions

- Treat any intense algae bloom with suspicion.
- Do not swim or wade in water containing algae scum.
- Do not drink water from algae contaminated waters.
- Provide an alternate source of drinking water for pets and livestock.
- Contact your Regional Health Authority if a bloom occurs in your area.
- Contact a physician if any symptoms occur after being in contact with algae affected waters.
- Contact a veterinarian if your pet has been in contact with contaminated water.

Public Health Division
Environmental Public Health Services

For more information, please contact your nearest Environmental Public Health Services office.

Edmonton Main Office	*(780) 413-7928*
Edmonton General Hospital	*(780) 413-7711*
Strathcona	*(780) 467-5571*
Spruce Grove	*(780) 962-7509*
Leduc	*(780) 980-4644*
St. Albert	*(780) 459-6671*

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Public Health Division
Environmental Public Health Services

Blue-Green Algae

(Cyanobacteria)

Capital Health
EDMONTON AREA

Blue-Green Algae

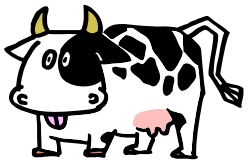
Blue-green algae (also called cyanobacteria), are found naturally in many lakes, ponds and reservoirs. These algae, given the right conditions, may multiply significantly in summer months causing extensive growths referred to as blooms. During calm conditions, algae often form surface accumulations that appear as scum on the water surface. The algae may look blue-green or greenish brown in appearance, and often produce a musty earth or grassy odor. Some bloom forming species of blue-green algae also produce potent toxins. When toxic algal blooms die and decay, toxic chemicals may be released into the water. While most toxin is rapidly degraded within two weeks, it can be present in the water at lower concentrations for several months following the bloom. Some blooms have been severe enough to cause livestock deaths. Although some algal blooms do not contain toxic species of algae, it is not possible to know from its appearance whether or not a bloom is harmful. If an algal bloom is present, precautions should be taken as if it was toxic.

Human Health Effects

Human illnesses have been reported after being in contact with water containing blue-green algae. Through recreational activities such as swimming and boating, symptoms of skin irritation, rashes, sore throat, sore red eyes, swollen lips and hay-fever like allergic reactions have been experienced. Drinking water containing blue-green algae has been known to cause nausea, stomach cramps, vomiting, diarrhea, fever, headache, pains in muscles and joints, weakness and liver damage. Children may be more intensely affected because they tend to spend more time in the water and may accidentally ingest contaminated shoreline water. ***Treat all algae blooms with caution***. Visit your local doctor or hospital if you have been in contact with water containing blue-green algae and are experiencing symptoms.

Livestock and Pets

Although lakes are generally a good source of drinking water for livestock and pets, lakes contaminated with blue-green algae can be deadly if algae toxins are present.



Some illnesses and deaths of livestock and wildlife have been linked to these animals drinking water containing blue-green algae. Animals should be kept away from natural water sources that contain algal blooms as they are not as concerned with the appearance or smell of the water before they drink it.

Watering Vegetable Gardens

Blue-green algae affected water should not be used to water edible plants, especially plants that have edible portions exposed to the ground surface such as cabbages, lettuces, tomatoes and other salad vegetables. At present it is not known if fruits and vegetables absorb the toxins found in algae contaminated water.

Cooking

Boiling the water does not remove toxins from water, therefore do not cook with water that contains blue-green algae.