



BLUE GREEN ALGAE INTOXICATION

ABOUT THE DISEASE

Blue-green algae, also called **cyanobacteria**, are microscopic bacteria found in freshwater ponds, lakes, streams, and brackish water ecosystems. While not all types of algae are toxic, **cyanobacteria** produce toxins (microcystins, anatoxins) that can cause liver damage or failure with neurologic effects.

All species of animals are susceptible to intoxication, including humans. Be careful when allowing swimming in contaminated areas.

Microcystins can cause liver damage or failure, and signs include:

- Vomiting, diarrhea, bloody or black, tarry stool
- Weakness
- Pale gums
- Jaundice (yellowing of gums, skin, or eyes)
- Disorientation, seizures, coma
- Shock, death

Anatoxins can cause neurotoxicity, and signs include:

- Excessive salivation
- Muscle tremors
- Muscle rigidity
- Paralysis
- Difficulty breathing
- Respiratory failure

OBTAINING A DIAGNOSIS

There are no specific tests for **cyanobacterial** toxins.

A presumptive diagnosis is often achieved through thorough clinical history and physical examination.

Routine laboratory testing will help identify liver enzyme changes, low blood sugar, low blood protein, clotting problems, or hemorrhage.

Other testing like blood pressure, radiographs (x-rays), and ultrasound may help assess state and severity of shock.

TREATMENT

Unfortunately, treatment is limited and often unsuccessful due to the rapid onset of signs.

Early and aggressive supportive care includes management of rapid shock with intravenous (IV) fluids and electrolytes, as well as anticonvulsants to control seizure activity. Other medications like atropine may be symptomatically beneficial in reducing excessive salivation and subsequent fluid loss.

TIPS FOR SUCCESS

- Prevention is the first step, so inspect all ponds and bodies of water before pets go swimming.
- Early and rapid intervention are the keys to success.