

Blue-Green Algae

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Cyanobacteria

- The common name for cyanobacteria is blue-green algae.
- Cyanobacteria are naturally occurring organisms.
- Cyanobacteria are single-celled organisms that live in fresh, brackish, and marine water.

Cyanobacteria

- Cyanobacteria are related more closely to bacteria than to algae.
- Cyanobacteria are found worldwide.
- CyanoHABs can use up the oxygen and block the sunlight that other organisms need to live.
- They produce powerful toxins that affect the brain and liver.



**Microcystis bloom
St. Johns River, FL**

Cyanotoxin Types

- There are four (4) types of Cyanotoxins:
- Dermatotoxins
- Neurotoxins
- Saxitoxin, Neosaxitoxin
- Hepatotoxins

How Can I be Exposed?

- Humans can be exposed to cyanobacterial toxins by:
 - Drinking water that contains the toxins
 - Swimming in water that contains high concentrations of cyanobacterial cells
 - Breathing air that contains cyanobacterial cells or toxins.

Health Effects

- Health effects associated with exposure to high concentrations of cyanobacterial toxins include:
 - stomach and intestinal illness
 - trouble breathing
 - allergic responses
 - skin irritation
 - liver damage
 - neurotoxic reactions, such as tingling fingers and toes.

Health Effects

- Scientists are exploring the human health effects associated with long-term exposure to low levels of cyanobacterial toxins.
- Some studies have suggested that such exposure could be associated with chronic illnesses, such as liver cancer and digestive-system cancer.

How to Keep Safe

- Avoid areas with visible algae and/or scums.
- Direct contact and ingestion are associated with the greatest health risk.
- Never allow children or pets to play in or drink scummy water

How to Keep Safe

- Avoid bathing, immersion of head, and/or ingestion.
- Avoid waterskiing in visible scums or waters.
- Wear clothing that is loose fitting.

How to Keep Safe

- Wet suits may result in greater risk.
- If you come into contact with Blue-Green Algae, shower or wash thoroughly to remove algal material.
- There are no US drinking or recreational water standards for cyanotoxins.
- The World Health Organization (WHO) set a provisional guideline of 1.0 ug/L for microcystin.

Where can I get Information?

- DOH hotline for reporting illnesses related to cyanobacteria exposure is 1-888-232-8635
- Visit <http://www.myfloridaeh.com/> and click under the Aquatic Toxins program.

??Questions??