

Occupational exposure to algal toxins:

WI DNR
April 2008



Audience –

DNR staff & DNR volunteers.
Others with occupational exposure- Water rescue, military, construction, water sports competitions, waterfront maintenance, etc

As a person who works around water, you should be aware of problems associated with algal toxins. They have been implicated in deaths of pets, livestock and, in one case, a man in Wisconsin. Since few people drink algae laden water, the primary danger comes from skin reactions or respiratory problems associated with the toxin. While most people avoid entering or handling heavily algae-laden water as part of recreational pursuits, some have jobs or other circumstances that necessitate contact. Although green lake conditions are common, reports of human health problems related to exposure to algal toxins are rare. Some of this is no doubt due to avoidance. Plus, the symptoms can resolve within a few hours or days without medical attention. Also, studies suggest that allergic reactions occur in only 20-25% of the exposed population. Please make yourself familiar with the symptoms and treatment of toxin exposure and, more importantly, how to avoid the problem.

For more information on algal toxins see:

<http://dnr.wi.gov/lakes/bluegreenalgae/>
<http://www.cdc.gov/hab/cyanobacteria/facts.htm>



Dermal contact - Symptoms:

Skin irritation, visible rash, hives and blisters, especially under clothing or wetsuits

Dermal contact - Exposure avoidance:

Wear boots & gloves

Immediately rinse exposed skin with clear water. Extended contact under wet clothing or wetsuits can trigger and accelerate reaction.

Fill wetsuits with clear water before entering algae laden water and clean suit after use.



Inhalation reaction - Symptoms

Runny eyes and nose, sore throat, asthma-like symptoms or allergic reactions.

Inhalation reaction – Exposure avoidance:

Minimize aerosols of algae-laden water caused by agitation.

Be aware of wind direction. Do preparation work outside of affected areas. Get in and out fast.

Be aware of the possibility of aerosols associated with irrigating with algae-laden surface water.

Treatment:

Remove from exposure and provide supportive treatment. For severe reactions contact your doctor or the Poison Information Hotline (800-222-1222).

Should you let your kids or pets play in this?

BAD IDEA!

Algae are common in lakes and rivers. But at high concentrations a type called "blue-green" algae can make people and animals sick.

What to look for:

- Does the water look "pea soupy"?
- Does it smell swampy?

Blue-green algae can:

- irritate skin, eyes and nasal passages and make you sick.
- poison your pets or livestock – animals have died from it.

If you or your pets have come in contact with blue-green algae, **wash thoroughly.**

Think you or animals are sick from it? Call a doctor or veterinarian immediately.



When in doubt, best keep out!

This poster prepared by the Minnesota Interagency Work Group on Blue-Green Algae.

In Wisconsin - <http://dnr.wi.gov/lakes/bluegreenalgae/>