

# 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 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).