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).