



Memo

Date: September 11, 2013

To: Mayor Merkes
City of Menasha Common Council

From: Todd Drew, RS
Environmental Health Sanitarian
City of Menasha Health Department

Re: Blue-Green Algae (*Cyanobacteria*)

The Menasha Health Department has received several requests for information on the health effects of blue-green algae, due to the heavy bloom being experienced on some channels of the lake in the City. This memo explains blue-green algae and potential health effects when exposed.

Blue-green algae (BGA) is a naturally occurring microscopic organism which is present in Wisconsin lakes, streams and ponds in low levels. When conditions are favorable BGA can have large blooms which can pose a potential health risk. BGA blooms can pose the following health concerns:

- Dermal contact with BGA can cause irritation in humans and pets. If skin is exposed to BGA swimmers and pets should be thoroughly rinsed off, including removal and rinsing of swim wear.
- Some species of BGA can also produce toxins under certain conditions. Dermal, ingestion or inhalation exposures to BGA toxins pose the most serious potential health risks. Symptoms of BGA toxin exposure would include:
 - Muscle cramps
 - Twitching
 - Paralysis
 - Cardiac or respiratory failure
 - Death in pets
 - Seizures in pets
 - Nausea
 - Vomiting
 - Acute liver failure
- Not all species produce toxins and the species that are able to produce toxins do not always do so even during blooms. The potential presence of toxins is assumed during a BGA bloom as a health precaution.

Humans and pets can be exposed to BGA and BGA toxins through skin contact while swimming, if quantities of water are swallowed or when airborne droplets are inhaled

while water skiing, using jet skis, using high pressure washers to remove shoreline mats or any other activities which may cause water to be rendered airborne and inhaled. It is recommended that individuals not swim or wade in water with blooming algae, or allow their pets to enter the water when blooms are present. Individuals should also not treat blooms with algaecides, as dying BGA cells will actually release their toxins and as a result increase the level of toxins available in the water.

The strong odors related to BGA blooms do not pose a health risk alone. Again, health risks occur by skin contact with the algae, by ingestion of algae infected water or by aerosolizing water containing the algae. If any symptoms are noted in a human or pet after possible exposure to BGA you should seek medical attention for the person or pet as soon as possible.

If you should have additional questions related to BGA and BGA exposure please contact the Menasha Health Department (920) 967-3520.