Addressing Harmful Algal Blooms at DHS

WI Coastal Beach Working Group
November 14, 2016

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Wisconsin Department of Health Services
Program Activities

• Identify, evaluate and report cases of human and animal health events related to cyanobacteria in Wisconsin

• Develop outreach capacity to support case reporting and increase awareness of the health issues related to cyanobacteria

• Coordinate water sampling with regional DNR staff and analysis with the State Laboratory of Hygiene
How Does DHS Learn About Illnesses?

- Direct contact with Division of Public Health (DPH) staff via email or phone

- *Report a Case* through DPH website [dhs.wisconsin.gov/eh/bluegreenalgae](http://dhs.wisconsin.gov/eh/bluegreenalgae)

- Wisconsin Poison Center (WPC) automated email case notification

- Department of Natural Resources (DNR), local public health or lake association referral
Blue-Green Algae

Wisconsin’s Harmful Algal Blooms Program

Wisconsin’s Harmful Algal Blooms program collects information about human and animal illness and death resulting from exposure to blue-green algae. Tracking illness information will help the Wisconsin Division of Public Health measure the problem of blue-green algae in our lakes and rivers.

If you get sick after swimming in a Wisconsin lake or river, please report possible algae-related illness. This program does not provide medical treatment, so if you are experiencing severe symptoms seek medical attention immediately.

When in doubt, best keep out!

Back to Environmental Health Resources

Last revised: March 03, 2011
Wisconsin's Harmful Algal Blooms program monitors exposure to blue-green algae. Tracking illness information will help the Wisconsin Division of Public Health measure the problem of blue-green algae in our lakes and rivers.

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Partnership with the WI Poison Center (WPC)

- WPC Receives a HAB-related call
- Email generated to DPH staff with case description
- Case report is faxed to DPH
- DPH contacts caller for full case description
- WPC sends monthly summary of cases
DHS and DNR decide jointly whether an \( H_2O \) sample in warranted

\( H_2O \) sample is analyzed by WI State Lab of Hygiene

DNR provides local public health with \( H_2O \) results

DHS contacts local and state DNR staff

\( H_2O \) sample is collected by regional DNR lakes staff

State Lab reports \( H_2O \) sampling results back to state-level DNR

Local public health issues health advisories

Pre-beach season: \( H_2O \) sampling kits are “staged” at regional DNR offices throughout the state
Routes of Exposure and Symptoms

1. Skin Contact:
   - Rash, hives and skin blisters (especially in areas under swimsuits)

2. Ingestion:
   - Abdominal pain
   - Diarrhea
   - Vomiting
   - Nausea
   - Numb lips, tingling fingers and toes, or dizziness

3. Inhalation:
   - Flu-like illness
   - Respiratory irritation (runny eyes, nose, a sore throat)
   - Asthma-like symptoms
## Results: Health Complaints

<table>
<thead>
<tr>
<th>Year</th>
<th># of Health Complaints</th>
</tr>
</thead>
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<tr>
<td>2009</td>
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<tr>
<td>2010</td>
<td>27</td>
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<td>2014</td>
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<tr>
<td>2015</td>
<td>10</td>
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<tr>
<td>2016</td>
<td>33</td>
</tr>
</tbody>
</table>
## Results: Water Sampling

<table>
<thead>
<tr>
<th>Year</th>
<th># of Samples</th>
<th>High Risk Cell Counts &gt; 100,000/ml</th>
<th>Moderate Risk Cell Counts 20,000-100,000/ml</th>
<th>Toxins Detected</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>13</td>
<td>6</td>
<td>3</td>
<td>9</td>
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<tr>
<td>2013</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

*/* Indicates one or more non-standard samples were received from DNR wardens and/or veterinarians.

- DNR staff use standardized HAB sampling kits to collect water samples, which are then shipped overnight to the State Lab of Hygiene.
Outreach and Program Sustainability

• Health alerts issued in response to water sampling results

• Press releases, YouTube Video, Live Chat with the Experts

• Targeted trainings for local health departments, lake managers, etc.

• Presentations at local, state and national public health events, local lakes associations, DNR lakes meetings
Overarching Guidance

- Don’t swim where water is discolored or where you see foam, scum or algal mats
- Shower and wash hands after swimming in lakes, rivers and ponds
- Clean fish thoroughly and discard the viscera and guts
- Keep pets out of soupy, green water or where you see foam, scum, or mats of algae
- Rinse dogs off immediately – do not let them lick algae off their fur
- Respect water-body closures and health advisories
When in Doubt, Stay Out!

CAUTION
WATER QUALITY ADVISORY
This water may contain blue-green algae capable of producing toxins that can be dangerous to humans and pets.

FOR YOUR SAFETY
- If water is cloudy, looks like green paint or pea soup, or has a floating scum layer or floating clumps
  - Do not swim or swallow water
  - Do not allow pets to swim or drink
  - Do not allow children to play in scum layer from shoreline
- Rinse off after swimming

For more information please contact the LOCAL HEALTH DEPARTMENT at (___) ____ - ______

Questions?
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