



Harmful Algal Blooms in Wisconsin: Results of a Statewide Public Health Surveillance Program

**American Water Resources Association
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Presentation Overview

- Describe Wisconsin's Harmful Algal Blooms (HAB) program
- Discuss routes of exposure and typical symptoms
- Provide a summary of 2009-2013 health and environment data
- Opportunity for questions



The HAB Program at DHS



- 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
- This project was supported by a cooperative agreement with the Centers for Disease Control and Prevention

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
- Wisconsin Poison Center (WPC) automated email case notification
- Department of Natural Resources (DNR), local public health or lake association referral



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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!



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The Official Internet site of the Wisconsin Department of Health Services

Blue-Green Algae -- Home Page - Windows Internet Explorer provided by DHS - State of Wisconsin

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http://www.dhs.wisconsin.gov/eh/bluegreenalgae/

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Algal Bloom Exposure Report

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Algae-Related Illness Report Form

Please use this form to report a human or animal illness or death that you think was related to exposure to blue-green algae. If you have questions about this form, please call Dr. Lynda Knobeloch at 608 266-0923 or email her at lynda.knobeloch@wi.gov. Thank you for reporting this incident to us. We are working hard to improve the health of all Wisconsin residents and visitors.

1. Please enter today's date

m/m/dd/yyyy
2. Please enter your name and address
 Name
 Street Address
 City/township name, State, Zip
3. Are you reporting on a HUMAN or ANIMAL illness?

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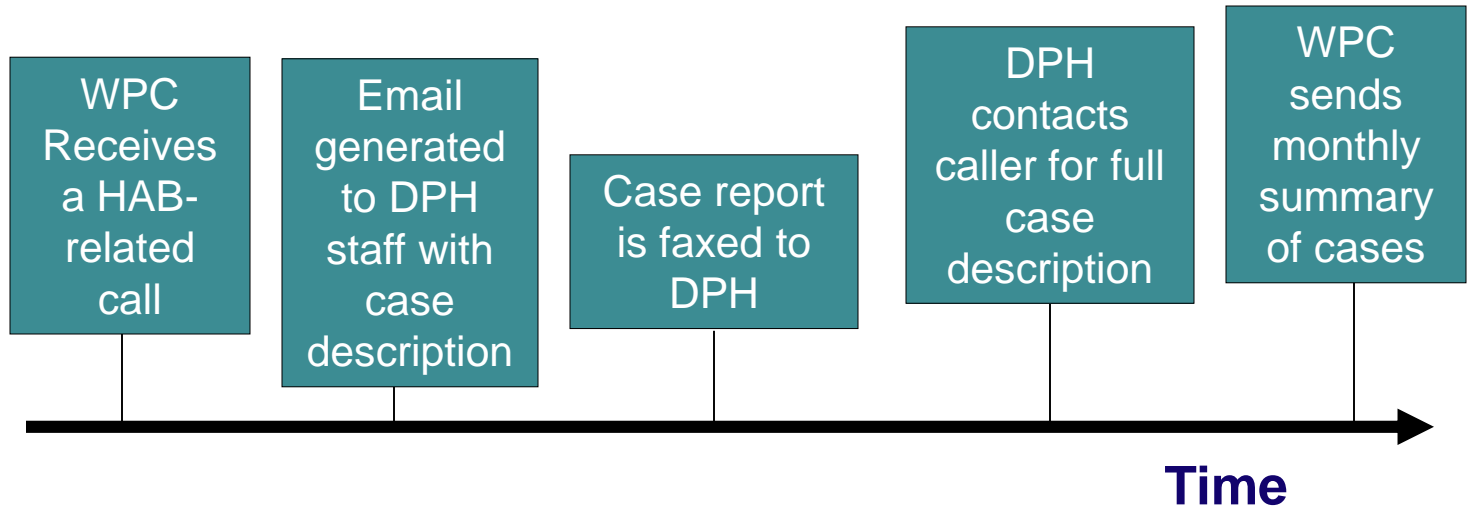
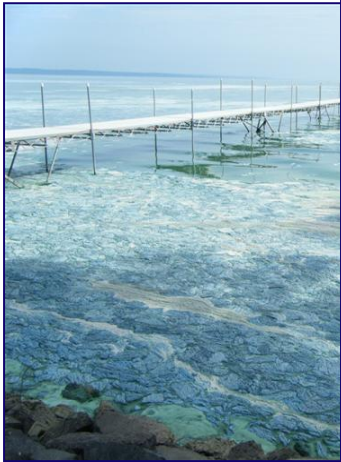
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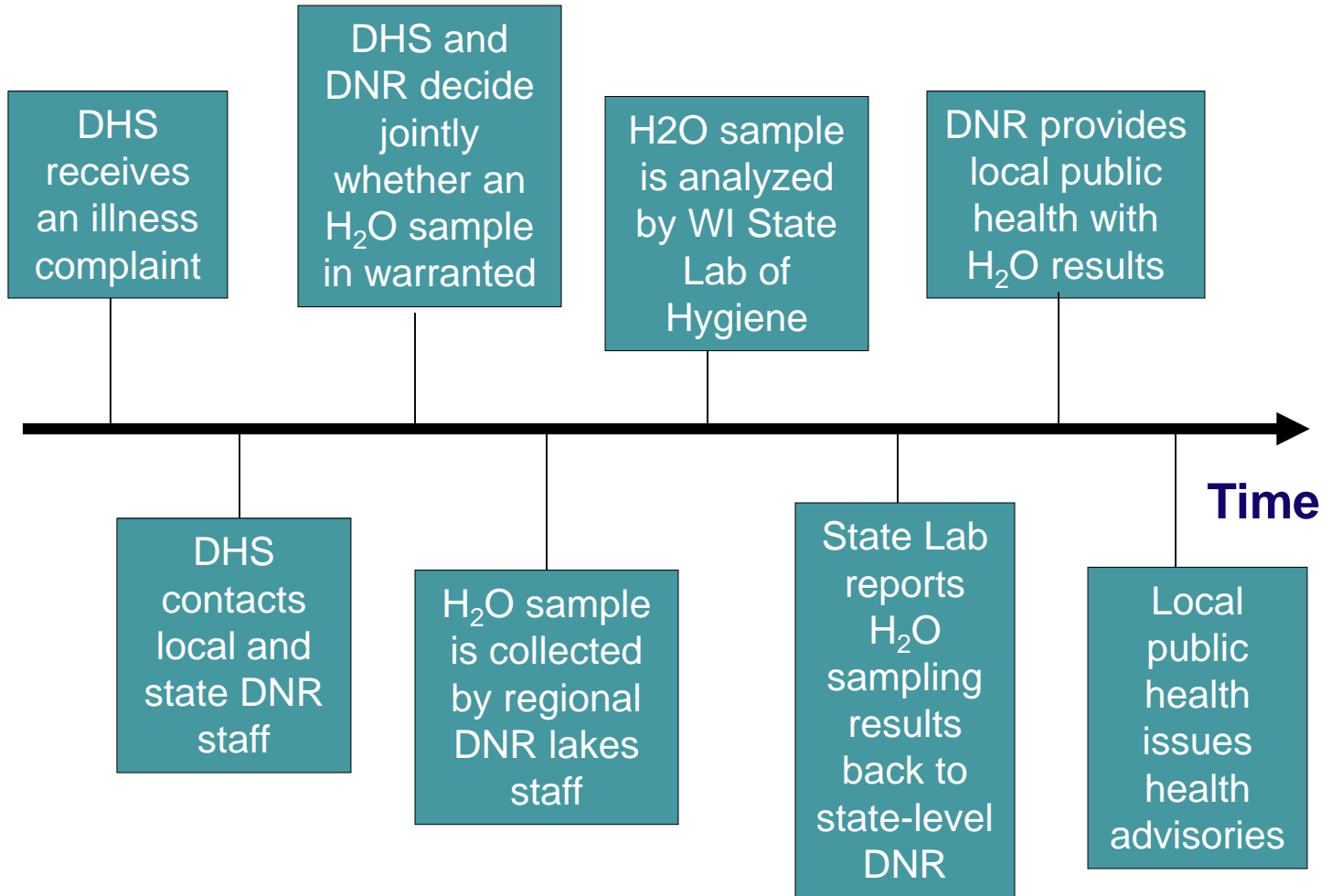
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Partnership with the WI Poison Center



Response Timeline



Pre-beach season: H₂O sampling kits are “staged” at regional DNR offices throughout the state



Outreach and Education



- Presentations at local, state and national public health events, local lakes associations, DNR lakes meetings
- Educational materials distributed at local and statewide events
- YouTube Video, Live Chat with the Experts
- Targeted trainings for local health departments, lake managers, etc.



Routes of Exposure and Symptoms



1. Skin Contact:

- Rash, hives and skin blisters (especially in areas under swimsuits)



2. Ingestion:

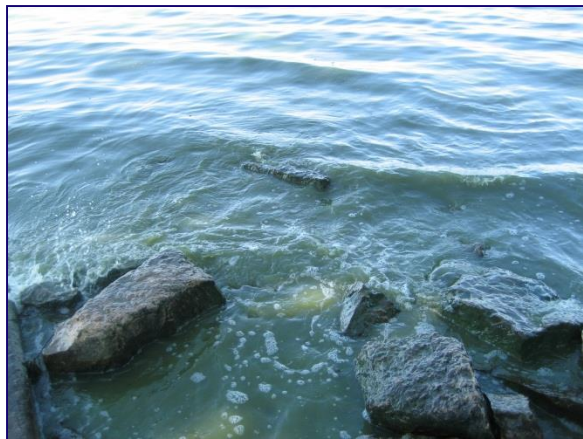
- Abdominal pain
- Diarrhea
- Vomiting
- Nausea
- Numb lips, tingling fingers and toes or dizziness



3. Inhalation:

- Flu-like illness
- Respiratory irritation (runny eyes, nose, a sore throat)
- Asthma-like symptoms

Health Complaint Results



Health Complaints Overview 2009-2013

Year	# of Health Complaints
2009	37
2010	27
2011	36
2012	33
2013	13

Symptoms Across All Years**

Symptoms Across All Years**	# of Reports
Dermal Rash	31
Respiratory Irritation	24
Gastrointestinal Distress	56
Cold/Flu-like Illness	37

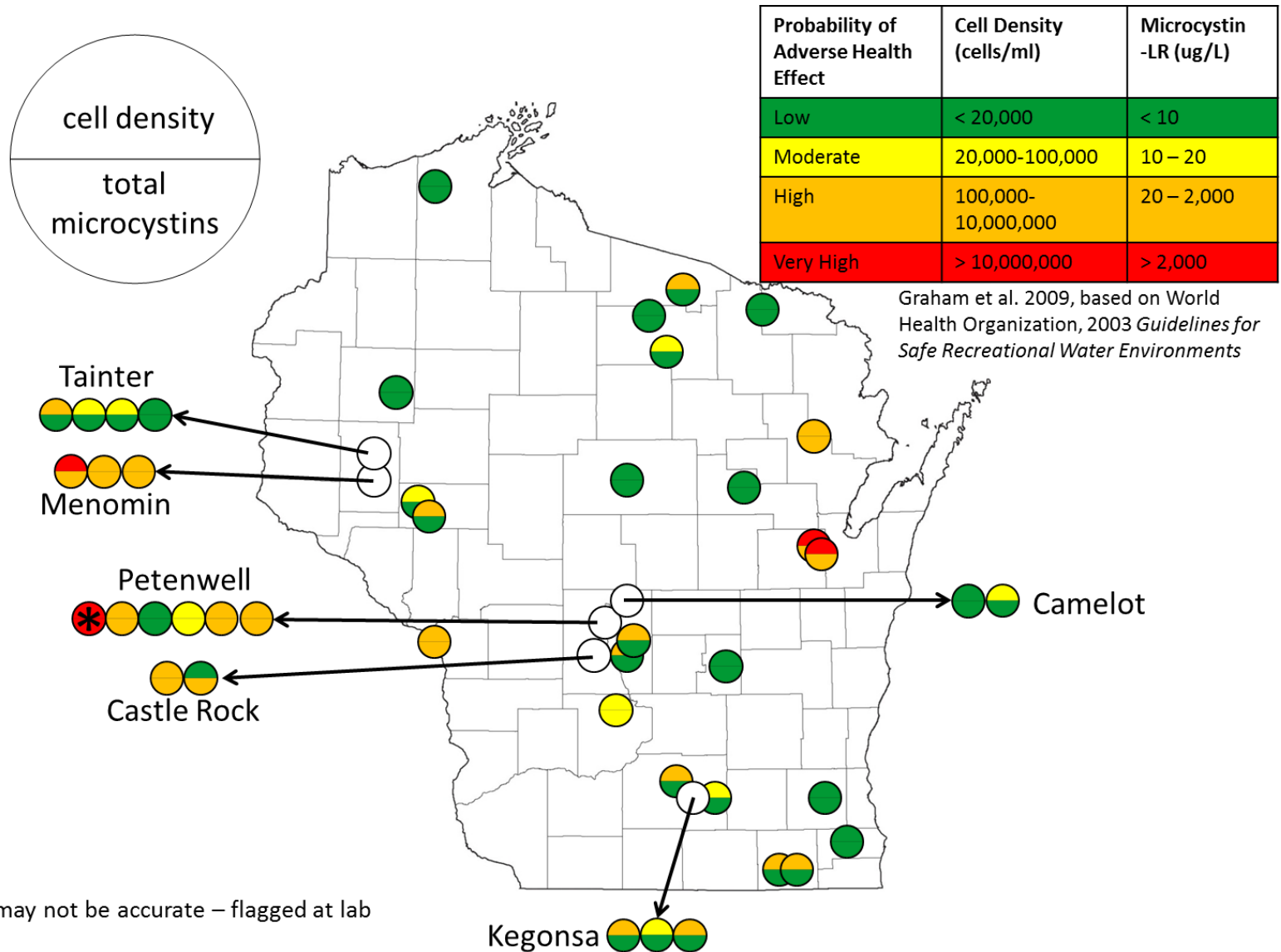
**Many cases included multiple symptoms, so the total number of symptoms exceeds the total number of reports.

Water Sampling Results

Year	# of Samples Taken	High Risk Cell Counts > 100,000/ml	Moderate Risk Cell Counts 20,000-100,000/ml	Toxins Detected
2009	13	6	3	9
2010	6 (1 non-standard)	2	1	2
2011	11 (*2 non-standard)	6	3	7
2012	13 (*2 non-standard)	6	3	6
2013	3	1	0	0

- DNR staff use standardized HAB sampling kits to collect water samples, which are then shipped overnight to the State Lab of Hygiene.
- Non-standard samples have been received from DNR wardens and from veterinarians.

Geographic Distribution of HAB Water Sampling



Graphic courtesy of Wisconsin Department of Natural Resources.



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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