Addressing **Harmful Algal Blooms** and Related Illnesses in Wisconsin

Wisconsin Coastal Beaches Meeting
May 16, 2019
Presented by Amanda Koch, MPH,
Waterborne Diseases Epidemiologist

Wisconsin Department of Health Services
Division of Public Health
Bureau of Environmental and Occupational Health
What are blue-green algae?

- True bacteria (cyanobacteria) that can photosynthesize
- Can grow to form nuisance “blooms”
- 50 species are known to produce toxins (cyanotoxins)
Blooms don’t all look the same!
Various toxin types

- Hepatoxins
- Neurotoxins
- Dermatotoxins

Signs and symptoms depend largely on route of exposure

- Dermal
- Ingestion
- Inhalation
Animals

- Particularly vulnerable due to their behaviors and smaller size
- Often serve as sentinels for human illness
We’re all about partnerships!

- Wisconsin Division of Public Health
- HABRI Surveillance and Response in Wisconsin
- Wisconsin Department of Natural Resources
- Wisconsin State Laboratory of Hygiene
Conducts surveillance of health effects related to HAB exposure.

Investigates reports of human and animal illnesses.
DPH HAB Surveillance Program

Coordinates water sampling and analysis.

Helps local public health issue health advisories and beach closures.

Provides education and outreach.
Lake Superior-focused HABs Workshop

- Ashland, WI near Apostle Islands National Lakeshore
- 40 attendees from diverse professional areas
- Sessions focused on introductory topics with opportunities for small- and large-group discussion

"Blooms & the Big Lake"

Satellite imagery courtesy of NOAA
“Blooms & the Big Lake”

| Dot Yourself! | Water Science          |
|               | Public Health & Safety |
|               | Education / Outreach   |
|               | Water or Natural Resources Management |
|               | “Other”                |
“Blooms & the Big Lake”
“Blooms & the Big Lake”
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• Main takeaway: Need for clearly defined statewide communication and response protocol

• Future *Blooms & Lake Michigan* workshop?
  – Green Bay
  – Lake Winnebago (Great Lakes Basin)
  – Veteran’s Lagoon (Great Lakes Basin)
HAB signage on the way!

SCAN you before SWIM

A blue-green algae bloom may be present. Blue-green algae can produce toxins which can make people and animals sick.

Be alert! Avoid water that:

- Is discolored or streaky
- Looks like spilled paint or pea soup
- Has floating scum, globs, or mats
- Has small green dots floating in it

✓ Do not swallow lake water or touch foam, scum, or algal mats.
✓ Do not let pets swim in scummy water or lick algae off their fur.
✓ Rinse fish with fresh, clean water and throw away guts before cooking and eating.
✓ Do not swim in areas where you cannot see your feet in knee-deep water.

For questions, call ____________.

To learn more about blue-green algae, visit www.dhs.wi.gov and search “algae”.

CAUTION

BLUE-GREEN ALGAE (CYANOBACTERIA) BLOOM OR MAT MAY BE IN THE WATER

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✓ Do not swim in areas where you cannot see your feet in knee-deep water.

Call your doctor, the Wisconsin Poison Center, or your veterinarian if you or your animals have sudden sickness or signs of poisoning.
Wisconsin Poison Center: (800) 222-1222

Report blue-green algae-related illnesses to your local health authority!
Call ____________.

To learn more about blue-green algae, visit www.dhs.wi.gov and search “algae”.

Wisconsin Department of Health Services | Division of Public Health Bureau of Environmental and Occupational Health | P-XXXXX (05/2019)
HAB signage on the way!

BEACH CLOSED
BLUE-GREEN ALGAE (CYANOBACTERIA) ARE PRESENT

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Wisconsin Poison Center: (800) 222-1222

For questions or to report a blue-green algae-related illness, call the local health authority:

To learn more about blue-green algae, visit www.dhs.wi.gov and search “algae”.

WISCONSIN DEPARTMENT OF HEALTH SERVICES | DIVISION OF PUBLIC HEALTH | BUREAU OF ENVIRONMENTAL AND OCCUPATIONAL HEALTH | P-XXXXX (05/2019)
Questions?

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