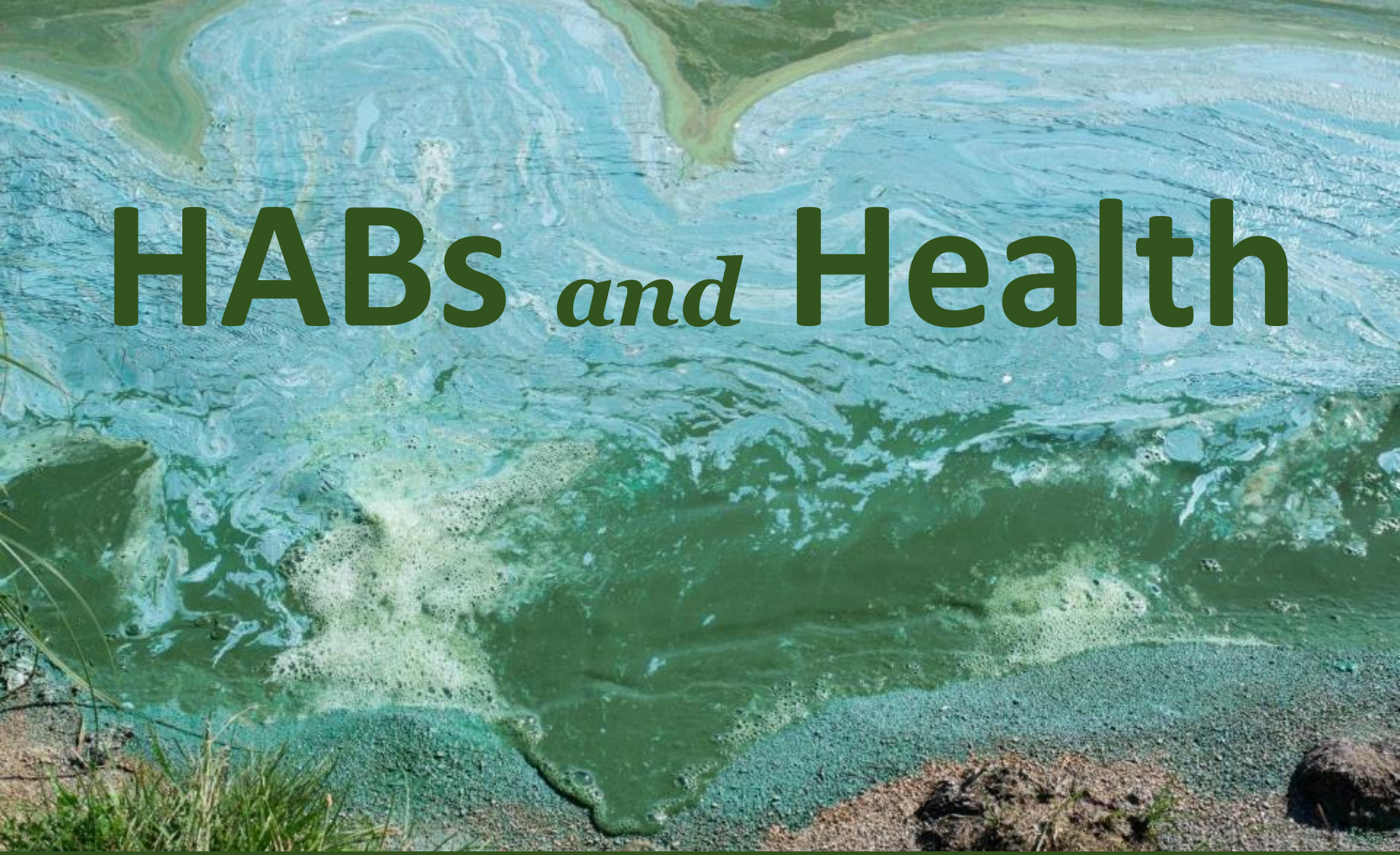
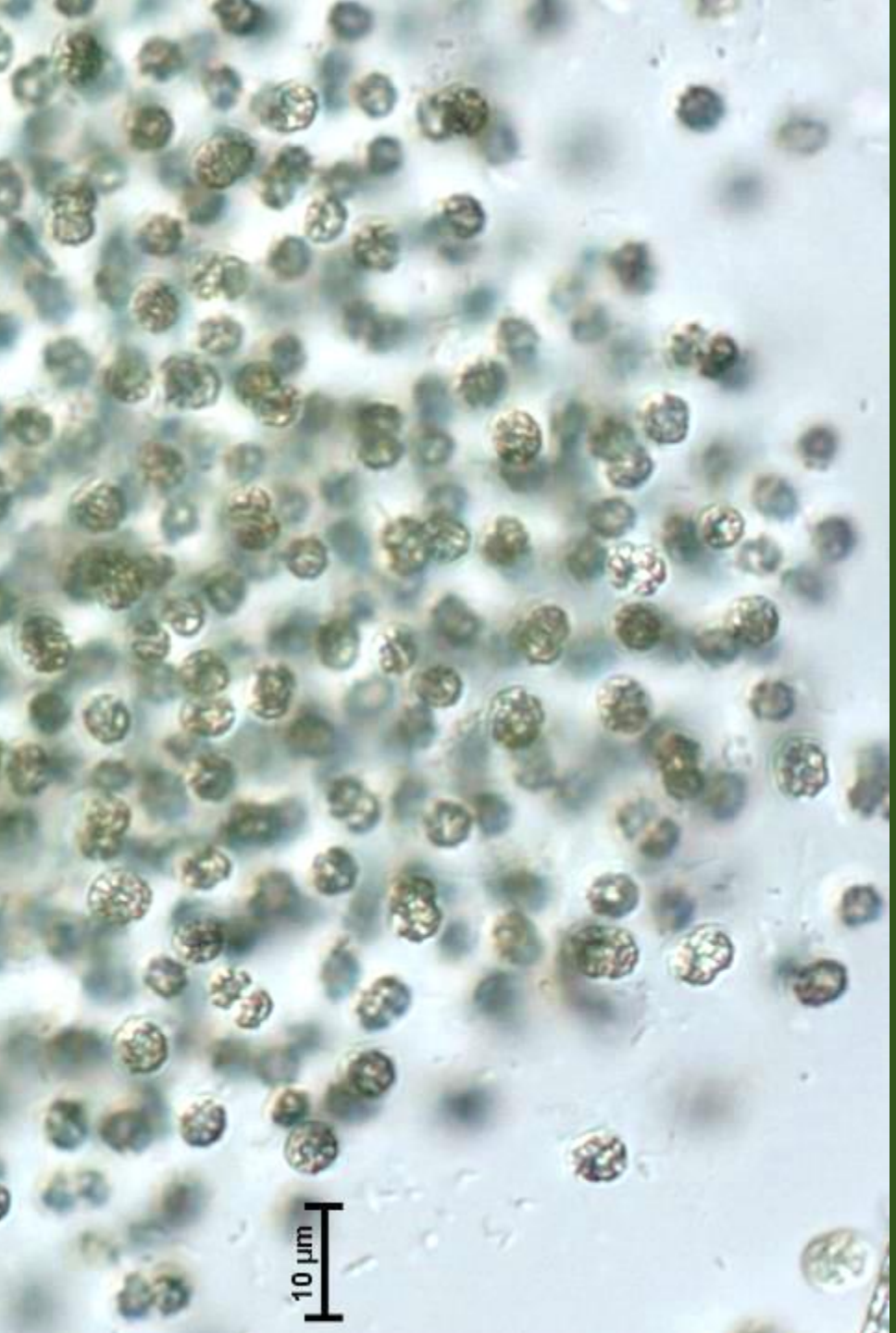


HABs *and* Health

Wisconsin Lakes & Rivers Convention
April 3, 2020
Presented by Amanda Koch, MPH,
Waterborne Diseases Epidemiologist

Wisconsin Department of Health Services
Division of Public Health
Bureau of Environmental
and Occupational Health

Human and Animal Health Effects



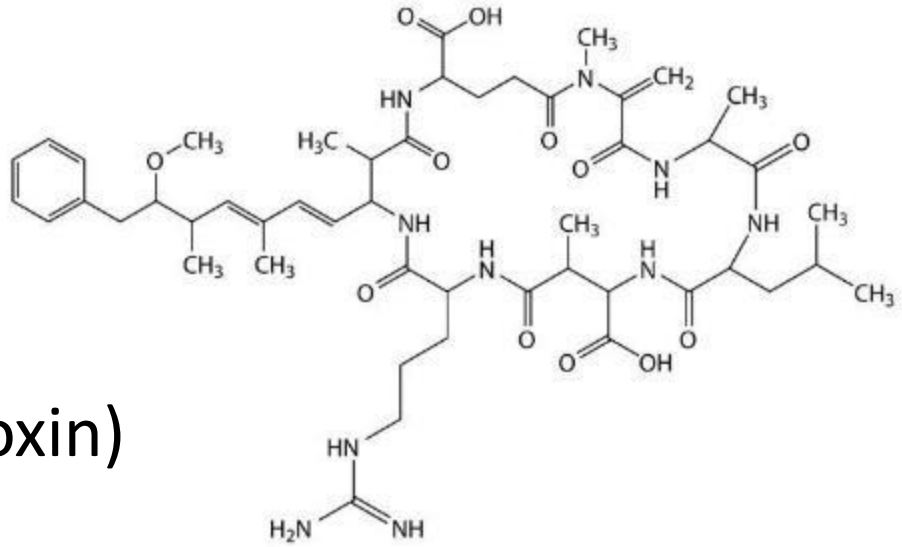
Not all cyanobacteria are harmful.

- Helped create the Earth's atmosphere
- Over 2,600 described species
  - About 50 are known produce toxins
  - Toxins aren't produced all the time

Cyanobacterial Toxins

Various toxin types

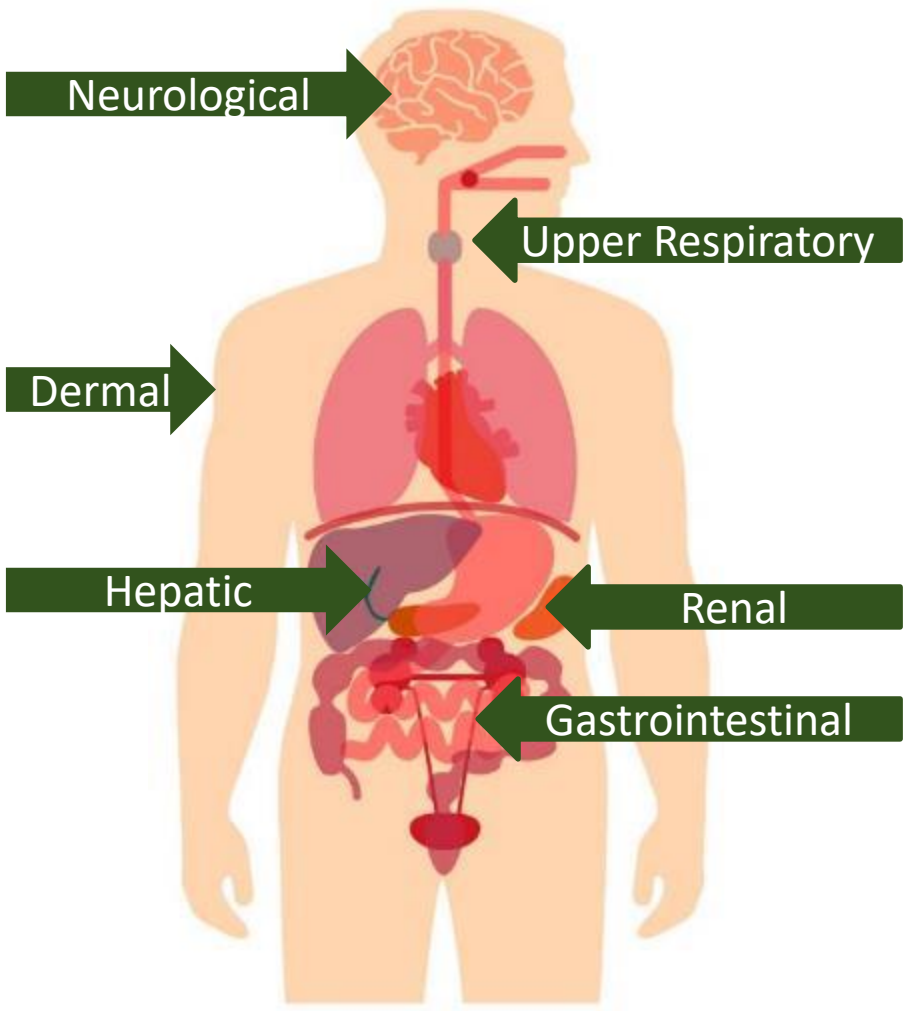
- **Hepatotoxins**
  (e.g., microcystin-LR, cylindrospermopsin)
- **Neurotoxins**
  (e.g., anatoxin-a, saxitoxin)
- **Dermatotoxins**
  (e.g., lipopolysaccharide endotoxins)



Cyanobacterial Toxins

Signs and symptoms depend largely on:

- Route(s) of exposure
- Species and toxin type(s) present
- Cyanobacterial cell and toxin concentrations
- Vulnerability (behaviors, body size, preexisting conditions)



How are people exposed?

- Activities
  - Recreational
  - Personal use
  - Occupational
- Exposure routes
  - Dermal
  - Ingestion
  - Inhalation

FloridaWaterCoalition.org

Dermal contact

- Rash
- Hives
- Skin blisters
- Lesions most common under swimsuits

Ingestion

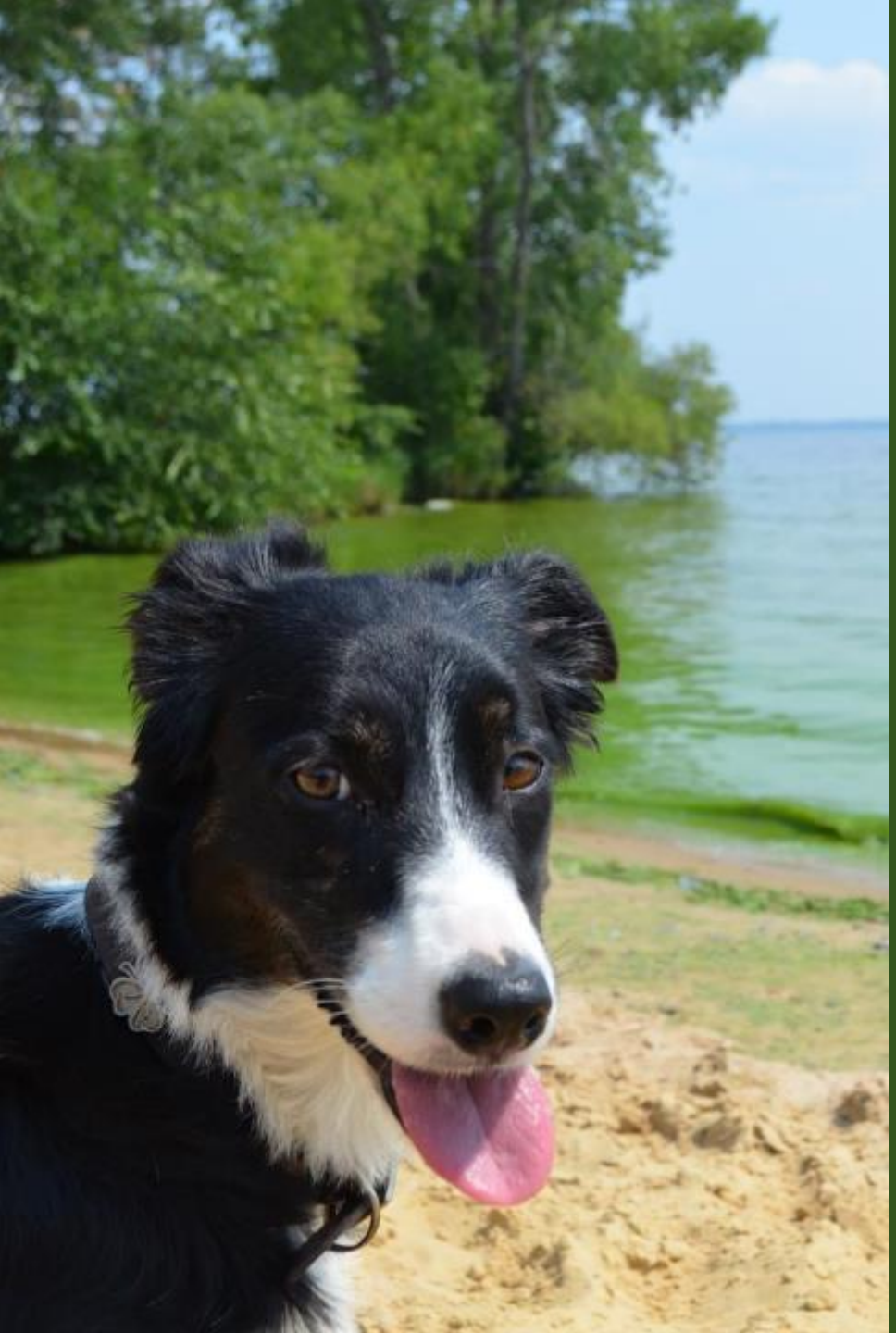
- Abdominal pain
- Nausea
- Diarrhea
- Vomiting
- Numb lips
- Tingling fingers and toes
- Dizziness

Inhalation

- Influenza-like illness
- Runny eyes
- Runny nose
- Sore throat
- Asthma-like symptoms

Animals

- Particularly vulnerable due to their behaviors and smaller size
- Often serve as sentinels for human illness



Dogs

- Most common victims
- Deaths are well-documented

Animal Signs of Illness

- Lethargy
- Vomiting
- Drooling
- Diarrhea
- Weakness
- Respiratory distress
- Paralysis
- Seizures
- Coma
- Death

Harmful Algal Blooms Program

Wisconsin Division of Public Health

DPH HAB Surveillance Program

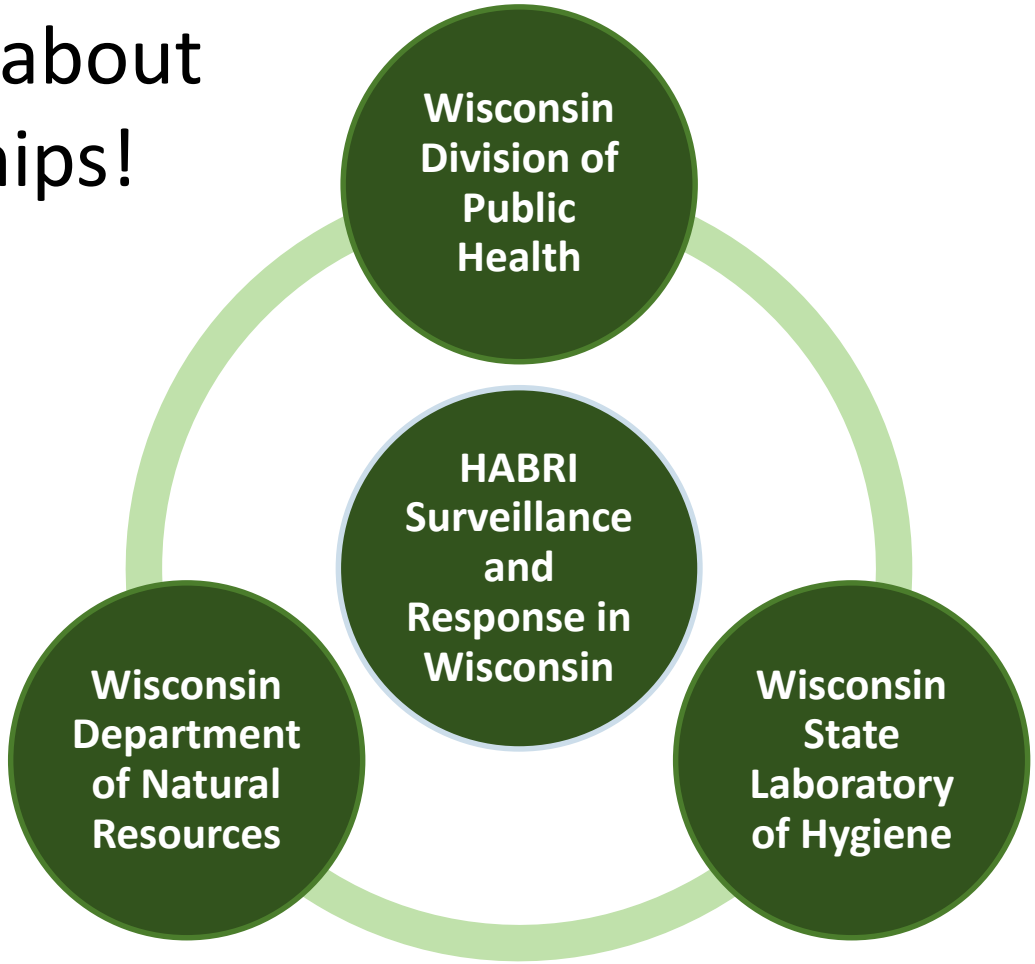
- Established in 2008 through the CDC's Harmful Algal Bloom Illness Surveillance System project (HABISS)
- Supported by CDC and the Great Lakes Restoration Initiative
  - Council of State and Territorial Epidemiologists (CSTE) Applied Epidemiology Fellowship Program
  - Other staffing and program support

CDC
Centers for Disease Control and Prevention

Great Lakes RESTORATION

DPH HAB Surveillance Program

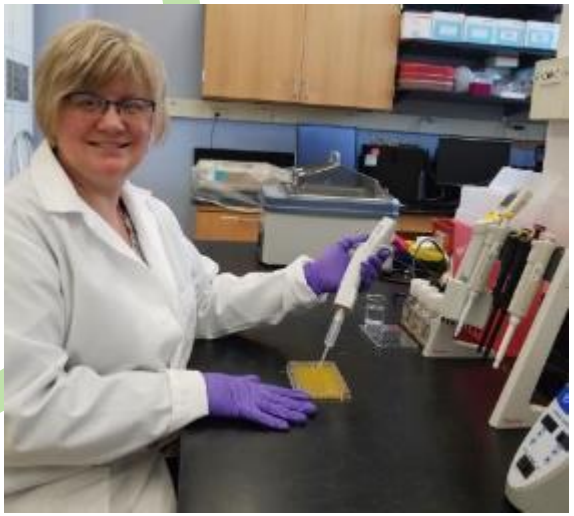
We're all about partnerships!



DPH HAB Surveillance Program

We're all about partnerships!

HABRI Surveillance and Response in Wisconsin



DPH HAB Surveillance Program

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.

DPH HAB Surveillance Program

Illness complaint reporting methods

- Online case-reporting tool on DPH blue-green algae website
- Direct contact with program staff
- Referrals from DNR, local health departments, and lake associations
- Wisconsin Poison Center
- Clinicians

DPH HAB Surveillance Program

WISCONSIN DEPARTMENT of HEALTH SERVICES

Search Wisconsin DHS

About DHS | Data & Statistics | Diseases & Conditions | Health Care & Coverage | Long-Term Care & Support | Prevention & Healthy Living | Partners & Providers | Certification, Licenses & Permits

Topics A-Z: A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

Prevention & Healthy Living > Environmental Health > Water > Blue-Green Algae

- Blue-Green Algae Home
- Understanding Algae
- Health Concerns
- Algal Bloom Photos
- Keeping our Lakes Clean
- For Health Professionals
- Resources and Links
- Contact Us

Blue-Green Algae

The Wisconsin Department of Health Services, Division of Public Health (DPH) collects information about human and animal illness resulting from exposure to blue-green algae. Tracking illness information will help DPH 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, stay out!

NEW!

For healthcare providers: beginning 7/1/2018, report any suspected human cases of Cyanobacteria and Cyanotoxin Poisoning electronically through WEDSS or by mailing or faxing a completed Acute and Communicable Disease Case Report, F-44151 to the address on the form.

For members of the general public and veterinarians: call 608-266-1120 or complete the online form Harmful Algae Bloom (HAB) Illness or Sighting Survey, F-02152 (Web Survey) to report any blue-green algae blooms and related human or animal illnesses to the Wisconsin Harmful Algal Blooms Program.

DPH HAB Surveillance Program

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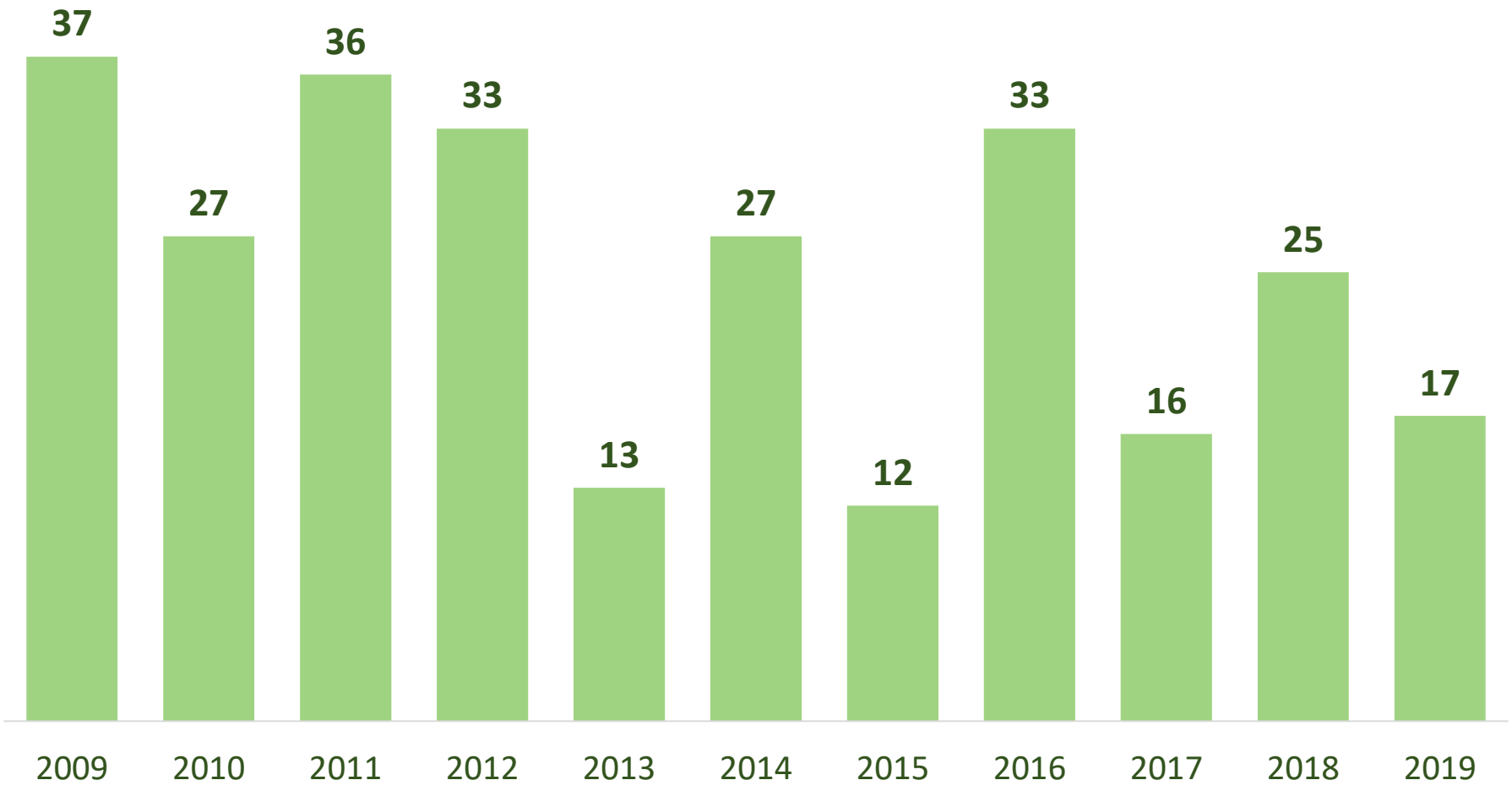
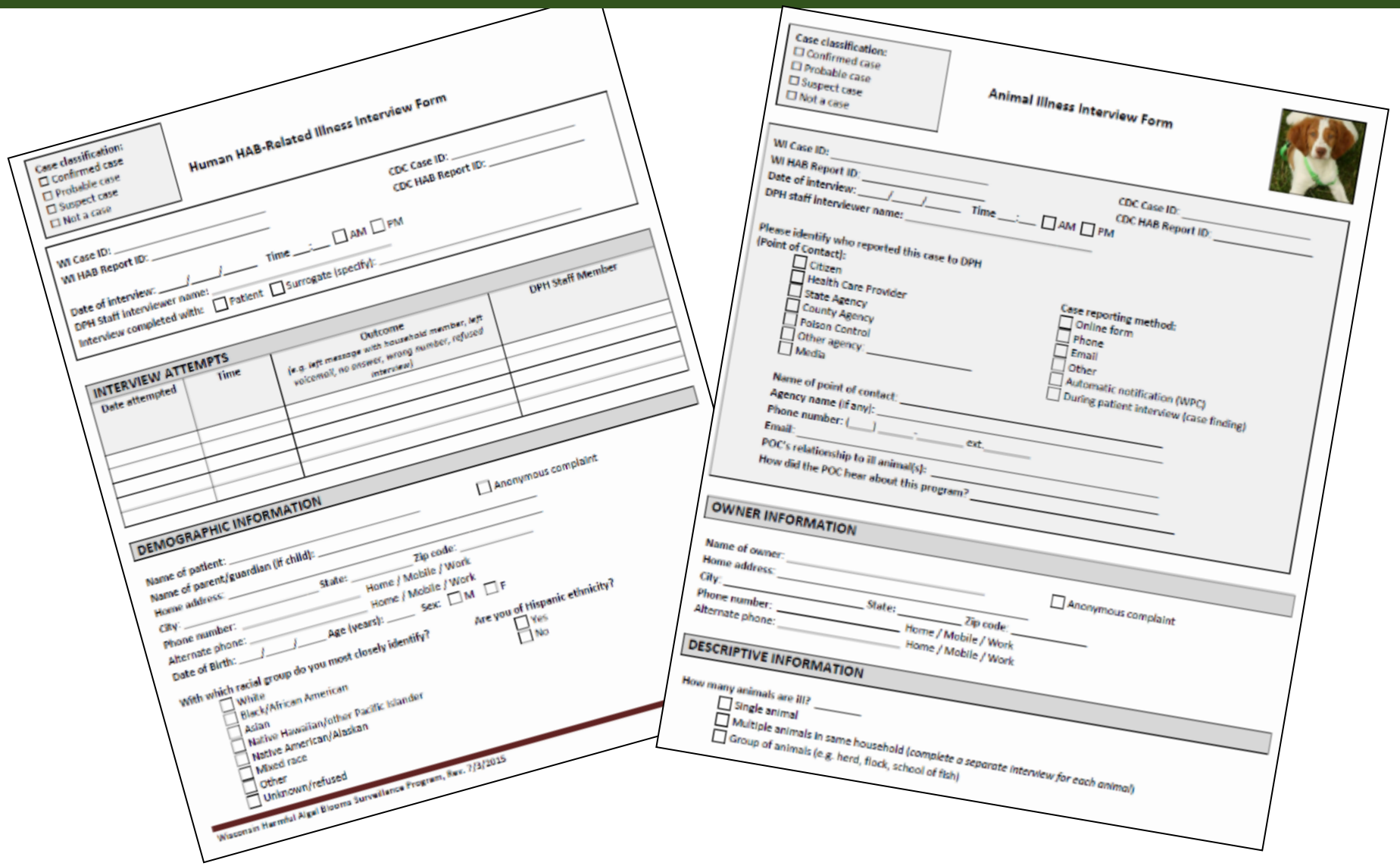
Annual Health Complaints



DPH HAB Surveillance Program



Case classification:
☐ Confirmed case
☐ Probable case
☐ Suspect case
☐ Not a case

Human HAB-Related Illness Interview Form

CDC Case ID:
CDC HAB Report ID:

WI Case ID:
WI HAB Report ID:
Date of interview: ___/___/___ Time ___:___ ☐ AM ☐ PM
DPH Staff Interviewer name:
Interview completed with: ☐ Patient ☐ Surrogate (specify):

INTERVIEW ATTEMPTS			
Date attempted	Time	Outcome (e.g. left message with household member, left voicemail, no answer, wrong number, refused interview)	DPH Staff Member

DEMOGRAPHIC INFORMATION

☐ Anonymous complaint

Name of patient:
Name of parent/guardian (if child):
Home address: State: Zip code:
City: Home / Mobile / Work
Phone number: Home / Mobile / Work
Alternate phone:
Date of Birth: ___/___/___ Age (years): Sex: ☐ M ☐ F

With which racial group do you most closely identify?
☐ White
☐ Black/African American
☐ Asian
☐ Native Hawaiian/other Pacific Islander
☐ Native American/Alaskan
☐ Mixed race
☐ Other
☐ Unknown/refused

Are you of Hispanic ethnicity?
☐ Yes
☐ No

Wisconsin Harmful Algal Blooms Surveillance Program, Rev. 7/3/2015

Case classification:
☐ Confirmed case
☐ Probable case
☐ Suspect case
☐ Not a case

Animal Illness Interview Form

WI Case ID:
WI HAB Report ID:
Date of interview: ___/___/___ Time ___:___ ☐ AM ☐ PM
DPH staff interviewer name:

CDC Case ID:
CDC HAB Report ID:

Please identify who reported this case to DPH (Point of Contact):
☐ Citizen
☐ Health Care Provider
☐ State Agency
☐ County Agency
☐ Poison Control
☐ Other agency:
☐ Media

Case reporting method:
☐ Online form
☐ Phone
☐ Email
☐ Other
☐ Automatic notification (WPC)
☐ During patient interview (case finding)

Name of point of contact:
Agency name (if any):
Phone number: (___) ___-___ ext.
Email:
POC's relationship to ill animal(s):
How did the POC hear about this program?

OWNER INFORMATION

☐ Anonymous complaint

Name of owner:
Home address:
City:
Phone number: State: Zip code:
Alternate phone: Home / Mobile / Work
Home / Mobile / Work

DESCRIPTIVE INFORMATION

How many animals are ill? ___
☐ Single animal
☐ Multiple animals in same household (complete a separate interview for each animal)
☐ Group of animals (e.g. herd, flock, school of fish)

DPH HAB Surveillance Program

Harmful Algal Bloom Surveillance Program
Field Staff Sampling Protocol

Wisconsin Division of Public Health
Wisconsin Department of Natural Resources

2018 Update

When to use this kit:
For Response Monitoring by DNR staff when these three criteria are met:

- illnesses suspected to be related to HAB exposure are reported;
- DHS Division of Public Health partners determine the case histories, symptoms, and environmental conditions are consistent with HAB exposure;
- full cyanobacterial identification and enumeration, cyanotoxin analysis, water chemistry, and coliform bacteria testing are required.

Use may be warranted in other situations with public health impact but consult with the Statewide Blue-green Algae Coordinator before using the kit.

When NOT to use this kit:

- Confirmation of bloom presence only.
- Cyanobacterial identification and/or enumeration without requirement for cyanotoxin analysis, water chemistry, or E. coli testing.

Consult with the Statewide Blue-green Algae Coordinator for photo identification, or seek identification and enumeration services from the Wisconsin State Laboratory of Hygiene (WSLH).

If non-DNR entities (county staff, homeowners) are seeking cyanobacterial testing, please refer them to the Statewide Blue-green Algae Coordinator. They can seek services from WSLH, but if testing results are going to be used for beach monitoring or other public health issues, the coordinator needs to brief them on availability of messaging resources and the need to work with local public health officials.

DPH HAB Surveillance Program

Harmful Algal Bloom Surveillance Program
Field Staff Sampling Protocol

Wisconsin Division of Public Health
Wisconsin Department of Natural Resources

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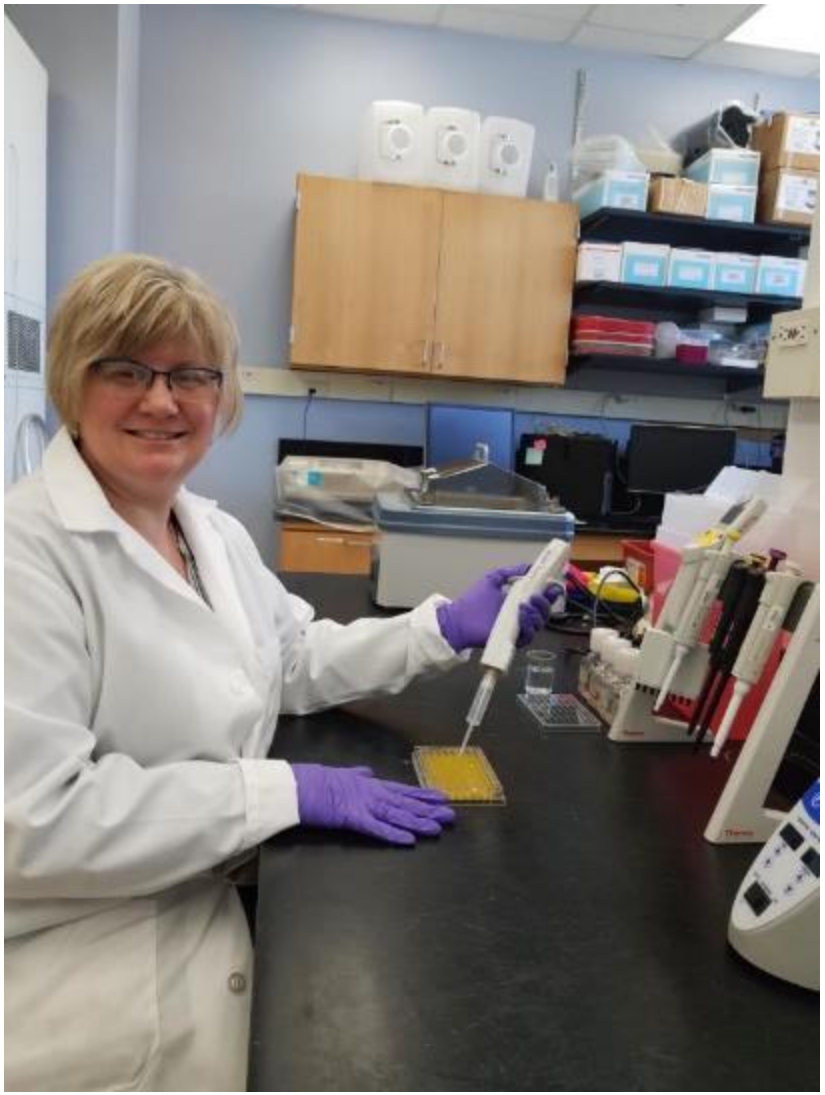
DPH HAB Surveillance Program



DPH HAB Surveillance Program

HEALTH ALERT

Toxic blue-green algae may be present in this area.

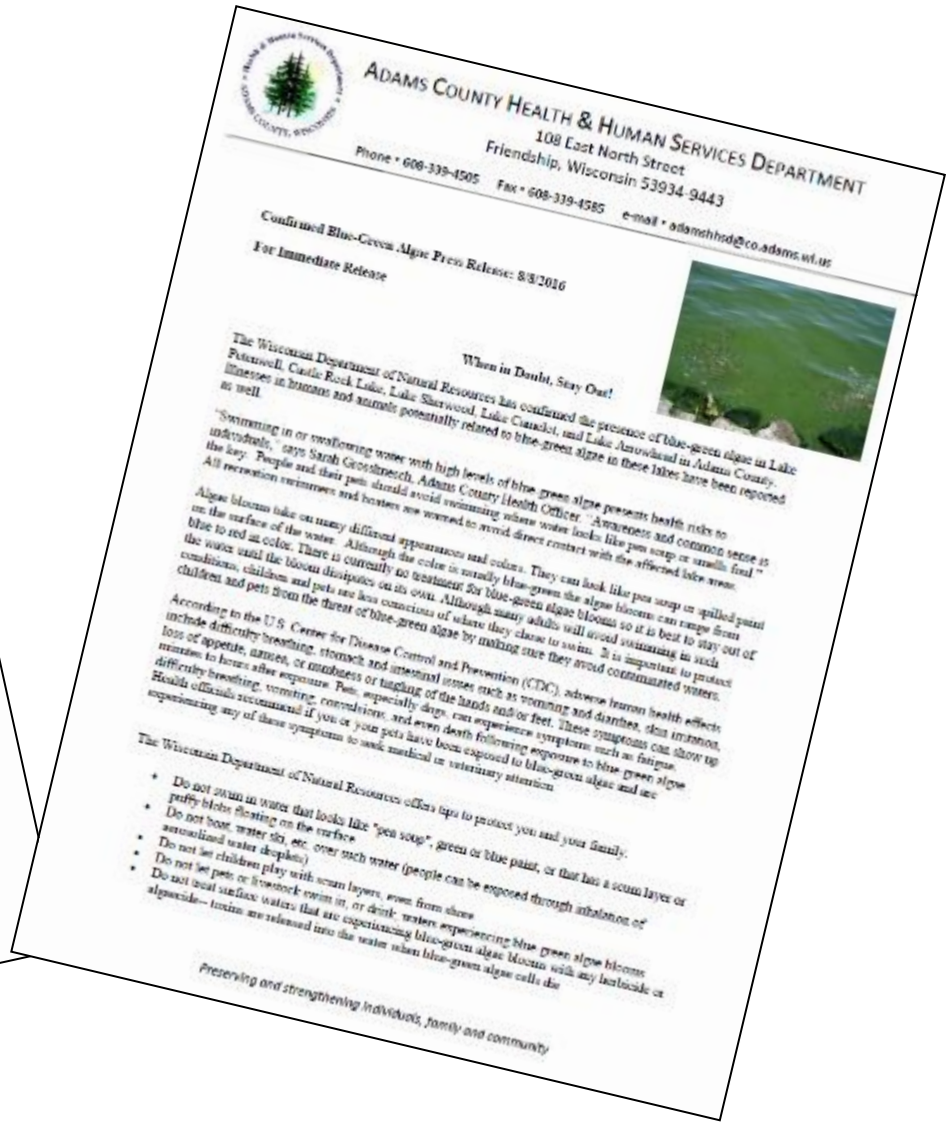
Avoid swallowing lake water and do not touch algal scums. Keep pets away from the water.

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

Be alert! Avoid water that:

- Looks like pea soup or spilled paint
- Is discolored or has colored streaks
- Has surface scums, mats, or films
- Has green dots or globs floating below the surface

For more information, call the [county name] Health Department at [phone number] or visit [department website].



ADAMS COUNTY HEALTH & HUMAN SERVICES DEPARTMENT
108 East North Street
Friendship, Wisconsin 53934-9443
Phone • 608-339-4505 FAX • 608-339-4585 e-mail • adamshhsd@co.adams.wi.us

Confirmed Blue-Green Algae Press Release: 8/8/2016

For Immediate Release

When in Doubt, Stay Out!

The Wisconsin Department of Natural Resources has confirmed the presence of blue-green algae in Lake Petenwell, Castle Rock Lake, Lake Sherwood, Lake Camelot, and Lake Arrowhead in Adams County. Illnesses in humans and animals potentially related to blue-green algae in these lakes have been reported as well.

"Swimming in or swallowing water with high levels of blue-green algae presents health risks to individuals," says Sarah Geenhaesch, Adams County Health Officer. "Awareness and common sense is the key. People and their pets should avoid swimming where water looks like pea soup or smells foul." All recreation swimmers and boaters are warned to avoid direct contact with the affected lake areas.

Algae blooms take on many different appearances and colors. They can look like pea soup or spilled paint on the surface of the water. Although the color is usually blue-green the algae blooms can range from blue to red in color. There is currently no treatment for blue-green algae blooms so it is best to stay out of the water until the bloom dissipates on its own. Although many adults will avoid swimming in such conditions, children and pets are less conscious of where they choose to swim. It is important to protect children and pets from the threat of blue-green algae by making sure they avoid contaminated waters.

According to the U.S. Center for Disease Control and Prevention (CDC), adverse human health effects include difficulty breathing, stomach and intestinal issues such as vomiting and diarrhea, skin irritation, loss of appetite, nausea, or numbness or tingling of the hands and/or feet. These symptoms can show up minutes to hours after exposure. Pets, especially dogs, can experience symptoms such as fatigue, difficulty breathing, vomiting, convulsions, and even death following exposure to blue-green algae. Health officials recommend if you or your pets have been exposed to blue-green algae and are experiencing any of these symptoms to seek medical or veterinary attention.

The Wisconsin Department of Natural Resources offers tips to protect you and your family:

- Do not swim in water that looks like "pea soup", green or blue paint, or that has a scum layer or puffy blobs floating on the surface.
- Do not boat, water ski, etc. over such water (people can be exposed through inhalation of aerosolized water droplets)
- Do not let children play with scum layers, even from shore
- Do not let pets or livestock swim in, or drink, waters experiencing blue-green algae blooms
- Do not load surface waters that are experiencing blue-green algae blooms with any herbicide or algaecide– toxins are released into the water when blue-green algae cells die

Preserving and strengthening individuals, family and community

HAB-Related Illness Case Studies

Human Illness Case Study

- In August 2017, DPH received faxed report from the Wisconsin Poison Center (WPC).
- 17-year-old male became ill with gastro-intestinal illness the day after recreating in a lake for 30 minutes

Human Illness Case Study

- DPH interviewed the family the following week
- Exposure location was near shoreline of county park
- Activities: swimming near shoreline, dunking, playing catch in waist-deep water

Human Illness Case Study

- Signs and symptoms:
  - Headaches within 1 hour of exposure
  - Following morning: abdominal cramping and diarrhea lasting <24 hours
  - No known ill contacts
  - Did not seek medical care
- Environmental conditions:
  - Murky, green, “pea soup” water with rotten egg odor
  - Three dead carp present

Human Illness Case Study

- Water Sampling
  - Too late for illness response sampling
  - Other data available?
    - Citizen monitoring at deep hole on day of exposure:
      Secchi depth: 2.5 ft
      Clarity: murky
      Color: green
    - Unknown conditions at shallower shoreline locations

Human Illness Case Study

Conclusion

- Signs and symptoms characteristic of cases of HAB-related gastrointestinal illness
- There was observational and environmental evidence of a bloom
- Lab-based HAB data unavailable

Human Illness Case Study

Conclusion

- Signs and symptoms characteristic of cases of HAB-related gastrointestinal illness
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Probable cases

Animal Illness Case Study

Two dogs died within 1 hour of each other on the same day after swimming in the same lake.

- Dogs had no connection
- Dogs swam at different beaches (Beach A, Beach B)
- No blooms were visually observed
- Owner of one dog went to the media

Animal Illness Case Study

Cavalier King Charles Spaniel

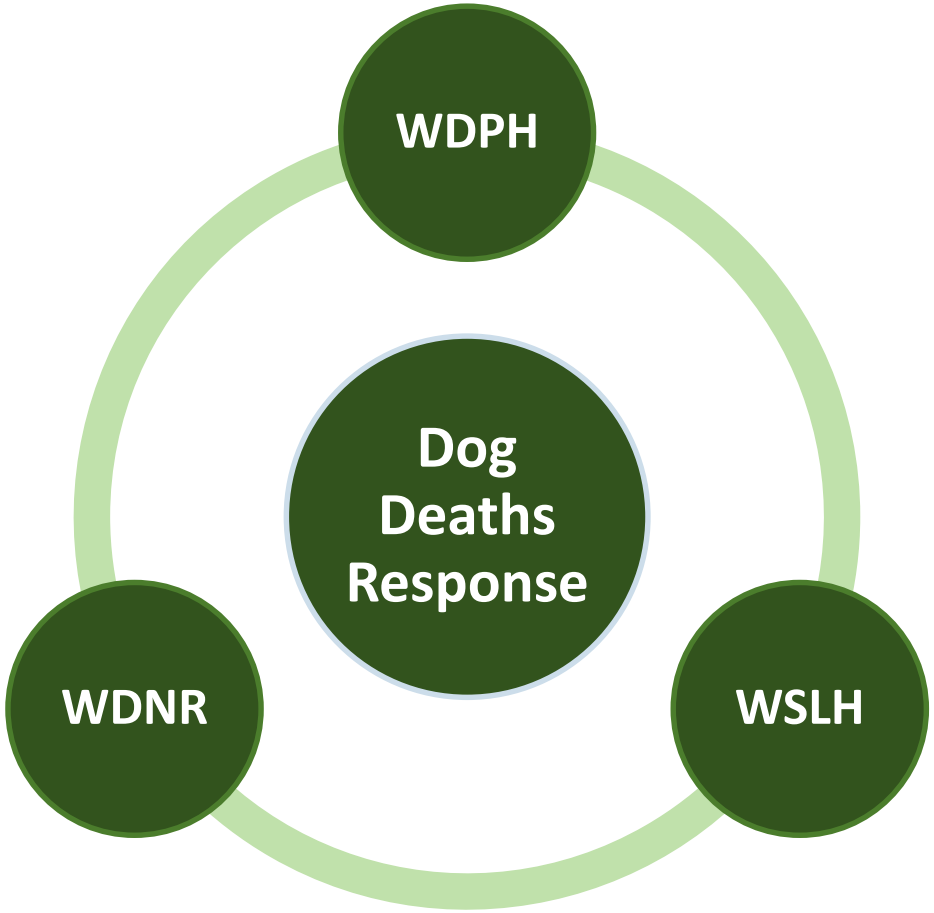
- **Activities at Beach A**: Swimming, playing fetch
- **Exposure duration**: 1 hour
- **Fast onset of severe illness**
- **Environmental conditions**: Brown, murky water; no signs of an algal bloom

Animal Illness Case Study

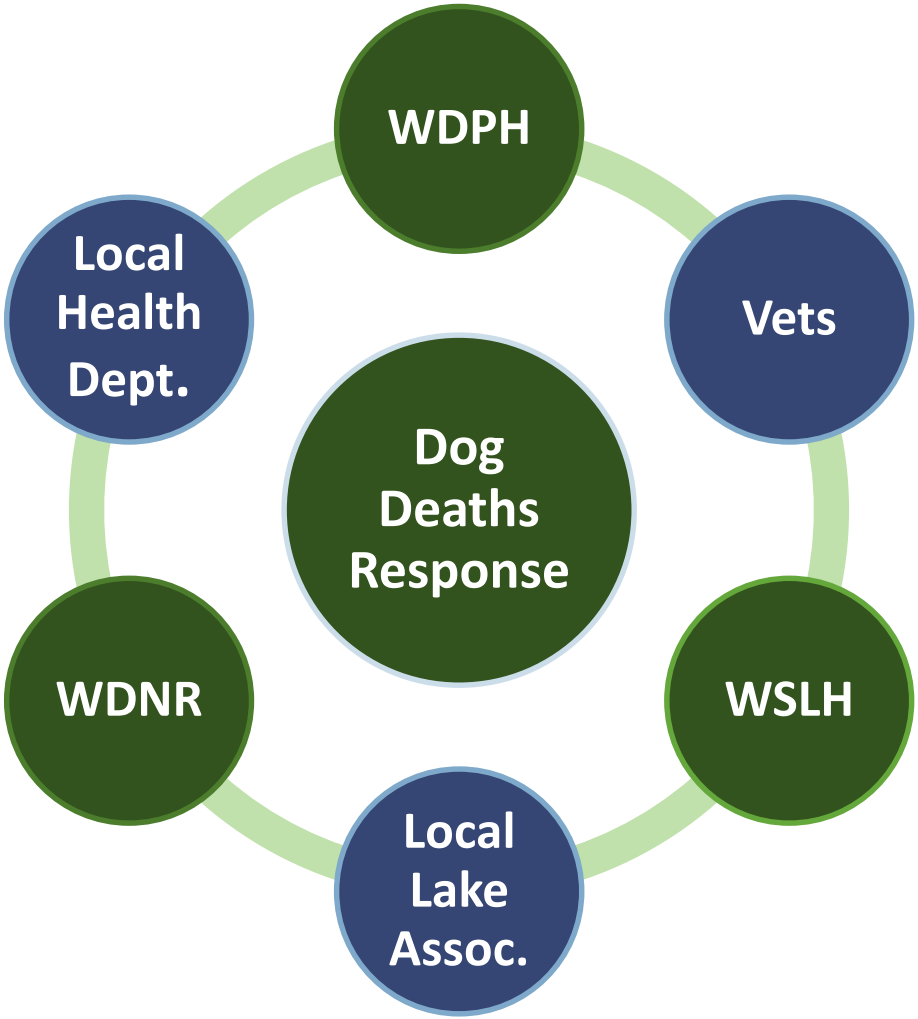
Border Terrier

- **Activities at Beach B**: Swimming, playing fetch
- **Exposure duration**: 20-25 minutes
- **Fast onset of severe illness**
- **Environmental conditions**: Brown, murky water; no signs of an algal bloom

Animal Illness Case Study



Animal Illness Case Study



Animal Illness Case Study

WDPH

Interviewed dog owners and served as point-of-contact between investigation partners

WDNR

Collected and analyzed water samples at Beach A and Beach B where dogs were exposed

WSLH

Analyzed water samples and dogs' stomach contents for cyanobacteria and cyanotoxins

Animal Illness Case Study

Local Health Dept.

Collected and analyzed water samples for cyanobacteria and cyanotoxins

Local Lake Assoc.

Shared results from routine monitoring at Beach A on day of dogs' exposures

Vets

Received, examined, and attempted to treat animals during ER visits; performed necropsies and additional post-mortem testing on both dogs

Animal Illness Case Study

Water sample analysis

- **Low** cyanobacterial cell counts with either **non-detectable** or **very low** levels of cyanotoxins

Stomach content analysis

- Cavalier King Charles Spaniel: **non-detectable** cyanotoxins
- Border Terrier: **non-detectable** cyanotoxins

Post-mortem analyses and necropsies

- Ruled out cyanotoxin exposure
- Identified other possible causes of illness and death

Animal Illness Case Study

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Post-mortem analyses and necropsies

- Ruled out cyanotoxin exposure
- Identified possible other causes of illness and death

Not a case!

Public Health Importance

Public Health Importance

- Emerging public health problem worldwide.
- Projected increases in severity and magnitude.
- Health impacts are still poorly understood.

Public Health Challenges

- Poor recognition of cases
- Failure to associate illness with algal bloom exposure
- Challenging to diagnose
  - Non-specific symptoms
  - Medical attention not sought
  - Low case recognition among doctors and vets
  - No available diagnostic test

Illness Prevention

How Can I Help?

How Can I Help?

- **Become familiar with the signs and symptoms and water conditions.**

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- Become familiar with the signs and symptoms and water conditions.
- Educate others.

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- **Report suspected illnesses.**

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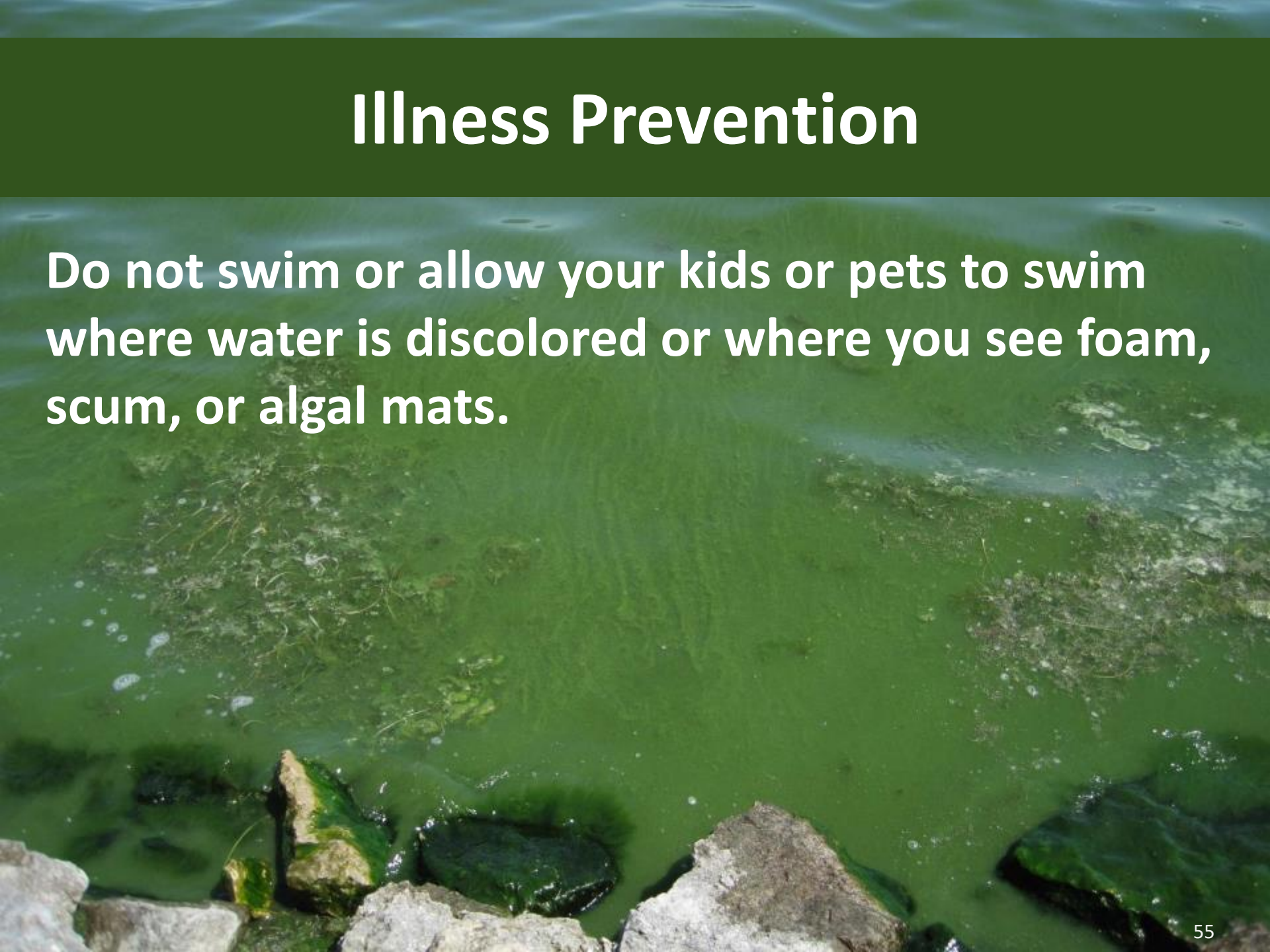
- Report suspected illnesses.
- Encourage others to report suspected illnesses.
- **Report obvious blooms to the Wisconsin DNR.**

Illness Prevention

Illness Prevention

Do not swim or allow your kids or pets to swim where water is discolored or where you see foam, scum, or algal mats.



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Do not boat, tube, water ski, jet ski, or wakeboard through algal blooms.

Illness Prevention

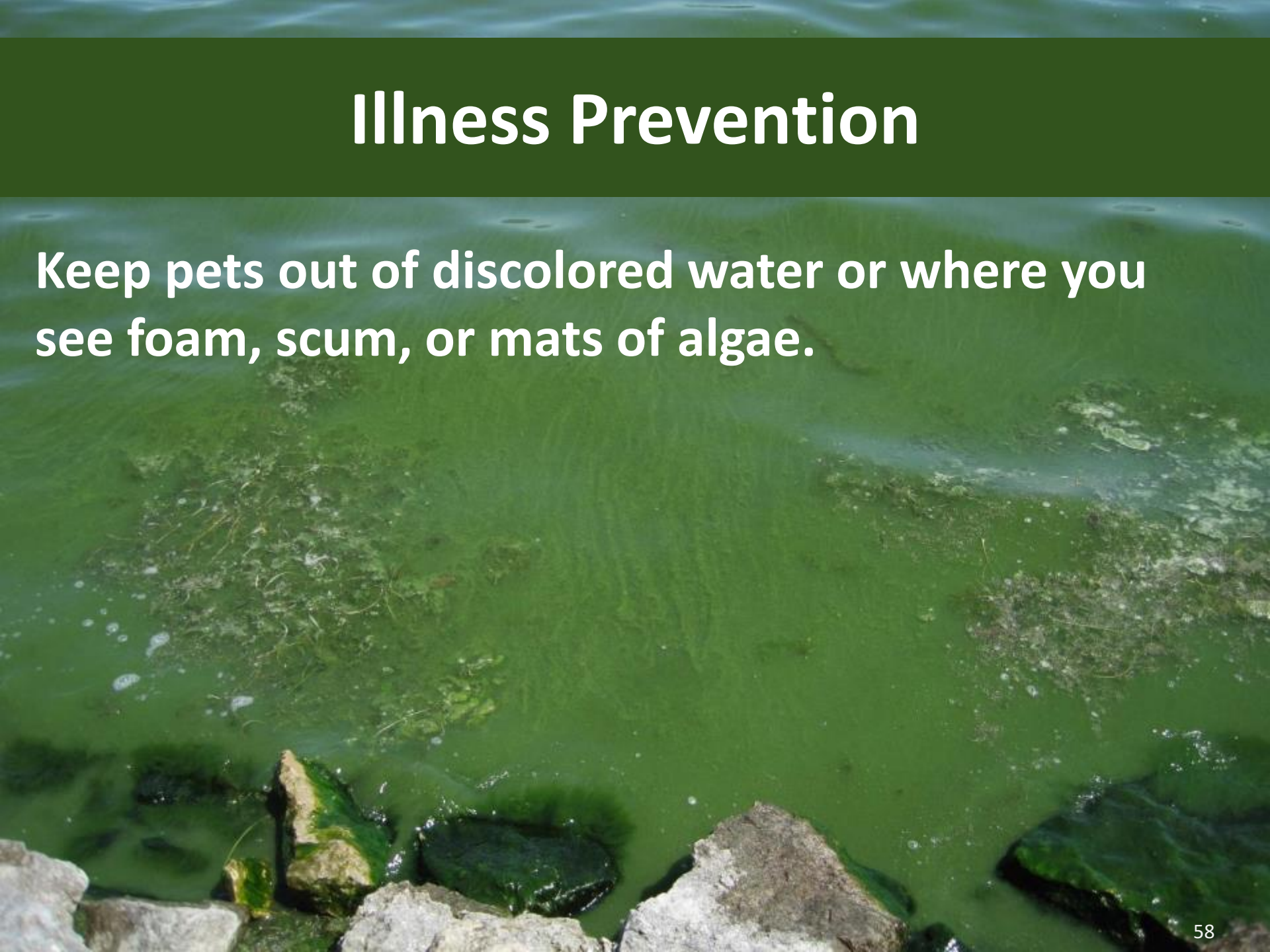
Do not swim or allow your kids or pets to swim where water is discolored or where you see foam, scum, or algal mats.

Do not boat, tube, water ski, jet ski, or wakeboard through algal blooms.

Shower after swimming in lakes, rivers, and ponds.

Illness Prevention

Keep pets out of discolored water or where you see foam, scum, or mats of algae.



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If dogs swim in scummy water, rinse them off right away—do not let them lick algae off their fur.

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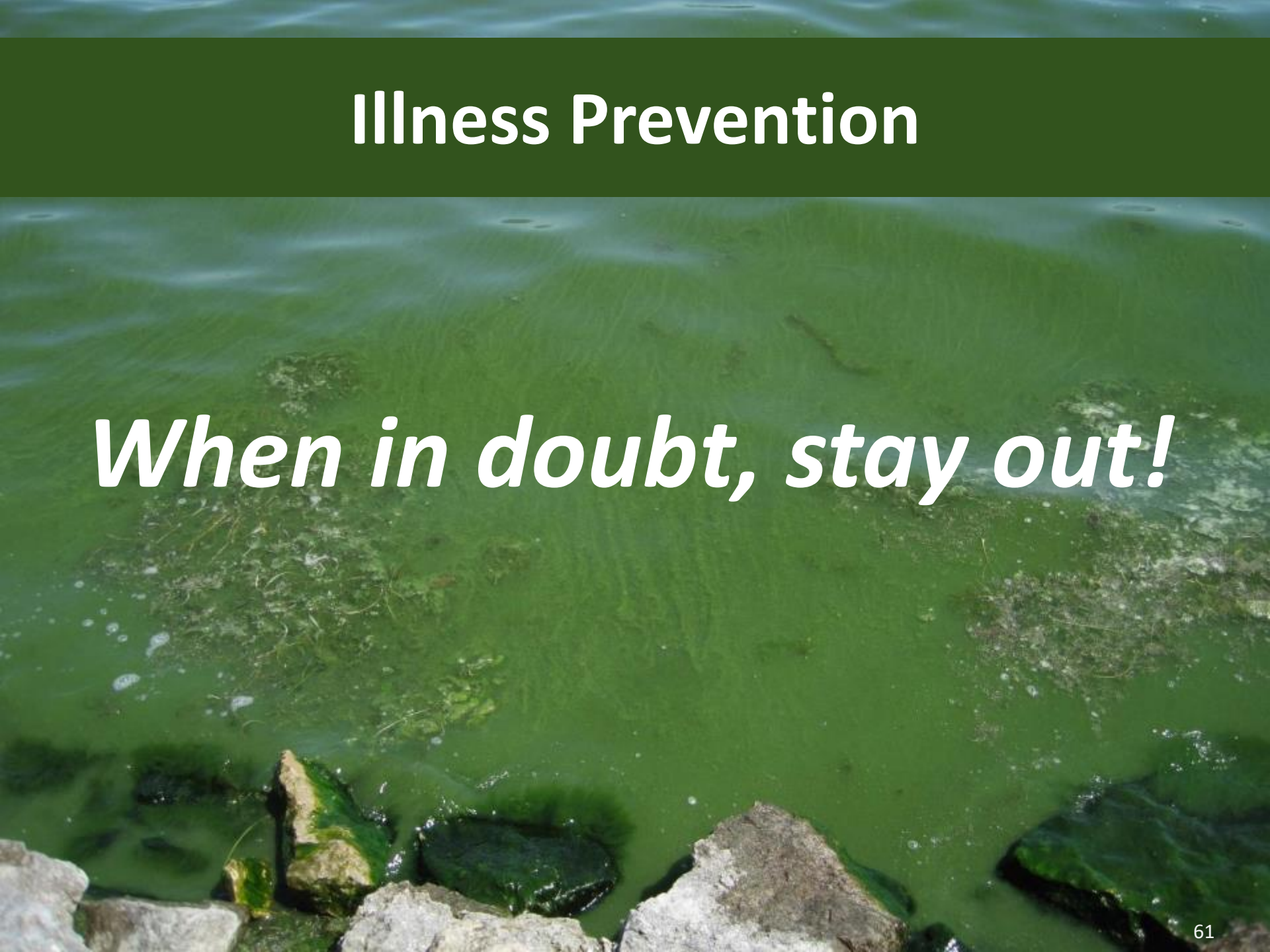
Respect beach closures and health advisories.

Illness Prevention



Resources

Blue-Green Algae and Dog Safety

Blue-green algae are photosynthetic bacteria known as *cyanobacteria* and are a natural part of water bodies. With enough sunlight and nutrients, cyanobacteria can grow quickly and form a blue-green algae *bloom*. Blooms often look like spilled paint or pea soup and can change the color of the water to green, blue, turquoise, brown, purple, or white. Some blooms form a layer of scum or mats on the surface of the water. **Blue-green algae can produce toxins which can make people and animals sick** after they drink, breathe in, or have contact with the water. Many dogs have become sick and some have even died after drinking water with an algae bloom. Learn how to keep your dog safe!

Why are blue-green algae especially harmful to dogs?

- Dogs can't tell whether water is safe to swim or play in.
- When dogs swim and play in water, they tend to swallow water.
- Because dogs have smaller bodies, they can get sick after swallowing just a little bit of unsafe water.

How can I keep my dog safe?

- Choose clear water without noticeable discoloration or surface scum, foam, and algal mats.
- Do not let your dog swim in places where beach closure and water quality notices are posted.
- Supervise your dog at all times. Do not let your dog eat algal scum or mats or lick algae off its fur.
- Always offer fresh, clean water for your dog to drink instead of lake, river, or pond water.
- If you have any doubt about what is in the water, keeping your dog out is the safest thing to do.

What should I do if my dog goes in water with blue-green algae?

- Immediately wash your dog and yourself with clean water.
- Keep an eye on your dog for sudden signs of poisoning such as:
  - Vomiting
  - Diarrhea
  - Difficulty breathing
  - Weakness
  - Seizures
  - Extreme tiredness
- If your dog develops any symptoms, take them to a veterinarian immediately.
- Report any blue-green algae related illness to the Wisconsin Division of Public Health by calling 608-266-1120 or completing an online survey at www.dhs.wi.gov and searching "algae."

BUREAU OF ENVIRONMENTAL AND OCCUPATIONAL HEALTH
Harmful Algal Blooms Program | Go to www.dhs.wi.gov and search "algae"
Wisconsin Department of Health Services | Division of Public Health
P-00089 (08/2018)

PROTECTING YOUR FAMILY FROM HARMFUL ALGAL BLOOMS

Stay healthy around harmful algae with these simple steps!

THE HARMFUL ALGAE AND HEALTH CONNECTION

Wisconsin has more than 15,000 lakes and rivers that are home to many organisms, including algae.

In Wisconsin, algal blooms usually happen between mid-June and mid-September.

Take these important steps to protect your health and that of your family if you come across a harmful algal bloom.

WAYS TO PROTECT YOURSELF

- **Know what an algal bloom looks like.** Blue-green algae blooms can appear overnight. They can be fluorescent blue, green, white, red, or brown, and may look like thick paint or pea soup floating on the water.
- **Look for beach notices.** Be sure to check beach postings and water quality notices before you or your pet go swimming. You can be exposed while swimming by inhaling water spray or just being near a bloom.
- **Watch where your pets play.** If your pet does come into contact with blue-green algae, immediately wash them off with clean water—don't let them lick it off their fur.
- **When in doubt, stay out!** If you wade into water up to your knees and cannot see your feet, the amount of algae could be unsafe.

WHAT TO DO IF YOU COME IN CONTACT WITH A BLOOM

Rinse off.

Pro tip: Shower yourself and rinse off your pet immediately, and clean all gear after use.

Get medical treatment.

Pro tip: If you think you, your pet, or your livestock might have been poisoned by algal toxins, get medical help.

Call the poison center.

Pro tip: If you are experiencing symptoms, call the Wisconsin Poison Center (800-222-1222).

For more tips, view the full toolkit at:

WWW.DHS.WISCONSIN.GOV/CLIMATE

WISCONSIN CLIMATE AND HEALTH PROGRAM
Bureau of Environmental and Occupational Health
www.dhs.wisconsin.gov/climate | JANUARY 2018 | dhsclimate@wi.gov

Resources

Staying Safe and Healthy in Wisconsin's Lakes

What You Need to Know about Blue-Green Algae

With over 15,000 lakes, Wisconsin is a prime destination for summer fun. Learn what you can do to keep your lake visit safe and healthy by protecting yourself and your family from the harmful effects of blue-green algae.

What are blue-green algae?

- Blue-green algae are photosynthetic bacteria known as *cyanobacteria* and are a natural part of water bodies.
- With enough sunlight and nutrients, cyanobacteria can grow to high levels and form a blue-green algae *bloom*.
- Blooms are often smelly, look like spilled paint or pea soup, and can change the color of the water to green, blue, turquoise, purple, tan, or white. Some blooms form a layer of scum or mats on the surface of the water.
- While some blooms can stay in the same location for a long time, others can quickly come and go with changing currents and wind patterns. Blooms usually form during the summer months in Wisconsin, or May–September.
- **Blue-green algae blooms can produce toxins that can make people and animals sick after they swallow, breathe in, or have contact with the water.**

How can I keep myself, my family, and my pets safe at the lake?

- When searching for a spot to swim, choose the clearest water possible. Avoid water that:


Looks like spilled latex paint


Looks like green pea soup


Is discolored or streaky


Has small green dots floating in it


Has floating scum, globs, or mats


Has dead fish or other animals

- Always shower off after swimming in lakes, rivers, and ponds.
- If dogs swim in scummy water, rinse them off with fresh, clean water and don't let them lick algae off their fur.
- Don't swim or allow your pets to swim in places where beach closure or water quality notices are posted.
- Try not to swallow the water. Besides blue-green algae, lake, river, and pond water can contain other bacteria and parasites that can make you sick if you swallow it. Always use safe water for drinking!

P-01888 (07/2019)

BUREAU OF ENVIRONMENTAL AND OCCUPATIONAL HEALTH
Harmful Algal Blooms Program | Go to www.dhs.wi.gov and search "algae"
Wisconsin Department of Health Services | Division of Public Health

How can I tell if what I'm seeing are blue-green algae, or something else?

Blooms have look-alikes! These conditions do not produce toxins and are NOT harmful:


True algae (green algae)


Yellow plant pollen


Tiny aquatic plants (duckweed)

To determine whether what you're seeing are true algae or blue-green algae, you can conduct the jar or stick test. Remember to wear rubber or latex gloves for protection!

The Jar Test

- With gloves on, use a glass jar to collect a sample just below the surface of the water (avoid collecting just the top layer of scum).
- Fill the jar about three-quarters full (leave room at the top for gas production). Wipe any scum off the outside of the jar and screw the lid on. Give it a shake.
- Leave the jar in a location where the contents will not be disturbed for 2–3 hours.
- After 2 or 3 hours, observe the jar to see where the algae have settled. Algae that sink to the bottom are likely true algae, and algae that form a greenish ring at the top of the water are likely blue-green algae (cyanobacteria).


white cyanobacteria float, true algae sink

The Stick Test

- With gloves on, push a long, sturdy stick into the surface of the algal material and slowly lift it out of the water.
- If the stick comes out looking like it has been dipped into a can of paint, the material is likely blue-green algae. If it comes out with long, green, hair-like strands or threads, the material is probably true algae (filamentous green algae).
- While accumulations of filamentous green algae may be a nuisance in a lake, they are not a health hazard.


Green algae are not harmful.

**These tests may help you determine if you have higher levels of blue-green in your lake, but they don't tell you whether or not the blue-green algae are actually producing toxins. When in doubt, it's best to keep out!*

How can I report a bloom I see in Wisconsin?

Email the Wisconsin Department of Natural Resources at DNRHABS@wisconsin.gov to report a bloom and ask questions about blooms and bloom mitigation strategies. Be sure to include descriptions of bloom size, duration, and location with lake name, town name, and county name. Include photos taken both close up and farther away.

What if someone goes in water experiencing a bloom?

- They should immediately shower off with fresh, clean water.
- Monitor for sudden signs of blue-green algae-related illness, such as:
  - Vomiting
  - Diarrhea
  - Headache
  - Abdominal pain
  - Cough
  - Sore throat
  - Skin rash
  - Blistering
- Seek medical care if symptoms occur or call the Wisconsin Poison Center at 800-222-1222 for advice. If pets become suddenly ill with signs of poisoning, bring them to a veterinarian immediately.
- Report blue-green algae-related illnesses to your local health department.

Resources

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  - Skin rash
  - Blistering
- Seek medical care if symptoms occur or call the Wisconsin Poison Center at 800-222-1222 for advice. If pets become suddenly ill with signs of poisoning, bring them to a veterinarian immediately.
- Report blue-green algae-related illnesses to your local health department.

Look for new HAB signs!

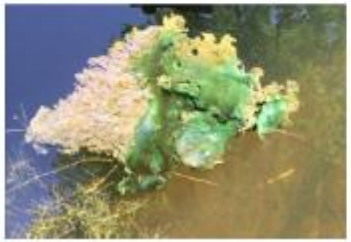
SCAN *you* *before* SWIM

A blue-green algae bloom may be present. Blue-green algae can produce toxins that 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"

Wisconsin Department of Health Services | Division of Public Health
Bureau of Environmental and Occupational Health | P-02421C (05/2019)

CAUTION

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

Blue-green algae can produce toxins that can make people and animals sick.

Be alert! Avoid water that:

Is discolored or streaky

Looks like spilled paint or pea soup

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Has small green dots floating in it

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- ✓ **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.**

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

For questions or to report a blue-green algae-related illness, 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-02421A (05/2019)

Reporting Blue-Green Algae (Cyanobacteria) Blooms and Related Human and Animal Illnesses in Wisconsin

To report a bloom only:

- Email the Wisconsin Department of Natural Resources at DNRHABS@wi.gov.
- Include descriptions of bloom size, duration, and location with lake, town, and county name, as well as any photos taken both close up and farther away.

Gina LaLiberte, MS • Applied Limnologist/DNR Blue-Green Algae Coordinator
Gina.LaLiberte@wisconsin.gov

To report a human or animal illness:

- Call your local health department OR the Wisconsin Division of Public Health at 608-266-1120.
- An online survey for reporting harmful algal bloom-related illness can be found by visiting dhs.wi.gov and searching “algae”.

Amanda Koch, MPH • Epidemiologist/DPH HAB Program Coordinator
Amanda.Koch@dhs.wi.gov