



CyanoSymposium 2026

# Communicating HAB Health Risks

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A drinking water focus



# CDC's HAB communication support for partners



Free communication resources



Audience research results



Technical assistance

### Keep pets safe near lakes and rivers

**✓ DO**

- Follow guidance on posted signs.
- Rinse yourself and your pets with tap water right after going in the water.
- Bring plenty of water for pets to drink.

**✗ DON'T**

- Don't let pets drink lake, river, or stream water.
- Don't let pets eat algae or lick it off their fur.

[www.cdc.gov/habs](http://www.cdc.gov/habs)

### Facts about Cyanobacterial Blooms for Poison Center Professionals

<https://www.cdc.gov/habs/materials/factsheet-cyanobacterial-habs.html>

Cyanobacterial blooms can make people and animals ill. Learn more about exposures, signs and symptoms, laboratory testing, and illness management.

#### Cyanobacterial blooms can harm people and animals

Cyanobacteria, also referred to as blue-green algae, are microscopic organisms that live primarily in fresh water but can also be found in brackish or salt water.

An overgrowth of cyanobacteria is referred to as a "cyanobacterial bloom." Cyanobacterial blooms are usually blue-green in color, but can be other colors, including red or brown. When a bloom occurs, scum might float on the water surface. As it decays, it can smell like rotting plants. Cyanobacterial blooms more often occur during the summer or early fall but can occur anytime during the year. Cyanobacteria usually multiply and bloom when the water is warm, stagnant, and rich in nutrients (phosphorus and nitrogen) from sources such as fertilizer runoff or septic tank overflows.

Not all cyanobacterial blooms are harmful. A bloom can be harmful to people, animals, or the environment if it

- uses up the oxygen in the water
- releases harmful gases
- produces toxins
- becomes too dense

#### Common cyanotoxins

- Microcystins
- Cylindrospermopsins
- Anatoxin-a
- Guaitoxin, formerly known as anatoxin-a(S)
- Saxitoxins
- Nodularins
- Lyngbyatoxins

#### Human exposure to cyanobacterial blooms and cyanobacterial toxins

##### Routes of exposure

- Ingestion: swallowing contaminated water or eating food contaminated with toxins (including taking contaminated nutritional supplements)
- Inhalation: breathing in aerosolized toxins
- Skin contact: direct contact with contaminated water during activities like swimming or boating
- Eye contact: direct contact with contaminated water or aerosols

People are most often exposed to cyanobacterial blooms and toxins through recreational water. However, in a limited number of cases toxins have been detected in tap water systems and have prompted [drinking water advisories](#). When tap water is contaminated, additional exposures to toxins can occur through activities like showering or household use.

**Social media toolkit:**  
[www.cdc.gov/harmful-algal-blooms/toolkit-socialmedia](http://www.cdc.gov/harmful-algal-blooms/toolkit-socialmedia)

**Communication resources:**  
[www.cdc.gov/harmful-algal-blooms/communication-resources](http://www.cdc.gov/harmful-algal-blooms/communication-resources)





# Perceptions and Communication Preferences

Data from surveys and focus groups with U.S. adults

## AWARENESS

# U.S. adults report low to moderate awareness of HABs.

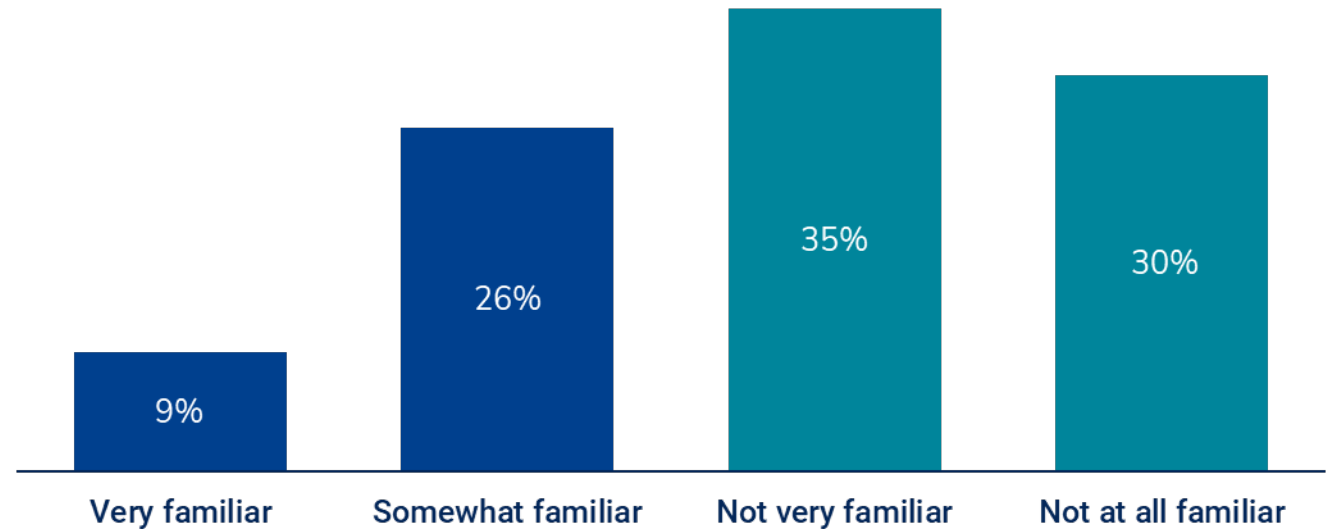
It [harmful algal blooms] was only new to me in the last five years. I've heard it since about 2018 or '19...but I've always been around water bodies.

– Focus group participant, 2024

## 65% of participants were unfamiliar with HABs

Survey question:

A harmful algal bloom can occur in fresh water (like lakes or rivers) or salt water (like oceans). Other names for harmful algal blooms include blue-green algae, cyanobacteria, and red tide. How familiar are you with harmful algal blooms?



Data from Porter Novelli View 360+ Survey, 2022; N=1,007 U.S. adults

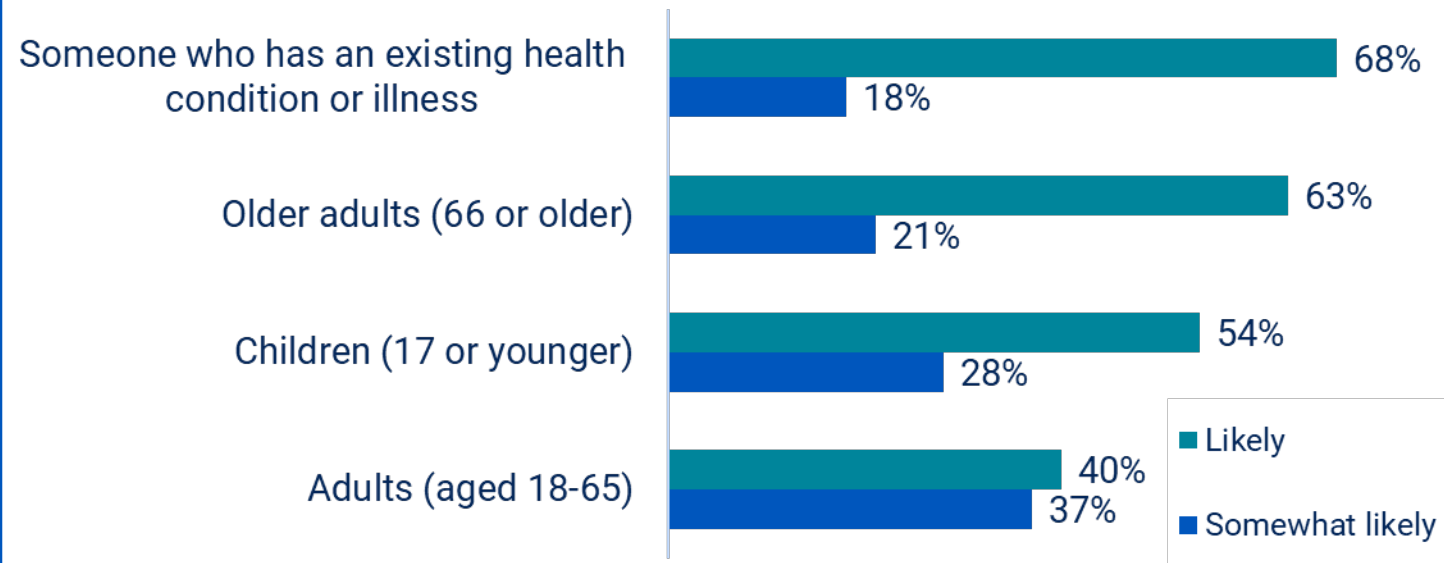
## RISK PERCEPTIONS

Participants thought anyone could get sick from HABs, but that certain groups were more likely to get sick.

Participants thought **people with existing health conditions, older adults, and children** were likely to get sicker from HABs than adults (18-65 yrs.)

Survey question:

How likely is it that a harmful algal bloom would make any of the following types of people sick enough to go to a healthcare provider?



Data from Porter Novelli View 360+ Survey, 2021; N=1,007 U.S. adults

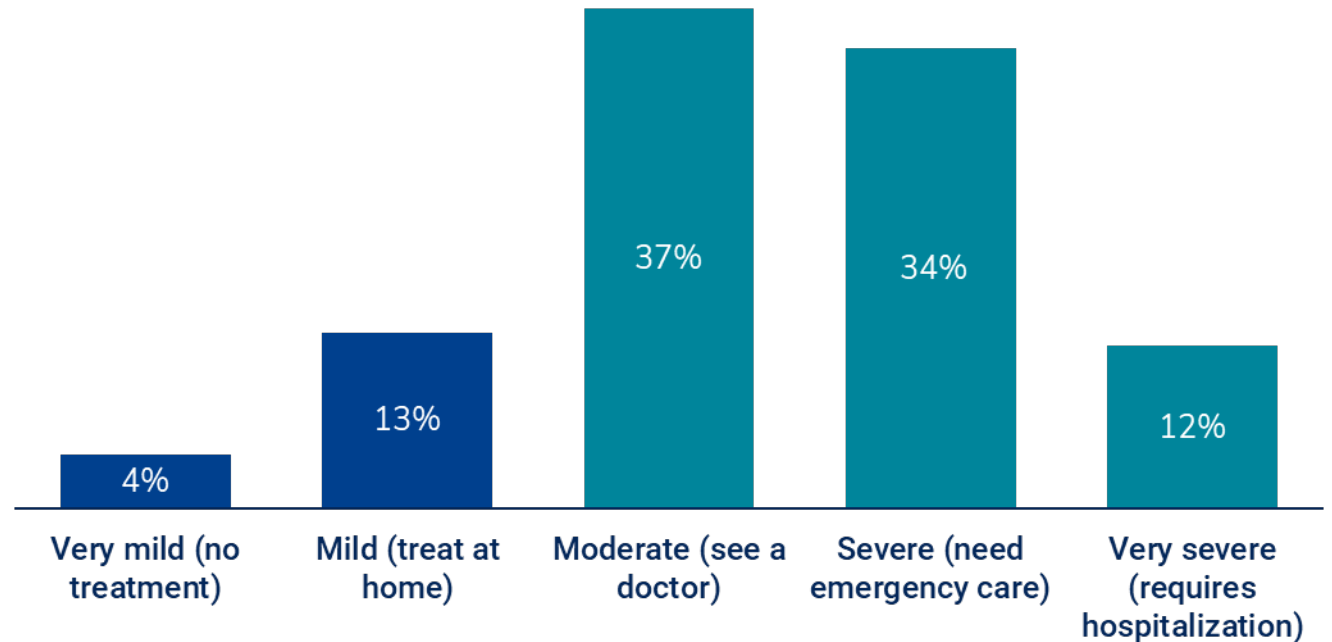
## ILLNESS SEVERITY

Participants thought illnesses from swallowing water contaminated by a HAB would be moderate to severe.

**83%** of participants thought illnesses would **require medical care**

Survey question:

How severe do you think illnesses from swallowing water contaminated by a harmful algal bloom are?



Data from Porter Novelli View 360+ Survey, 2023; N=1,011 U.S. adults

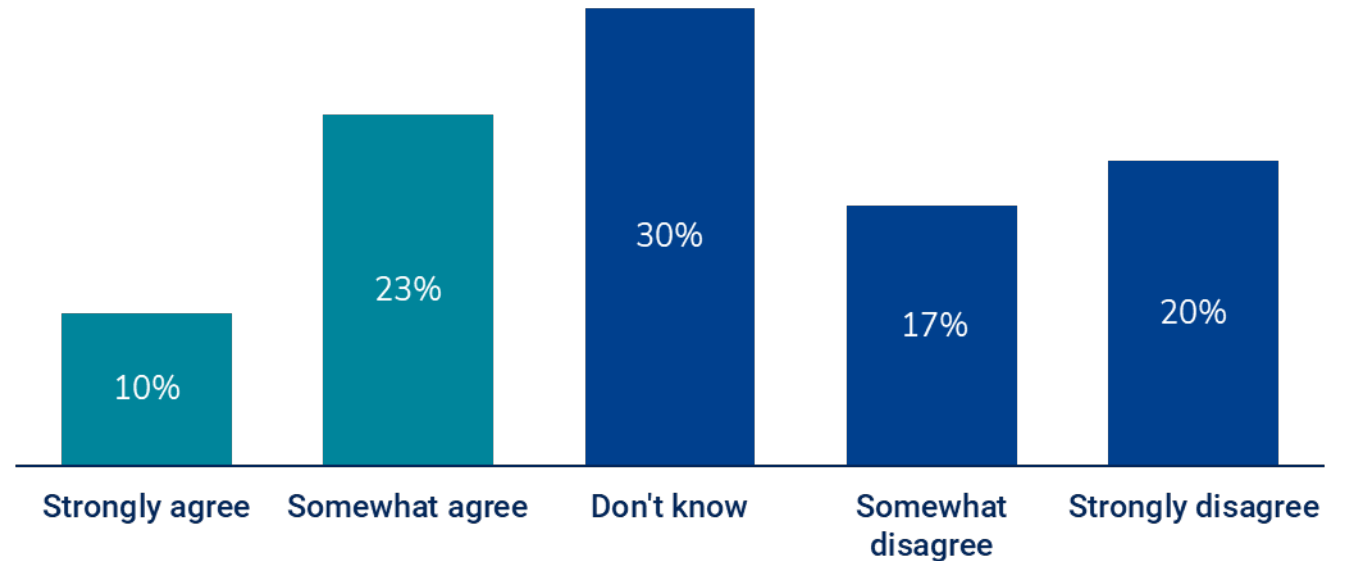
## PREVENTION KNOWLEDGE

**Participants had a mixed understanding of whether boiling HAB-contaminated water would make it safe.**

**33% of participants thought boiling would make water safe**

Survey question:

How much do you agree or disagree: Boiling water that is contaminated with a harmful algal bloom will make the water safe to drink.



Data from Porter Novelli View 360+ Survey, 2022; N=1,007 U.S. adults

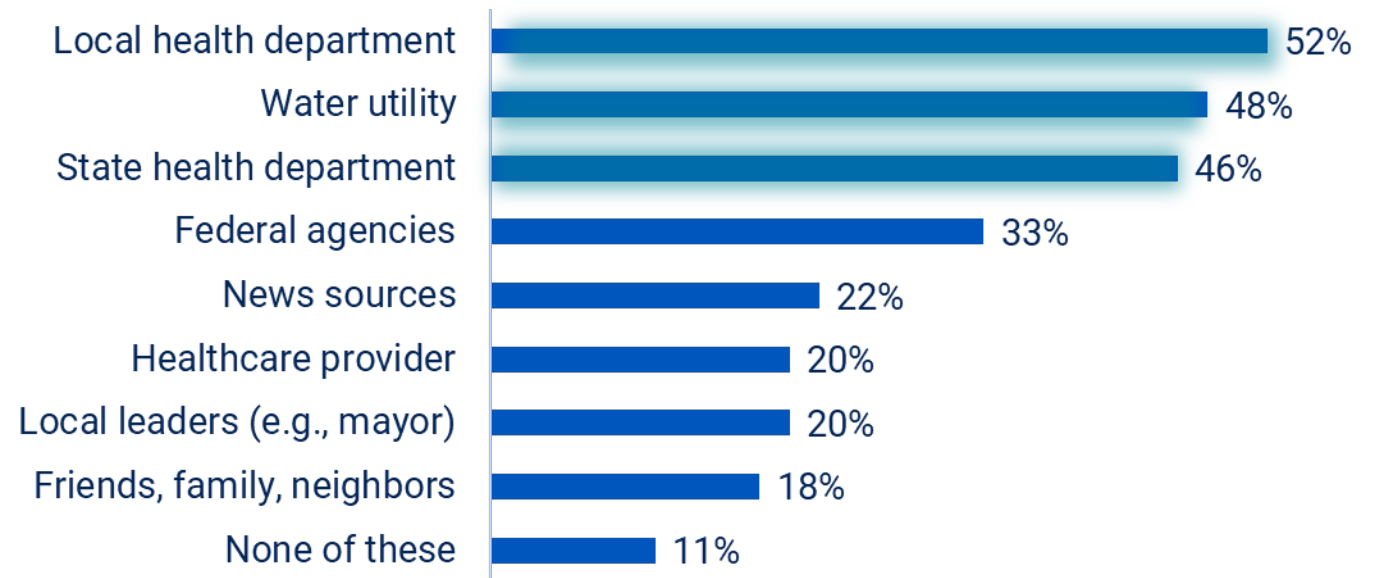
## TRUSTED SOURCES

Participants were more likely to trust local or state officials than other sources for information.

### About half of participants trusted local and state officials for information about tap water safety

Survey question:

Whom do you trust to inform you about the safety of your tap water? Select all that apply.



Data from Porter Novelli View 360+ Survey, 2021; N=1,004 U.S. adults

## PREFERRED TERMS

# Participants generally understood and preferred “harmful algae” or “toxic algae.”

I think harmful needs to be in the word because I know myself, I've taken blue-green algae as to just be, "Oh, isn't that pretty?" As opposed to, "Is it dangerous?"

– Focus Group Participant, 2024

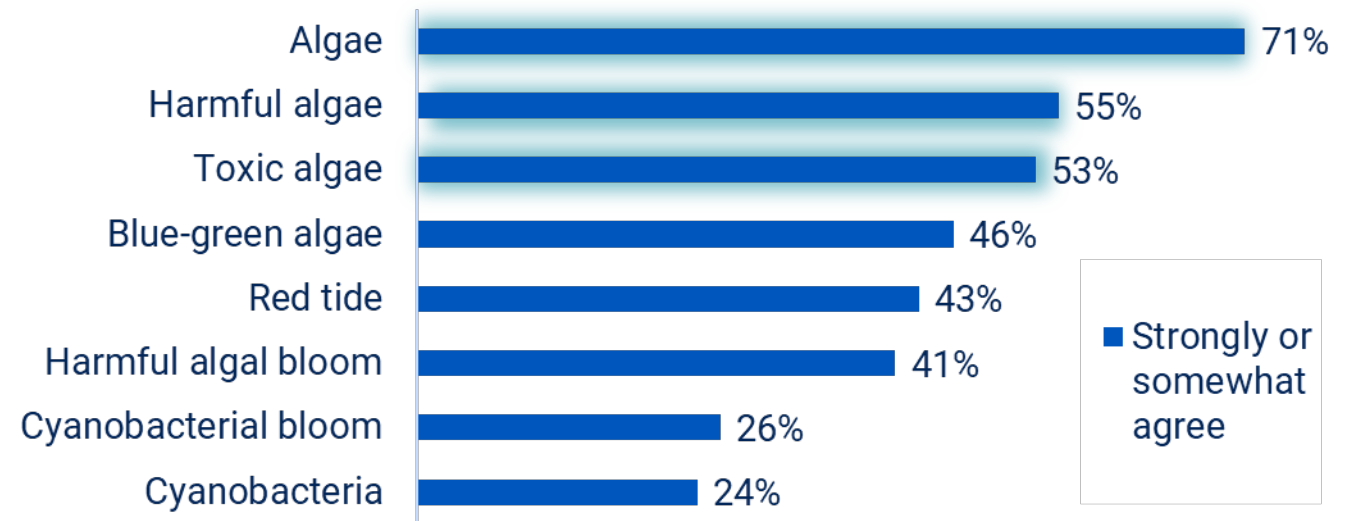
If you get into [the term “harmful algae and cyanobacteria”], where you can't even pronounce the word, which maybe the rest of you can. But I feel like my brain zones out and doesn't pay attention when I can't quickly interpret a word. But algae, I can see quick. I know what it is. I know what the word is. So I can put it together, where if I see cyanobacteria or something, I would be like, "I don't even know what that is."

– Focus Group Participant, 2024

## More than half of participants understood the terms algae, harmful algae, and toxic algae

Survey question:

I understand what the following words or phrases mean and could explain them to another person.



Data from Porter Novelli View 360+ Survey, 2023; N=1,011 U.S. adults



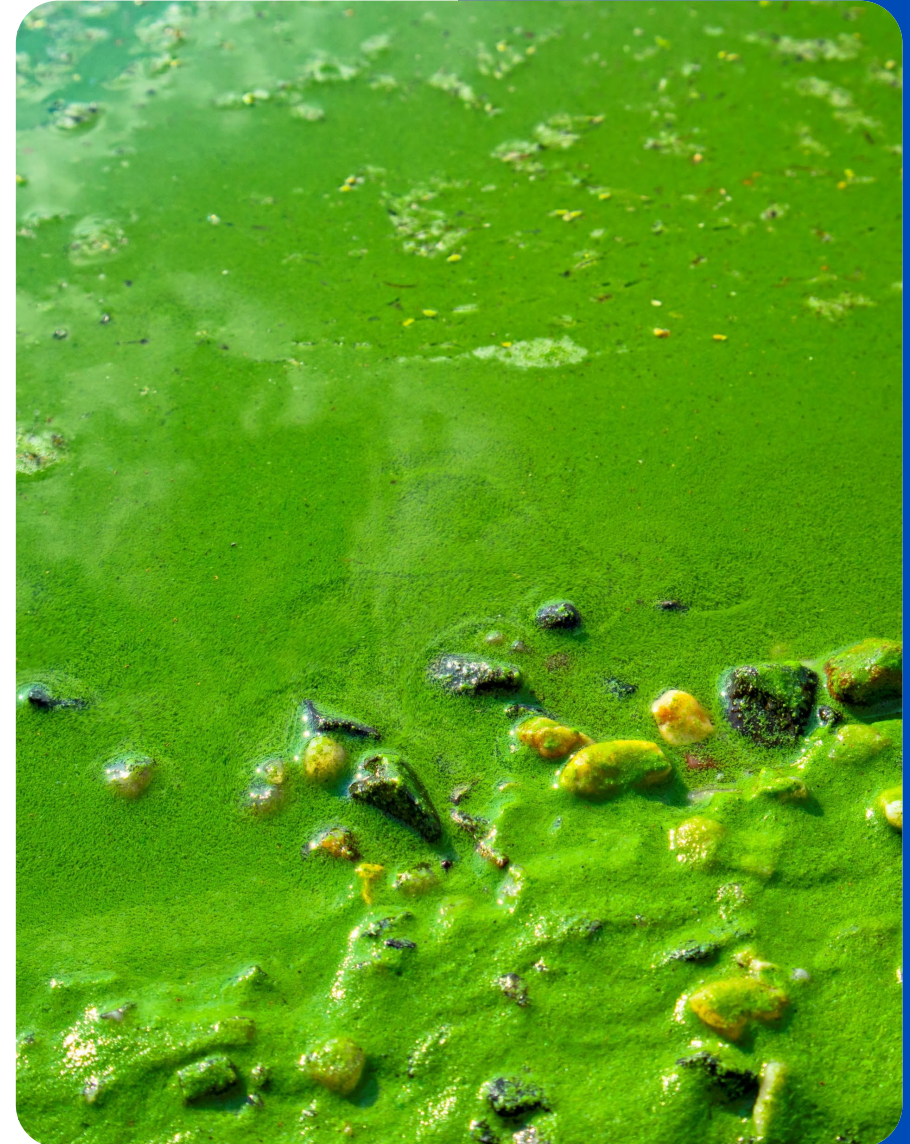
# Tips for Effective Communication

Informed by focus group feedback and best practices

## TIPS FOR EFFECTIVE COMMUNICATION

# Creating HAB communications

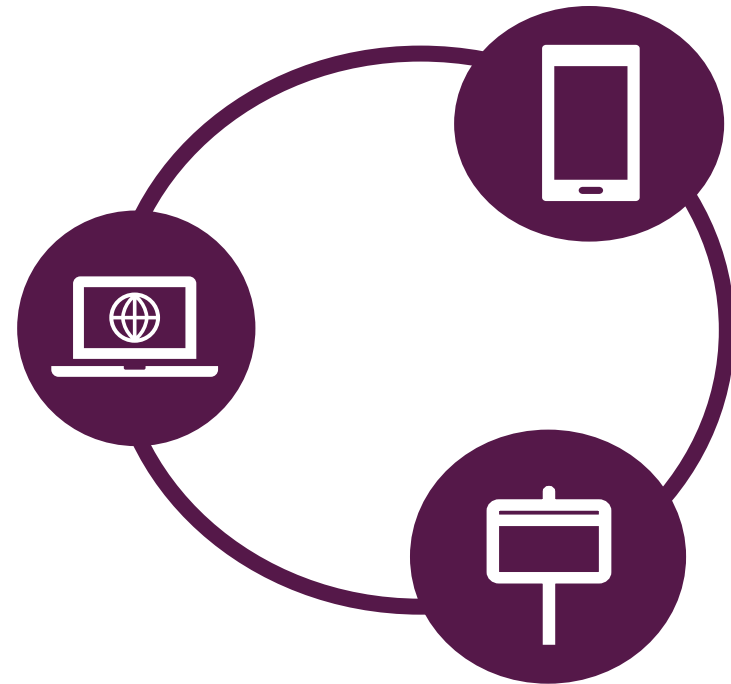
- Provide clear information about:
  - Where the problem is
  - Exposures
    - “You can get sick by swallowing the water or getting it on your skin”
  - Possible symptoms
  - How to prevent illness
- Reflect the seriousness of the threat in the design
  - Bold, easy-to-read fonts
  - Reds, oranges, or yellows for advisories
- Increase trust
  - Include your organization’s logo
  - Add a website with more information



## TIPS FOR EFFECTIVE COMMUNICATION

# Disseminating HAB communications

- Make up-to-date information available in multiple places
  - Official websites
  - Social media (Facebook, Instagram, YouTube)
  - Physical signs, if applicable



## TIPS FOR EFFECTIVE COMMUNICATION

# Drinking water risk communications

- Be first and keep info updated
- Truthfully tell what you know, don't know, and what is being done to fill in the gaps
- Communicate with empathy and respect
- Promote positive action to empower decision-making
- Use plain language
  - “Swallow” instead of “ingest”
  - List common symptoms instead of “adverse health effects”
- Provide concise and consistent messages





## SUMMARY

# Tips for communicating about HABs and drinking water



## Understand your audiences

- Levels of awareness
- Risk perceptions
- Behaviors



## Be clear and concise

- Use plain language
- Tell people what they can do to stay healthy
- Use effective visuals



## Reach people where they are

- Express empathy
- Use communication channels your audience prefers
- Communicate through trusted spokespeople and organizations

## References and resources

- » **Crisis & Emergency Risk Communication (CERC), CDC**  
[cdc.gov/cerc](https://cdc.gov/cerc)
- » **Drinking Water Advisory Communication Toolkit, CDC**  
[cdc.gov/water-emergency/php/dwact](https://cdc.gov/water-emergency/php/dwact)
- » **HABs and Health Website, CDC**  
[cdc.gov/habs](https://cdc.gov/habs)
- » **Freshwater Harmful Algal Blooms and Health: Awareness, Behaviors, Perceptions, and Communication Preferences Among U.S. Adults.** *Journal of Environmental Health*, March 2026
- » **Public awareness and concern about harmful algal blooms – United States, 2020.** *J Water Health*, 2024

# Thank you.

For more information, contact CDC  
1-800-CDC-INFO (232-4636)  
TTY: 1-888-232-6348 <https://www.cdc.gov/>  
Follow us on social @CDCgov

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the U. S. Centers for Disease Control and Prevention.

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