



Cyanotoxins Preparedness and Response Plans Framework

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Pre-Workshop Webinar: Learning
about Cyanotoxins Management
Plans and Tools

Thursday, September 26th, 2019



- Overview of tools to prepare, respond and mitigate cyanoHABs and cyanotoxins events in drinking and recreational waters.

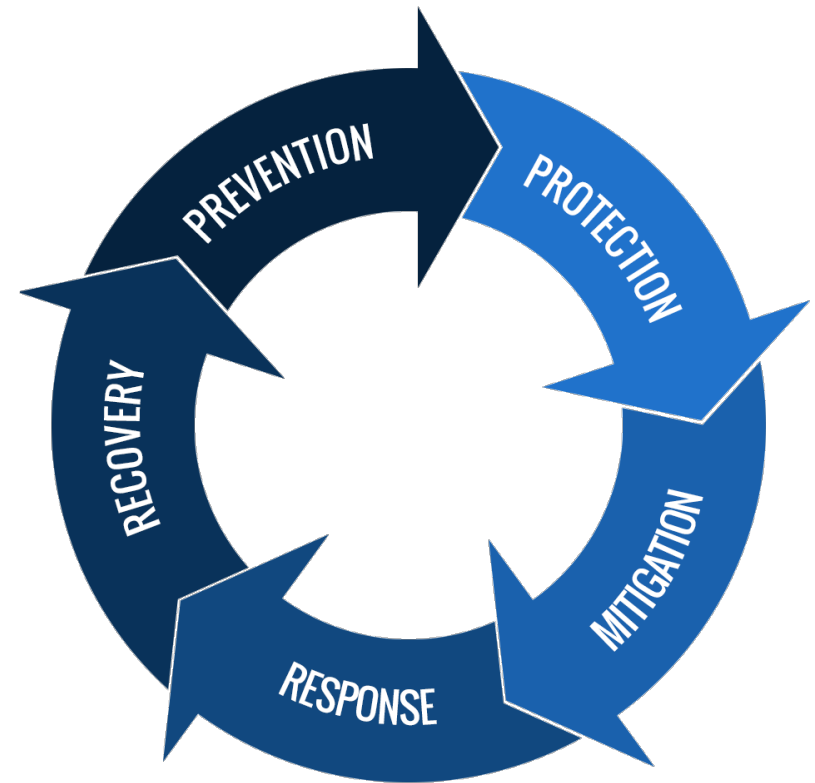
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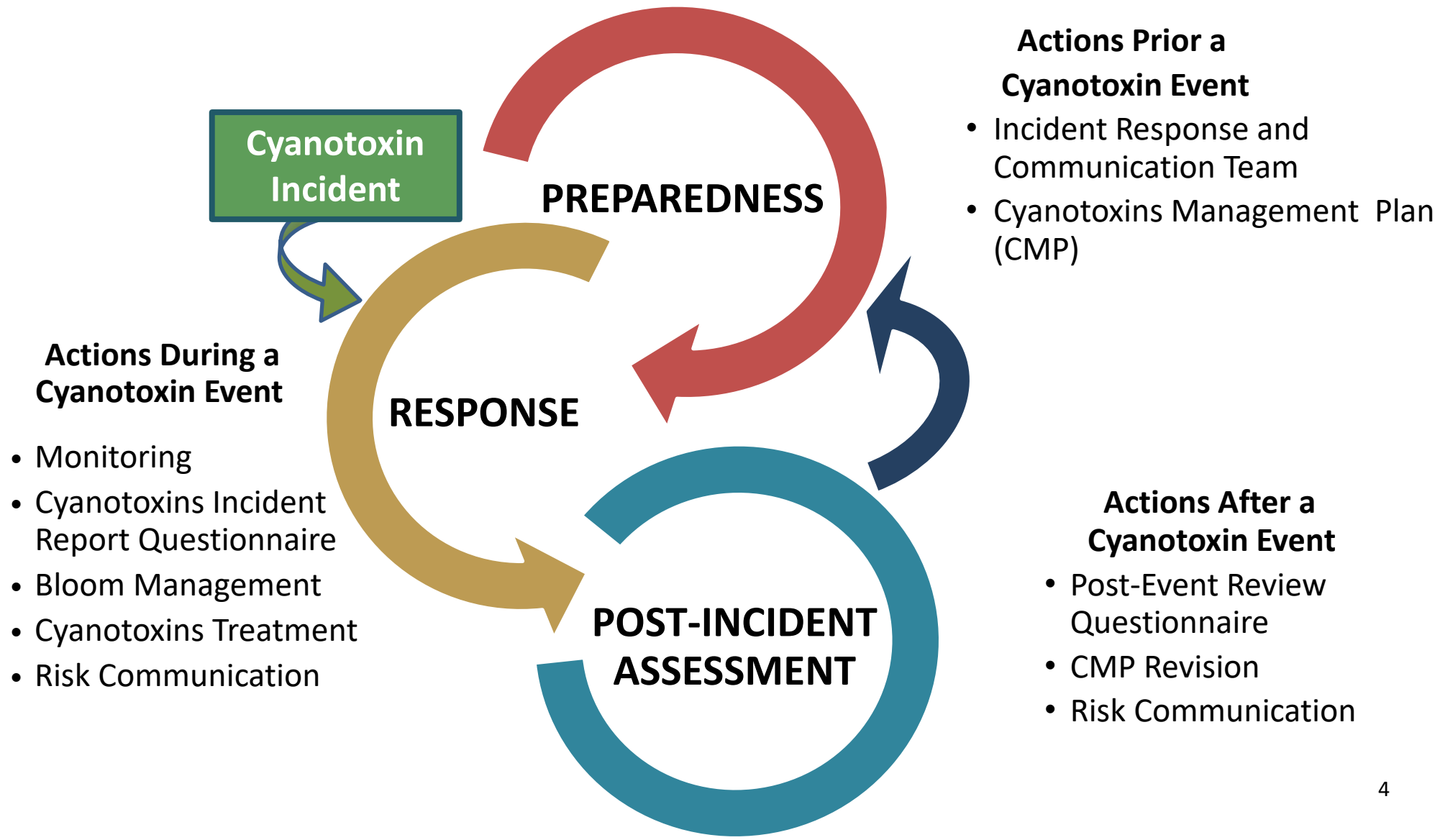
Using the template of the Department of Homeland Security's [National Incident Management System \(NIMS\)](#), an integrated framework that defines the roles and responsibilities of federal, state and local first responders during emergency events, approaches to prepare for, and respond to cyanotoxins events in drinking and recreational waters were developed for this exercise.

This framework will be called for our purposes The Cyanotoxins Preparedness and Response Framework

National Preparedness Core Cycle



Source: [National Protection Framework, Federal Emergency Management Agency \(FEMA\)](#)



Actions Prior to a Cyanotoxins Event

States and tribes can be greatly affected by cyanobacterial blooms in surface waters used for recreation and as a source of drinking water.

Before a HABs event, it is recommended that states and tribes:

- Initiate communications between states, tribes and other stakeholders to create a **Cyanotoxins Incident Response and Communication Team**.
- Public water systems as well as recreational water managers with source waters that are susceptible to HABs can benefit from developing a **Cyanotoxin Management Plan (CMPs)**.

Resources to Prepare For Cyanotoxins Events

- ✓ [Cyanotoxins Incident Response and Communication Team Contact Information Template](#) (Appendix B of EPA's document Cyanotoxins Management Plan Template and Example Plans)
- ✓ [Cyanobacteria Bloom Response Contact List](#)
- ✓ [EPA's Cyanotoxin Management Plan Template and Example Plans](#)

Actions Prior to a Cyanotoxins Event (Continued)

When developing cyanotoxins management plans, it is recommended that states and tribes:

- Perform a source water assessment (monitoring) to determine if the waterbody is susceptible to cyanotoxins.
- Establish and document sampling procedures, analytical testing procedures, and list of laboratories to conduct toxins analysis.
- Establish monitoring and management procedures and evaluate bloom control and management techniques, as well as drinking water treatment.
- Have a risk communication plan in place.

Resources to Support CMPs

- ✓ [Drinking Water Advisories for the Cyanotoxins Cylindrospermopsin and Microcystins](#)
- ✓ [Recommended Human Health Recreational Ambient Water Quality Criteria or Swimming Advisories for Microcystins and Cylindrospermopsin](#)
- ✓ [Recommendations for Public Water Systems to Manage Cyanotoxins in Drinking Water](#)
- ✓ [Monitoring and Responding to Cyanobacteria and Cyanotoxins in Recreational Waters](#)
- ✓ [Water Treatment Optimization for Cyanotoxins](#)

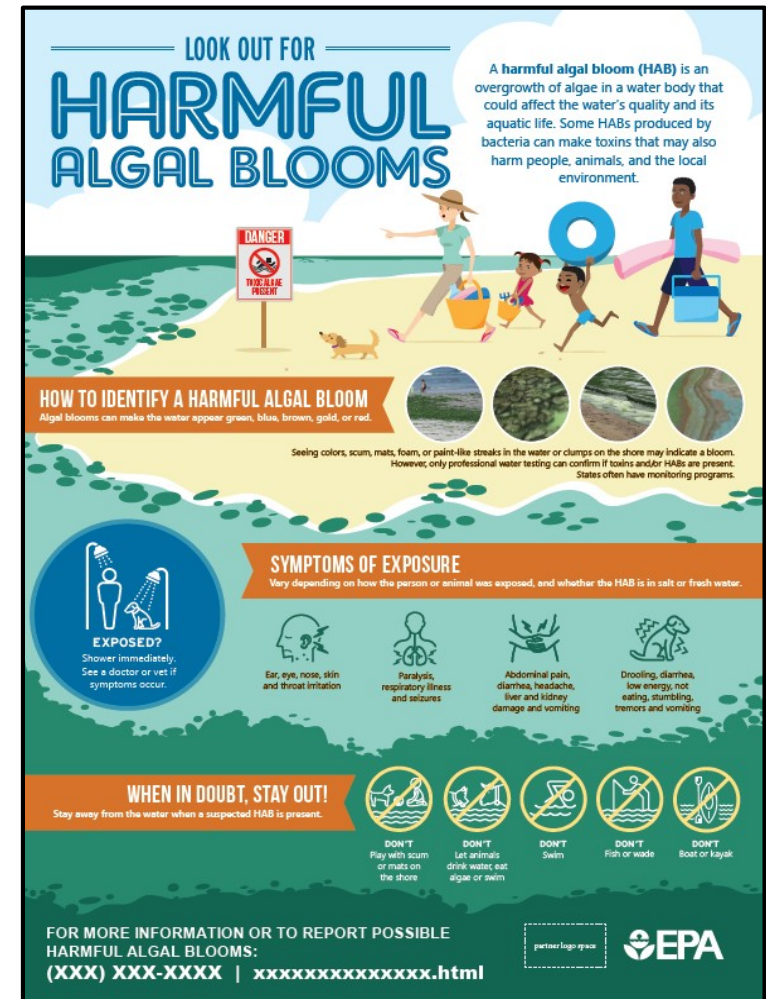
Actions Prior to a Cyanotoxins Event (Continued)

Planning for a HABs event also involves establishing communication plans for the public.

The EPA has developed tools and resources to assist water managers and public water systems to develop their risk communication plans.

Resources on Risk Communication

- ✓ [Drinking Water Cyanotoxin Communication Toolbox](#)
- ✓ [Recreational Water Communication Risk Toolbox for Cyanobacterial Blooms](#)



Actions During a Cyanotoxins Event

During a suspected or confirmed cyanotoxins event, it is recommended that states and tribes:

- Have a **Cyanotoxins Incident Report Questionnaire** that can be used as a guide to conduct a proper and timely monitoring and assessment of the incident.
- Have accessible **Frequently Asked Questions** on cyanobacteria and cyanotoxins for risk communication with public and media.
- Report suspected or confirmed HABs or cyanotoxins-associated human and animal illnesses to the CDC's **One Health Harmful Algal Bloom System (OHHABS)** voluntary reporting system.
- Have accessible Information on blooms control and management techniques.
- Have accessible Information on cyanotoxins treatment in drinking water systems.

Resources for Assistance During a Cyanotoxins Incident

- ✓ [Cyanotoxins Incident Report Questionnaire](#)
- ✓ [Incident Action Checklist - Harmful Algal Blooms](#)
- ✓ [Harmful Algal Blooms and Cyanotoxins FAQs](#)
- ✓ [Frequently Asked Questions: Laboratory Analysis for Microcystins in Drinking Water](#)
- ✓ [CDC's One Health Harmful Algal Bloom System](#)
- ✓ [Water Treatment Optimization for Cyanotoxins](#)
- ✓ [Recommendations for Cyanobacteria and Cyanotoxin Monitoring in Recreational Waters](#)
- ✓ [Recommendations for Public Water Systems to Manage Cyanotoxins in Drinking Water](#)

Actions During a Cyanotoxins Event (Continued)

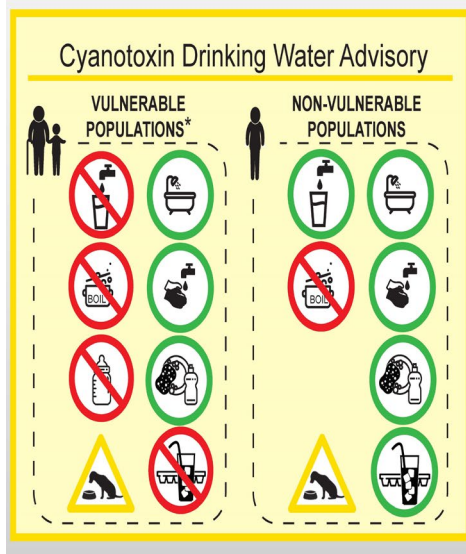
It is recommended that the states and tribes use consistent communication tools during an event.

The EPA has developed ready-to-use templates to develop risk communication materials, including:

- Templates: for press releases, drinking water advisories and recreational criteria/swimming advisories, and social media and text alerts;
- General Information: talking points and messages for consumers and recreators, frequently asked questions and factsheets;
- Graphics: downloadable options for graphics.

Resources on Risk Communication

- ✓ [Drinking Water Cyanotoxin Communication Toolbox](#)
- ✓ [Recreational Water Communication Risk Toolbox for Cyanobacterial Blooms](#)



PRESS RELEASE

RECREATIONAL WATER CLOSURE ISSUED

FOR IMMEDIATE RELEASE
Media Contact: [Insert name, title, telephone and fax number, and e-mail of spokesperson]
[Insert phone area code] [Insert phone number] [Insert fax number] [Insert e-mail address]
[Insert address]
[Insert city, state, zip code]
[Insert date]

WHY IS THERE A CLOSURE?

- Cyanotoxins are cyanobacteria toxins, a toxin produced by cyanobacteria (formerly known as blue-green algae) was detected in the water at levels that could cause harm at [location] on [date].
- Samples collected on [date] show cyanotoxins are cyanobacteria toxin at [location] at [levels and/or range], which are above the state-designated recreational water health advisory levels.

WHAT SHOULD I DO?

- Do not swim, wade or ~~submerge~~ in the water, surf, fish or dip at [location].
- Seek medical attention if you or family members are experiencing illness after swimming or playing in water. Recreational water containing cyanotoxins are cyanobacteria toxin at levels exceeding the state's guidelines for issuing a Health Advisory can put you at risk of various adverse health effects including upset stomach, vomiting and diarrhea. Exposure to concentrations of cyanotoxins higher than the state's guideline values could potentially result in more serious illness, including liver or kidney damage.
- Animals may be vulnerable to adverse health effects of cyanotoxins are cyanobacteria toxin at the detected levels indicated above. Contact a veterinarian if animals show signs of illness.
- If you, your family members or your animals have experienced adverse cyanotoxins are cyanobacteria toxin health effects, please contact [State or local Health Department] to report the illness.

WHAT IS BEING DONE?

- [Organization name] is working closely with local and state public health and emergency response agencies to address the situation.
- [Organization name] will post updated information where the cyanotoxins are cyanobacteria toxin levels are less than or equal to the State's Health Advisory levels, the Advisory is lifted or if there are any changes to the conditions of this recreational closure.

For more information, please contact [contact information] or visit [website]. Please share this information with other people who recreate in these waters, especially those who may not have received this notice directly.

This notice is being sent to you by [Organization name] [Phone number] [Address] [State, City, State ZIP code] [www URL]

Actions After a Cyanotoxins Event

Once the HABs and cyanotoxins event is over, it is recommended for states and tribes to conduct a post-incident comprehensive assessment to identify the adequacy of the cyanotoxins incident response and assess the effectiveness of the response.

A debrief with all the involved agencies, e.g. drinking water systems and managers of recreational sites, after the incident helps to identify problems and flaws during the incident and determine areas that need improvement, as well as those actions that contributed to a successful response and that should be repeated in future cyanotoxins contamination events.

Resources to use after a cyanotoxins event

- ✓ [HABs Post-Emergency Event Review Questionnaire](#)
- ✓ [Incident Action Checklist - Harmful Algal Blooms](#)

One more tool....**DRAFT EPA Cyanotoxins
Preparedness and Response Toolkit**

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EPA's Cyanobacteria HABs Website
www.epa.gov/cyanohabs