

NYSDOH FIELD GUIDANCE Blue-Green Algae and Regulated Bathing Beaches

This module is for internal use by NYSDOH Regional, District and Local Health Department offices to address blue-green algae (BGA) bloom concerns at waterbodies with regulated bathing beaches. It provides guidance to close/reopen a swim area at the regulated bathing beach. It also provides information for coordinating optional response outside the regulated bathing beach area.

Click the [Go to Module](#) button and use the Main Menu bar to navigate through the guidance. This menu bar is designed to follow a decision-making process to identify and respond to BGA blooms. The module also provides links to resources necessary for implementation.

About the Guidance

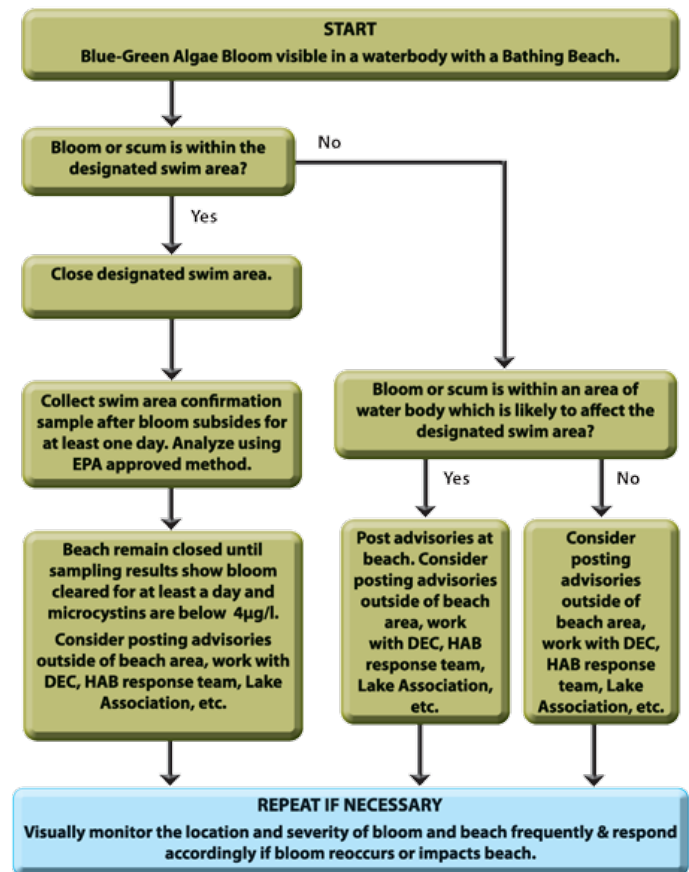
Sampling for blue-green algal toxins is not necessary to close a swim area. The decision to close a regulated swim area is based on visual evidence of a BGA bloom and considers the bloom's location to assess the potential risk to swimmers. Closing a swim area based on visual evidence of a bloom is more protective because exposure to any blue-green algae, whether they contain toxins or not, can cause health effects when water with dense blooms are contacted, swallowed or inhaled.

However, samples must be collected to determine when a swimming area can be reopened. These samples must be used to confirm that the BGA bloom has cleared and to determine that microcystin toxins are below 4µg/l before the designated swimming area can be reopened. We recommend that samples for microcystins be analyzed using EPA Method 546.

Please notify your [NYSDOH regional office](#) and harmfulalgae@health.ny.gov when you are investigating a bloom, or closing or reopening a swim area. Please include: the location, including county; name of beach; waterbody; date of event (closure, reopening) and any photos. You should also please email harmfulalgae@health.ny.gov or contact your regional office with any concerns associated with the use of this module.

[Go to Module](#)

Overview: Blue-green Algae Guidance for Waters with Operating Regulated Bathing Beach



7/20

[Click to enlarge](#)

NYSDOH FIELD GUIDANCE Regulated Bathing Beaches

Main Menu

[START: Bloom response](#)

[Bloom locator](#)

[BGA bloom in swim area](#)

[BGA bloom LIKELY to
affect swim area](#)

[BGA bloom NOT LIKELY
to affect swim area](#)

[No BGA bloom present](#)

[Report BGA bloom-
related symptoms](#)

Options Menu

[Support for identifying a
BGA bloom](#)

[Support for determining
if a BGA bloom cleared](#)

[Advisories outside beach](#)



Blue-Green Algae

*Reporting and managing
blue-green algae (BGA bloom) at
regulated bathing beach areas*

Resources

[NYCRR Part 6, Subpart 6-2
Bathing Beaches](#)

[Blue-green Algae Blooms:
Bathing Beach Guidance
Update \(2017 Field memo\)](#)

[Algal toxins in surface
waters \(2003 Field memo\)](#)

[Contacts](#)

[Definitions](#)

[FAQs](#)

[Photo References](#)

[Blue-green Algae Bloom
Response for Beach
Operators and Staff](#)

[Illness reporting form
\(CDC 5212\)](#)

[Outreach templates](#)

[BGA bloom sampling
procedure](#)

[Wadsworth Request for
Analysis Form DOH-246
\(8/15\)](#)

7/14/20

For NYSDOH and LHD staff use only

Main Menu

[START: Bloom response](#)

[Bloom locator](#)

[BGA bloom in swim area](#)

[BGA bloom **LIKELY** to affect swim area](#)

[BGA bloom **NOT LIKELY** to affect swim area](#)

[No BGA bloom present](#)

[Report BGA bloom-related symptoms](#)

Options Menu

[Support for identifying a BGA bloom](#)

[Support for determining if a BGA bloom cleared](#)

[Advisories outside beach](#)

START: Bloom Response

- You have been notified that there is a bloom on a water body with a regulated bathing beach

Tasks:

- Obtain photos, conduct interview to determine if BGA and its proximity to the beach. Compare against *Photo References*. Note: samples are not needed to confirm BGA bloom. *Need help? Get support for identifying a BGA bloom*
- Provide/verify beach operator has *Blue-green Algae Bloom Response for Beach Operators and Staff fact sheet*.
- Notify your *NYSDOH regional office* and *harmfulalgae@health.ny.gov* that you are investigating a bloom. Please include: the location, including county; name of beach; waterbody; date of event and any photos.
- Results show
 - BGA bloom suspected: **Continue to BGA bloom locator**
 - No BGA bloom suspected
 - Task: Notify your *NYSDOH regional office* and *harmfulalgae@health.ny.gov* that you are no longer investigating a bloom
 - Event Ends

Main Menu

START: Bloom response

Bloom locator

BGA bloom in swim area

BGA bloom LIKELY to
affect swim area

BGA bloom NOT LIKELY
to affect swim area

No BGA bloom present

Report BGA bloom-
related symptoms

Options Menu

Support for identifying a
BGA bloom

Support for determining
if a BGA bloom cleared

Advisories outside beach

Bloom Locator

- Bloom is located in ...
 - a designated swimming area
 - an area LIKELY to affect a designated swim area
 - an area NOT LIKELY to affect a designated swim area

BGA Bloom in Swim Area: Close Swim Area (or Maintain Closure)

Main Menu

[START: Bloom response](#)

[Bloom locator](#)

[BGA bloom in swim area](#)

[BGA bloom LIKELY to
affect swim area](#)

[BGA bloom NOT LIKELY
to affect swim area](#)

[No BGA bloom present](#)

[Report BGA bloom-
related symptoms](#)

Options Menu

[Support for identifying a
BGA bloom](#)

[Support for determining
if a BGA bloom cleared](#)

[Advisories outside beach](#)

- Advise operator to close swim area at the beach in accordance with Subpart 6-2.4(b)(5) and 6-2.15(a),(d),(f) as appropriate

Tasks:

- Notify your *NYSDOH regional office* and *harmfulalgae@health.ny.gov* that the swim area is closed. Please include: the location, including county; name of beach; waterbody; date of closure and any photos.
- Provide operator with *Blue-green Algae Bloom Response for Beach Operators and Staff and signs*;
- Inform beach operators to visually monitor location and severity of bloom in swimming and nearby areas to identify when bloom subsides.
- Inform operators to notify LHD of any reported BGA bloom-related symptoms in accordance with *Subpart 6-2.7(d)*
- If applicable notify media (see *Outreach Templates*)
- *Consider issuing advisories outside beach*
- Blooms persists: Keep swim area closed
- Bloom clears: *Next steps*
- *Need help determining if bloom has cleared.*

Main Menu

[START: Bloom response](#)

[Bloom locator](#)

[BGA bloom in swim area](#)

[BGA bloom LIKELY to affect swim area](#)

[BGA bloom NOT LIKELY to affect swim area](#)

[No BGA bloom present](#)

[Report BGA bloom-related symptoms](#)

Options Menu

[Support for identifying a BGA bloom](#)

[Support for determining if a BGA bloom cleared](#)

[Advisories outside beach](#)

BGA In the Swim Area: Bloom Clears

- Collect a water sample in the designated swimming area one day after the bloom has cleared.
Task: Follow [BGA bloom sampling procedures](#)
- If water sample results show the water is still discolored and/or microcystins are $>4 \mu\text{g/L}$ (BGA persists) **Maintain Beach Closure.**
Task: Wait one day, repeat steps above, if water still looks clear.
- If water sample results show water is clear AND microcystins are $<4 \mu\text{g/L}$ (BGA bloom has cleared) **Reopen swim area and re-evaluate advisory status.**

Main Menu

[START: Bloom response](#)

[Bloom locator](#)

[BGA bloom in swim area](#)

[BGA bloom **LIKELY** to affect swim area](#)

[BGA bloom **NOT LIKELY** to affect swim area](#)

[No BGA bloom present](#)

[Report BGA bloom-related symptoms](#)

Options Menu

[Support for identifying a BGA bloom](#)

[Support for determining if a BGA bloom cleared](#)

[Advisories outside beach](#)

Reopen Swim Area: Re-evaluate Advisory Status

- Advise operators to reopen the swim area

Tasks:

- Remove beach closure signs
- Advise bathing beach operator to visually monitor water body and beach throughout swimming season
- Notify your [NYSDOH regional office](#) and harmfulalgae@health.ny.gov that swim area is reopened. Please include: the location, including county; name of beach; waterbody; date of reopening) and any photos.
- Consider [advisories outside the beach](#)
- Assess nearby areas of the water body for BGA blooms
 - [BGA bloom likely to affect designated swim area](#)
 - [BGA bloom not likely to affect designated swim area](#)
 - No bloom present: Event Ends

Main Menu

[START: Bloom response](#)

[Bloom locator](#)

[BGA bloom in swim area](#)

[BGA bloom **LIKELY** to affect swim area](#)

[BGA bloom **NOT LIKELY** to affect swim area](#)

[No BGA bloom present](#)

[Report BGA bloom-related symptoms](#)

Options Menu

[Support for identifying a BGA bloom](#)

[Support for determining if a BGA bloom cleared](#)

[Advisories outside beach](#)

BGA Bloom Likely to Affect Swimming Area

- Advise operator to issue/maintain BGA Advisory at regulated bathing beach

Tasks:

- Operator should visually monitor location and severity of bloom and bathing beach area because conditions (wind, current, etc.) may cause the bloom to enter the swim area.
- Provide operator with Blue-green Algae Bloom Response for Beach Operators and Staff and signs,
- If applicable, notify media (see Outreach Template).
- Operators also should notify LHD of any reported BGA bloom-related illness in accordance with Subpart 6-2.7(d)
- Consider advisories outside the beach
- **If BGA conditions change:**
 - BGA bloom enters designated swimming area
 - BGA bloom becomes unlikely to affect swimming area
 - BGA bloom subsides, no longer visible

Main Menu

[START: Bloom response](#)

[Bloom locator](#)

[BGA bloom in swim area](#)

[BGA bloom LIKELY to affect swim area](#)

[BGA bloom NOT LIKELY to affect swim area](#)

[No BGA bloom present](#)

[Report BGA bloom-related symptoms](#)

Options Menu

[Support for identifying a BGA bloom](#)

[Support for determining if a BGA bloom cleared](#)

[Advisories outside beach](#)

BGA bloom NOT LIKELY to Affect Swimming Area

- Consider maintaining/issuing BGA Advisory at regulated bathing beach

Tasks:

- Provide operator with Blue-green Algae Bloom Response for Beach Operators and Staff and signs,
- If applicable notify media (see Outreach Templates).
- Operator should visually monitor location and severity of bloom and bathing beach area because environmental conditions (wind, current, etc.) may cause the bloom to enter the swim area and warrant beach closure.
- Operators also should notify LHD of any reported BGA bloom-related illness in accordance with Subpart 6-2.7(d)
- Consider advisories outside the beach

If BGA Conditions Change:

- BGA bloom enters designated swimming area
- BGA bloom becomes likely to affect swimming area
- BGA bloom subsides, no longer visible

Main Menu

START: Bloom response

Bloom locator

BGA bloom in swim area

BGA bloom LIKELY to
affect swim area

BGA bloom NOT LIKELY
to affect swim area

No BGA bloom present

Report BGA bloom-
related symptoms

Options Menu

Support for identifying a
BGA bloom

Support for determining
if a BGA bloom cleared

Advisories outside beach

No BGA Bloom Present

- Advise operators to rescind advisories/reopen beach/remove signs

Tasks:

- *Notify operators that BGA bloom has cleared;*
- *Notify media if necessary (Outreach Templates)*
- *Advise bathing beach operator to visually monitor waterbody and beach throughout swimming season*
- *Notify your NYSDOH regional office and harmfulalgae@health.ny.gov. Please include: the location, including county; name of beach; waterbody; date of reopening and any photos.*
- **Event Ends**

Main Menu

[START: Bloom response](#)

[Bloom locator](#)

[BGA bloom in swim area](#)

[BGA bloom **LIKELY** to affect swim area](#)

[BGA bloom **NOT LIKELY** to affect swim area](#)

[No BGA bloom present](#)

[Report BGA bloom-related symptoms](#)

Options Menu

[Support for identifying a BGA bloom](#)

[Support for determining if a BGA bloom cleared](#)

[Advisories outside beach](#)

Report BGA Bloom-related Symptoms: Document, Notify, Investigate, Report

- LHD should inform operators to report BGA-related symptoms to them in accordance with [Subpart 6-2.7\(d\)](#)
- Reported human or animal illnesses associated with exposure to a BGA bloom should be documented in accordance with policies and procedures established for your office.
- Notify harmfulalgae@health.ny.gov and [your NYSDOH Regional Office](#) if you receive human or animal illness reports that are associated with BGA bloom exposure.
- Outbreaks of more than one illness associated with BGA bloom should be investigated with the assistance of the Regional Office.
- Report BGA bloom-related symptoms associated with regulated bathing beaches or other exposures to [BCEHFP and NYSDOH regional office](#) using [CDC 5212](#).
- Report illnesses associated with drinking water to the [Bureau of Water Supply Protection](#).

Main Menu

[START: Bloom response](#)

[Bloom locator](#)

[BGA bloom in swim area](#)

[BGA bloom **LIKELY** to affect swim area](#)

[BGA bloom **NOT LIKELY** to affect swim area](#)

[No BGA bloom present](#)

[Report BGA bloom-related symptoms](#)

Options Menu

[Support for identifying a BGA bloom](#)

[Support for determining if a BGA bloom cleared](#)

[Advisories outside beach](#)

Get Support Identifying a BGA Bloom

If you have a suspicious looking bloom in a water body with a regulated bathing beach and want help identifying if it's BGA...

- Notify your [NYSDOH regional office](#) and harmfulalgae@health.ny.gov that you are investigating a suspicious BGA bloom.
- Take pictures of bloom* and or a sample of the bloom from the site and in swimming area Follow [BGA bloom sampling procedures](#)
- Email: harmfulalgae@health.ny.gov (and copy [NYSDOH regional office](#)) or another entity that you are confident can assist with BGA identification. Please include: the location, including county; name of beach; waterbody; date of event and any photos.
- **The swim area must be closed on visual evidence of a bloom.** But, if desired, bloom samples could also be analyzed using toxin test strips, microscopy, chlorophyll differentiation or PCR to confirm the bloom is BGA, after the swim area has been closed.
- Bloom ID results indicate:
 - **BGA bloom suspected:** Return to [Bloom Locator](#)
 - **BGA bloom not suspected:** Event ends
Task: Send an email to your [NYSDOH regional office](#) and harmfulalgae@health.ny.gov notifying us that the event is over

**Please note, picture of blooms may be used and shared by NYSDOH in correspondence and educational materials.*

Main Menu

[START: Bloom response](#)

[Bloom locator](#)

[BGA bloom in swim area](#)

[BGA bloom **LIKELY** to affect swim area](#)

[BGA bloom **NOT LIKELY** to affect swim area](#)

[No BGA bloom present](#)

[Report BGA bloom-related symptoms](#)

Options Menu

[Support for identifying a BGA bloom](#)

[Support for determining if a BGA bloom cleared](#)

[Advisories outside beach](#)

Get Support for Determining if BGA Bloom Cleared

If you are not sure if the bloom has cleared:

- Notify your [NYSDOH regional office](#) and harmfulalgae@health.ny.gov that you need help determining if bloom has cleared enough to sample for reopening the swimming area.
- Take pictures of a sample of water from the swim area (or other bloom site as appropriate) Follow *Collecting Your Sample in the [BGA bloom sampling procedures](#)*
- Email pictures to: harmfulalgae@health.ny.gov (and copy your [NYSDOH regional office](#)).
- Consultation with DOH indicates:
 - **BGA bloom has cleared:** return to [BGA In the swim area: Bloom clears.](#)
 - **BGA bloom remains in swim area:** return to [BGA bloom in swim area: close swim area \(or maintain closure\)](#)

Main Menu

[START: Bloom response](#)

[Bloom locator](#)

[BGA bloom in swim area](#)

[BGA bloom **LIKELY** to affect swim area](#)

[BGA bloom **NOT LIKELY** to affect swim area](#)

[No BGA bloom present](#)

[Report BGA bloom-related symptoms](#)

Options Menu

[Support for identifying a BGA bloom](#)

[Support for determining if a BGA bloom cleared](#)

[Advisories outside beach](#)

Advisories Outside the Beach

- Consider issuing advisories and public notification for bloom areas outside of the regulated bathing beach area
- Consider additional communication/coordination with other agencies, organizations or individuals, such as NYS DEC Regional Offices, Lake Associations, emergency management agencies, etc.

Tasks: Consider using the [Response Plan Worksheet](#) to assist with coordination and activities and the [Outreach Templates](#) to assist with messaging and public notification.

- **[Review Rescinding a BGA Advisory: Items to Consider](#)** to decide whether or not to sample or rescind advisories outside the regulated bathing beach area.