

What are cyanobacteria and harmful algal blooms?

Algae and cyanobacteria have been around for billions of years and are natural components of ecosystems around the world, including freshwater, estuarine, and marine water bodies. They perform many roles that are vital to our aquatic communities by producing oxygen and being a food source. However, when certain conditions are favorable for these organisms, algae and cyanobacteria can rapidly multiply causing accumulations of cells called “blooms.” When blooms pose a risk to human, animals, and the environment, they are referred to as harmful algal blooms (HABs).



How to report a HAB or related illness?

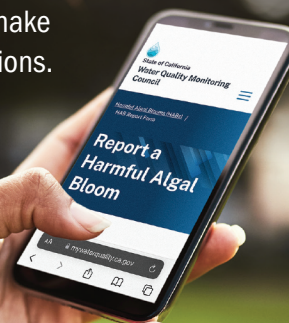
Take action and report any potential HAB or related illness at mywaterquality.ca.gov/habs/bloom-report/ or scan the QR code to the right.



You will be asked for:

- Location and contact information.
- HAB event information and any relevant environmental conditions.
- Information about any potentially HAB-related illness in humans, pets, or wildlife.
- Photos of suspected HAB.

This will initiate the response from California state and local agencies to evaluate water conditions and make signage recommendations.



OEHHA
SCIENCE FOR A HEALTHY CALIFORNIA



Freshwater and Estuarine
Harmful Algal Bloom
(FHAB) Program

Harmful Algal Bloom FAQs



mywaterquality.ca.gov/habs/

Do HABs create health concerns?

Algae and cyanobacteria can produce harmful substances, such as toxins, irritants, or taste and odor compounds, that can cause illness in humans and animals. They can also displace other aquatic organisms and impact water quality, including dissolved oxygen levels. People and pets can be exposed to HABs and become ill when recreating in or near water, as well as drinking water from local waterways. People can also be exposed when eating fish and shellfish that have toxins in the edible tissues. Children and pets are more likely to have HAB-related illnesses because of common behaviors that increase their exposure. Children typically swallow more water while recreating and put their hands in their mouth more often than adults. Pets drink from waterways and tend to lick their fur.

HAB-related illness usually develops within minutes to hours of exposure. Illness symptoms in humans

may include irritation of the skin (rash), ears, eyes, or nose, sore throat, coughing, difficulty breathing, headache, nausea, vomiting, or diarrhea. Illness signs for animals may also include excessive drooling, weakness, disorientation, seizures, and possible death.

What do HABs look like?

Some cyanobacteria blooms are more easily visible and can:

- Form a “scum” or “foam” on the water surface.
- Change water color and/or clarity (appear cloudy or murky).

Other cyanobacteria blooms can:

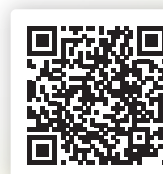
- Float beneath the surface,
- Wash up or “strand” along the shore, or
- Grow attached to aquatic plants or on the bottom (benthic) of a water body.

Blooms can appear in many colors: green, blue, yellow, red, black, or brown.

Toxins may be present even when the water appears clear. The levels of toxins, when present in the water, can only be determined by laboratory sample analysis.

Where and when are HABs occurring in California?

HABs occur in waters all across California and, in some cases, can be found year-round. Always look for any posted advisory signage. For more information on HABs, resources, and to check the **California HAB Report Map** for information about current conditions, scan the QR code below.



**PROTECT
OUR COMMUNITY**
Report Algal Blooms!



How do I protect myself, my family, and pets from HABs?

Practice Healthy Water Habits . . .



Follow all instructions on posted advisories, if present.



Avoid algae and scum in the water and on shore.



Supervise children and pets (dogs) when recreating in or near water.



If you think a HAB is present, do not let pets and other animals go into or drink the water, or eat scum and algal accumulations on the shore.



If you think a HAB is present, reduce the potential for breathing in sprays or mists by avoiding areas downwind of the bloom, and activities near the bloom that could kick up spray, such as boating at higher speeds, water skiing, or splashing.



Don't drink the water or use it for cooking.



Wash yourself, your family, and your pets with clean water after water play.



If you catch and eat fish, throw away the guts and clean fillets with tap water or bottled water before cooking.



Avoid eating shellfish if you think a HAB is present.