



Harmful Algal Bloom (HAB) Frequently Asked Questions

What are cyanobacteria and harmful algal blooms?

Cyanobacteria (also known as blue-green algae) and algae occur in freshwater and estuarine waterbodies. Algae and cyanobacteria have been around for billions of years and are natural components of ecosystems. They perform many roles that are vital to our aquatic communities, by being a food source and producing oxygen. However, when conditions are favorable, cyanobacteria can grow rapidly, causing algae blooms.

Cyanobacteria can produce harmful toxins that cause health risks to humans and animals. When blooms pose a risk to humans, animals, and the environment, they are referred to as harmful algal blooms (HABs). Some algae grow attached to the bottom (benthic) and can form algal mats.

How do I know if there is a HAB in the water?

Sometimes the bloom is easily visible, forming “scum” or discoloration on the water surface. Other times, it is less visible, floating beneath the surface or on the bottom of a water body (benthic). Blooms can appear green, blue, yellow, red, or brown. Cyanotoxins, produced by cyanobacteria, cannot be visually detected in water or tissues.

Please refer to our HAB program and HABs resources webpages.

Where and when are HABs occurring in Nevada?

HABs typically occur during the warmer months of summer when water temperatures rise, and water becomes more stagnant. Voluntarily reported HABs are posted on the HAB Reports Map.

Please refer to our HAB Data webpage for the most up to date HAB data.

What causes HABs?

Increased inputs of nutrients like nitrogen and phosphorus (from fertilizers and human or animal wastes) promote cyanobacterial growth and can lead to increased occurrences of HABs. Low flows, stagnant water, increased intensity, and duration of sunlight, and sustained high temperatures create the ideal conditions for HABs.

What are the possible health concerns of HABs?

Cyanotoxins pose risks to the health and safety of drinking water and people and pets recreating in bodies of water affected by blooms. They can also accumulate in fish and shellfish to high levels that threaten people and wildlife. Pets, especially dogs, are susceptible to HABs because they are less deterred by green, smelly water that may contain HABs and swallow more water while swimming and playing in the water.

What guidelines does Nevada use for HABs?

There are currently no federal or state regulatory standards for cyanotoxins in recreational waters or drinking water. However, the Nevada Division of Environmental Protection developed a suggested voluntary guidance for responding to HABs in recreational waters based on the US



Environmental Protection Agency's (EPA) recommended Human Health Recreational Ambient Water Quality Criteria or Swimming Advisories for Microcystins, Cylindrospermopsin, and Anatoxin-a. Participating HABs Monitoring Program agencies are encouraged to follow this guidance when HABs pose a health threat.

What can I do?

- Report any suspected HAB or potential HAB-related illness via the HAB Program webpage.
- Help reduce nutrients in your local lake, rivers, and streams.
- Practice healthy habits at your local lake, river, or stream:
 - Heed all instructions on posted advisories.
 - Avoid algae and scum in the water and onshore.
 - Keep an eye on children and pets (dogs).
 - 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.
 - Reduce the potential of spray and mist inhalation by avoiding areas downwind of the bloom, and activities near the bloom that could kick up spray, such as high-speed boating, water skiing, or splashing.
 - Do not drink the water or use it for cooking.
 - Wash yourself, your family, and your pets with clean water after water play.
 - If you catch 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.