

# RECOGNIZING BLOOMS



HABs can occur in a variety of colors, including bright blue, green, white, brown and red. More than one color may be present. HABs commonly (but not always) form scums or mats and may look like thick paint floating on the water. They may also give off a foul odor. There is no way to determine if an algal bloom is toxic by looking at it. It is easy to mistake growths of green algae or duckweed (both non-harmful) for HABs. Keep children and pets away from discolored water, and/or water producing foul odors.

**When in doubt, stay out!**



## IF YOU ARE EXPOSED

Rinse off yourself, children, and animals with clean water if exposed to blooms or surface scums, or water that is noticeably discolored.

Stop using/recreating in the water and consider medical attention if people or animals have symptoms and might have touched, swallowed, or inhaled surface waters with possible blooms.



## GUIDANCE FOR HARMFUL ALGAL BLOOMS (HABs) IN NEVADA

### WHEN IN DOUBT, STAY OUT!

REPORT A SUSPECTED BLOOM



Nevada Division of Environmental Protection,  
Spill Hotline: 1-888-331-6337



Human Illness: Nevada Department of Health and Human Services:  
1-775-400-0333



Animal Illness: Nevada Department of Agriculture, State Veterinarian:  
1-775-738-8076



## EXPOSURE PATHWAYS



Skin  
Contact



Swallowing  
Contaminated  
Water



Breathing  
in Toxins



Eating  
Contaminated  
Food

Studies indicate that exposure via mouth is the largest source of recreational exposure to cyanotoxins. Skin contact is also likely to be an important route of exposure to cyanobacteria.

Children are likely to be at greater risk to exposure because they spend more time in contact with the water and typically swallow more water while swimming and playing in affected waters.

Animals such as dogs and cattle have died from exposure, which may occur by drinking the water and algal scum directly, or by licking their coats that have picked up the cyanobacteria while wading or swimming in the water.

Avoid areas with blooms or surface scums and keep children and animals away from areas with blooms or surface scums. **Check for local and state swimming or fishing advisories prior to visiting water bodies.** Never swim at beaches that are closed and follow HAB advice.

**Never drink, prepare food, cook, or make ice with untreated surface water, bloom or no bloom.** Untreated surface water might contain cyanobacteria and their toxins as well as other bacteria, parasites, or viruses that can cause illness.

### For more information visit:

<https://ndep.nv.gov/water/rivers-streams-lakes/water-quality-monitoring/harmful-algal-bloom-program>

<https://www.epa.gov/cyanoHabs>

<https://www.cdc.gov/habs/general.html>

## ADVERSE HEALTH EFFECTS

Exposure to HABs can cause a variety of health effects, from relatively mild to potentially serious. Symptoms depend on factors such as the amount of toxins or cyanobacteria, the type of toxin or cyanobacteria, and the route and length of exposure.

### Human Symptoms

#### Ingestion

- Vomiting
- Diarrhea
- Abdominal pain
- Weakness
- Headache
- Tingling sensation
- Muscle cramps
- Dizziness
- Trouble breathing

#### Skin Contact

- Eye irritation
- Rash
- Hives
- Blisters or sores

#### Inhalation

- Nose irritation
- Sore throat
- Coughing
- Wheezing
- Difficulty breathing

### Animal Symptoms

- Weakness
- Fatigue
- Staggering
- Difficulty breathing
- Excessive salivation/drooling
- Vomiting
- Convulsions
- Liver damage/failure
- Death

## WHAT ARE HARMFUL ALGAL BLOOMS?

Naturally occurring cyanobacteria, also known as blue-green algae, may experience rapid growth under optimum conditions of temperature and nutrients. Rapid growth of cyanobacteria often results in a bloom that can produce cyanotoxins that are harmful to humans and animals. Blooms can occur year-round but are most common in the summer when warm stagnant water combines with high nutrient levels. People and animals should avoid blooms because exposure can cause a variety of health effects in humans, and can sicken or kill pets, livestock and wildlife.