

# Do Not Allow Your Dog Even Casual Exposure to This Deadly Toxin

It can lead to death within hours, from liver failure or respiratory paralysis. Poisonings are known in 13 states via inhaling, ingesting, and skin exposure. If you see any of these 14 symptoms or suspect your dog has romped into this toxin, get immediate help.

Reviewed by Dr. Becker

## STORY AT-A-GLANCE

- Exposure to toxic blue-green algae claims the lives of dogs every year; It can damage the liver and nervous system, inflame the respiratory tract, and irritate the skin, eyes, nose, and throat
- Not all blue-green algae are toxic. Harmful blooms usually smell bad and resemble pea soup, green paint, or floating mats of scum
- Exposure to toxic blue-green algae is a life-threatening emergency for your pet. Seek veterinary care immediately

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According to a 2013 study, between 2007 and 2011, 13 states (Florida, Iowa, Maryland, Minnesota, New York, North Carolina, Oregon, Virginia, Wisconsin, California, Kansas, Montana, and Texas) reported 67 suspected or confirmed cases of dogs being poisoned through exposure to harmful algae blooms.<sup>1</sup> The dogs came in contact with the algae in a variety of ways:

- 58 were in fresh water, 1 was in marine water, and 9 exposure sources were unknown
- 9 dogs were made sick by inhaling the blooms, 6 ingested the blooms, 36 were exposed through the skin with accompanying ingestion, and 16 had unknown contact
- 29 dogs had gastrointestinal symptoms (vomiting and diarrhea)
- Other symptoms included lethargy (12 cases) and neurologic signs, including stumbling or change in behavior (6 cases)

## In 2015, One Dog Died and Another Became Desperately Ill from Blue-Green Algae Exposure

In June 2015 in west-central Minnesota, one dog died and another became seriously ill after swimming in Red Rock Lake, which contained an early bloom of toxic blue-green algae.

Not all blue-green algae are dangerous, by the way. The toxic blooms are often described as looking like pea soup, green paint, or "floating mats of scum." They also tend to smell bad.

The algae blooms can cause damage to the liver and nervous system, inflame the respiratory tract, and irritate the skin, eyes, nose, and throat.

In humans, exposure to harmful algae can cause a skin rash, hives, runny nose, irritated eyes, and throat irritation. If water containing the toxic blooms is swallowed it can cause nausea, vomiting, diarrhea, headache, throat irritation, and muscle pain.

In dogs, wading into water where algae have accumulated can cause seizures and convulsions.

## **Deadly Cyanobacteria**

Blue-green algae contain deadly bacteria called cyanobacteria. Cyanobacteria are microscopic organisms found in freshwater lakes, streams, ponds, and brackish (salty) water ecosystems.

The algae give the water a blue-green or “pea soup” appearance. It looks almost as if someone spilled blue or green paint on the surface of the water. These floating blooms can form thick, dense mats that collect near the shore, which is where animals and people come in contact with them.

Blue-green algae are prevalent in the mid-to-late summer months and are most often found in nutrient-rich water. It is believed the algae tends to bloom in locations where there is heat and low water flow combined with high levels of nutrients like nitrogen and phosphorus.

This type of blue-green algae is different from the species that is considered a superfood. The superfood variety is obviously toxin free, grown in a controlled environment, and sold to the human food market.

## **Blue-Green Algae Toxicity in Animals**

Not all blue-green algae are toxic, but since there’s no way to know whether a plant is poisonous without testing, experts advise that all blooms floating on natural bodies of water should be considered potentially toxic. Even minor exposure — like a dog drinking a few mouthfuls of contaminated water — can be lethal.

Blue-green algae are toxic not only to dogs and cats, but also to horses, cows, and birds. Dogs that swim regularly in lakes and ponds are at higher risk of exposure. Hunting dogs are also at higher risk due to increased exposure outdoors. Symptoms of blue-green algae toxicity include:

- Diarrhea
- Shock
- Blood in the stool or black tarry stool
- Excessive drooling or tearing
- Pale mucous membranes
- Muscle tremors
- Jaundice
- Muscle rigidity
- Seizures

- Bluish discoloration of skin and mucous membranes
- Disorientation
- Difficulty breathing

Symptoms depend on the toxin involved. Toxins that attack the liver cause blood work changes including elevated liver enzymes, low blood sugar, low protein, and occasionally, abnormal clotting activity. These toxins can result in liver damage or failure and immediate aggressive treatment is necessary to save the animal.

Exposure to another type of toxin found in blue-green algae, anatoxins, results in nervous system symptoms and can bring death in minutes to hours due to respiratory paralysis.

## **Exposure to Blue-Green Algae Is a Medical Emergency**

It's important to understand that no antidote currently exists for the toxins produced by blue-green algae. Immediate veterinary care is imperative. If you suspect your pet has been exposed to blue-green algae, seek immediate emergency veterinary care.

## **Why Is Some Algae Toxic and Some Very Healthy for Consumption?**

It can be very confusing to pet owners to hear about these toxic algae blooms because many pet parents feed medicinal algae to their pets as a whole food supplement.

The algae grown in controlled environments for the nutraceutical, supplement, and food industry is entirely different than the type of algae that naturally blooms in lakes and ponds. Spirulina and other types of cyanobacteria and healthful algae are popular supplements and have been proven to be safe and very beneficial, in terms of improving overall vitality.

### **Sources and References**

[TwinCities.com October 25, 2015](#)

<sup>1</sup> [Toxins \(Basel\). 2013 Sep; 5\(9\): 1597-1628](#)

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