

Summer Killer Alert: Please Don't Let Your Pets Breathe, Touch, Eat or Drink Here

This nearly unknown warm-weather menace can bring on a true medical emergency - severe illness and death even with the most aggressive treatment. Your best plan is prevention. So while you may have never heard of this, it's a horrible hazard you'll do well to avoid like the plague.

Analysis by Dr. Karen Shaw Becker

STORY AT-A-GLANCE

- A summertime hazard many pet parents aren't aware of is toxic blue-green algae, which are found in freshwater lakes, streams and ponds
- Blue-green algae contain deadly cyanobacteria that can cause severe illness and death, most commonly in dogs who swim in or drink from contaminated water sources
- Exposure to blue-green algae is a medical emergency and immediate veterinary care is required
- Since blue-green algae toxicity is often fatal even with aggressive treatment, play it safe by keeping your pet away from any body of water that is greenish in color
- Not all blue-green algae are toxic; harmful blooms usually smell bad and resemble pea soup, green paint or floating mats of scum

Editor's Note: This article is a reprint. It was originally published June 14, 2017.

There's a warm weather menace lurking in the environment many dog parents have never even heard of, and while I hate to throw a monkey wrench into anyone's summertime fun, I feel it's my duty to raise awareness about the dangers of blue-green algae.

Every summer there are reports of pet deaths after exposure to these toxic algae. 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.¹ The dogs came in contact with the algae in a variety of ways:

- 58 were in fresh water, one was in marine water and nine exposure sources were unknown
- Nine dogs were made sick by inhaling the blooms, six 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 (six cases)

While the most common victims of blue-green algae are dogs, other animals are also at risk, including cats, birds, horses, livestock and wildlife that drink from contaminated bodies of water, or groom themselves after a swim. 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.

Blue-Green Algae Contain Deadly Bacteria

Blue-green algae contain deadly microorganisms called cyanobacteria, which are microscopic organisms found in freshwater lakes, streams, ponds (including backyard 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. 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. It can be very confusing to pet parents to hear about toxic algae blooms because many feed medicinal algae to their pets as a whole food supplement.

The algae grown in controlled environments for the nutraceutical, supplement and food industries are entirely different than the algae that naturally bloom in lakes and ponds. Spirulina and other types of health-giving algae are popular supplements and have been proven to be safe and very beneficial.

Blue-Green Algae Toxicity in Animals

Not all blue-green algae are toxic, but there's no way to know whether a plant is poisonous without testing. According to the Food Poisoning Bulletin:

"There is no way to tell if a blue-green algal bloom is toxic by looking at it. The harmful blooms look like pea soup, green paint, or floating mats of scum. They sometimes have a bad smell. But these blooms aren't always large and dense and can be present in a lake with little visible algae.

*Before you, your children, or your pets go into the water, look at the lake closely to see if there is algae on the water or on the shore."*²

Experts advise that all blooms floating on natural bodies of water should be considered potentially toxic. Even minor exposure, such as a dog drinking a few mouthfuls of contaminated water, can be lethal. Symptoms of blue-green algae toxicity include:

- Vomiting
- Coma

- 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 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. If you suspect your pet has been exposed, rinse him with fresh water, administer high-potency homeopathic Nux Vomica if possible and seek immediate emergency veterinary care.

Your veterinarian or emergency animal hospital staff may induce vomiting if your dog isn't yet showing signs of poisoning. Symptomatic patients may need to be hospitalized to receive life-saving treatments such as intravenous (IV) fluids, medications to control seizures or vomiting, oxygen therapy and blood transfusions.

Unfortunately, death may occur within hours of exposure, even with aggressive treatment, which is why preventing exposure is so important. If you see a body of water that is a greenish color, play it safe and steer clear.

Sources and References

[VetStreet March 20, 2017](#)

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

² [Food Poisoning Bulletin May 29, 2016](#)
