

# PET HEALTH UPDATE

Reminder: Pet Health and Blue-Green Algae

TO: SONOMA COUNTY VETERINARIANS

FROM: KAREN MILMAN MD MPH, HEALTH OFFICER

QUESTIONS: DISEASE CONTROL UNIT – PUBLIC HEALTH (565-4566)

DATE: AUGUST 9, 2017

CC: PLEASE SHARE WITH ALL STAFF

## **SITUATION**

Consistent with our experience during the summers of 2015 & 2016 blue green algae toxins have been detected along the Russian River. Therefore, county health and water quality board officials are encouraging recreational users of the Russian River to take precautions and practice healthy water habits. Veterinarians are requested to promote awareness and healthy water habits and to be alert for possible cases of toxin mediated illness in pets that are exposed to the river.

# **Actions Requested of Veterinarians:**

- 1. Be alert for and evaluate potential cases of blue-green algae toxin mediated illness:
  - a. See clinical description below, and
  - b. Ask about exposure to the Russian River or other bodies of water known to have bluegreen algae, and
  - c. Stay apprised of the Russian River Status by checking the Sonoma County website at <a href="http://www.sonoma-county.org/health/services/bluegreen.asp">http://www.sonoma-county.org/health/services/bluegreen.asp</a> Promote awareness and prevention as outlined below.
- 2. For pets with a high suspicion of illness or death due to cyanobacteria toxin exposure, pursue testing:
  - a. See options for testing below.
- 3. Notify Sonoma County Disease Control via phone (707) 565-4566 or fax (707) 565-4565 of pets with illness if proven by laboratory testing to be toxin mediated.

#### BACKGROUND

Algae, including blue-green algae, is a normal inhabitant in many water environments. Warm water, low flows and abundant nutrients can cause algae to grow more rapidly than usual and create algal mats or "blooms". Most algae, including blue-green algae, do not produce toxins. Some species of blue-green algae have the ability to produce toxins, including neurotoxins, hepatotoxins and dermatologic toxins, which can create health affects for humans and animals. It is important to note that although some blue-green algae can produce toxins, they do not do so all the time.

Algal blooms can look like green, blue-green, white, or brown foam, scum or mats floating on the water or along the shore. Within the Russian River cyanobacteria have been embedded in otherwise harmless filamentous algae. If toxin is present, dogs and children are most likely to be affected. Dogs are especially vulnerable because they tend to drink more water and lick algae off their fur.

## CLINICAL

Toxins can cause a variety of symptoms including contact irritation (e.g., eye, nose, mouth and skin), gastro-intestinal symptoms (e.g., abdominal pain, nausea, vomiting, diarrhea, hepatic inflammation) and neurologic symptoms (e.g., numbness, muscle tremors, seizures, difficulty breathing). In animals, toxin exposure can be fatal.

## **TESTING**

There are no widely available rapid diagnostics for confirmation of cyanotoxin poisoning. If you are interested in pursuing testing, for a fee, the California Animal Health and Food Safety Laboratory in Davis is able to provide clinical testing. For information on specimen collection, laboratory testing contact Drs. Robert Poppenga or Arya Sobhkumari, 530-752-6322.

## **TREATMENT**

Treatment is generally supportive care.

#### **NOTIFICATION**

Please notify Sonoma County Disease Control via phone (707) 565-4566 or fax (707) 565-4565 if you take care of a pet with laboratory confirmed cyanobacteria toxin mediated illness. Please provide this information: your name and contact information, type of animal, date you cared for animal, location and extent of water exposure, laboratory test results, illness onset date, symptom category (dermatologic, gastrointestinal, hepatic, neurologic), and if animal died. Also provide owner name and contact information.

#### **PREVENTION**

Healthy water habits can prevent illness. Please encourage recreational water users of the Russian River to follow these healthy water habits with their pets:

- Avoid all algal scums or mats, which are found most often along the shore line;
- Do not let pets drink the water, swim through scums or mats, play near scums or mats on shore, nor lick their fur after contact with scums or mats;
- Wash your pets with clean water after river play;
- Get medical attention for your pet if you think it have been poisoned by blue-green algae toxins. Be sure to tell the medical professional about possible contact with blue-green algae.

#### **RESOURCES**

#### Blue-green algae:

- State Water Resources Control Board: http://www.waterboards.ca.gov/water\_issues/programs/bluegreen\_algae/
- California Department of Public Health: https://archive.cdph.ca.gov/HealthInfo/environhealth/water/Pages/Bluegreenalgae.aspx
- Center for Disease Control: http://www.cdc.gov/healthcommunication/toolstemplates/entertainmented/tips/algalblooms.html

#### **Status of Russian River:**

Call the beach hotline at (707) 565-6552 or go to our website:

• Sonoma County Department of Health, Environmental Health and Safety: <a href="http://www.sonoma-county.org/health/services/bluegreen.asp">http://www.sonoma-county.org/health/services/bluegreen.asp</a>

#### Categories of urgency levels

**Health Alert**: conveys the highest level of importance; warrants immediate action or attention **Health Advisory:** provides important information for a specific incident or situation; may not require immediate action **Health Update:** provides updated information regarding an incident or situation; unlikely to require immediate action