INVESTIGATION OF UNEXPLAINED ILLNESSES IN DOGS VISITING THE VENICE CANALS AREA, CITY OF LOS ANGELES (JUNE – AUGUST 2025)

On July 28, 2025, the Veterinary Public Health Program at the Los Angeles County Department of Public Health was first notified by the group of concerned residents and pet owners that multiple dogs were becoming ill or dying after walking in the Venice Canals area.

These reports prompted the initiation of a coordinated multi-agency investigation involving the California Water Boards, City of Los Angeles, the Los Angeles County Agricultural Commissioner, State of California Interagency Harmful Algal Bloom (HAB)-related Illness Workgroup (member agencies: State Water Resources Control Board, Office of Environmental Health Hazard Assessment, California Department of Public Health, California Department of Fish and Wildlife) and International Bird Rescue.

Investigation of Dog Illnesses

Veterinary Public Health conducted several site visits to the canals. Case reports were provided by residents, pet owners and veterinarians. Extensive interviews of pet owners were conducted, and all available veterinary medical records of affected dogs were reviewed. However, not all dogs were seen by a veterinarian, and in some cases, medical records and diagnostic tests were not available for review. A formal case definition was developed to help identify cases and exclude those where illness was attributed to another known cause.

Between June 6 and August 11, 2025, a total of 27 canine illnesses and five canine deaths were identified in dogs that had recently visited the canals. The majority of cases (74%) occurred during a two-week period from July 17 to July 30, 2025, with dogs showing symptoms including vomiting, diarrhea, tremors, seizures, and lethargy—clinical signs consistent with possible toxin exposure.

Symptoms Observed in Dogs

The 27 dogs showed a range of moderate (8 dogs) to severe (19 dogs) symptoms with an acute and progressive onset including:

- **Neurologic signs:** (15 dogs) dull mentation, severe lethargy, seizures, tremors/spasms, disorientation, poor muscle control, difficulty walking, and uncontrolled eye movements
- **Gastrointestinal signs:** (19 dogs) loss of appetite, vomiting, excess salivation, and diarrhea (sometimes bloody).
- **Other symptoms**: low blood pressure, generalized weakness, and the inability to stand up.

Owners were asked about a variety of potential exposures, including possible contact or ingestion of harmful substances, drinking or swimming in canal waters and any current medications including flea and tick medications. The only consistent exposure reported across all cases was that the dogs had recently walked in or around the canals before the onset of illness.

From the veterinary medical records available, bloodwork was performed for 13 of the 27 dog cases. Among those, three dogs showed elevated kidney values, and two showed elevated liver

values. Drug testing was conducted in four cases, and all results were negative. No consistent patterns or significant findings were observed across the laboratory and diagnostic results for the dog cases.

Toxins and Exposures Considered

Site investigations focused on identifying potential environmental hazards in the affected area. These included both naturally occurring risks and the possibility of deliberate contamination. Possible toxins considered included:

- Pesticides such as organophosphates
- Rodenticides (rat poison)
- Mold-related toxins (aflatoxins and mycotoxins)
- Harmful algal blooms toxins (HAB)

A simultaneous die off in Western Gulls reported along the Los Angeles County coastline did not appear to be linked to the dog illnesses at the canals.

Pesticides Findings

In response to concerns from residents about potential pesticide exposure, site inspections and environmental samples tested by the Agricultural Commissioner's Office confirmed that no pesticide misuse occurred.

Findings in Canal Waters

During the initial site visit on July 29, 2025, investigators confirmed a noticeable odor and abnormal algae growth in the Eastern Canal. As part of the investigation, the State and Los Angeles Regional Water Board representatives from California's Freshwater and Estuarine HAB Program collected water, algal mat, and scum samples from the Eastern Canal for laboratory analysis.

Partner agencies ultimately determined that a harmful algal bloom (HAB) event was present in the Eastern Canal. Laboratory analyses identified the presence of several types of potentially toxin-producing HABs and detected three cyanotoxins (in descending order of toxin levels): cylindrospermopsin, microcystin, and anatoxin-A.

These results prompted recommendations from the State Water Board and Department of Public Health to the City of Los Angeles to continue to post HAB Advisory signs at the Warning level based on detected toxin levels, per the State's HAB response guidance, and perform biweekly water quality testing until two consecutive tests confirm that cyanotoxin levels and visual HAB indicators are below advisory levels. Additional testing performed on water samples taken August 26, 2025, showed the HAB toxins levels had decreased.

Canal Cleanings and Possible Exposure

Observations of the Eastern canal cleaning and algae removal process on August 19–20, 2025, revealed that algal material was sometimes dropped onto the sidewalks during removal, where dogs could come into contact with it. Despite efforts to sweep it away, some residual material can

persist, and there was no ability to hose off the sidewalks. Per information gathered by residents and reported by the landscaping company, similar cleaning and algae removal processes were conducted at the Venice Canals on June 2-3, June 16-19, July 7-10, July 21-24, and August 25-28, 2025, coinciding with the timeline when most of the illness cases were observed. This may have provided an opportunity for dogs to be exposed through direct consumption or walking through the material and later consuming it when licking their paws.

Following the site visits, Public Health provided City of Los Angeles the observations and recommendations regarding the canal cleaning and algae removal process, emphasizing the importance of ongoing investigation and evaluation to determine whether additional mitigation measures are necessary.

Testing in Dogs

Unfortunately, because many of the illnesses occurred before Public Health was notified, only a limited number of biological samples (blood and urine from three dogs) were available for toxicology testing. No deceased dogs were available for necropsy (post-mortem evaluation), which is often critical for determining cause of death.

Samples from the three dogs were tested for a broad range of potential toxins, including the three HAB toxins detected in the canal. Testing was conducted using advanced methods (gas and liquid chromatography-mass spectrometry, or GC-MS/LC-MS), capable of identifying and quantifying a wide array of chemical compounds present in the samples.

All three dogs tested negative for the HAB toxins and other harmful chemical substances. While no toxins were detected in these samples, it does not rule them out as a cause of illness, as some toxins are rapidly metabolized, cleared quickly from the body and may not have been present in the specific samples collected. Additionally, ideal specimens for HAB toxin testing including stomach contents and organ tissues, as well as post-mortem samples were not available.

While a definitive link between the dog illnesses and the toxins produced by the algae could not be confirmed through the limited samples available for testing, the clinical signs observed in the dogs were consistent with incidences of HAB-related dog illnesses reported elsewhere. Moreover, the timing of the cases coincided with recorded increases and decreases of HAB toxins in the water.

Advice for Pet Owners and Veterinarians

In a warming climate, HAB events may occur more often and present an ongoing challenge. Pet owners and veterinarians are strongly advised to learn more about HABs and to follow the reports of HAB events from the State of CA Water Quality Monitoring Council. Residents and visitors to the affected area are encouraged to follow all posted canal advisories and safety guidance.

Whenever and wherever a HAB event is detected, pet owners should strive to keep pets indoors and/or away from the area until the event has been addressed and mitigated. Do not allow pets to enter or drink the canal water. Do not allow pets to ingest, touch, or sniff algae, scum, or any debris near the canal water. For areas experiencing a HAB event, complete removal of algal material and fluids from areas where pets walk is strongly advised. Any HAB materials or fluids on a pet should

be immediately washed off. ***Pet owners who think their pets may be sick should seek immediate veterinary care.***

Suspected or confirmed HABs and any potentially HAB-related illnesses (human and animal) should also be reported to the State Water Board. The State of California Office of Environmental Health Hazard Assessment (OEHHA) developed a fact sheet for veterinarians on recognizing, diagnosing and treating animals for exposure to blue-green algae. For additional assistance, contact the 24-hour ASPCA Animal Poison Control Center hotline at (888) 426-4435 (A consultation fee may apply).

Veterinarians in Los Angeles County can report suspected cases in animals to the Veterinary Public Health Program at vet@ph.lacounty.gov.

The Veterinary Public Health Program at the Los Angeles County Department of Public Health extends sincere condolences to the families and pet owners of the dogs that passed or that were affected. We deeply appreciate the time, effort, and valuable information shared by pet owners and members of the Venice Canals community

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SELECT REFERENCES:

1. State of California – Water Quality Monitoring Council - Harmful Algal Blooms (HABs) Fact Sheet for Veterinarians https://oehha.ca.gov/risk-assessment/fact-sheet/blue-green-algae-veterinarian-reference
2. State of California – Water Quality Monitoring Council – FAQs for Pets, Livestock & Harmful Algal Blooms (HABs) https://mywaterquality.ca.gov/habs/resources/domestic-animals.html
3. California Office of Environmental Health Hazard Assessment (OEHHA) – Marine Harmful Algal Bloom (HAB)-Related Illness Tracking https://oehha.ca.gov/habs/marine-harmful-algal-bloom-hab-related-illness-tracking
4. US Centers for Disease Control and Prevention (CDC) – Harmful Algal Bloom (HAB)Associated Illness https://www.cdc.gov/harmful-algal-blooms
5. US Centers for Disease Control and Prevention (CDC) – Animal Safety Alert – Cyanobacterial blooms https://www.cdc.gov/harmful-algal-blooms/media/pdfs/algal_bloom_tall_card.pdf
6. Environmental Protection Agency – Harmful Algal Blooms in Water Bodies – What you can do https://www.epa.gov/habs/what-you-can-do