

Florida Department of Health

Harmful Algal Blooms Veterinary Surveillance

Florida
HEALTH

March 23, 2026

Presenter



Sherri Kasper, DVM, MS
Harmful Algal Bloom Veterinary Epidemiologist
Bureau of Epidemiology
Florida Department of Health

Project Summary

Develop domestic animal surveillance for harmful algal bloom (HAB) toxin-related disease using:

- Florida mosquito virus surveillance as a template
- Animal data for surveillance
- Veterinary case definitions
- Education to enhance reporting
- Data-based triggers for public notification

Why Use Animals for Surveillance?

- **Increased exposure risk**
 - Ingestion of untreated water
 - Ingestion of contaminated material
 - Swimming through large blooms
- **Potential trigger for public notification**
- **To improve characterization of HAB toxicosis**
 - Risk factors
 - Clinical presentation
 - Testing
- **To engage domestic animal owners**
 - Human health aspects
 - Veterinary health aspects

HABS are a Concern for Pets and Other Animals

Dog illnesses and death linked to HAB toxin exposure:

- Fresh water
- Salt water

Exposure from:

- Ingestion of blooms and/or toxins
 - Fish carcasses, water, bloom material from fur or bloom material directly
 - Microcystin contaminated supplements
- Inhalation risk unknown

Signs That May Indicate Pet HAB Toxin Exposure

Signs of illness in dogs typically occur within a few minutes to days after HAB toxin exposure.

Clinical signs:

- Lack of energy
- Not eating
- Vomiting
- Diarrhea
- Yellow eyes or gums
- Bruising
- Dark urine
- Weakness
- Stumbling
- Tremors/seizures
- Difficulty breathing
- Excessive drooling

Building an Animal Surveillance Program

Case Definitions

- Data consistency

Standardize Information with Partners

- Health care providers
- Public

Work with Laboratories

- HAB toxin panel for veterinarians

Increase Awareness

- In-person veterinary outreach
- Online educational tools

Case Definition: Background

- **HAB information**
 - Organism description
 - Toxin description
- **Geographical location**
- **Toxin exposure**
 - Summary of potential exposures
 - Activities

Case Definition: Criteria

Epidemiological

- Animal lifestyle
- Potential for exposure
- Time from exposure to illness onset

Clinical

- Most common clinical signs

Professional Diagnosis

- Rule out other causes

Laboratory

- Confirmatory vs. presumptive

Environmental

- Confirmatory vs. presumptive vs. supportive

Case Definition Criteria

Case Classification	Epidemiological	Clinical Criteria	Professional Diagnosis	Lab*-Animal		Environmental		
				P**	C^	S^^	P	C
Confirmed								
Probable								
Suspect								

- *Lab = Laboratory
- **P = Presumptive
- ^C = Confirmatory
- ^^S = Supportive

Standardize Information

Standardize information for human and veterinary health care providers and the public with input from our partnerships with:

- Florida Department of Health (DOH)
- Florida Fish and Wildlife Conservation Commission (FWC)
- Florida Department of Environmental Protection (DEP)
- Florida Department of Agriculture and Consumer Services (DACCS)
- Centers for Disease Control and Prevention (CDC)

Improve public notification accessibility.

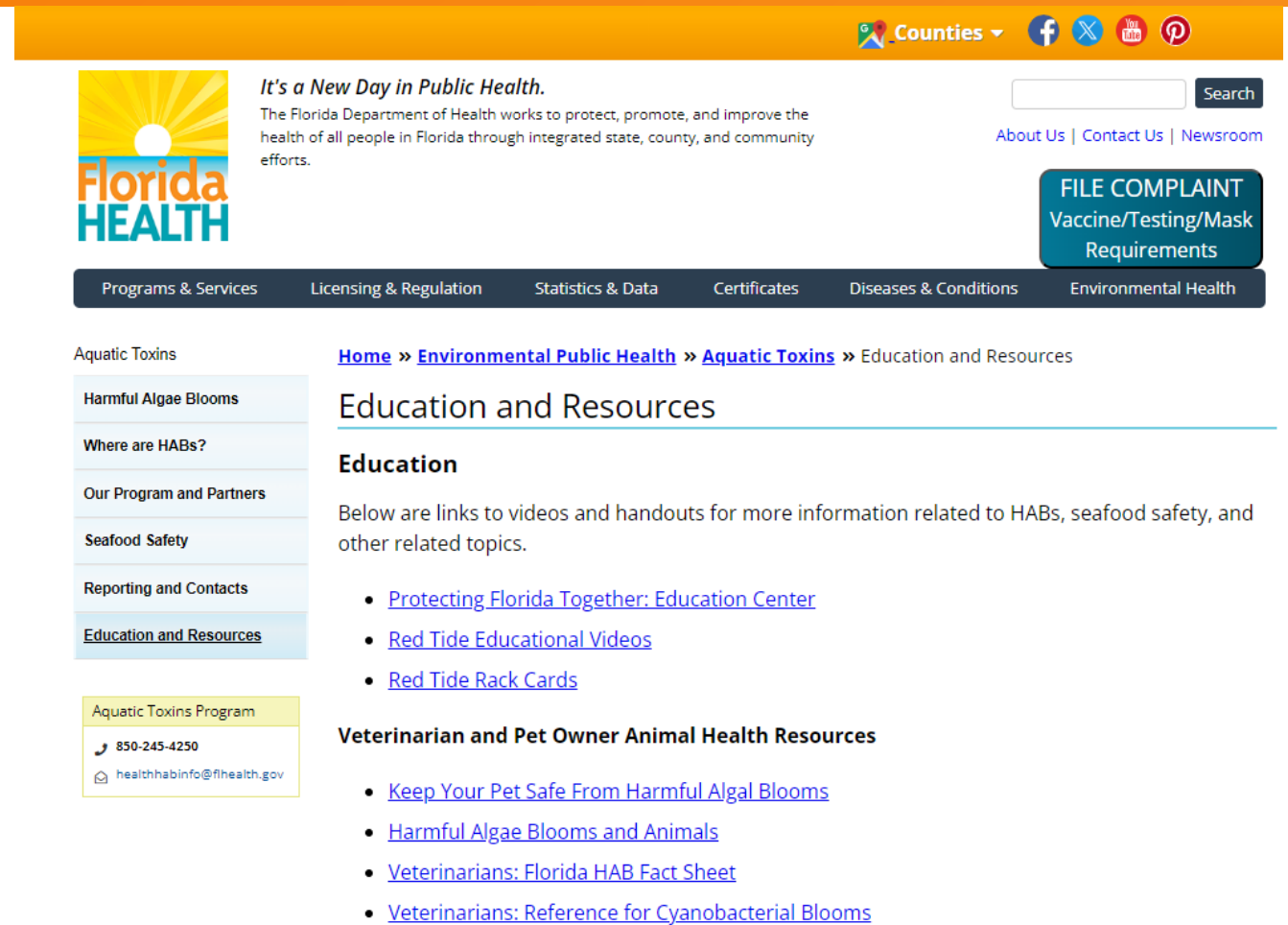
Work With Laboratories for Animal Specimens

- California Animal Health and Food Safety Laboratory
- GreenWater Laboratories
- Kansas State Veterinary Diagnostic Laboratory for rumen or stomach contents (contact laboratory before sending)
- CDC working on procedures

No governmental approval, recommendation, accreditation, or endorsement of any kind is intended or implied by the appearance of any name in this listing. This list is not intended to be exhaustive.

Veterinary and Pet Fact Sheets

Education and Resources



The screenshot shows the Florida Department of Health website. At the top, there is a navigation bar with social media icons for Facebook, Twitter, YouTube, and Pinterest, and a 'Counties' dropdown menu. Below this is a search bar and a 'Search' button. A prominent blue button reads 'FILE COMPLAINT Vaccine/Testing/Mask Requirements'. A dark navigation bar contains links for 'Programs & Services', 'Licensing & Regulation', 'Statistics & Data', 'Certificates', 'Diseases & Conditions', and 'Environmental Health'. The main content area is titled 'Aquatic Toxins' and includes a sidebar with links to 'Harmful Algae Blooms', 'Where are HABs?', 'Our Program and Partners', 'Seafood Safety', 'Reporting and Contacts', and 'Education and Resources'. The 'Education and Resources' section is highlighted. Below the sidebar, there is a contact box for the 'Aquatic Toxins Program' with the phone number 850-245-4250 and email healthhabinfo@flhealth.gov. The main content area features a breadcrumb trail: 'Home » Environmental Public Health » Aquatic Toxins » Education and Resources'. The section is titled 'Education and Resources' and 'Education'. It contains a paragraph: 'Below are links to videos and handouts for more information related to HABs, seafood safety, and other related topics.' followed by a list of links: 'Protecting Florida Together: Education Center', 'Red Tide Educational Videos', and 'Red Tide Rack Cards'. Below this is a section titled 'Veterinarian and Pet Owner Animal Health Resources' with a list of links: 'Keep Your Pet Safe From Harmful Algal Blooms', 'Harmful Algae Blooms and Animals', 'Veterinarians: Florida HAB Fact Sheet', and 'Veterinarians: Reference for Cyanobacterial Blooms'.

It's a New Day in Public Health.
The Florida Department of Health works to protect, promote, and improve the health of all people in Florida through integrated state, county, and community efforts.

Counties

Search

About Us | Contact Us | Newsroom

FILE COMPLAINT
Vaccine/Testing/Mask Requirements

Programs & Services | Licensing & Regulation | Statistics & Data | Certificates | Diseases & Conditions | Environmental Health

Aquatic Toxins

Home » Environmental Public Health » Aquatic Toxins » Education and Resources

Education and Resources

Education

Below are links to videos and handouts for more information related to HABs, seafood safety, and other related topics.

- Protecting Florida Together: Education Center
- Red Tide Educational Videos
- Red Tide Rack Cards

Veterinarian and Pet Owner Animal Health Resources

- Keep Your Pet Safe From Harmful Algal Blooms
- Harmful Algae Blooms and Animals
- Veterinarians: Florida HAB Fact Sheet
- Veterinarians: Reference for Cyanobacterial Blooms

Information for Pet Owners

If your dog swam in an algal bloom, ate anything near the water, or drank water near an algal bloom:

- Wash your dog
- Call your veterinarian

You can also call one of two animal poison control facilities
(Possible fee for consultation):

- American Society for the Prevention of Cruelty to Animals'
Animal Poison Control Center: 888-426-4435
- Pet Poison Helpline: 855-764-7661

Florida Health Page

Keep Pets Safe from HABs



Dr. Kasper's dog and family

Report and Permission to Obtain Records

Investigation of Potential Pet Exposure

Report

- County Health Department
- Florida Fish and Wildlife Conservation Commission (FWC) fish kill report
- Veterinarian

Permission to Obtain Records

- Owner asked to alert veterinarian

Organization

Investigation of Potential Pet Exposure

Organization of a single case

- Fill out survey

Organization of multiple cases

- Excel worksheet listing each pet
 - Veterinary contact
 - Clinical signs
 - Laboratory work results
 - Potential Exposure sites
 - Diagnosis

Communication with Veterinarian

Investigation of Potential Pet Exposure

Veterinary Call

- Speak to veterinarian

Veterinary Email

- Allows for easy record transfer

Review Records

Investigation of Potential Pet Exposure

Records Include

- History
 - Review previous disease
 - Presentation
 - Clinical signs
 - Where was pet
- Laboratory work and physical exam
- Veterinary diagnosis

Consensus Based on Case Definition

Investigation of Potential Pet Exposure

Case Definition

- Potential exposure
 - Direct contact with water
 - Indirect contact with water
- Veterinary diagnosis
- Specimen testing
- Environmental testing

Communication of Findings

Communication with state partner and veterinarian.

State Partner

- Email findings
 - Public record

Veterinarian

- Will be shared with owner

Information for Veterinarians

You can offer supportive information through the website and the fact sheet: [Florida HAB Fact Sheet for Veterinarians](#).

Have the veterinarian contact the Bureau of Epidemiology at the Department of Health (850-245-4401):

Sherri Kasper, DVM, MS
Harmful Algal Bloom
Veterinary Epidemiologist
Sherri.Kasper@FLhealth.gov
850-841-8465

Danielle Stanek, DVM, DACVPM
State Public Health Veterinarian
Danielle.Stanek@FLhealth.gov
850-245-4117

Contact Information



Sherri Kasper, DVM, MS

Florida Department of Health

Sherri.Kasper@FLhealth.gov

850-841-8465