Prevention

- Prevent dogs from eating bugs
- House dogs indoors at night
- Prevent dogs from eating potentially infected animals (mice, rats, etc.)
- Test breeding females, to prevent congenital transmission
- Turn off outdoor lights at night near kennels
- Manage habitats to reduce woody debris and wildlife nests
- Consider insecticide use

Find a kissing bug?

Our research lab tests kissing bugs as part of our research. If you've found a kissing bug you'd like to submit, please submit a photo at https://kissingbug.tamu.edu/Contact/

Avoid direct contact with the bug by using a glove or small plastic bag to catch the bug. Store the bug in a closed plastic bag, vial, or other container.

Please write down exactly where the bug was found, what the bug was doing (flying, walking, etc.), and the date/time.



Triatoma gerstaeckeri Kissing bug adult female

Chagas disease research at Texas A&M University



Researchers in the College of Veterinary Medicine and Department of Entomology study the ecology and epidemiology of kissing bugs, *Trypanosoma cruzi*, and risk of infection in humans and dogs. Samples from bugs and animals are tested for the parasite, and the results are used to answer questions related to Chagas disease in the United States.

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https://kissingbug.tamu.edu



VETERINARY MEDICINE & BIOMEDICAL SCIENCES TEXAS A&M UNIVERSITY

Canine Chagas Disease and Kissing Bugs in Texas

Information for dog owners and veterinarians with canine patients







"Discovering tomorrow's health solutions today."

Chagas disease: the facts

A microscopic parasite called Trypanosoma cruzi causes Chagas disease in humans and animals.



Trypanosoma cruzi



The parasite Trypanosoma *cruzi* is carried by kissing bugs, especially in their feces. Kissing bugs feed on blood and are usually active at night.

A kissing bug

Humans and animals may be infected with the parasite different ways, most commonly if kissing bug feces enter an eye, mouth or wound, or if an animal eats a kissing bug. It is possible for infection to pass from mothers to babies.

For owners of infected dogs

Direct transmission from dogs to humans has not been reported. Infection in dogs indicates the presence of infected kissing bugs, which may mean increased risk of transmission to humans.

Clinical Signs

Many infected dogs may never develop clinical signs and remain asymptomatic

Sudden death can occur at any stage of the disease when the parasite infects the heart

Acute Phase: fever, anorexia, lethargy, cardiac conduction abnormalities or arrhythmias

Chronic Phase: congestive heart failure, dilated cardiomyopathy (DCM) and arrhythmias

At-risk dog populations

All breeds of dogs may be at risk. Most cases have been diagnosed in:

- Sport-type and working dogs -- Young dogs -
- Multi-dog & outdoor kennel environments -

- Dogs that sleep outdoors -

- Puppies from diseased mothers -

To learn more, visit our website: <u>https://kissingbug.tamu.edu/</u> The website has information about kissing bugs, research, and how to contact us.

Diagnosis

The standard method of diagnosis is through a serology test called Indirect Fluorescent Antibody testing (IFA), which detects the presence of antibodies to the parasite. Diagnosis is based on a high index of suspicion, positive serology, and, in some cases, compatible clinical signs and echocardiographic and ECG findings.

The Texas A&M Veterinary Medical **Diagnostic Laboratory (TVMDL) offers** testing for Chagas disease. A 1cc serum sample is acceptable for serology testing to determine antibody titers. More information can be found at https://tvmdl.tamu.edu/

Treatment

There is currently no approved and available treatment to cure canine Chagas disease. If infected dogs have clinical signs, therapy is directed toward the symptomatic treatment of heart disease and arrhythmias. Drug-development studies are on-going.