

## Chagas' Disease

### American Trypanosomiasis

#### What is Chagas' disease and what causes it?

Chagas' (SHA-gus) disease (also called American trypanosomiasis [tri-PAN-o-so-MY-ah-sis]) is caused by a protozoan (single celled, microscopic) parasite called *Trypanosoma cruzi* (tri-PAN-o-so-MA cruise-EYE). The protozoan infects humans and animals through an insect called a "kissing bug" (or "assassin bug").

The disease can be seen in dogs and humans and initially causes flu-like signs (fever, headache), which can progress to heart failure over a long period of time. Cases primarily occur in Central and South America. A few cases occur occasionally in the southern U.S.

#### What animals get Chagas' disease?

In the U.S. dogs, opossums and armadillos are most likely to carry the protozoan that causes Chagas' disease. Many other animals can serve as carriers (or reservoirs), including cats, rabbits, raccoons, and rodents. Generally, dogs are the only animals that show signs of disease.

#### How can my animal get Chagas' disease?

Animals can get Chagas' disease by living or sleeping outside in an area where the "kissing bug" (**vector**) lives. This bug lives in cracks and holes of old, unkept buildings or homes and wooded areas and can be found in Latin America and as far north as Virginia in the U.S.

The protozoa develops in the intestine of the "kissing bug". This bug is a blood feeder and will bite its host (animal or human), then excrete

feces after feeding. This fecal material contains the protozoa, which then enters the bite wound created by the "kissing bug".

#### How does Chagas' disease affect my animal?

In dogs, the most common signs of infection are fever, sluggishness and an unkept hair-coat. Signs of heart failure may show up after an extended period of time. Other animals do not typically show any signs of illness.

#### Can I get Chagas' disease?

Yes. People usually get Chagas' disease from the "kissing bug" (**vector**) that bloodfeeds on humans and transfers the protozoan through its fecal matter. Occasionally people get Chagas' disease from blood transfusions or by transfer from mothers to their babies during pregnancy or when nursing.

People with Chagas' disease will have fever, loss of appetite, fatigue, swelling at the "kissing bug" bite site and swollen glands or lymph nodes. The bug usually bites around the eye.

In long term or severe cases, infection of the heart [myocarditis (my-O-car-DIE-tis)] and possible heart failure can occur.

#### Who should I contact if I suspect Chagas' disease?

##### In Animals –

Contact your veterinarian

##### In Humans –

Contact your physician.

#### How can I protect my animal from Chagas' disease?

Keep animals indoors and away from insects at night. Wooded areas are most likely to harbor the beetle, especially in the southern United States. Dogs should not be allowed to have contact with wild animals such as opossums, raccoons and armadillos to reduce the chance of infection.

#### How can I protect myself from Chagas' disease?

Avoid contact with the "kissing bug". If traveling to Latin America, particularly Central America, take precautions when camping or sleeping in huts to prevent insect bites. Kissing beetles are very susceptible to insecticides which can be used to remove the bugs from dwellings.

#### For More Information

CFSPH Technical Fact Sheets. Chagas' disease at <http://www.cfsph.iastate.edu/DiseaseInfo/>

CDC website. Chagas' disease at <http://www.cdc.gov/ncidod/dpd/parasites/chagasdisease/default.htm>

