

# Chagas Disease

Chagas disease, or American trypanosomiasis, is caused by the parasite *Trypanosoma cruzi*. Infection is most commonly acquired through contact with an infected **triatomine** bug (or “kissing bug,” because it often bites the face). Infection can also occur from mother to baby (congenital), contaminated blood products (transfusions), or an organ transplanted from an infected donor. Chagas disease occurs mainly in Latin America, where an estimated 8 million to 11 million people are infected. People living in rural areas are at greatest risk. Most individuals with Chagas disease in the United States acquired their infections in other countries. Although there are triatomine bugs in the United States, only rare cases originating in the United States have been documented. The November 14, 2007, issue of *JAMA* includes an article about Chagas disease.

## SIGNS AND SYMPTOMS

The acute infection phase lasts 2 to 3 months and is often mild; the chronic phase may be silent for many years. However, an estimated 30% of infected people will develop medical problems from Chagas disease over the course of their lives. Complications of chronic Chagas disease may include

- heart rhythm abnormalities that can cause sudden death
- dilated heart that doesn't pump blood well
- dilated **esophagus** (tube leading from throat to stomach) or colon, leading to difficulties with eating or passing stool

For people who have suppressed immune systems (for example, due to AIDS or chemotherapy), Chagas disease can reactivate with parasites found in the circulating blood. This can potentially cause severe disease.

## DIAGNOSIS

- Medical history (including questions about travel and living conditions), physical examination, and an electrocardiogram are the first steps in determining whether an individual may have Chagas disease.
- Blood tests
- Chronic infection, affecting the heart or the intestinal system, may require specific tests of heart function or the condition of the esophagus or intestine.

## TREATMENT AND PREVENTION

Treatment for Chagas disease is recommended for all people diagnosed with an acute infection, congenital infection, and suppressed immune systems. Other chronically infected people (especially children, but also some adults) may also benefit from treatment. In the United States, medication for Chagas disease is available only through the Centers for Disease Control and Prevention. For questions regarding treatment, physicians can contact the Division of Parasitic Diseases at 770-488-7775. In Latin America, housing improvement and insecticide spraying have decreased the number of newly infected people and completely halted insect transmission in some areas. Screening of blood donations is another important public health tool in helping to prevent transfusion-acquired Chagas disease in Latin America and in the United States.

Sources: World Health Organization, Centers for Disease Control and Prevention, National Institute of Allergy and Infectious Diseases

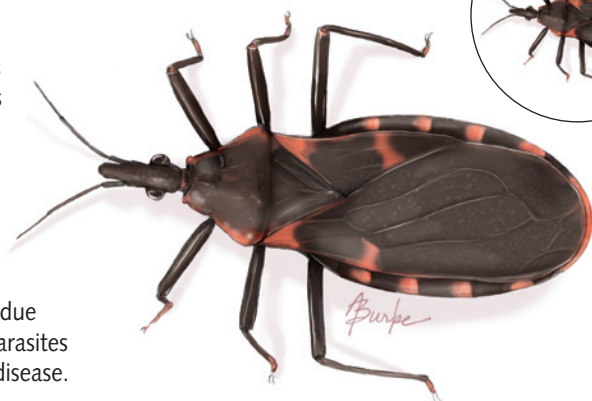
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Triatomine Bug (“Kissing Bug”)



## FOR MORE INFORMATION

- World Health Organization  
[www.who.int](http://www.who.int)
- Centers for Disease Control and Prevention  
[www.cdc.gov/ncidod/dpd/parasites/chagasdisease](http://www.cdc.gov/ncidod/dpd/parasites/chagasdisease)
- National Institute of Allergy and Infectious Diseases  
[www.niaid.nih.gov](http://www.niaid.nih.gov)

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