

CHAGAS DISEASE (AMERICAN TRYPANOSOMIASIS), TENNESSEE

CASE DEFINITION

Clinical description

Acute- The salient clinical features of Chagas disease include fever, malaise, hepatosplenomegaly and lymphadenopathy in the acute phase. An inflammatory response at the site of infection (chagoma) may last up to 8 weeks. In many patients, infection is subclinical. Acute infection can reactivate in immunocompromised patients.

Chronic, indeterminate- After the acute phase, *Trypanosoma cruzi* infection can be life-long. Most chronic carriers of *T. cruzi* have no clinical signs, which is considered the indeterminate form of the disease.

Chronic, symptomatic- 20-30% of indeterminate chronic carriers will progress to clinically evident disease of the heart or gastrointestinal tract. Arrhythmias are typically the first manifestation of cardiac complication. Other cardiac manifestations include palpitations, presyncope, and syncope. Gastrointestinal manifestations are less common and include dysphagia, odynophagia, esophageal reflux, weight loss, aspiration, cough, and regurgitation.

Laboratory criteria for diagnosis

- Positive parasitology (direct microscopy or blood culture)
- Positive PCR-based detection of *T. cruzi*
- Positive serology for *T. cruzi* antibodies in two different types of antibody tests or to two different antigens. (eg. Positive blood donor screening assay followed by radioimmunoprecipitation assay (RIPA).)

Case classification***

Suspect:

Any single positive serological test with no secondary test AND missing or negative clinical information. Includes single blood donor screening result with no clinical information.

Probable:

A single positive serologic test or discordant serologic tests AND physician diagnosed Chagas disease.

Confirmed:

Positive laboratory result according to laboratory criteria for diagnosis.

***For all confirmed and probable Chagas cases reported through blood agencies:

Please encourage patients to inform their healthcare provider of the test result. Also, please provide patients with an informational fact sheet regarding Chagas disease. Fact sheets can be found at the CDC website: <http://www.cdc.gov/parasites/chagas/resources/onepage.pdf>