



DSHS Chagas Disease (*Trypanosoma cruzi*) Exposure Assessment and Testing Guidance

Process 1

Person exposed or potentially exposed to a triatomine (kissing bug) and the bug or photo of the bug is available for identification

- Email the digital photo(s) to DSHS at the.vet@dshs.texas.gov
- If bug appears to be a triatomine or no photo is available, send the bug to DSHS for identification and testing (instructions and submission form are available on the DSHS Chagas [page](#)).
 - If the bug is not a triatomine, the person is NOT at risk for Chagas disease
 - If the bug tests **Positive** for *T. cruzi*, go to **Process 2** or **3**, depending on timeframe
 - If the bug tests **Negative** for *T. cruzi*, the person is NOT at risk for Chagas disease
- If the bug appears to be a triatomine, but is not available for testing and you wish to pursue clinical testing, go to **Process 2**

- If the person tests **Positive**, visit <https://www.cdc.gov/chagas/hcp/clinical-care/index.html> for information on Chagas disease evaluation and treatment
- If the person tests **Negative**, the person does NOT have Chagas disease
- If the person tests **Inconclusive**, consult with Regional DSHS Zoonosis Control staff

Process 2

Person tests positive at a blood bank
OR
 Person exposed or potentially exposed to a triatomine bug >8 weeks prior
OR
 Person with onset of cardiac disease compatible with chronic Chagas disease
OR
 Person with Chagas-positive mother or sibling
OR
 Person potentially exposed to blood or tissue from an infected person or animal >8 weeks prior (e.g., needlestick injury, tissue transplant)

Perform serology screening at the DSHS lab (uses TWO tests that detect antibodies to different antigens) OR a commercial lab (see page 2 for lab information).

Negative Serology
Person does NOT have Chagas disease

Positive Serology @ DSHS lab
OR a commercial lab that utilizes two or more tests that detect antibodies to different antigens^^ - see p. 2
Results indicate the presence of antibodies to *T. cruzi*

Inconclusive Serology OR a single Positive/Reactive screening test^- see p. 2
Public health should request that any remaining sample be forwarded to the DSHS lab & notify provider **OR** the provider can collect a new sample and send to DSHS.

Process 3

Person exposed or potentially exposed to a *T. cruzi*-infected triatomine bug ≤8 weeks prior
OR
 Person traveled to a highly Chagas-endemic area and has acute symptoms
OR
 Person potentially exposed to blood or tissue from an infected person or animal ≤8 weeks prior (e.g., needlestick injury, tissue transplant)

- Prior to sample submission, consult with Regional DSHS Zoonosis Control staff to 1) determine if PCR testing is warranted, and 2) to discuss other testing options
- If CDC approves testing by PCR, submit the appropriate sample to the DSHS lab for routing to the testing center (see page 2 for lab information). If serologic testing (Process 2) or blood smear examination is recommended, the sample should be sent to DSHS or a commercial lab.

*Specimens testing inconclusive at DSHS will not be forwarded to CDC for confirmatory testing while Chagas Disease Serology is offline.

Major Laboratories that Currently Perform *Trypanosoma cruzi* Testing

- **Texas Department of State Health Services Laboratory**
 - [Trypanosoma cruzi IgG Antibody Immunoassay](#)
 - Check Chagas IgG box in Section 6 of G-2A form
- **ARUP Laboratories^**
 - [Trypanosoma cruzi Antibody, IgG](#)
 - Test Code 0051076
- **Quest Diagnostics^**
 - [Trypanosoma cruzi Antibody, Total](#)
 - Test Code 13230
- **Mayo Clinic Laboratories^**
 - [Trypanosoma cruzi Total Antibody, Enzyme-Linked Immunosorbent Assay, Serum](#)
- **Kepera Diagnostics^^**
 - [Chagatest ELISA recombinante v.3.0, TESA Immunoblot, & Infynity Biomarkers Multi-Cruzi](#)
 - ELISA & TESA tested in parallel, reflex to Infynity assay if the two test results are discordant
 - Test Code 0051076
- **Centers for Disease Control and Prevention**
 - [Chagas Disease Serology](#) and [Chagas Disease Molecular Detection](#) (PCR) are currently offline. However, with CDC approval, PCR samples can be routed through the DSHS lab for testing at the Wadsworth Center parasitology lab at the New York State Department of Health.
 - Check Chagas Disease box in Section 7 of G-2A form