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

Process 2 Process 3

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

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) 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)

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*

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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.

- 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.

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

*Specimens testing inconclusive at DSHS will by automatically forwarded to CDC for further testing provided sample volume is sufficient.

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 (do not check Chagas Disease box in Section 7)

ARUP Laboratories^

- Trypanosoma cruzi Antibody, IgG
- Test Code 0051076

Quest Diagnostics^

- Trypanosoma cruzi Antibody, Total with Reflex to Confirmation
- Confirmation is performed at an additional charge (check with Quest for full details on tests performed)
- Test Code 13230

Mayo Clinic Laboratories^

Trypanosoma cruzi Total Antibody, Enzyme-Linked Immunosorbent Assay, Serum

Kephera Diagnostics^^

- Kephera Diagnostics | Infectious Disease Testing | Order Test
- Offers 3 serologic tests for Chagas: Wiener ELISA + TESA Blot in Parallel, Reflexed to Multi-Cruzi

Centers for Disease Control and Prevention

- Chagas Disease Serology and Chagas Disease Molecular Detection (PCR)
- Check Chagas Disease box in Section 7 of G-2A form

Disclaimer of Endorsement: Reference herein to any specific commercial laboratory or test does not necessarily constitute or imply its endorsement, recommendation, or favoring by the Texas Department of State Health Services.