

Provider Alert: Low Screening Coverage for Chagas Disease in Washington – Screening Recommendations

Date: July 28, 2025

This is a Provider Alert from the Washington State Department of Health regarding the importance of screening patients for Chagas disease if they have a history of residence in or prolonged travel to Mexico, Central, or South America. Chagas disease is a vector-borne parasitic disease which, if left untreated, can lead to chronic cardiac and gastrointestinal symptoms, adverse pregnancy outcomes, and/or congenital Chagas disease in infants.

Current Situation

The Washington State Department of Health (WA DOH) recently conducted an analysis that estimated more than 300,000 Washington residents meet screening criteria for Chagas disease; unfortunately, we also estimated screening coverage of 0.02–0.03% among the population recommended for screening.

WA DOH estimated that more than 2,500 Washington residents could be currently living with untreated infections of *Trypanosoma cruzi* (*T. cruzi*, the parasite that causes Chagas disease). If untreated, these cases could lead to an estimated 21–56 preventable congenital Chagas disease infections every 10 years.

Most people infected with *T. cruzi* are unaware that they have the disease, which is why provider screening is essential. WA DOH wants to ensure that providers are aware of the screening recommendations and treatment procedures for Chagas disease to increase screening uptake and improve patient outcomes.

Actions Requested

- Screen patients for Chagas disease if they meet <u>any</u> of the following screening criteria:
 - People who were born in Mexico, continental Central America, or continental South America (OR who lived in these areas for 6 or more months). In particular, the following populations are of concern:
 - Pregnant people
 - People with immune-compromising conditions
 - 2. **Family members of people diagnosed with Chagas disease** if travel or residence exposures were shared
 - 3. Any person whose gestational parent was diagnosed with Chagas disease.

- Be aware that Chagas disease has both acute and chronic phases, and screening testing is different depending on the stage:
 - Acute Chagas disease is commonly diagnosed by microscopy or Polymerase-Chain Reaction (PCR) testing.
 - Infants suspected of congenital Chagas disease should be screened using these methods.
 - Refer to the following CDC algorithms to guide Chagas testing for infants:
 - Infants less than 3 months of age (PDF)
 - Infants 3 months of age and older (PDF)
 - See <u>CDC Clinical Considerations for Congenital Chagas Disease</u> for more information.
 - Immunosuppressed patients may also experience re-activation of chronic Chagas disease; molecular (PCR) testing is also appropriate in these patients.
 - Chronic Chagas disease is diagnosed via serologic testing for T. cruzi antibodies
 - The majority of patients with Chagas in Washington are expected to have chronic Chagas disease, as the insect vector that spreads *T. cruzi* parasites is not present in Washington.
- Test all patients who meet the above screening criteria for <u>chronic</u> Chagas disease by ordering a *T. cruzi* serologic test.
 - Most commercial laboratories in the US offer a *T. cruzi* serologic test.
- If initial *T. cruzi* serology is positive, providers should be aware that all patients **should** have <u>confirmatory serologic testing</u> performed to confirm the diagnosis of Chagas disease.
 - No single serologic test is sensitive and specific enough to diagnose Chagas disease; as a result, at least two different serologic tests are recommended.
 - Many large commercial laboratories, including Mayo Clinic Laboratories and Quest Diagnostics, also offer confirmatory testing for Chagas disease.
 - Patients typically only need to provide one serum sample for use in multiple serologic tests.
 - Confirm with your commercial laboratory to determine if positive serology will automatically reflex to a second (confirmatory test), or if the confirmatory testing needs to be conducted through public health.
 - If the laboratory does not offer confirmatory testing, consult with the Local Health Jurisdiction in the patient's county of residence to forward the specimen for confirmatory testing through public health.
- After diagnosis of Chagas disease is confirmed, screen patients for cardiac or gastrointestinal complications and assess for treatment.
 - Patients diagnosed with Chagas disease are recommended to receive the following:
 - ECG (repeated annually)
 - Echocardiogram
 - Chest x-ray, if an echocardiogram cannot be performed

- Treat all cases of <u>acute or reactivated Chagas disease</u> and all chronic infections in children under 18 with antiparasitic drugs:
 - Nifurtimox and benznidazole are FDA-approved for treatment of T. cruzi infections in pediatric patients. Recommendations on dosage and treatment duration can be found on the <u>CDC Clinical Care of Chaqas Disease</u> webpage.
 - Use of antiparasitics to treat a patient outside of the FDA-approved age ranges (0-18 for nifurtimox, 2-12 for benznidazole) is based on clinical diagnosis and decision by the treating provider.
- Treatment is also recommended for adults 18 to 50 years old with chronic Chagas disease who do not already have advanced cardiomyopathy.
- For adults older than 50 years with chronic infection, the decision to treat should be individualized. See <u>CDC Clinical Care of Chagas Disease</u> for more details.
- Treatment is not indicated for pregnant or breastfeeding individuals, and should be delayed until after birth or cessation of breastfeeding.
- Report cases of Chagas disease to your <u>Local Health Jurisdiction</u> within 3 business days.

Background

Chagas disease is a vectorborne illness caused by the protozoan parasite *Trypanosoma cruzi*. *T. cruzi* is spread through the feces of infected triatomine bugs (aka "kissing bugs"), which are endemic to areas of Mexico and continental Central and South America. *T. cruzi* can also be passed congenitally and through infected blood or organ products. Triatomine insects are not endemic to Washington; most cases of Chagas disease diagnosed in Washington are among individuals born in Latin America and their children. There have also been limited reports of possible Chagas disease infection in some southern US states.

Chagas disease has both an acute and a chronic phase. Acute Chagas disease infections are often asymptomatic, but patients can present with nonspecific symptoms. Acute Chagas disease, when untreated, can resolve within weeks or months to a subclinical chronic infection. Some (20-30%) cases of Chagas disease can progress to a symptomatic chronic form of illness that may include severe cardiac and/or gastrointestinal involvement which can lead to fatal complications. Untreated Chagas disease can also lead to adverse outcomes in pregnant people and their infants. Congenital Chagas cases should be managed as acute Chagas infections; treatment will prevent potential severe complications for infants (including meningoencephalitis, pneumonitis, and death) and prevent complications from chronic Chagas disease later in life.

Acute Chagas infections can be diagnosed through polymerase chain reaction (PCR) and microscopy of thick and thin blood smears. Chronic Chagas disease is diagnosed through serologic tests that detect antibodies for *T. cruzi* parasites. No single test is sufficiently sensitive and specific enough for diagnosis, so clinicians are recommended to use two or more tests that can detect antibodies to different antigens. Common techniques include enzyme-linked immunosorbent assay (ELISA) and immunofluorescent antibody test (IFA).

Left untreated, chronic Chagas disease will lead to potentially fatal cardiac or gastrointestinal complications in 20-30% of patients. Antiprotozoal treatment (Benznidazole or Nifurtimox) is indicated for all acute and reactivated infections, and for all chronic infections in individuals under 18. Treatment is strongly recommended for patients under 50 without advanced cardiomyopathy. Persons diagnosed with Chagas disease should be evaluated for potential cardiac and gastrointestinal complications.

Resources

- WA DOH: Chagas Disease
- WA DOH: Patient Screening Tool for Chagas Disease (PDF)
- WA DOH: Prenatal and Infant Screening for Chagas Disease (PDF)
- CDC: Clinical Testing and Diagnosis for Chagas Disease
- CDC: Clinical Considerations for Congenital Chagas Disease
- CDC: Clinical Care of Chagas Disease
- CDC Continuing Education Opportunity: Chagas Disease, What U.S. Clinicians Need to Know
- <u>U.S. Chagas Diagnostic Working Group: Recommendations for the Screening and Diagnosis of Chagas Disease in the United States</u>

Contact

To report suspected cases, or for any other questions, please contact your <u>Local Health</u> <u>Jurisdiction</u>.