

Trypanosoma cruzi (Chagas Disease) PCR Testing

ABOUT: Trypanosoma cruzi is a protozoan parasite transmitted by kissing bugs. In dogs, it causes Chagas disease, which primarily damages the heart, often leading to sudden death. Endemic in the southern U.S. and Latin America.

SYMPTOMS: Enlarged lymph nodes, lethargy, poor appetite, weight loss, irregular heartbeat, and signs of heart failure. In some cases, sudden death occurs without warning.

PREVENTION: Prevent contact with kissing bugs (Triatomine insects) and house dogs indoors overnight in endemic areas. No vaccine exists.

GETTING TESTED: PCR can detect parasite DNA in blood during active infection.

- Preferred specimen: 2 mL whole blood in a purple top (EDTA) tube.
- Handling & Shipping: Invert gently to mix anticoagulant; do not shake. Wrap tubes in absorbent material and place in sealed zip-lock bags. Keep refrigerated (2-8 °C) until shipping. Ship overnight with ice packs that are separated from the samples by paper towels. Do not freeze. A positive PCR result confirms the presence of T. cruzi DNA in blood, indicating infection. Negative results indicate no parasite DNA is detected. Infection is not excluded as parasitemia may fluctuate or be intermittent. Repeat testing may be recommended if suspicion is high.

T. Cruzi PCR tests are processed and results reported on Wednesday.

