

Activity Guide for CHWs

Presentation 1: What is Chagas Disease?

Poll Questions:

1. Are you familiar with Chagas Disease? (No correct answer)
 - A. Yes
 - B. No
2. How can Chagas Disease be transmitted? Select all answers you think are correct!
 - A. Coughing and sneezing
 - B. Through kissing bug bites
 - C. Kissing bug feces entering a bite**
 - D. Pregnant mother to her unborn baby**
 - E. Contaminated food and drink**
3. Which of the following is a kissing bug?



- A. Top Left
- B. Top Right
- C. Bottom Left
- D. Bottom Middle**
- E. Bottom Right

(include names of lookalikes at the end)

4. What is the name of the parasite that causes Chagas disease?

- A. P. cruse
- B. T. cruzi**
- C. Tritomines
- D. COVID-21
- E. None of the Above

5. Chagas Disease is endemic in what regions? Select all that apply!

- A. Mexico**
- B. Central America**
- C. The United States
- D. South America**
- E. Europe

Case Study:

A mother comes to you asking for help with identifying and treating rather odd bug bites on her daughter's face. The young girl, probably around the age of five, appears to be healthy, but the bug bites appear to be quite itchy, and she continues to scratch her face throughout your conversation with the mother.

At first, the mother figured the girl was bit by something at the park the previous afternoon, but that morning she found a dead bug in her daughter's bed. The mother did not bring the bug with her, but she has some pictures of it on her phone. Based on the pictures, you can tell that the bug in question was less than an inch long and had orange stripes running up and down the side of its body.

Could the girl have been bitten by a kissing bug? What should be your next steps? Discuss the case with your assigned group for the next 10-15 minutes and be prepared to talk about your action plan when you return to the main group.

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Presentation 2: Symptoms and Treatment

Poll Questions:

1. Which of the following are symptoms of acute stage of Chagas Disease?

- A. Fever
- B. Body aches
- C. Rash or swelling at the bite site
- D. Nausea, diarrhea, vomiting
- E. All of the above**

2. True or false: Patients with Stage 1 Chagas disease show symptoms such as abnormal electrocardiograms (ECG) and chest x-rays.

FALSE. Patients during Stage 1 do not show any symptoms and have normal ECG and CXR.

3. What percentage of people with Chagas disease will develop cardiac damage?

- A. 70%
- B. 10%
- C. 50%
- D. 30%**

4. Is blood donor testing sufficient for diagnosing a patient with Chagas disease?

- A. Yes
- B. No**

5. What is the first step after a patient tests positive for Chagas disease?

- A. Send patient to physician for treatment
- B. Request Echocardiogram
- C. Confirm diagnosis with laboratory testing**
- D. Obtain complete medical history

6. Which of the following patients should *always* be recommended drug therapy for Chagas disease?

- A. Patient has acute T. cruzi infection
- B. Patient has early congenital T. cruzi infection
- C. Patient is a child less than 12 years old with chronic T. cruzi infection
- D. All of the above**

7. Which of the following patients should NEVER be offered drug therapy for Chagas disease?

- A. Adults > 50 years old without advanced cardiomyopathy
- B. Patients who have advanced chagasic cardiomyopathy with congestive heart failure
- C. Patients who are pregnant
- D. Patients with severe renal or hepatic insufficiency
- E. C and D only**
- F. All of the above

Case Study:

A 35-year-old patient receives a call from their local blood donation center after donating blood for the first time, alerting them that they tested positive for Chagas disease. They are currently not experiencing any symptoms. After looking at their patient history, they are found to be low risk for having Chagas disease.

What should be the next steps for this patient? What “stage” is the patient likely in? Discuss the case with your assigned group for the next 10-15 minutes and be prepared to talk about your action plan when you return to the main group.

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Presentation 3: Congenital Chagas Disease

Poll Questions:

1. Congenital transmission rates are _____.
A. 1%-5%
B. 0.5%-1%
C. 5-10%
D. 3-8%

2. True or false: Infected nursing mothers do not typically transmit Chagas disease.
True: Transmission through breast milk has not been reported. Mothers with Chagas can typically safely breastfeed. Only mothers with acute Chagas should not breastfeed.

3. What women would be considered at-risk for Chagas disease infection.
A. Women from locales endemic to Chagas disease
B. Women who have lived in rural regions
C. Women who have lived in a mud or thatched-roof house
D. All of the above
E. None of the above

4. True or false: Serologic testing is useful for detecting Chagas disease in infants.
False: Accurate diagnosis for infants relies on the detection of the *T. cruzi* parasite by examination of blood smears and/or PCR testing.

5. Who should seek testing if Chagas disease is confirmed in a mother? Select all that apply.
A. Each of the mother's children
B. The paternal grandmother
C. The mother's siblings
D. Family pets
E. The father of the child

6. True or False: Early treatment does not work well in infants.
False: Early treatment kills the *T. cruzi* parasite and can help prevent long-term complications. Treatment is ALWAYS recommended for infants and children up to 18 years.

Case Study:

While pregnant with her second child, a mother screens positive for Chagas disease. Last year, you remember that the mother, after visiting her family in El Salvador, came to you for advice on treating a fairly severe cold. Now, the same mother seeks your advice on what to do next and asks for help accessing resources on Chagas disease.

How would you advise the mother? What are the next steps she should take? Discuss the case with your assigned group for the next 10-15 minutes and be prepared to talk about your action plan when you return to the main group.

Alternate Case Study:

Instead of a case study/group activity, the CHW presenter could discuss their experience with another vector-borne disease. Diseases that affect pregnant mothers or disease that can be passed on congenitally would be particularly applicable for this discussion (Zika would be a great disease to discuss here).

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Presentation 4: Chagas Disease Prevention and Advocacy

Poll Questions:

1. Which of the following is a myth about Chagas prevention?
 - A. Kissing bugs native to US don't invade houses or feed on people
 - B. Prolonged feeding to defecation interval limits human exposure
 - C. Higher standard of housing limits exposure
 - D. Indigenous *T. cruzi* strains are not pathogenic
 - E. **All of the above**

2. Is the bug shown in the image a kissing bug?



- A. **Yes**

- B. No
3. Which of the following are kissing bugs? Select all that apply.



1.



2.



3.



4.



5.

- A. 1
B. 2
C. 3
D. 4
E. 5

4. Which of the following does not represent a blood meal for a Kissing Bug?

- A. Mouse
B. Armadillo
C. Coyote
D. **Butterfly**
E. Bat

5. True or False: Pets cannot get Chagas Disease.

False. Dogs and cats, especially those that spend a lot of time outdoors, can become infected with Chagas disease quite easily.

Case Study:

1. Are people living in *Colonias* (substandard housing developments, often found along the Texas-Mexico border) a high-risk population for contracting Chagas disease? Take into consideration geographic location and the type of housing. After discussing with your breakout groups for 10 minutes we will meet back here to discuss.
2. How can you reduce stigma about Chagas disease among community members? If you are doing a home visit, what signs could you look for that might indicate the individuals are at a risk for contracting Chagas disease? Break into discussion groups and discuss these questions. We will meet again in 15 minutes to share observations.