

Chagas Disease-Awareness Program for CHWs

Belinda Flores, R.N., B.S.

South Coastal AHEC Director

Paula Granados, Ph.D.

Assistant Professor, Texas State University



A Brief Review

- Chagas diseases CAN be transmitted congenitally
- If the child is diagnosed with Chagas early after birth treatments can be up to 90% effective
- In the US, an estimated 40,000 women of childbearing age have Chagas disease
- Many infants with congenital infection are asymptomatic at birth
- Testing for children needs to be done at multiple intervals, including after 9 to 12 months of age when they are clear of mother's antibodies
- Infants are treated by either benznidazole or nifurtimox, dosing is age-specific

Protect Your Baby from Chagas Disease

Chagas disease is an illness that can lead to serious heart and stomach problems, and even death. Chagas disease can be life threatening even though you may not feel sick now. In fact, people usually don't feel sick until many years after they have been infected.

Who can get Chagas disease?

Anyone. However, people have a much greater chance if at some point in their lives they have:

- Lived in rural areas of Mexico, Central America, or South America
- Stayed in a house in Mexico, Central America, or South America with walls that have cracks or crevices
- Seen this bug



How can someone get Chagas disease?

People usually get Chagas disease from contact with a triatomine bug (also called "kissing bug"). However, there are other ways the disease can be spread, including from an infected mother to her unborn baby.

What should I do if I think I might have Chagas disease?

If you think you might have Chagas disease, you should see your OB/GYN or other health care provider, who will examine you. He or she may take a sample of your blood for testing.

If I have Chagas disease, does it mean my baby is infected?

No, not necessarily. The risk of an infected mother spreading Chagas disease to her unborn baby is less than 1 in 10.

If I have Chagas disease, should my baby be tested?

Yes. If you have been told you have Chagas disease, all of your children should be tested, regardless of their ages.

Is there treatment for Chagas disease?

Yes, there is treatment for the disease. Your baby can be treated any time after birth, and treatment is very effective for newborns and children. You can be treated after your baby is born and you have finished breastfeeding.

Many people who have tested positive are leading healthy lives with the help of their health care providers.

For more information on Chagas disease, please visit www.cdc.gov/parasites/chagas or call 404.718.4745.



Ningun Bebe
con Chagas
Campaign



<https://youtu.be/FAXVP7Fzmog>

Session 4:

Talking about Chagas
disease and prevention

Myths about Chagas Prevention

- Kissing bugs native to US don't readily invade houses or feed on people
- Prolonged feeding to defecation interval limits human exposure
- Higher standard of housing limits exposure
- Indigenous *T. cruzi* strains are not pathogenic



How do kissing bugs get inside?

Kissing bugs can enter your home through:

- Crawl spaces
- Exposed cracks
- Gaps around patio doors
- Open chimney flues
- Windows



Kissing Bug Hideouts

Openings in door fixtures

Gaps under siding

Gaps in exterior walls



How do you get rid of Kissing Bugs?

Some procedures to prevent kissing bugs include the following:

- Caulk around openings for utility lines, plumbing pipes, and cables.
- Change porch lights to "bug light" bulbs.
- Close exterior doors tightly.
- Inspect pets for these bugs in their fur.
- Move firewood piles away from the house.
- Repair any damaged screens on all windows, crawlspace vents, and attic vents.
- Repair cracks in foundation that would allow insects to enter.
- Replace missing or damaged weather stripping.



More Prevention Tips



- Eliminate vector contact:
 - Improve housing/kennels
 - Use insecticides
 - Control vegetation & debris around home
 - Eliminate cracks & crevices in home
 - Regular cleaning
 - Deter wild animals
- Surveillance:
 - Collect and submit kissing bugs
 - Investigate suspect bites
 - Look for fecal spots (bedding)
 - Eggs, nymphs or adults around beds or around pet sleeping areas

Lets play a game: Identify the Kissing Bug!



What's wrong with this video?!?!?!?



This is typical BAD info shared with the public! Most of these bugs are NOT kissing bugs!!!

<https://www.youtube.com/watch?v=mncCqE1YMik>

Chagas' Disease Biology:

The Tropics



- Bug colonization of human habitation in roofs, walls, other sites
- Regular/continued exposure likely
- Bug infection rate 21-46%
- *T. infestans*

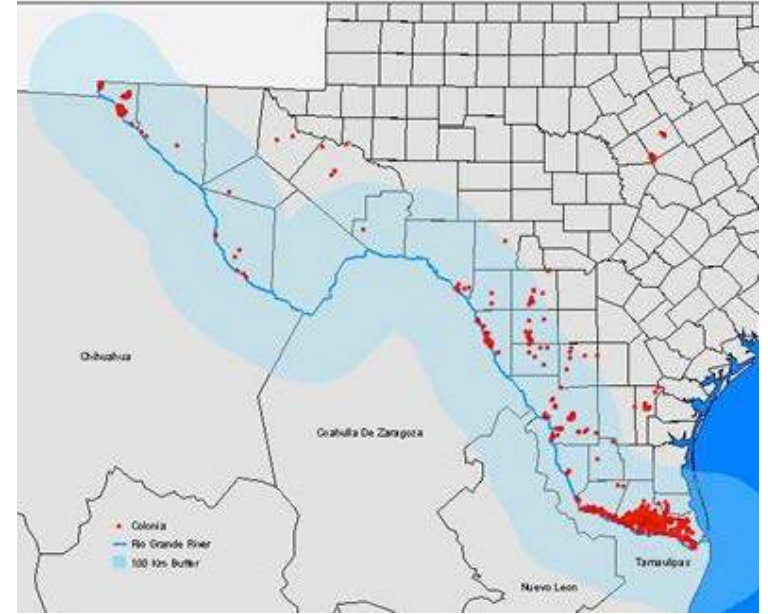


South Central Texas



- Bug colonization of human habitation in exterior walls, yard, some inside
- Intermittent exposure possible
- Bug infection rate ~ 64%
- *T. gerstaeckeri*





Colonias - High Risk Populations?

Which of These are Kissing Bug Habitats?



Which of These Does **NOT** Represent a Blood Meal for a Kissing Bug?



Kissing Bug Bites

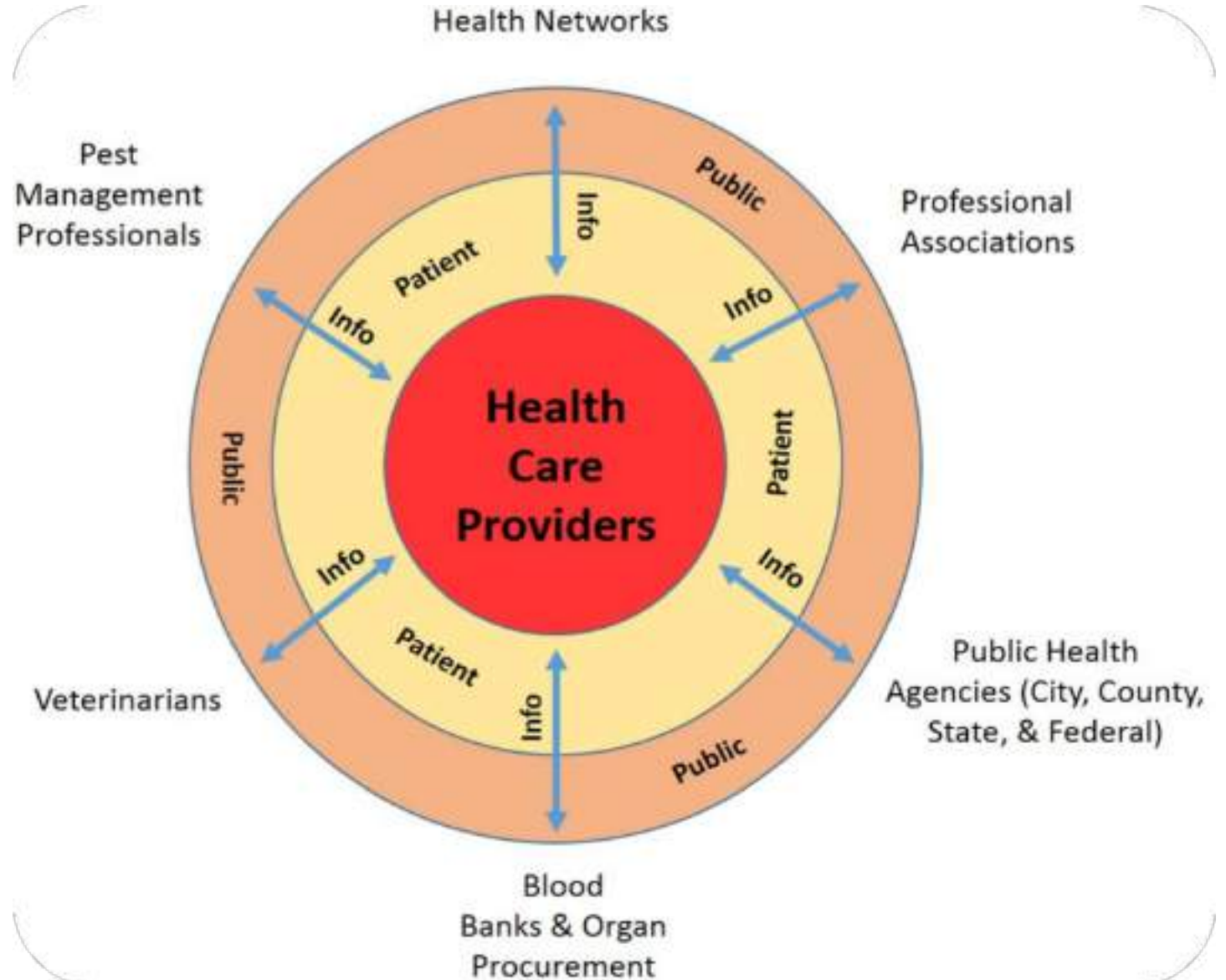


Chagas
Disease in
the United
States



<https://youtu.be/R01YQhI5PIw>

Model for Targeted Outreach





Stigmas Associated with Chagas disease

- Chagas almost always associated with poverty in rural areas and impoverished houses infested with triatomine bugs
- Infection with *T. cruzi* can lead to social rejection
- Infection can also mean work restriction because its association with poor health and potential difficulties in performing work, and even sudden death, creating a fear of financial losses by employers
- Social consequences of stigma can be extremely severe so many people are reluctant to seek screening and medical help, which can lead to more serious complications and further spread of the disease.

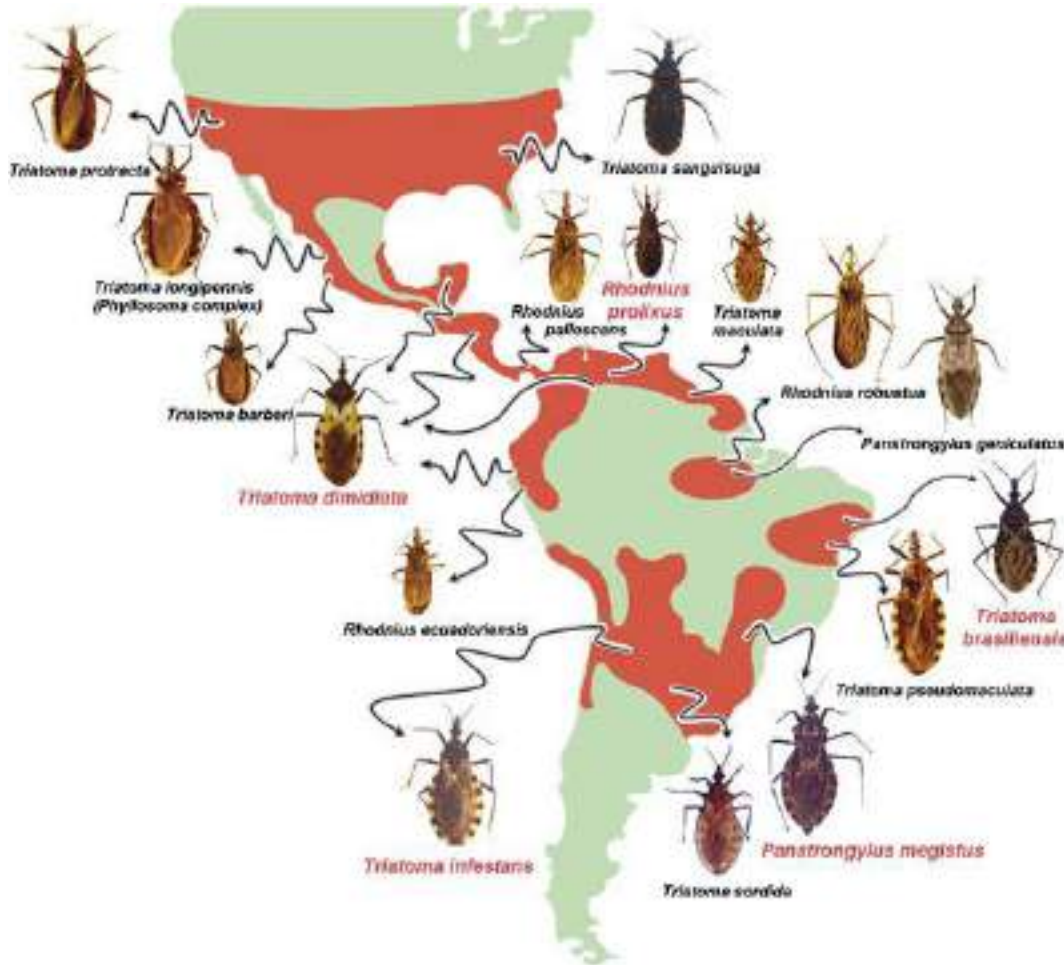
Emotional Burden of Chagas Disease

- Studies have shown that local communities of endemic countries do not have a clear understanding of Chagas disease
- Chagas disease is not necessarily associated with its vector or its symptoms
- Chagas disease associated with feelings of despair, fear of death, and suffering
- Negativity affects health-seeking behavior as people develop adaptive behaviors
 - Ex. Compromising both treatment and diagnosis by refusing to get screened

A close-up photograph of a person's hand holding a white rectangular card. The hand has purple nail polish on the thumb and index finger, and white nail polish on the middle and ring fingers. The card has the words "Why me?" written in a large, black, handwritten-style font. The background is blurred, showing what appears to be a person's arm and clothing.

Why me?

Chagas Disease Diagnosis in Non-endemic Countries



- Practitioners in non-endemic countries tend to consider Chagas disease a tropical illness restricted to Latin America
- Misconception causes misdiagnoses when presented with symptoms
- Patients infected with *T. cruzi* in non-endemic countries may not be aware of their condition which can lead to further transmission
- Some countries require mandatory *T. cruzi* testing for employment resulting in discrimination against infected individuals
- Lack of understanding, lack of knowledge, and incorrect beliefs are clear obstacles in promoting health-seeking behavior.

Chagas: Let's
Raise Our
Voices!



<https://vimeo.com/79476592>

Discussion



HOW WOULD 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 A RISK
FOR CHAGAS?

Advocacy & Teaching about Chagas

- Successfully navigate online resources so you can advocate with passion and facts.
- Use 211Texas.org to find resources in your community to assist individuals and families.
- Enhance small group presentation skills.
- Know your subject. Know more than you will present. Understand the cycle of infection.
- Be familiar with connecting to vulnerable populations.
- Practice using the assets/strengths in a community...its existing network of relationships.
- Practice mobilizing similar interest groups into larger more impactful groups.
- Use your new knowledge to educate families and providers



Case Study 4:

Pet tests positive for Chagas disease

Summary

- Regular home cleanings and upkeep can help to control for vector
- South Central Texas has an infection rate of ~ 64%
- Globalization has led to a rise in awareness about Chagas disease as an emerging issue in non-endemic regions, but some challenges still exist
- Training health personnel to facilitate diagnosis and provide medical care can greatly help to mitigate transmission and improve prognosis
- Lack of understanding and knowledge of Chagas disease, along with incorrect beliefs, are clear obstacles to promoting health-seeking behavior
- CHWs are a critical link between health providers and the community

Thank you!

**Please complete your post-knowledge tests to
receive CEU credit**