

2% of cases	98% of cases
Vector: <i>G. Morsitans</i>	Vector: <i>G. Palpalis</i>
Multiple animal reservoir	Humans are primary reservoir
Rapidly progressive acute febrile illness + lymphadenopathy Death before CNS Symptoms become prominent	"African Sleeping Sickness" Chronic course Intermittent fevers, night sweats, malaise Winterbottom sign – posterior CLAD Confusion, fatigue → stupor and coma



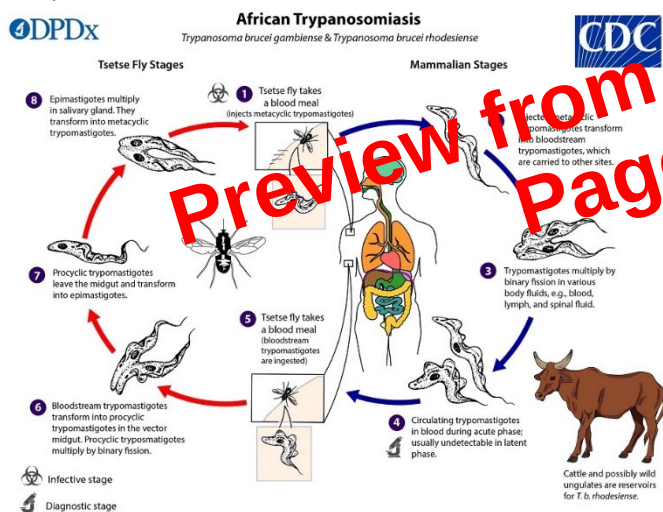
Reduviid bug

- Area of initial bite of *Tsetse* fly → local multiplication → transient chancre at bite site

Diagnosis

- Based on geography and clinical findings
- CSF
 - ↑ total IgM
 - Pleiocytosis: 50 to 500 mononuclears/μL** of CSF
- Identification of parasites via:
 - (1) thick and thin smears
 - (2) buffy coat preparations
 - (3) lymph node and bone marrow aspirate
 - (4) centrifuged CSF with Giemsa stain
- Culture, Animal inoculation
- Molecular Methods

Life Cycle



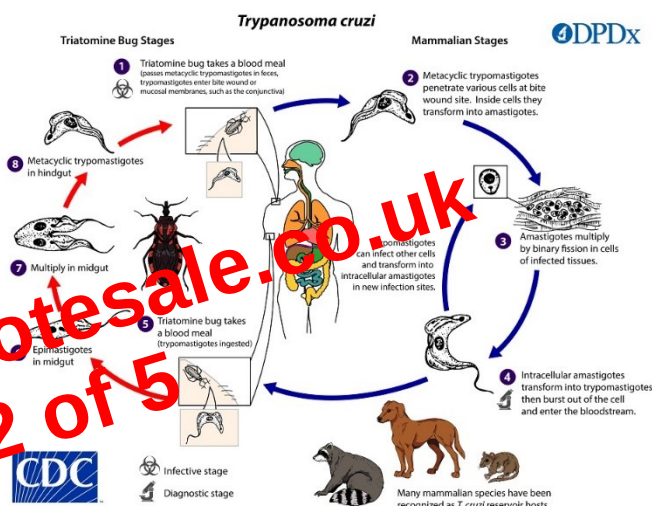
American Trypanosomiasis

Trypanosoma Cruzi: Chaga's Disease

- Transmission: "kissing bugs" - *Reduviidae*
 - Reduviid bugs **defecate** at time of feeding (contains the trypomastigotes)
 - Rubbing and scratching → enters the body or through intact mucosa of the mouth or conjunctiva
 - Can also be transmitted by **blood transfusion**

Life Cycle:

- Inoculation
- Enters nearby tissue cells → becomes dividing amastigotes
- Infected cells filled with amastigotes → transformation to trypomastigote
- Cell rupture → trypomastigote are released into the peripheral blood → reach distant tissues



Acute Manifestations

- Most common: children <5 y/o
- Malaise, fever, hepatosplenomegaly and **myocarditis**
- Romana's Sign** – swelling of tissues around the eyes



- Chagoma** – swelling around bite site of reduviid bug
- Disease is milder and more asymptomatic in older individuals – remains infected throughout life

Chronic Disease

- Megaesophagus, megacolon, hear conduction problems
- Related to destruction of the **effector cells of the parasympathetic system**
- Quiescent infections may be exacerbated by immunosuppression