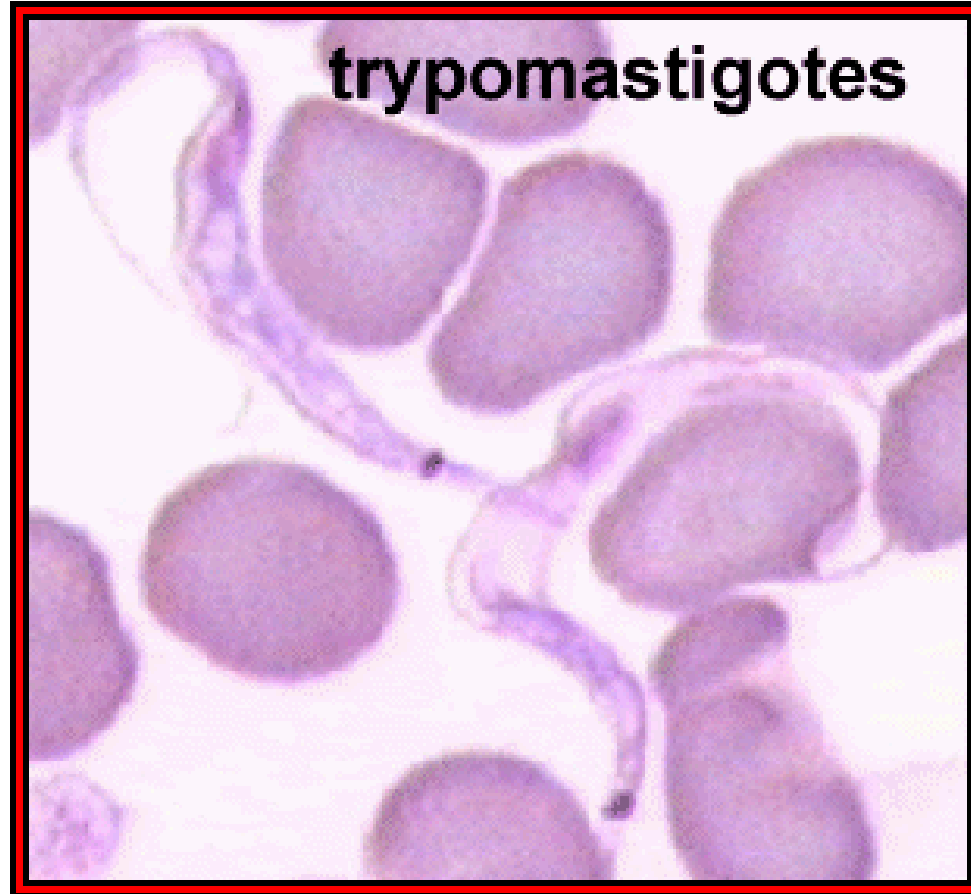
The background of the slide is a microscopic image showing several Trypanosoma parasites. These are elongated, spindle-shaped organisms with a characteristic wavy, undulating motion. They are stained in a dark purple or magenta color, contrasting with the lighter, yellowish-tan background. The parasites are scattered across the field of view, with some appearing more clearly than others. The overall appearance is that of a wet mount or stained smear of the parasites.

*Trypanosoma
gambiense and
rhodesiense*

Morphology

- Polymorphic spindle-shaped trypanosome measuring 14-33 microns in length

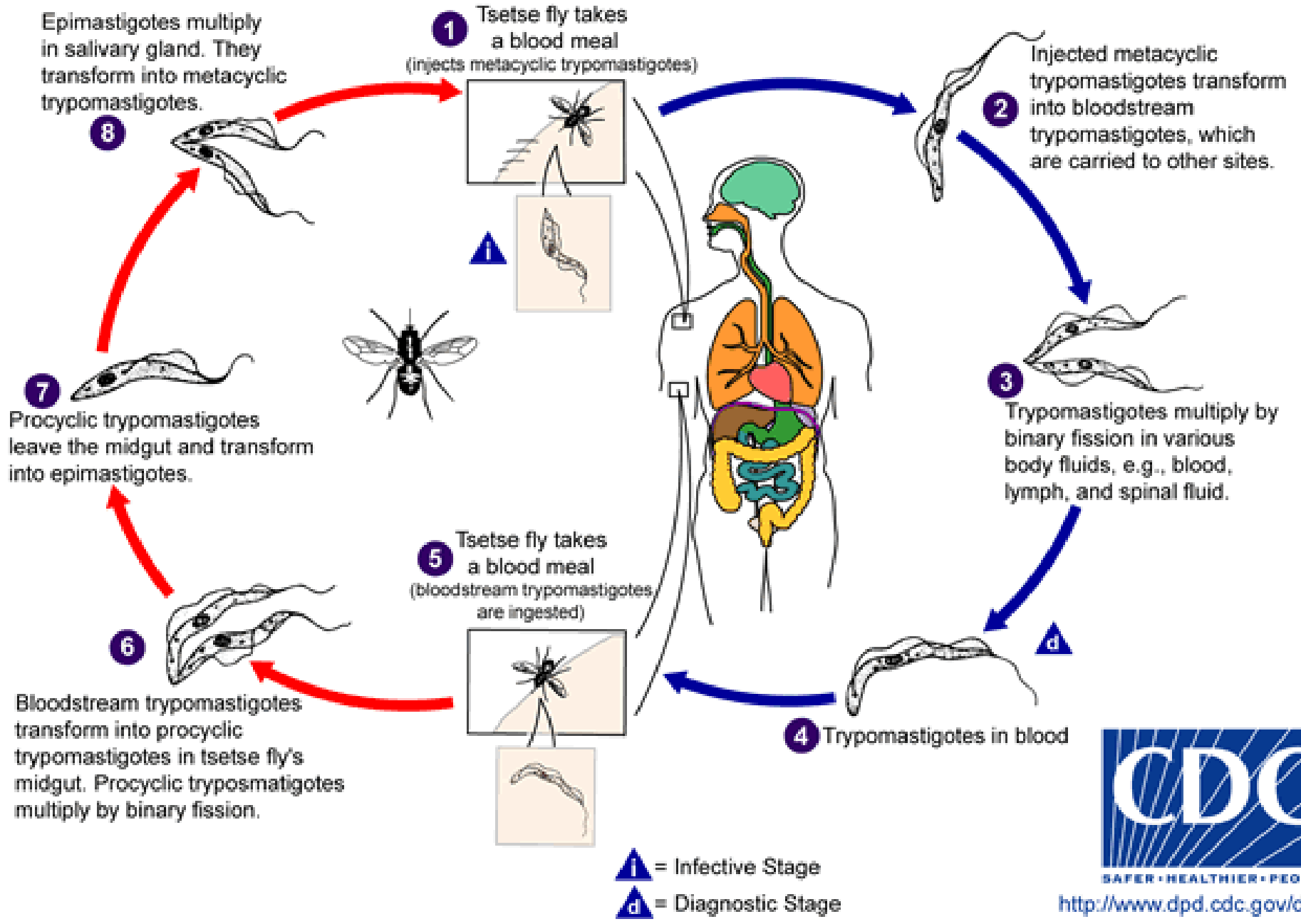


Life Cycle

- Vertebrate hosts → trypanosomes in blood, lymph nodes, spleen, and cerebrospinal fluid → those in blood ingested by tsetse fly → reproduce in gut → migrate to salivary glands → infective trypanosomes develop → inoculated into bite site of vertebrate host → multiplication occurs at bite site → dissemination to other parts of the body

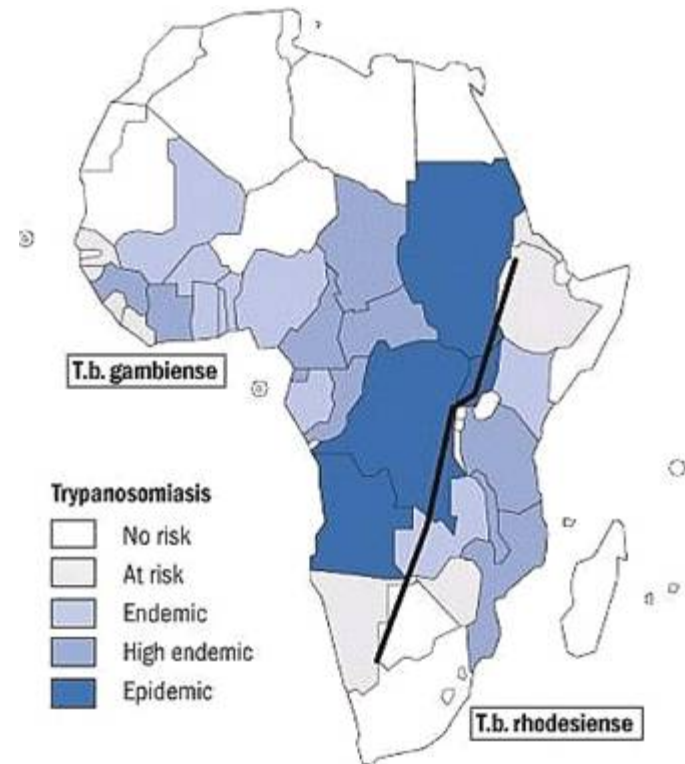
Tsetse fly Stages

Human Stages



Epidemiology

- Endemic zone in tropical Africa basically between 20 degree latitude north and south of equator
- There is some overlap east-west with both species, *gambiense* predominating in the western portion but occurring in some sections of the eastern portion
- *rhodesiense* is found only in the eastern portion



Diagnosis

- Demonstration of parasite in blood
- Lymph node aspiration
- Bone marrow examination
- Cerebrospinal fluid
- Serology used mainly for epidemiological studies



Symptomatology

- Acute Stage:
 - Asymptomatic
 - Fever
 - Chills headache
 - Anorexia
- Second Stage:
 - Asymptomatic or relapses with symptoms found in first stage

- Third Stage:
 - Fever
 - Lymphadenopathy (especially posterior cervical triangle, Winterbottom's sign)
 - Hepatosplenomegaly
 - Headache
 - Joint pains
 - Cramps
 - Weakness
 - Swelling of hands, legs and eyes
 - Erythematous rash
 - Asymptomatic periods followed by
 - Dyspnea
 - Cardiac pain
 - Disturbed vision
 - Nephritis
 - Dysmenorrhea
 - Asthenia
 - Invasion of the central nervous system leading to:
 - Severe headache
 - Mental dullness
 - Apathy
 - Muscle spasms
 - Irritability
 - Stiffness of the neck
 - Flaccid or spastic paralysis
 - Eventually continuous sleeping
 - Coma
 - Convulsions
 - Death



Treatment

- Tryparsamide (only in *gambiense*)
- Suramin
- Pentamidine isethionate
- Melarsoprol
- berenil

Prevention

- Vector control

