Medical Parasitology Terms

Host

Definitive host

Intermediate host

Life cycle

Medical Parasitology Terms

Habitat

Reservoir host

Vector

Carrier

Zoonosis

Medical Parasitology Terms

Infective stage

Diagnostic stage

Protozoa

Protozoa classification

- Protozoa
  - Amebae
    - Entamoeba Histolytica
    - Naegleria Floweri
  - Flagella
    - Giardia Lamblia
    - Trichomonas Vaginalis
    - Leishmania Species
    - Tyrpanosoma Species
  - Ciliates
    - Balantidium Coli
  - Sporoza
    - Cryptosporidium Parvum
    - Plasmodium Species
    - Toxoplasma Gondii

- Protozoa Disease Location
  - Intestines
    - Entamoeba Histolytica – Bloody Diarrhea
    - Balantidium Coli – Bloody Diarrhea
    - Giardia Lamblia – Watery Diarrhea
    - Cyrptosporidum Parvum – Watery Diarrhea
  - Urogenital
    - Trichomonas Vaginalis
  - Tissue and Blood
    - Naegleria Fowleri
    - Leishmania Species
    - Trypanosoma Species
    - Plasmodium Species
    - Toxoplpasma Gondii

Amoebiasis (Entamoeba histolytica)

CAUSATIVE AGENT

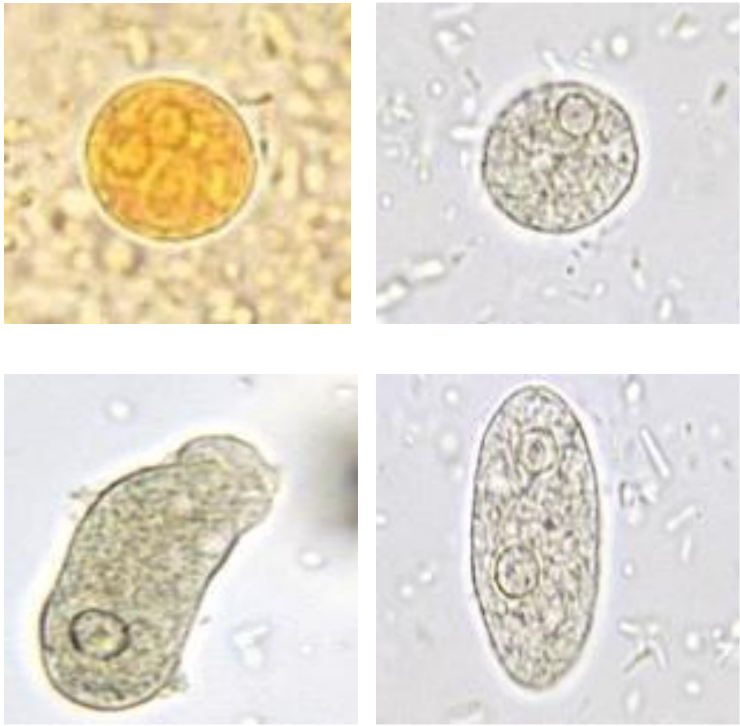
– Associated with intestinal and extra-intestinal infections “amoebic dysentery”

TRANSMISSION & POSSIBLE SOURCES OF INFECTION

SYMPTOMS

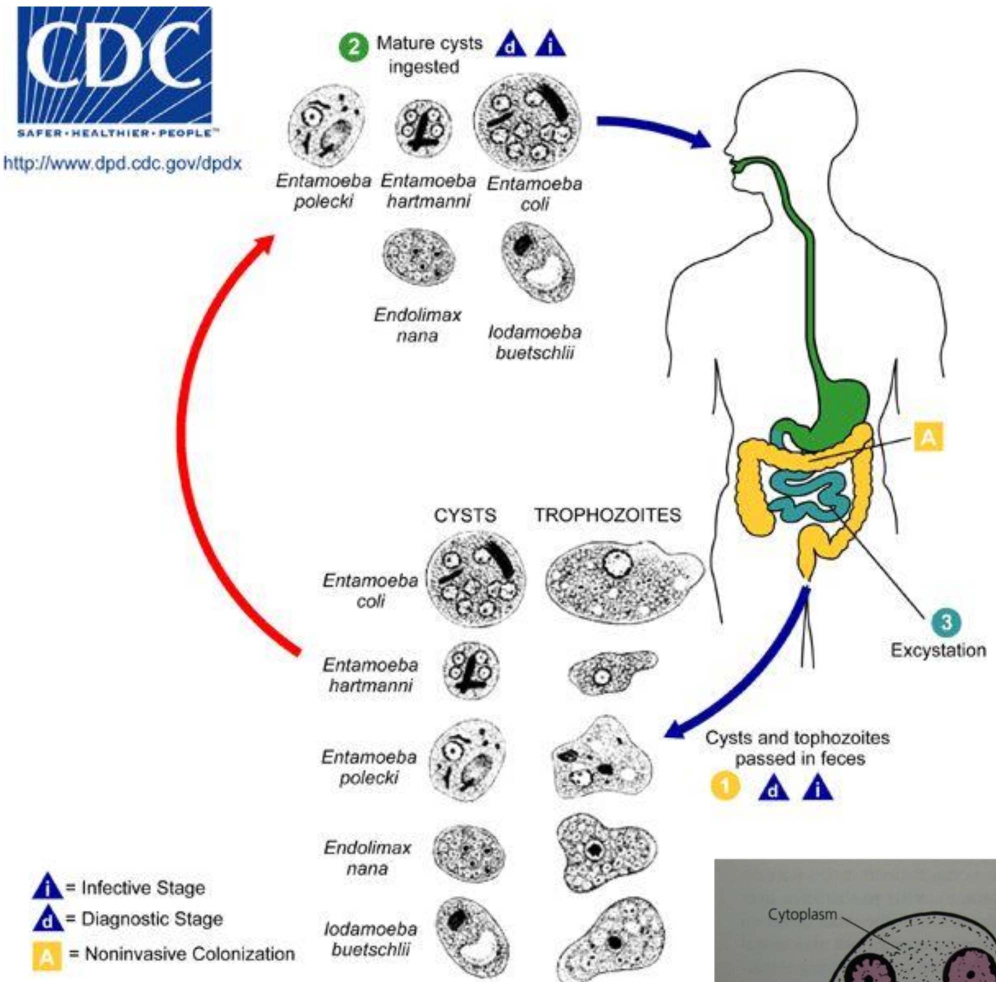
DIAGNOSIS

Cysts & trophs= same nuclear morphology



TREATMENT, PREVENTION & CONTROL

Lifecycle of *Entamoeba histolytica*



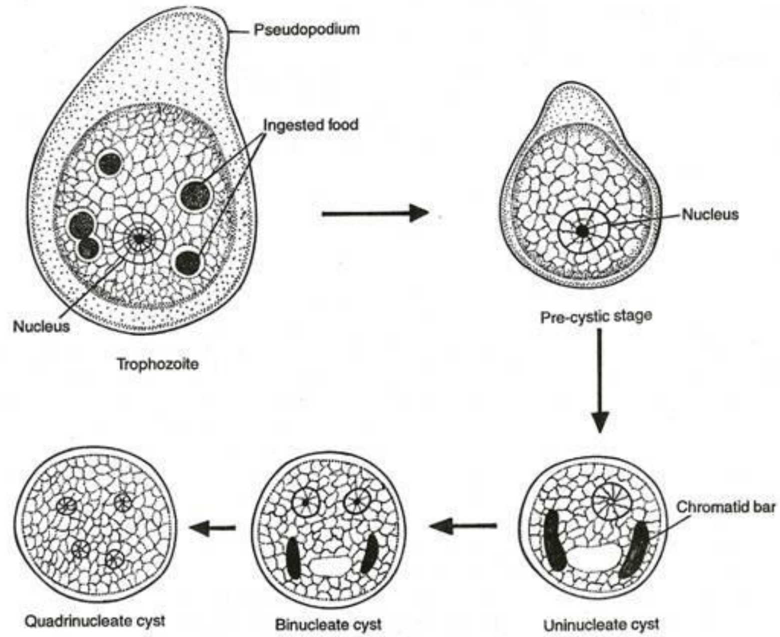
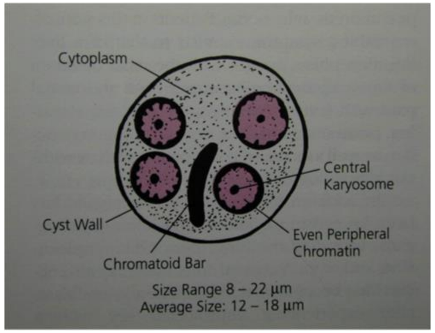
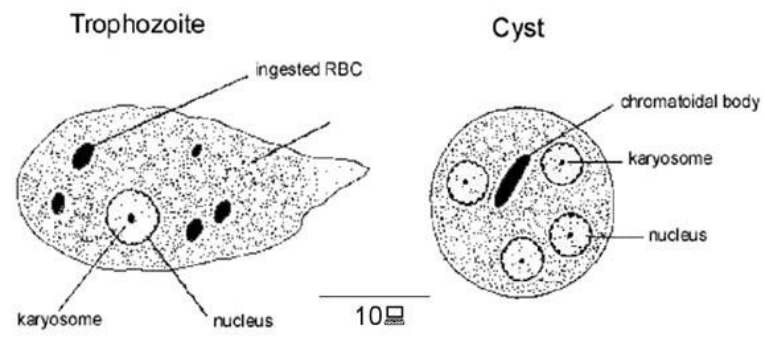


Fig. 174. Stages of life cycle of *Entamoeba histolytica*.





Amoebiasis (Entamoeba coli)

CAUSATIVE AGENT

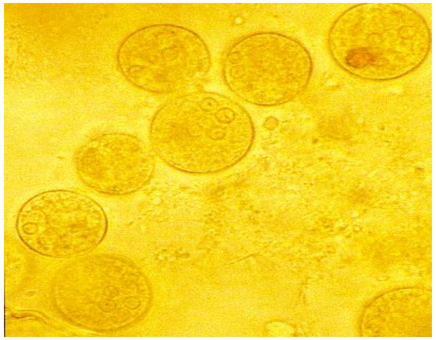
– *Entamoeba coli*, is a nonpathogenic, and causes no disease.

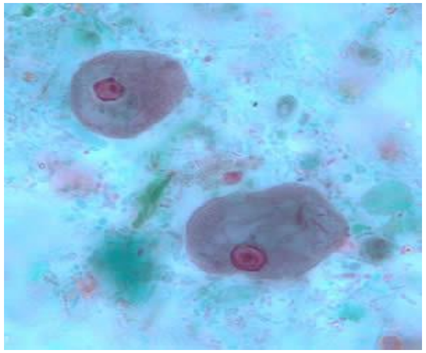
TRANSMISSION & POSSIBLE SOURCES OF INFECTION

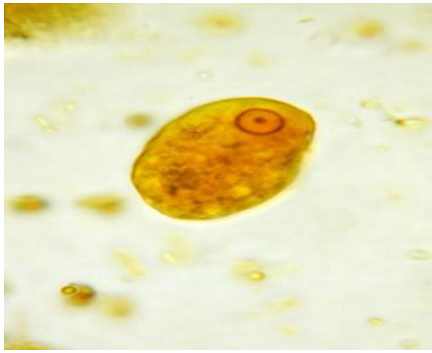
SYMPTOMS

DIAGNOSIS

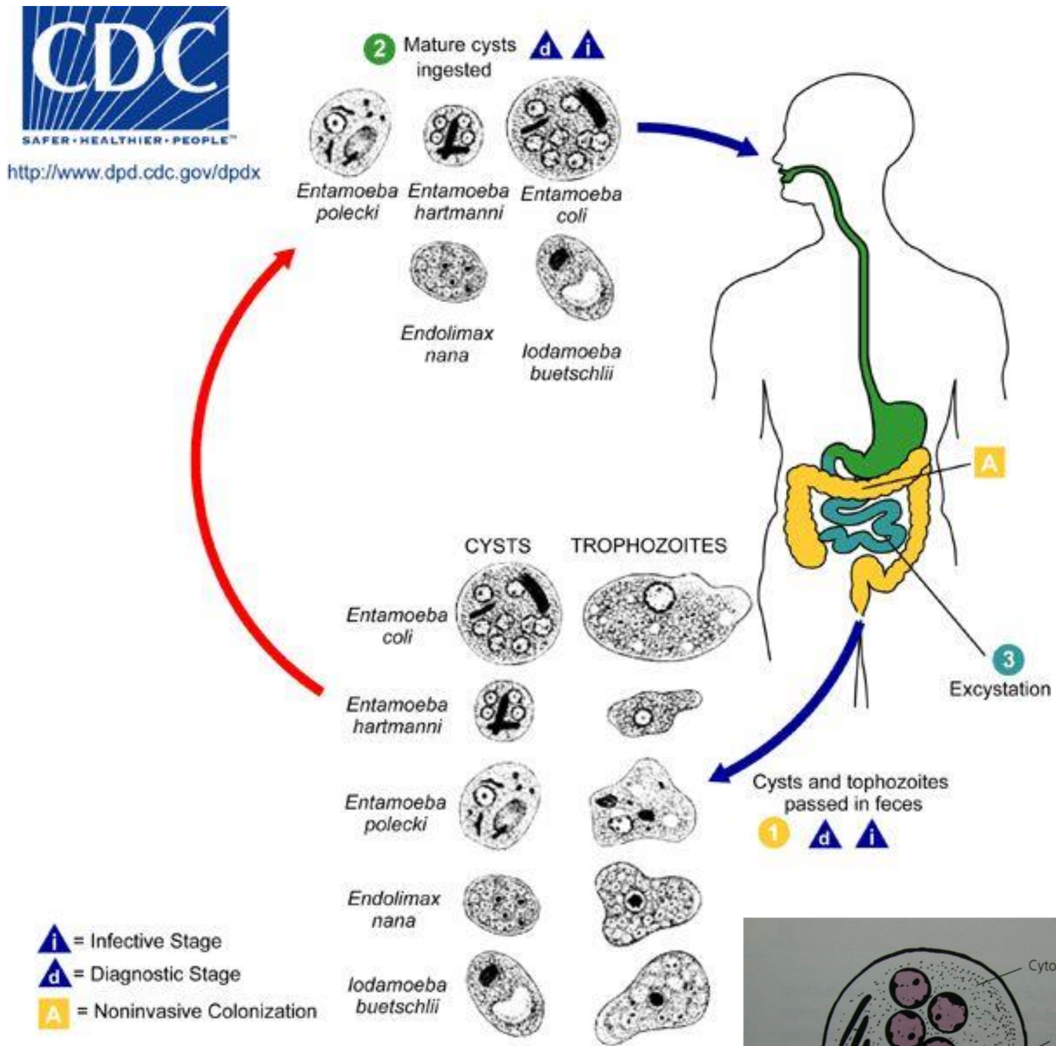
TREATMENT, PREVENTION & CONTROL







Lifecycle of *Entamoeba coli*



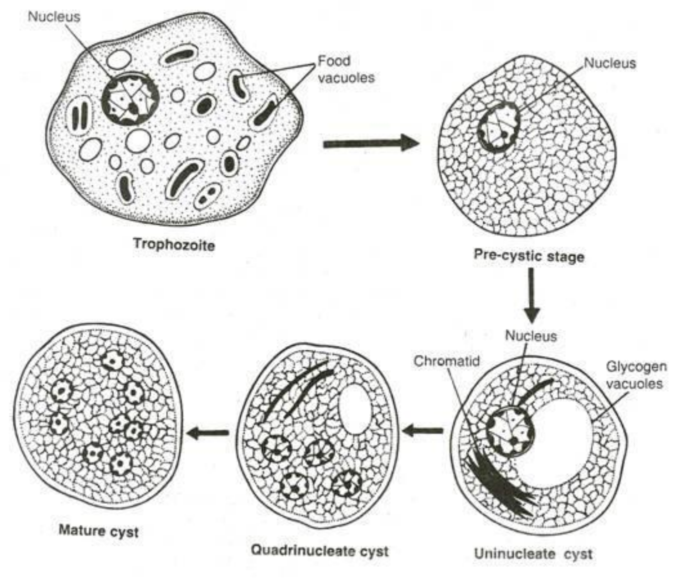
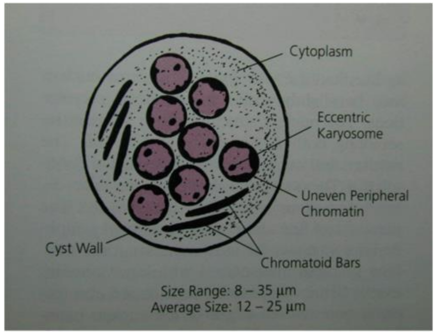
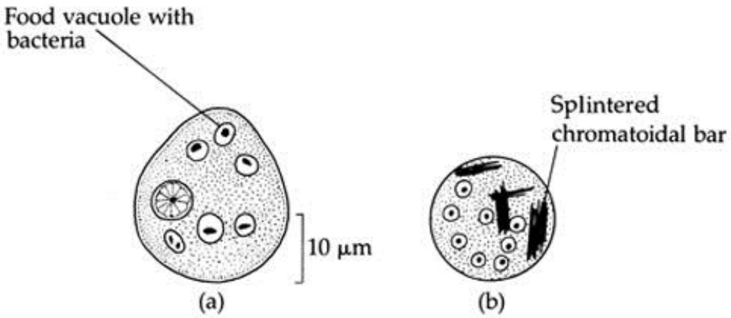


Fig. 177. Stages of life of *Entamoeba coli*.





Amoebiasis (Iodamoeba Butschlii)

CAUSATIVE AGENT

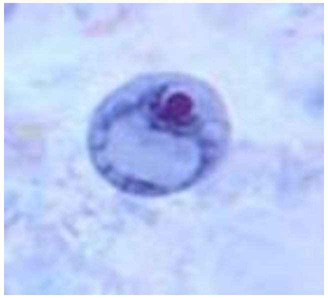
– *Iodamoeba Butschlii* is non pathogenic intestinal amoeba

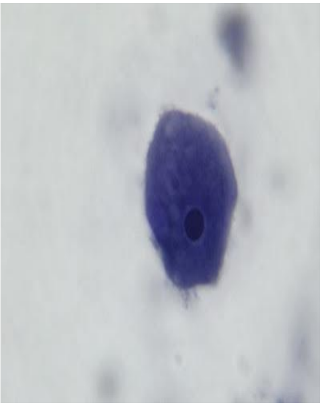
TRANSMISSION & POSSIBLE SOURCES OF INFECTION

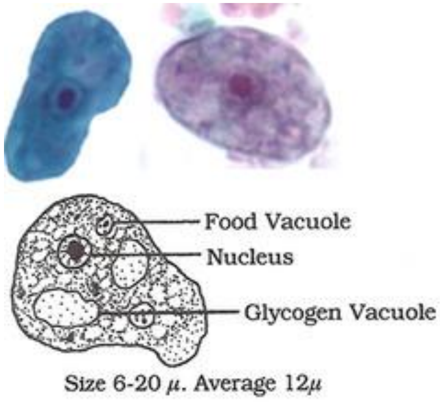
SYMPTOMS

DIAGNOSIS

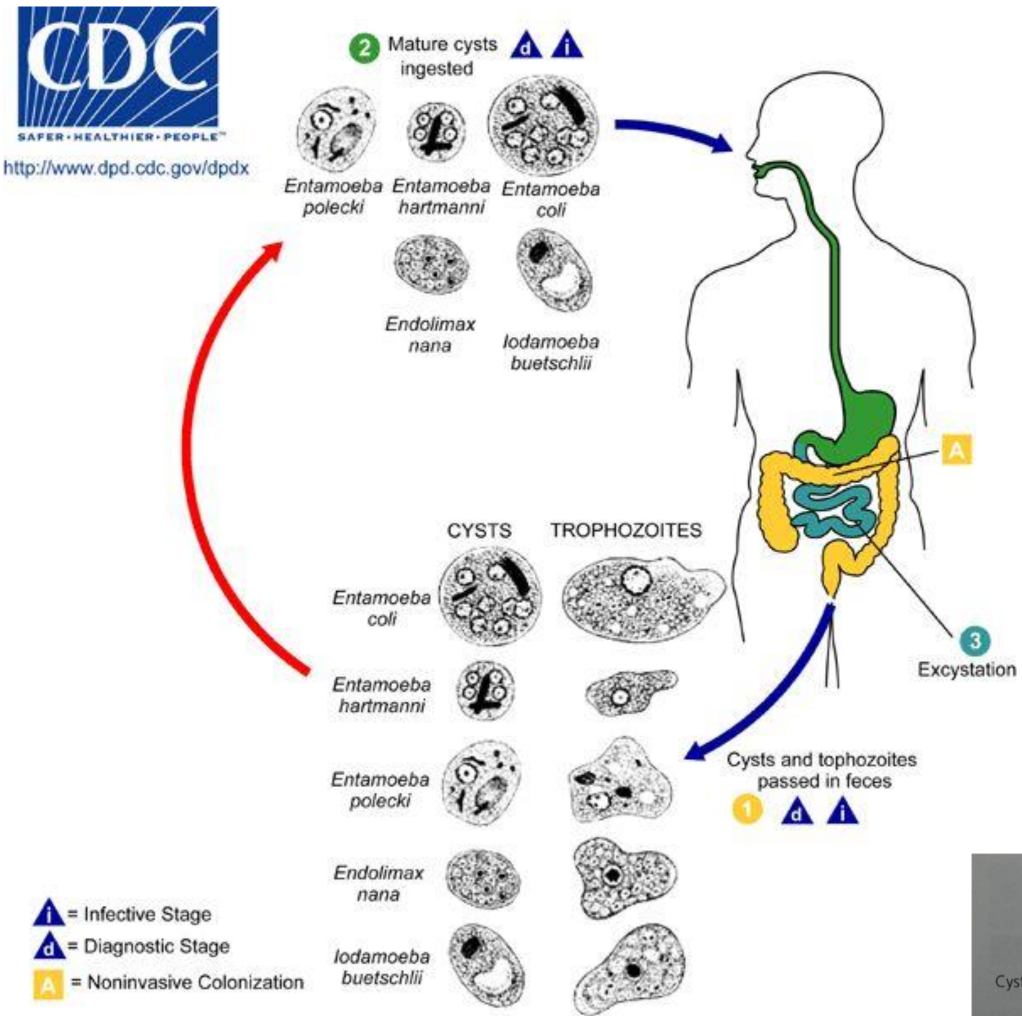
TREATMENT, PREVENTION & CONTROL







Lifecycle of *Iodamoeba Butschlii*



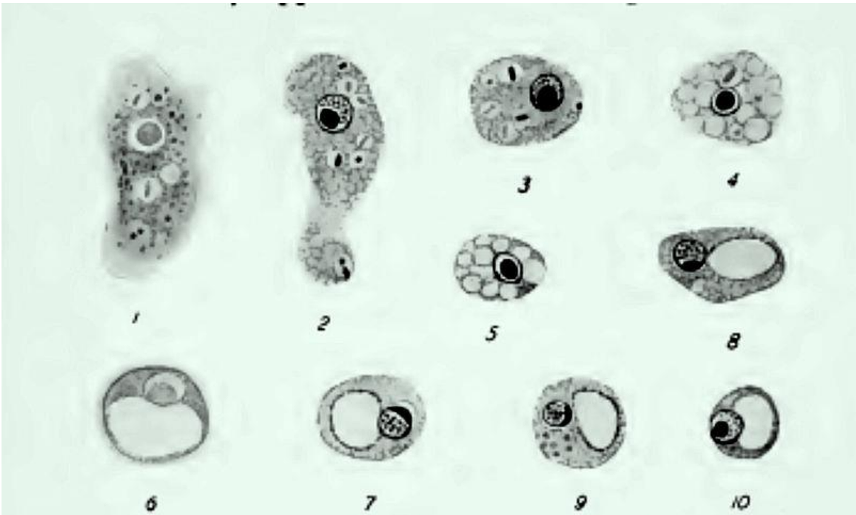
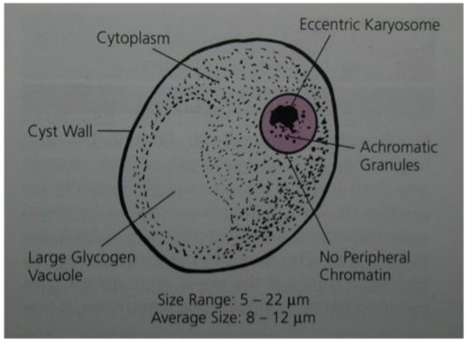
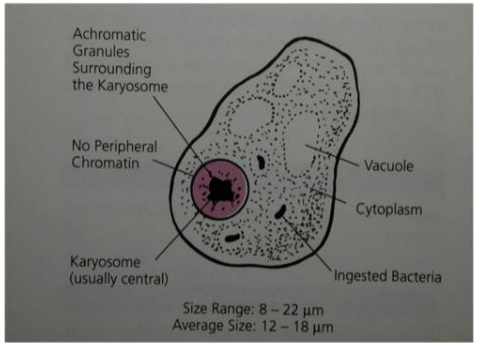


FIG. 4. *Iodamoeba bütschlii.* × 1150. (original)
1. A living amoeba.
2-5. Stained amoebae.
4, 5. Somewhat degenerated trophozoites.
6. A fresh cyst.
7-10. Stained cysts.

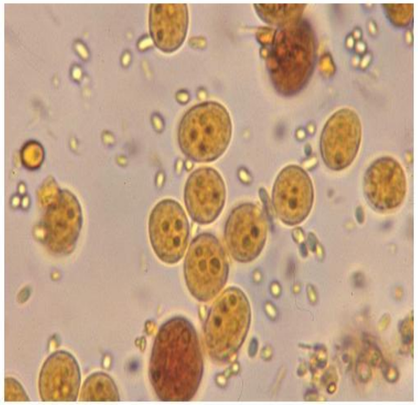


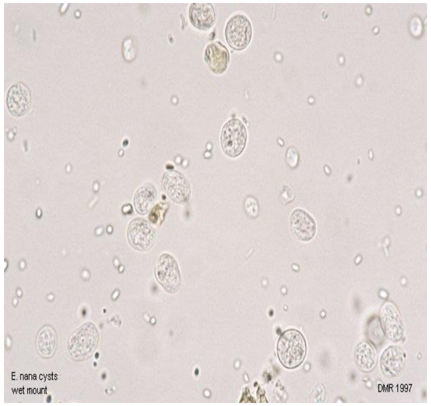


Amoebiasis (Endolimax nana)

CAUSATIVE AGENT

– it is a non-pathogenic intestinal amoeba and causes no disease



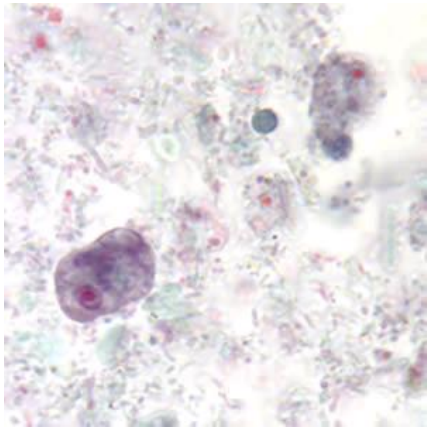


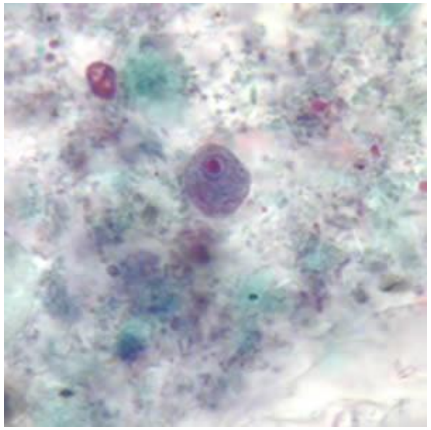
TRANSMISSION & POSSIBLE SOURCES OF INFECTION

SYMPTOMS

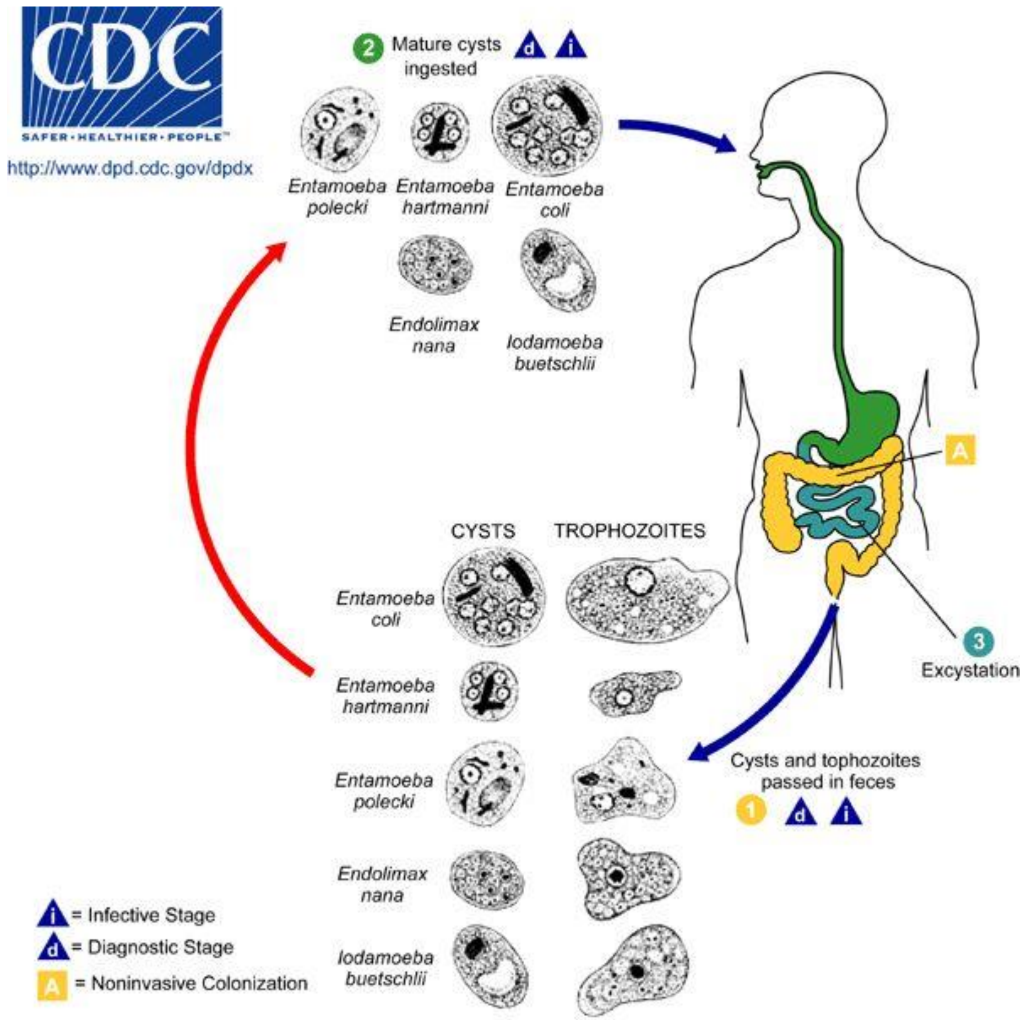
DIAGNOSIS

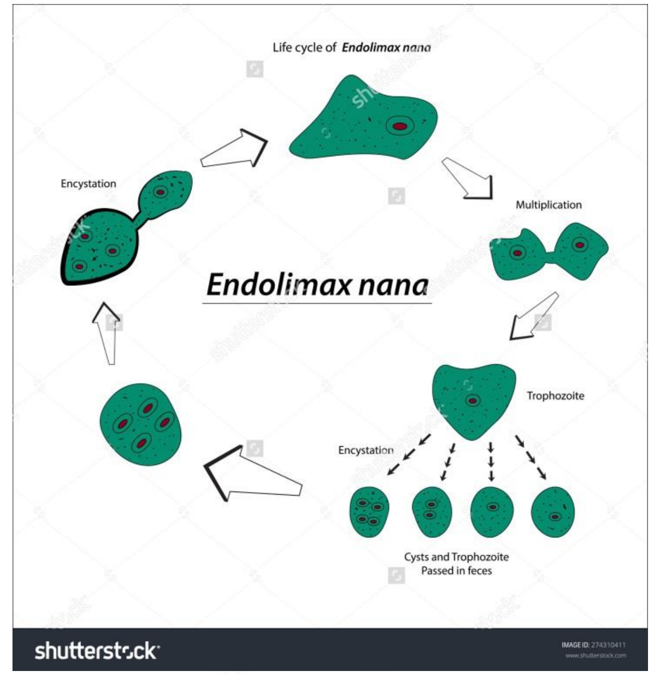
TREATMENT, PREVENTION & CONTROL

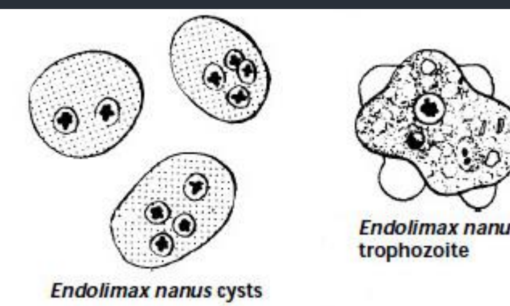


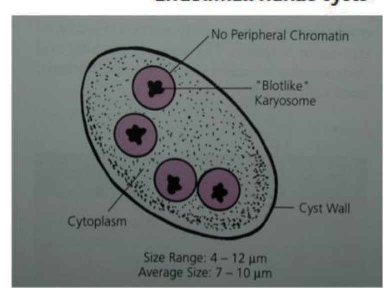


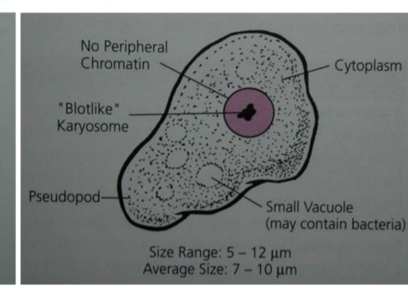
Lifecycle of *Endolimax nana*







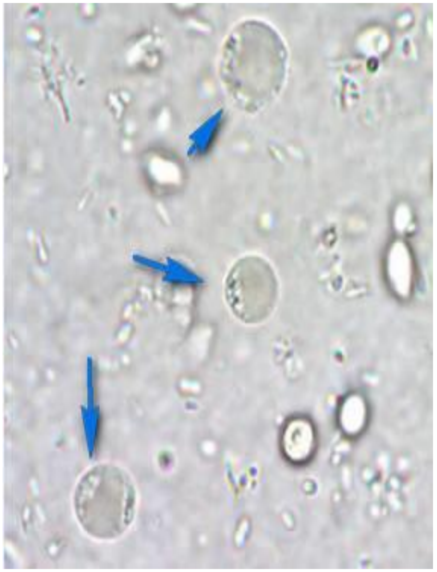




Blastocystis Hominis

CAUSATIVE AGENT

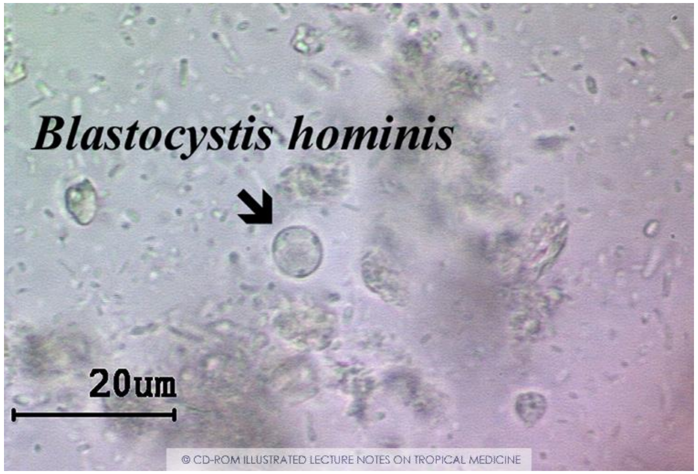
– *Blastocystis Hominis* is a protozoan intestinal parasite belonging to the Blastocystis genus of Stramenopiles.



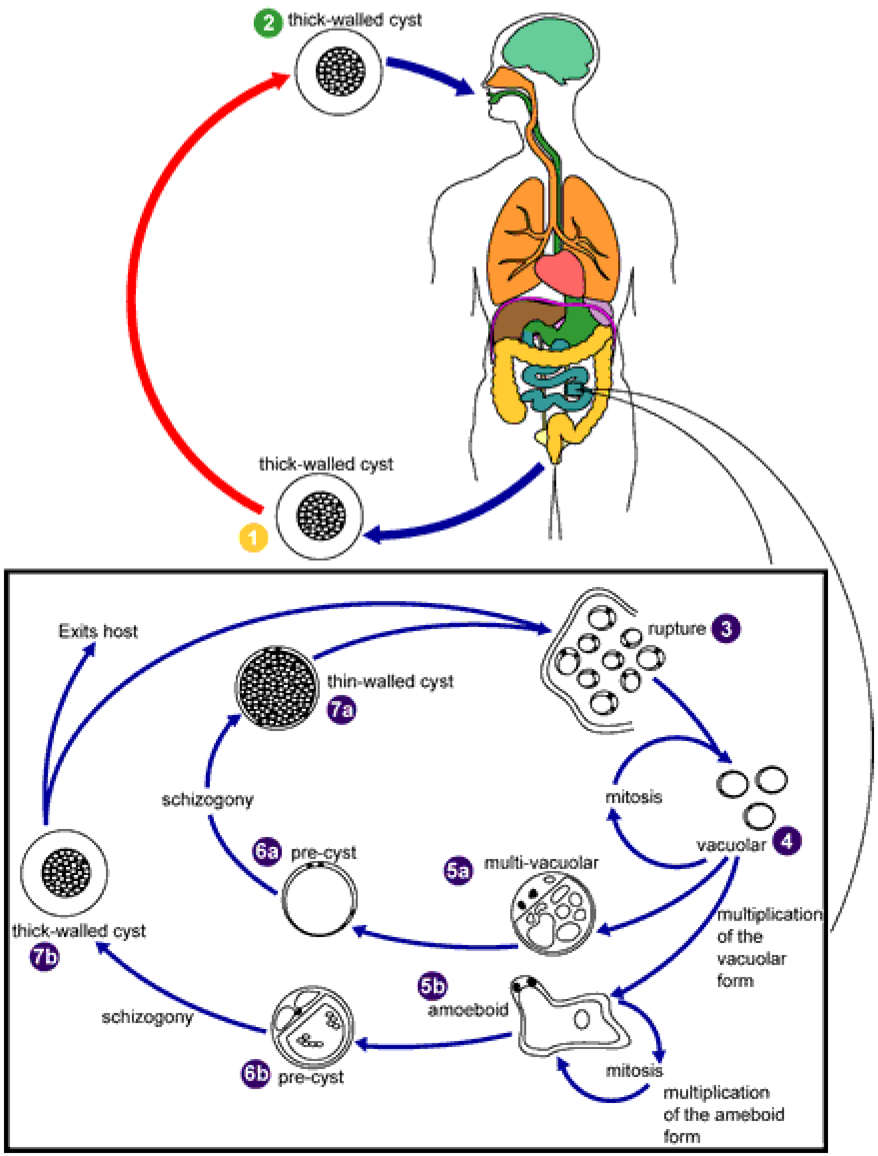
TRANSMISSION & POSSIBLE SOURCES OF INFECTION

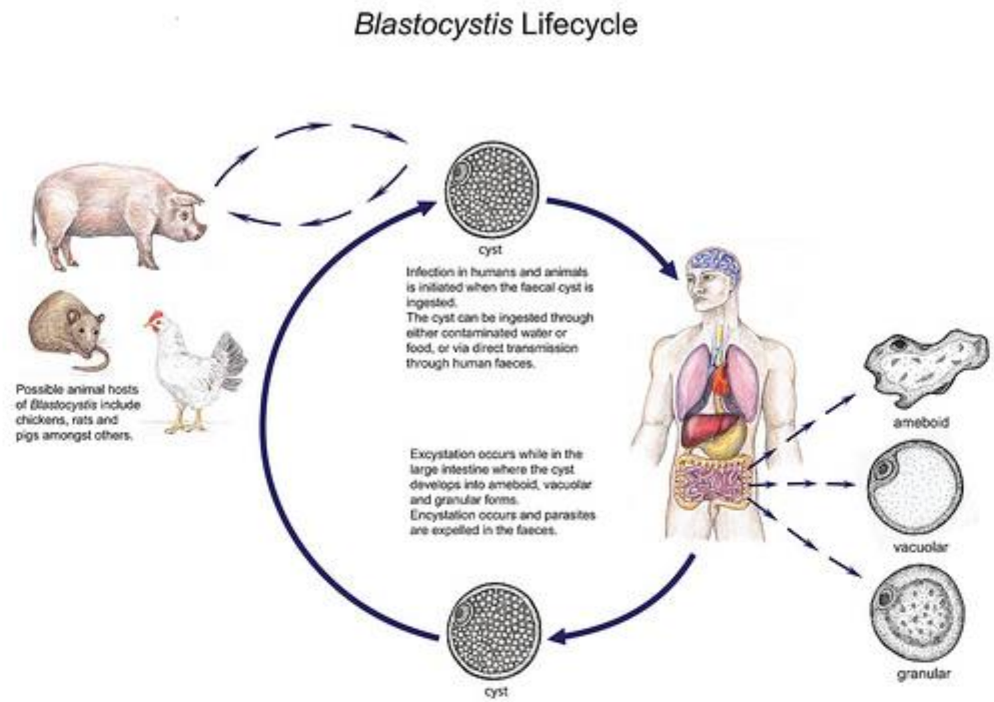
SYMPTOMS

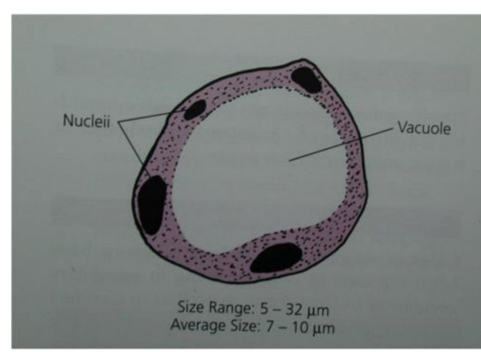
DIAGNOSIS, TREATMENT, PREVENTION & CONTROL

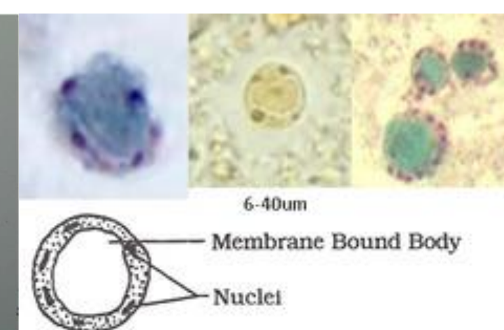


Lifecycle of *Blastocystis Hominis*

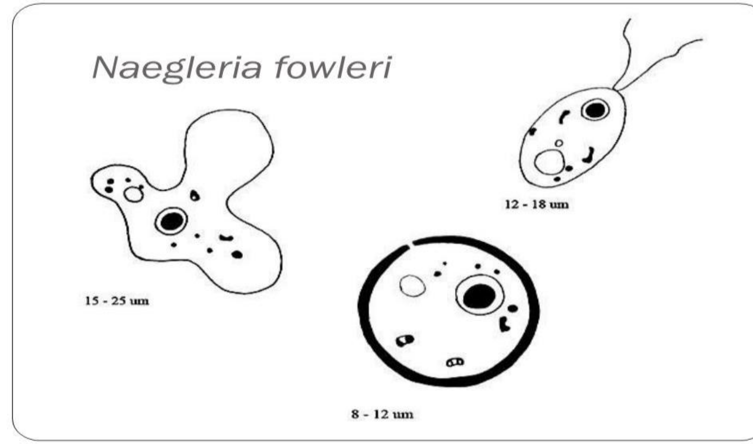








Naegleria spp. such as (Naegleria fowleri)



CAUSATIVE AGENT

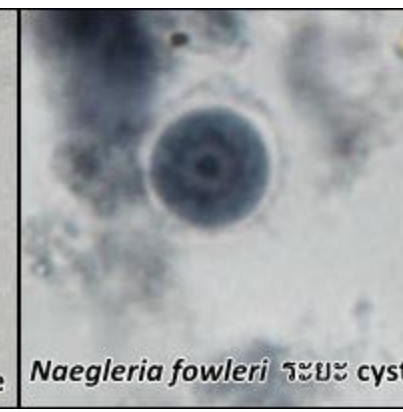
- can cause a very rare, but severe, infection of the brain

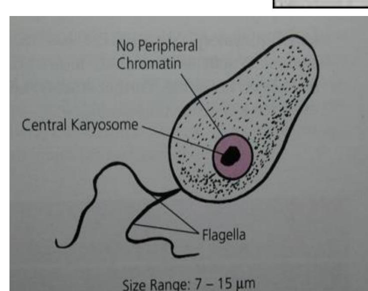
TRANSMISSION

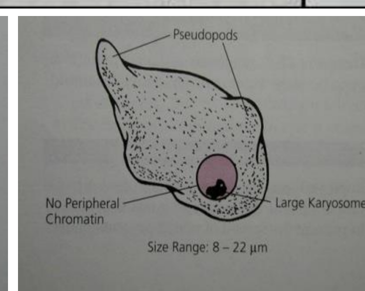
SYMPTOMS

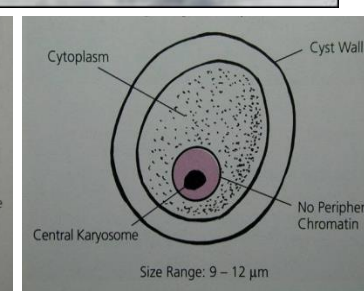
DIAGNOSIS

TREATMENT, PREVENTION & CONTROL

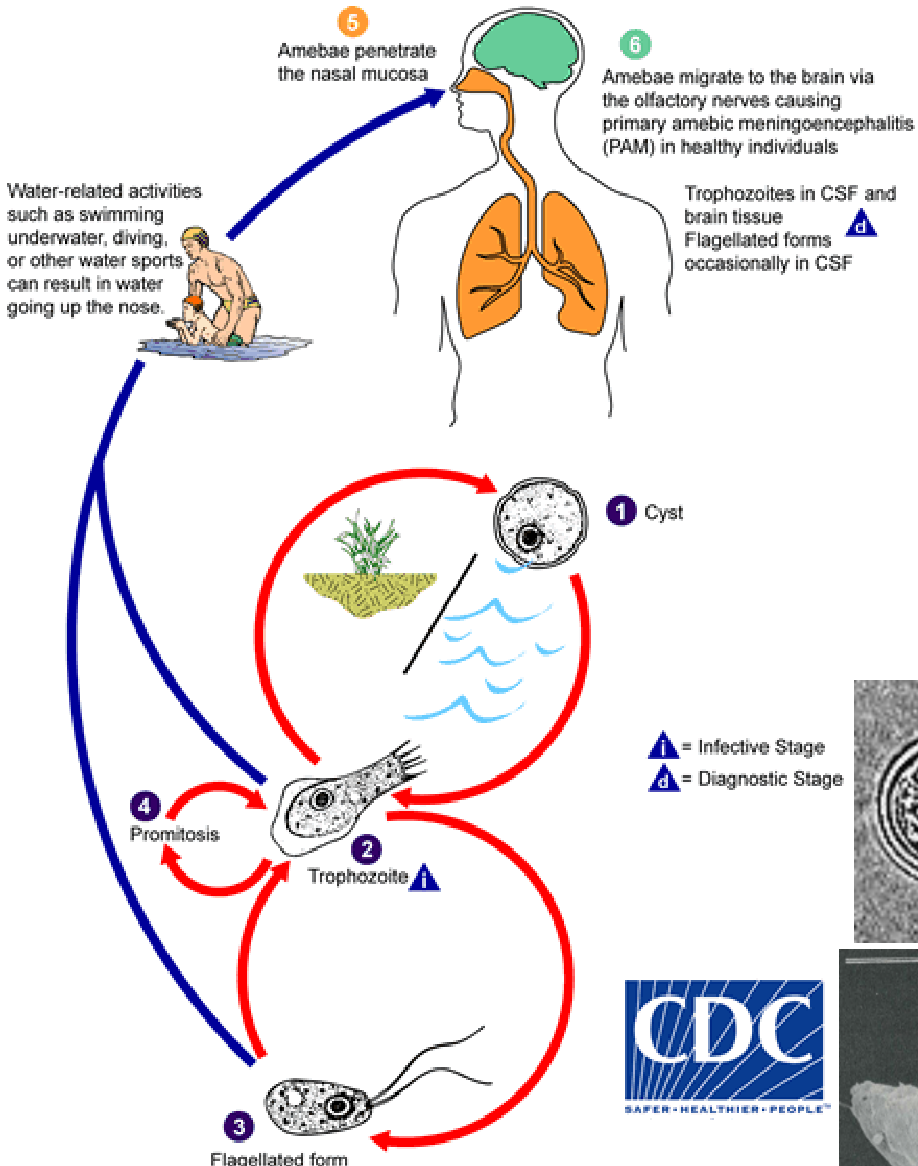


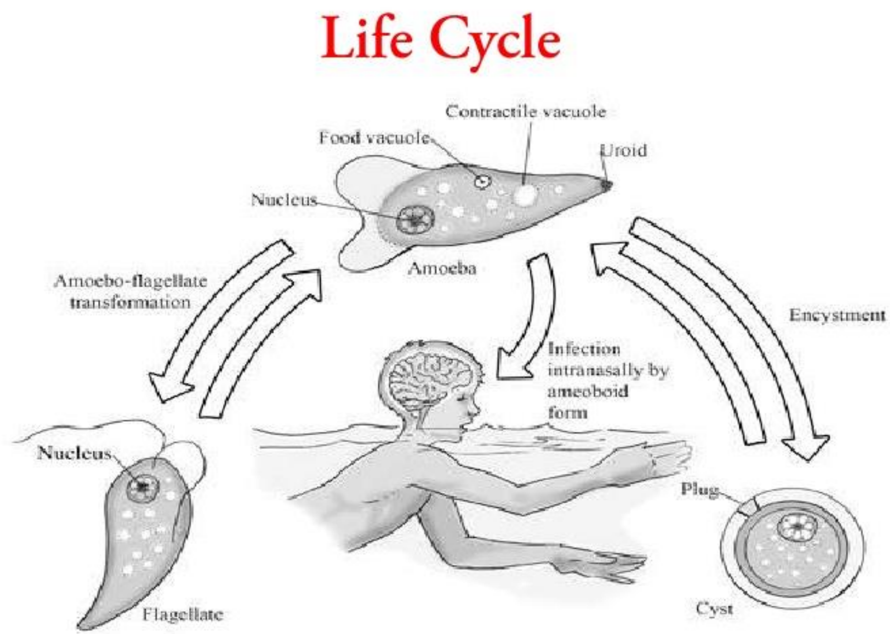


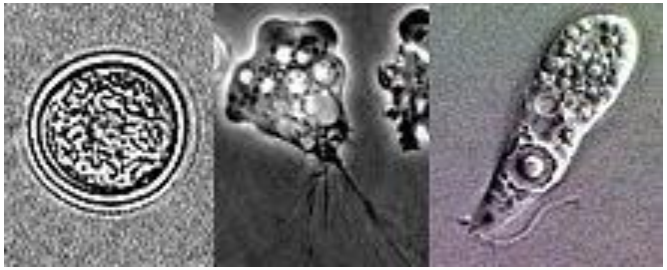


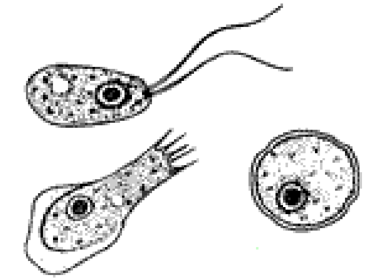


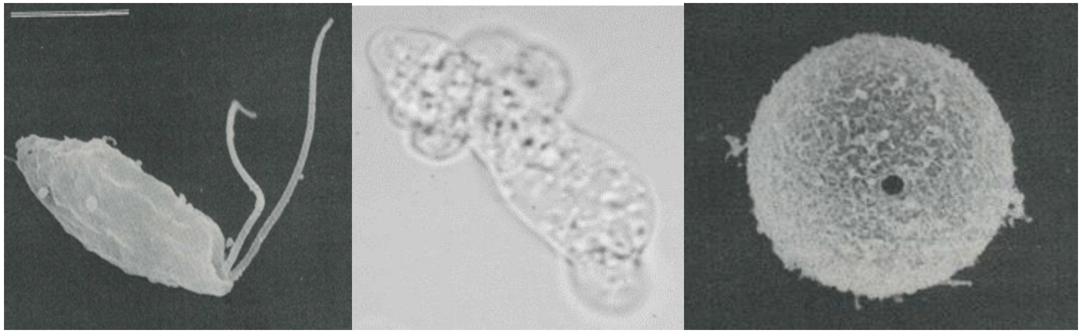
Lifecycle of *Naegleria spp.(Naegleria fowleri)*











Acanthamoeba spp. such as (Acanthamoeba keratitis)

CAUSATIVE AGENT

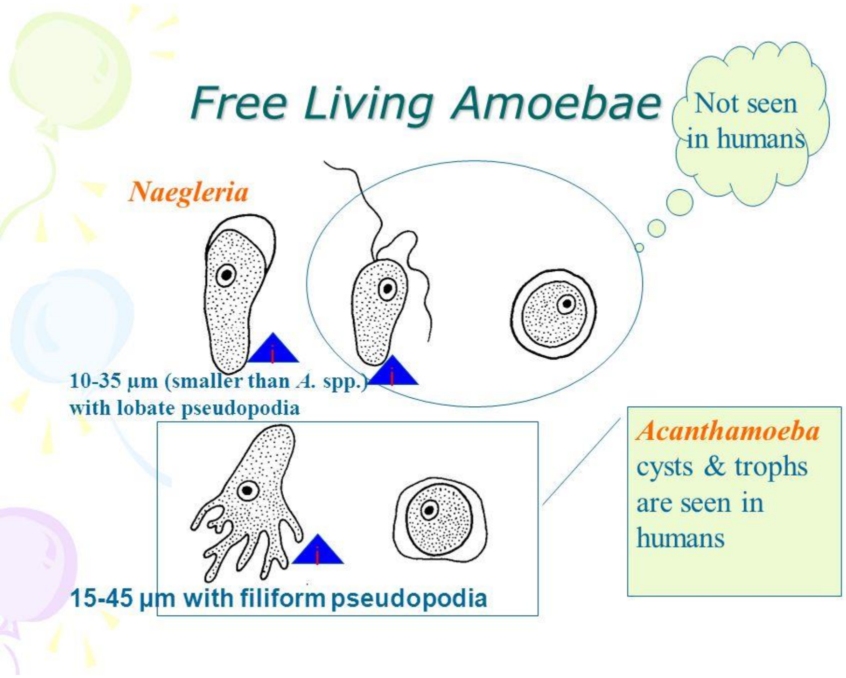
– Acanthamoeba is a genus of amoebae

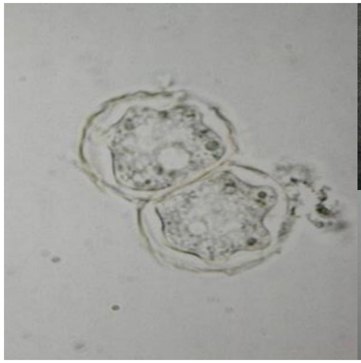
TRANSMISSION

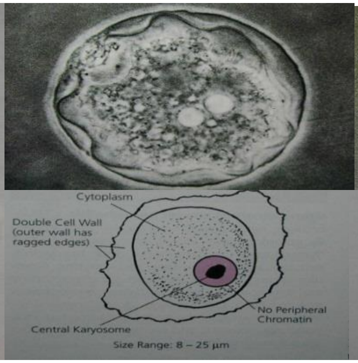
SYMPTOMS

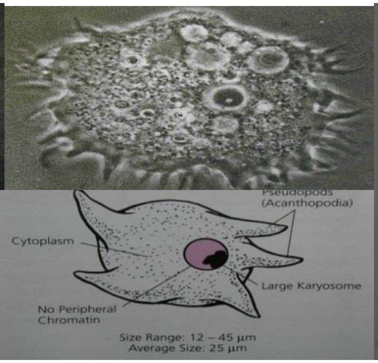
DIAGNOSIS

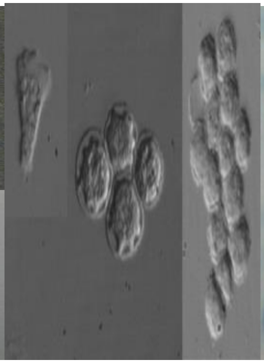
TREATMENT, PREVENTION & CONTROL

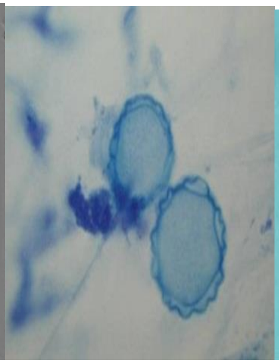


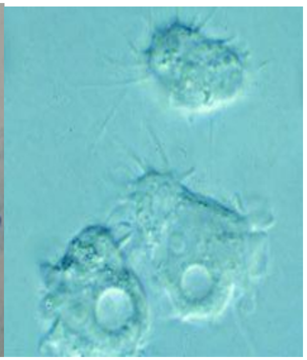




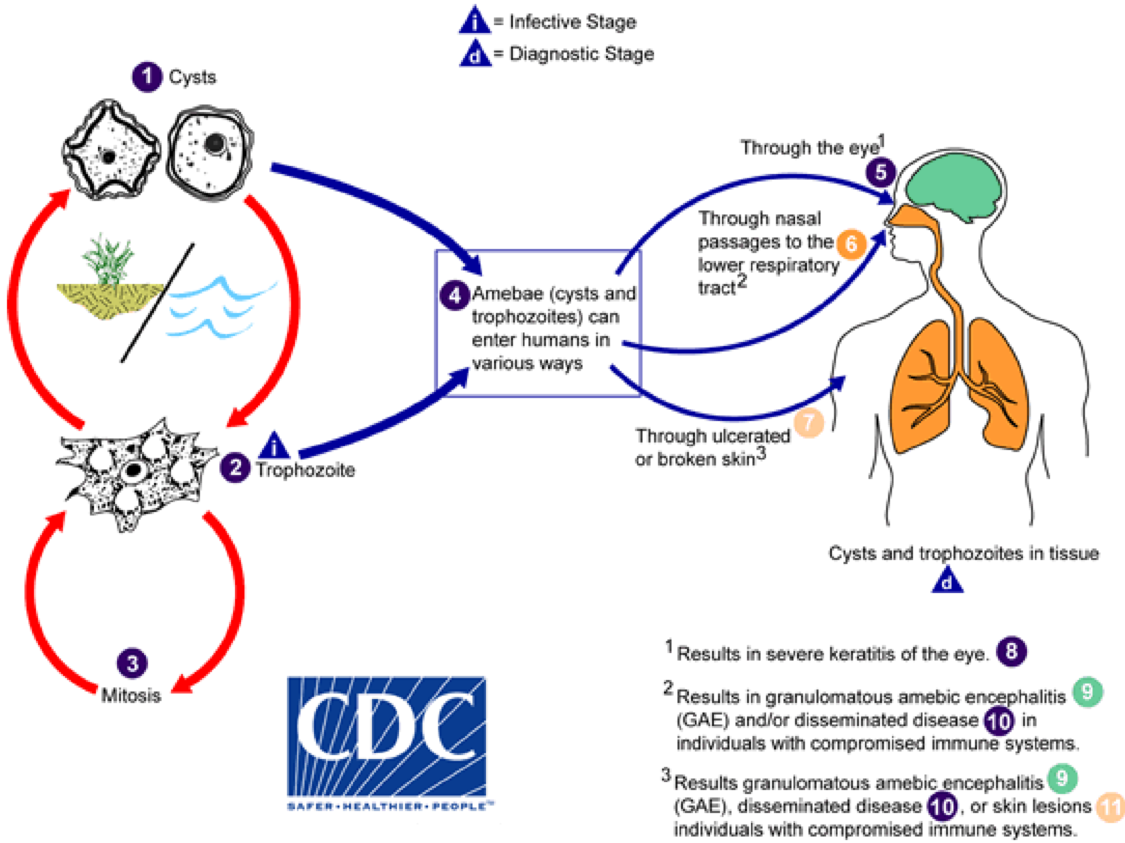


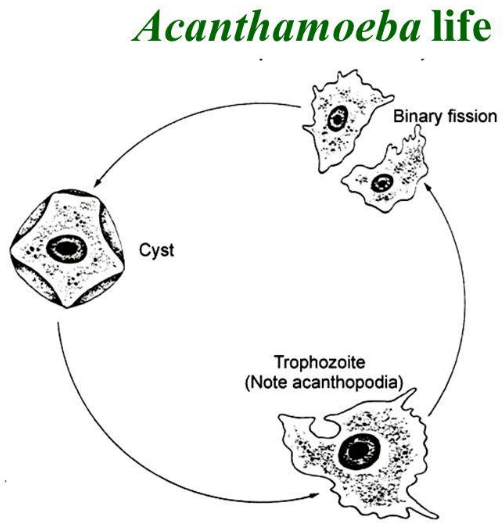


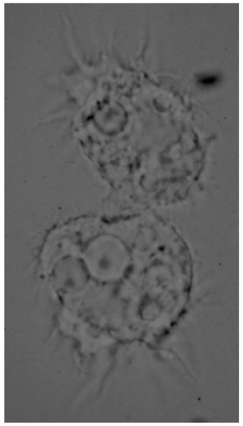


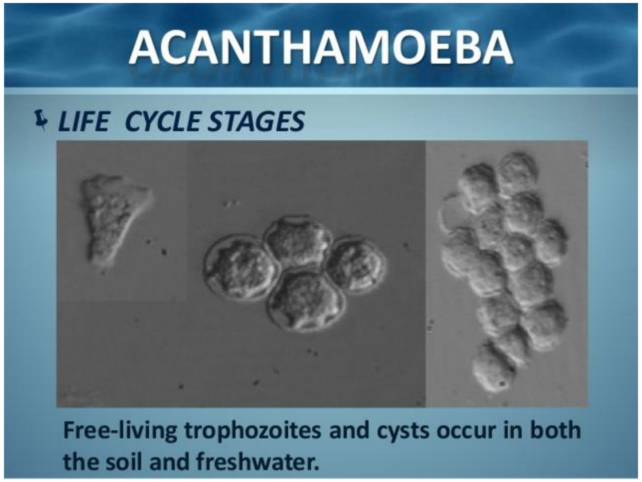


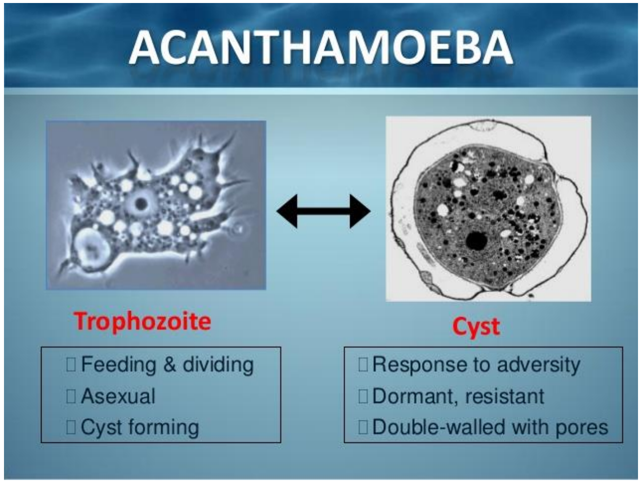
Lifecycle of *Acanthamoeba spp. such as (Acanthamoeba keratitis)*

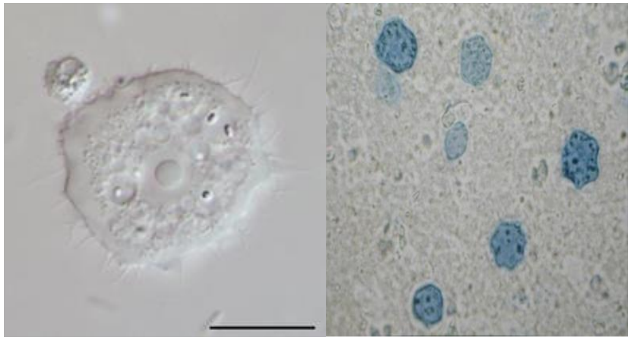








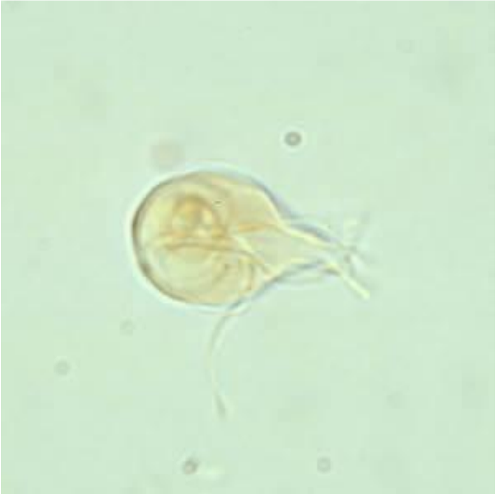




Giardiasis

CAUSATIVE AGENT

Giardia intestinalis (*Giardia lamblia* or *Giardia duodenalis*) is *pathogenic intestinal protozoa*



TRANSMISSION

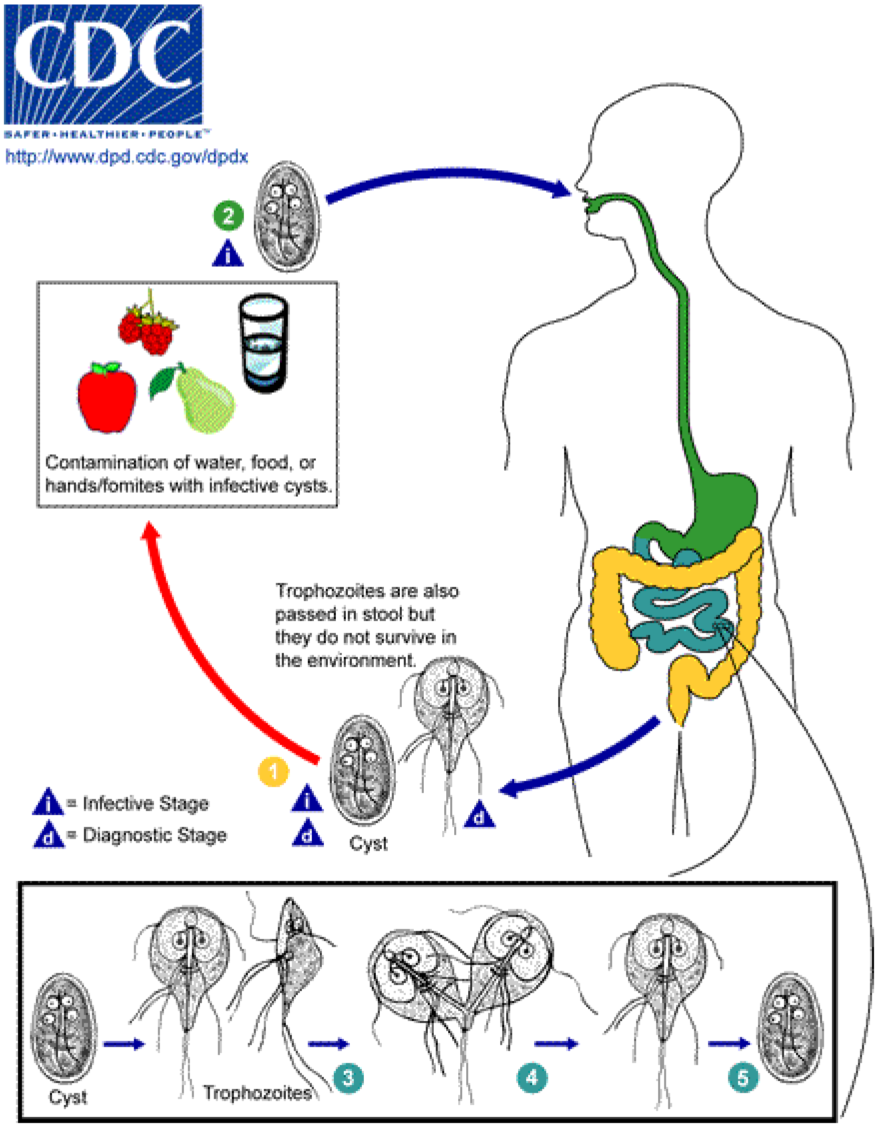
POSSIBLE SOURCES OF INFECTION

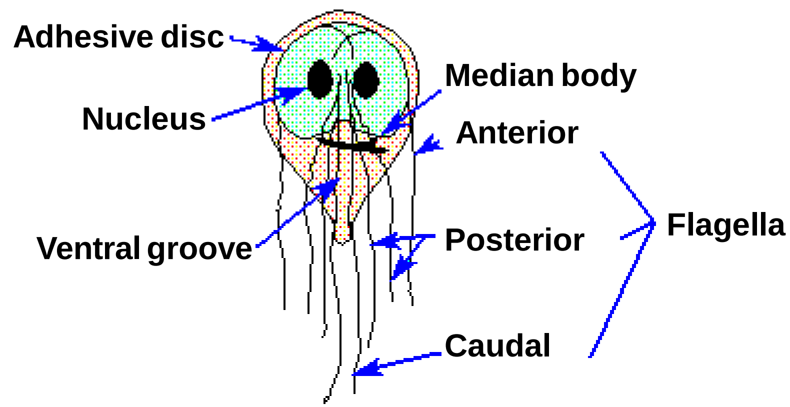
SYMPTOMS

DIAGNOSIS

TREATMENT, PREVENTION & CONTROL

Lifecycle of *G. intestinalis*





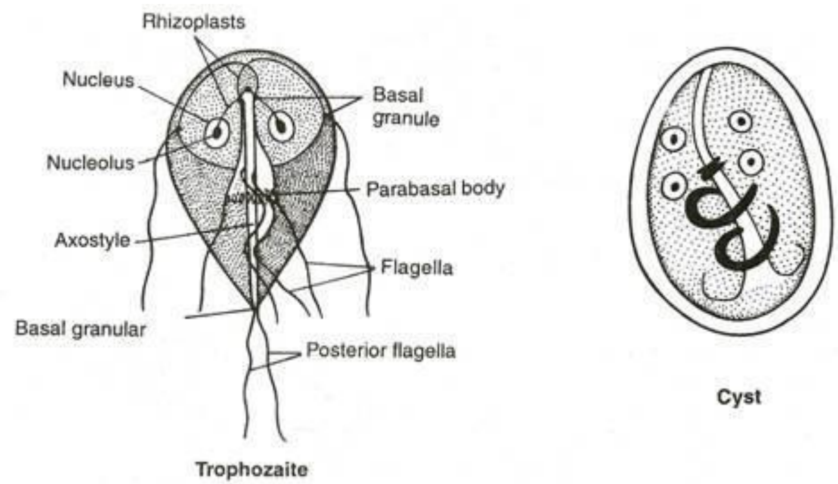


Fig. 181. Stages of life cycle of *Giardia intestinalis*.

Amoebiasis (Trichomonas vaginalis)

CAUSATIVE AGENT

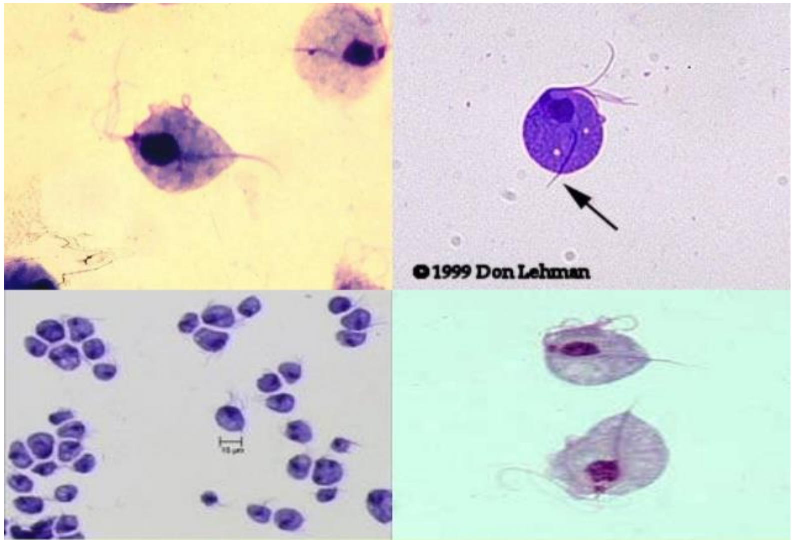
–Women are most often affected by this disease

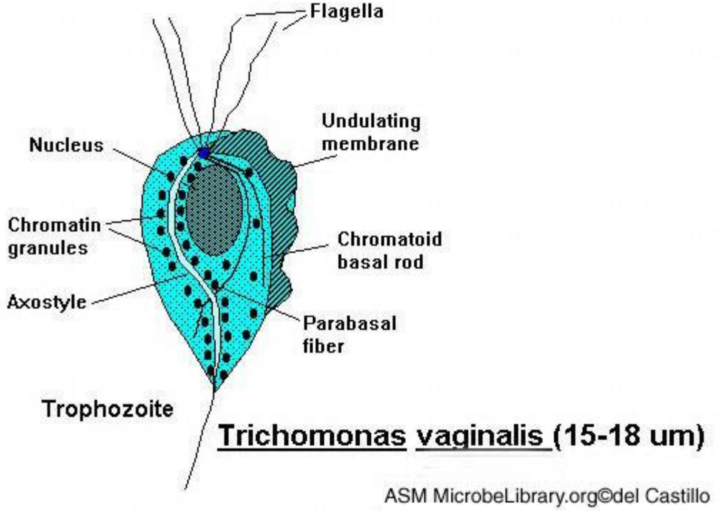
TRANSMISSION & POSSIBLE SOURCES OF INFECTION

SYMPTOMS

DIAGNOSIS

TREATMENT, PREVENTION & CONTROL





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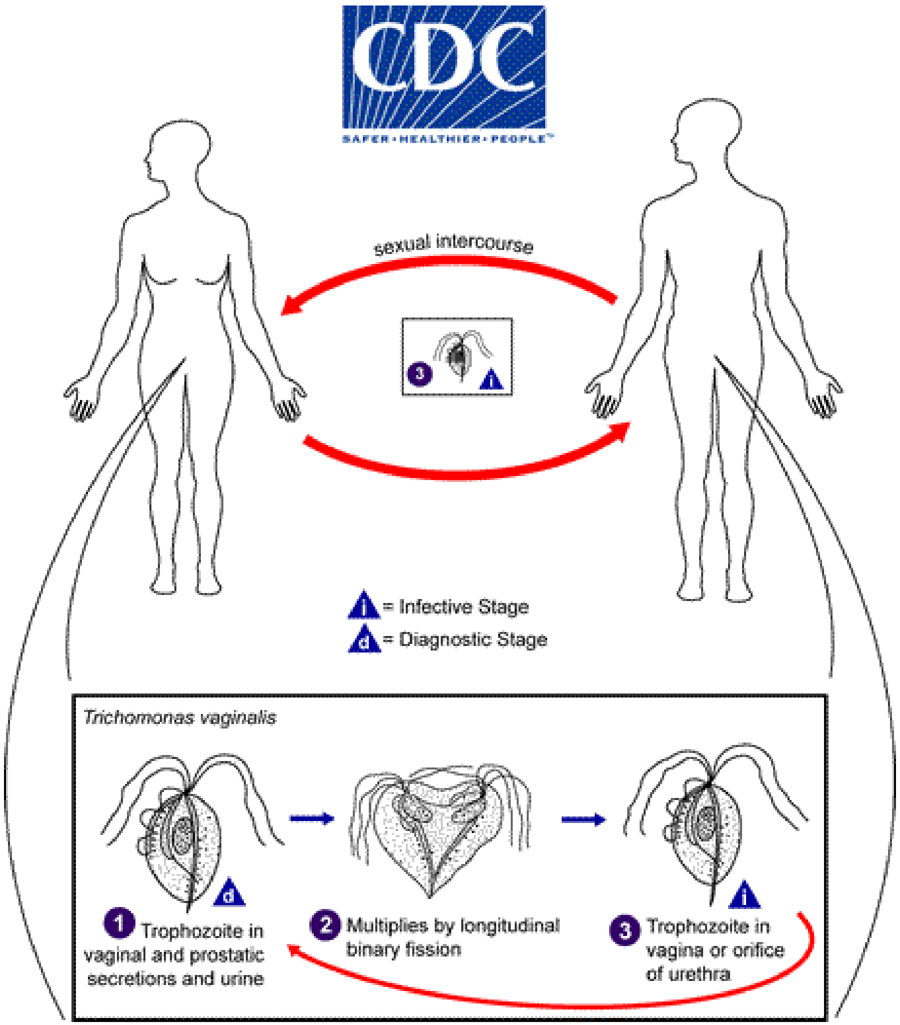
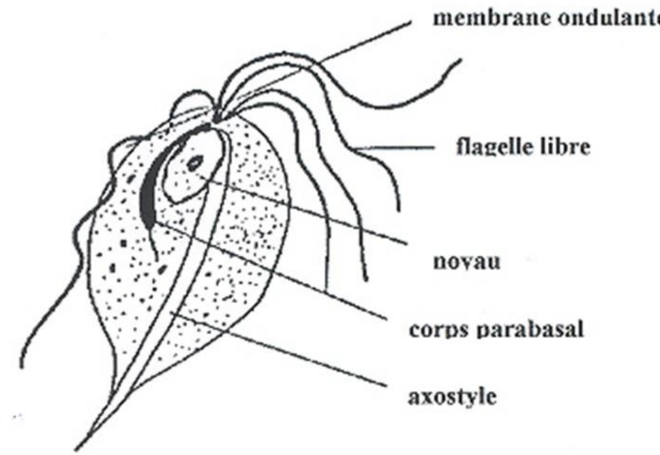
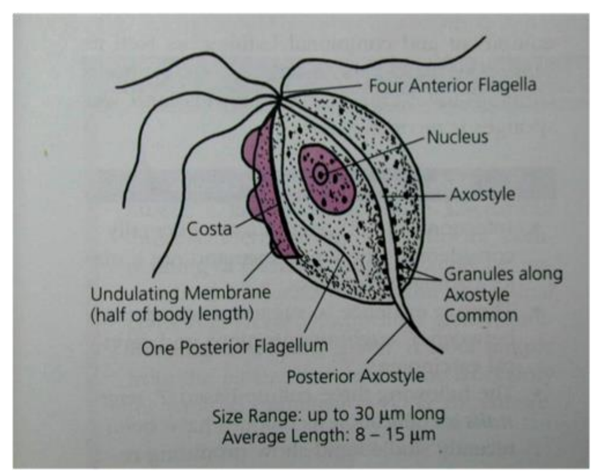
Lifecycle of *Trichomonas vaginalis*



Morphologie



Trichomonas vaginalis (trophozoïte 15-20 µm)



Blood Protozoa parasite- Leishmaniasis Disease (Leishmania)

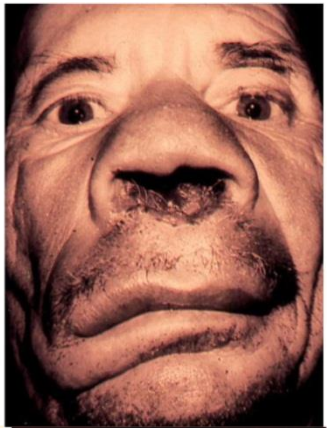
CAUSATIVE AGENT

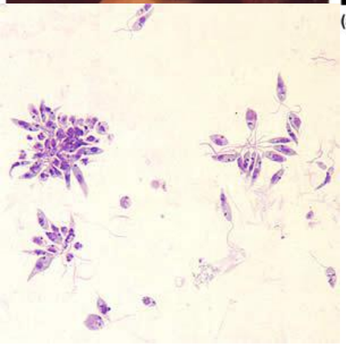
TRANSMISSION

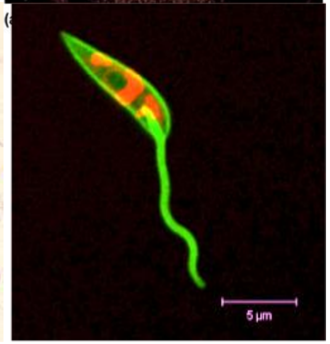
SYMPTOMS

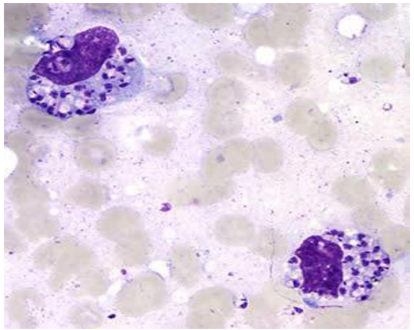
DIAGNOSIS

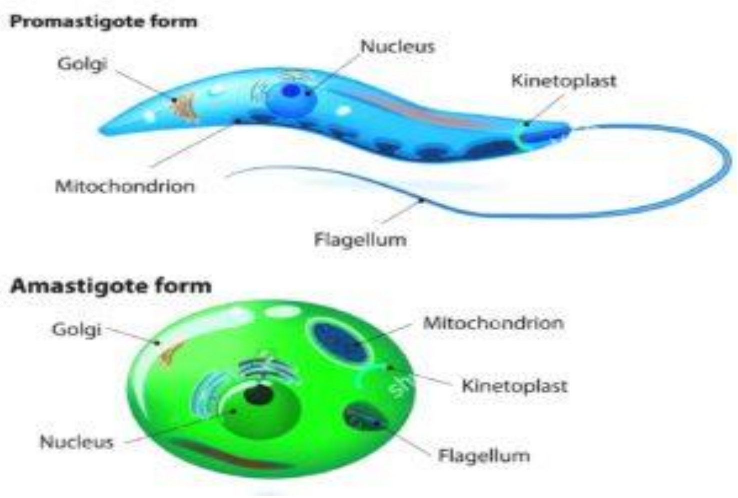
TREATMENT, PREVENTION & CONTROL



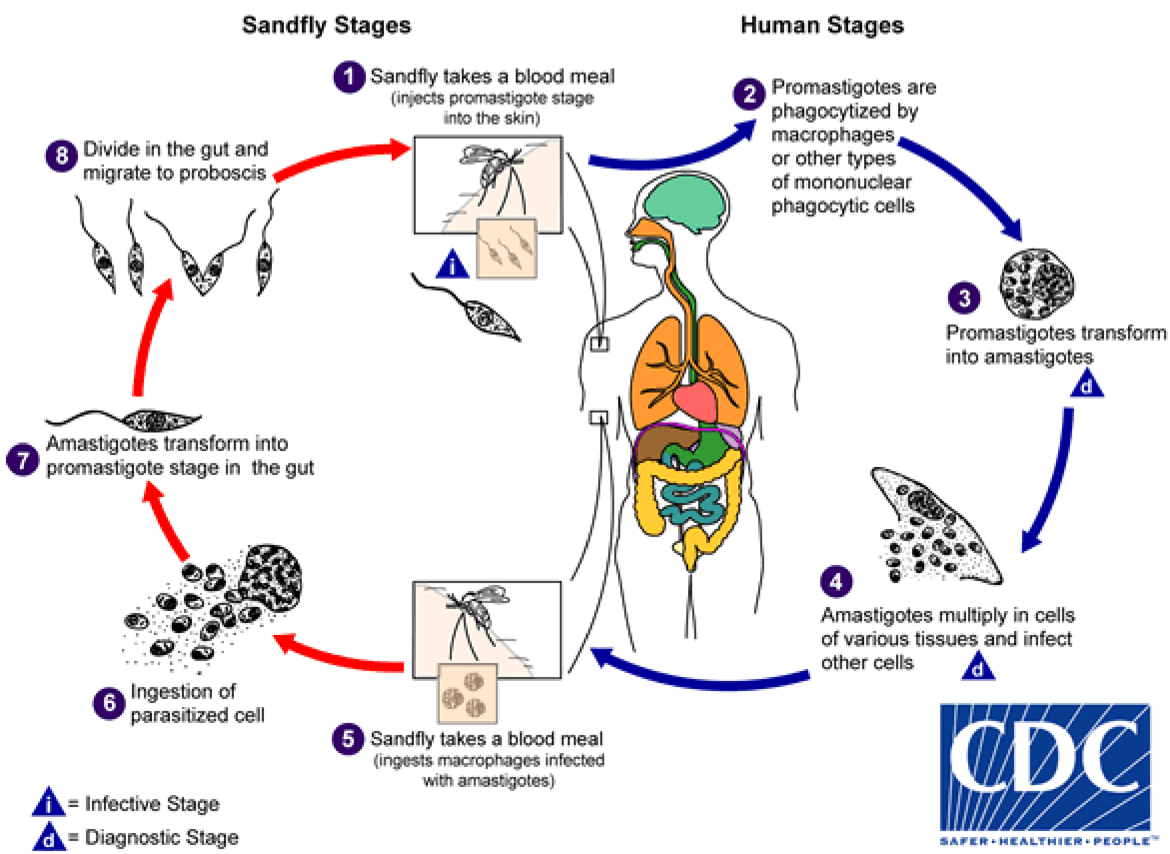


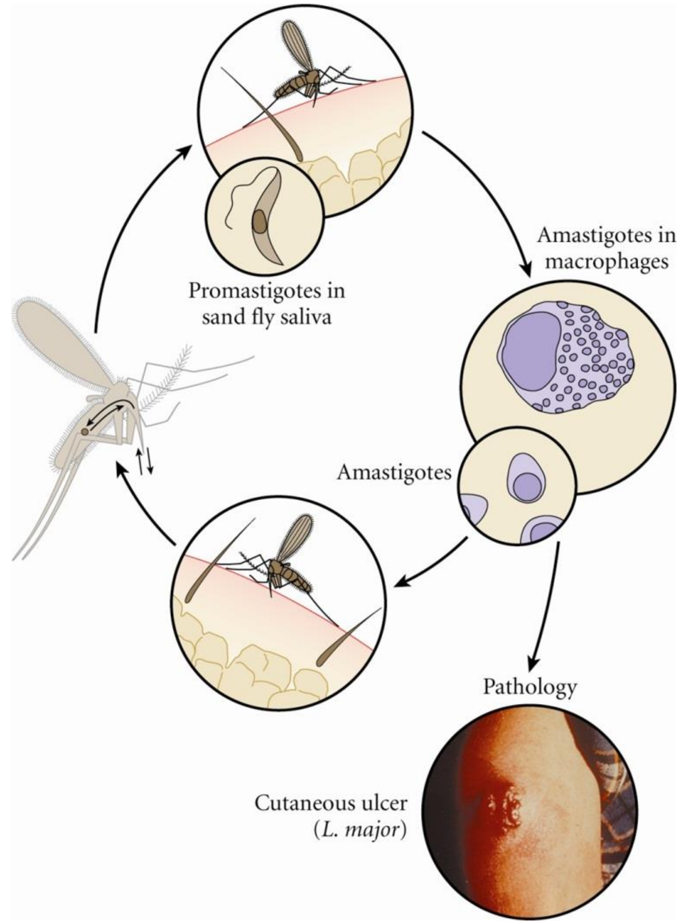


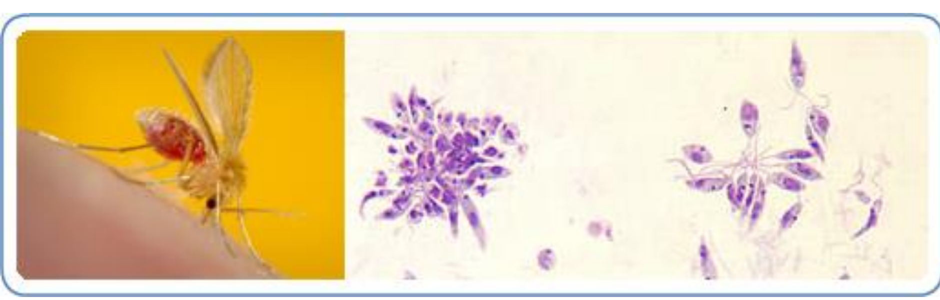


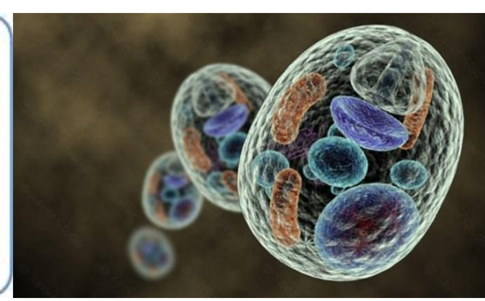


Lifecycle of *Leishmania*

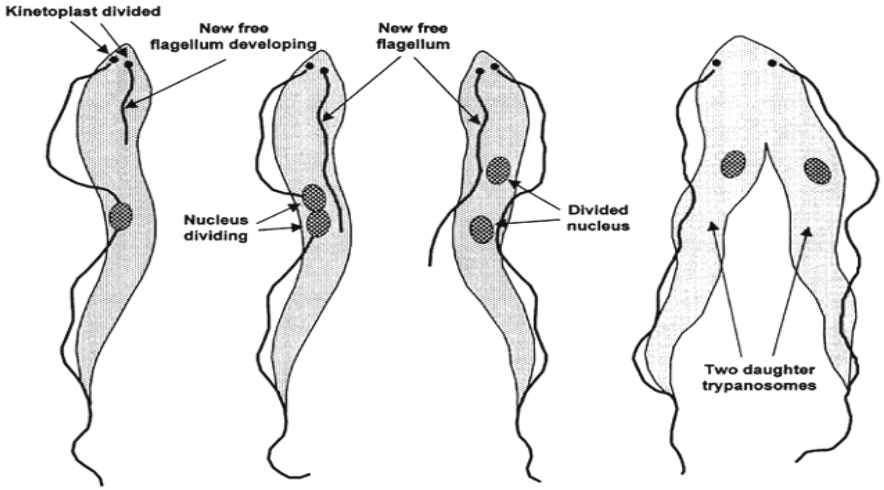








African Trypanosomiasis (Trypanosoma brucei)



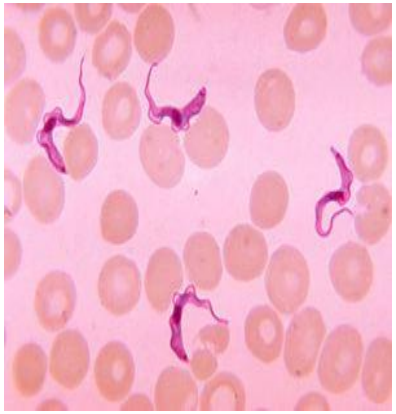
CAUSATIVE AGENT

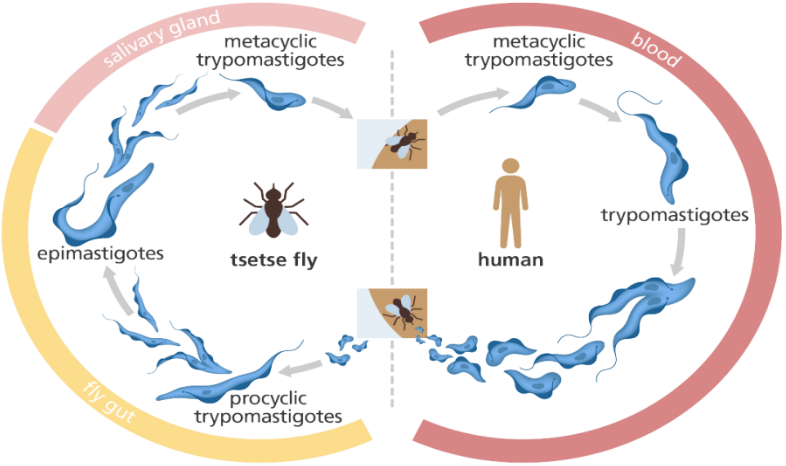
TRANSMISSION

SYMPTOMS

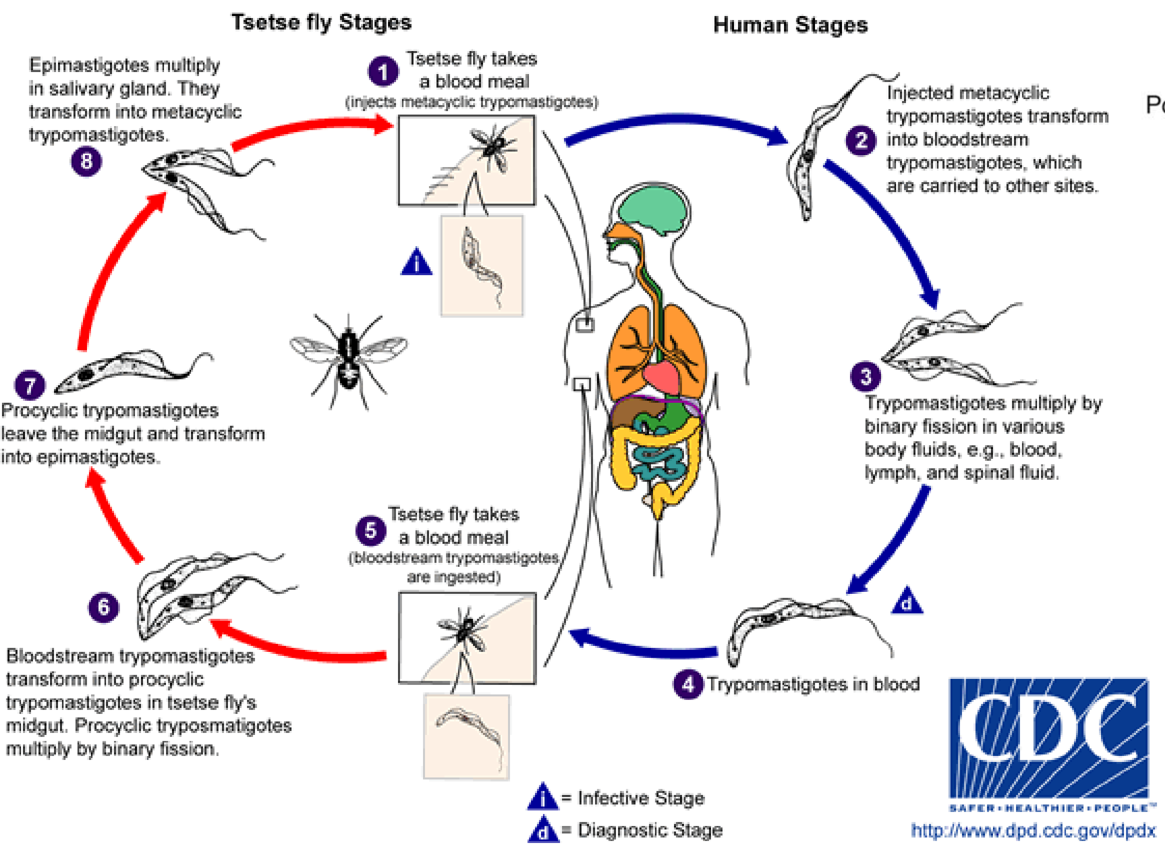
DIAGNOSIS

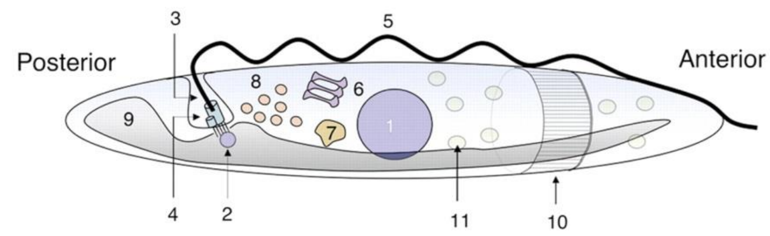
TREATMENT, PREVENTION & CONTROL



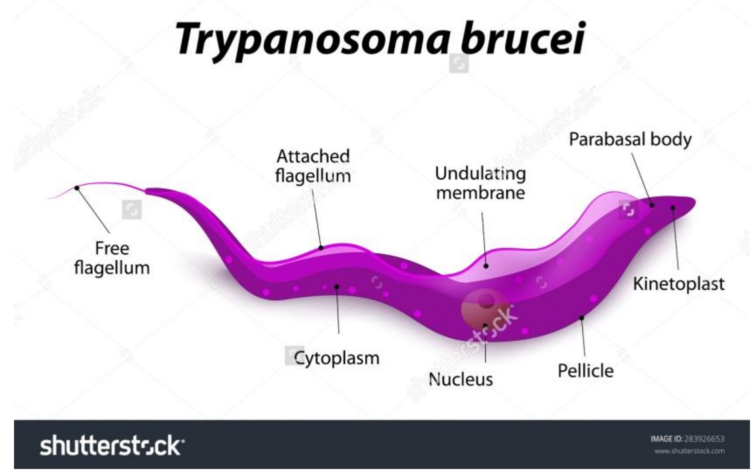


Lifecycle of *Trypanosoma brucei*





1. Nucleus
2. Kinetoplast
3. Flagellar pocket
4. Basal body and probasal body
5. Axoneme and paraflagellar rod
6. Golgi
7. Lysosome
8. Endosomes
9. Mitochondrion
10. Microtubule cytoskeleton
11. Glycosomes



American Trypanosomiasis/Chagas Disease (Trypanosoma cruzi)

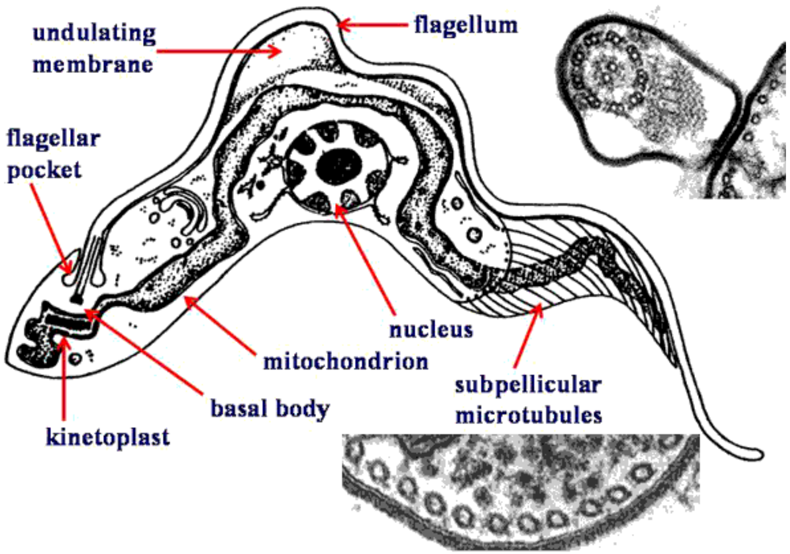
CAUSATIVE AGENT

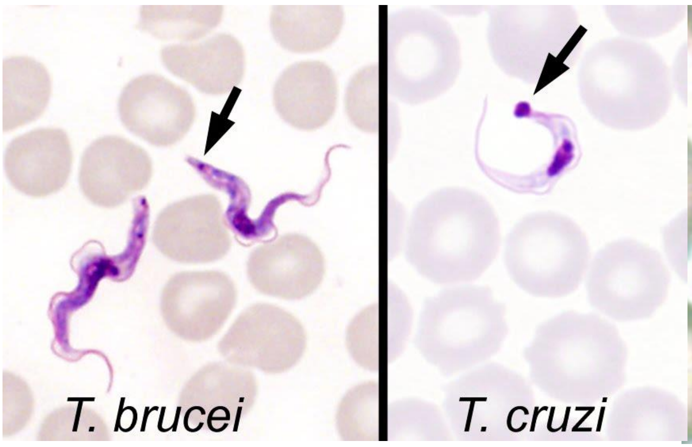
TRANSMISSION

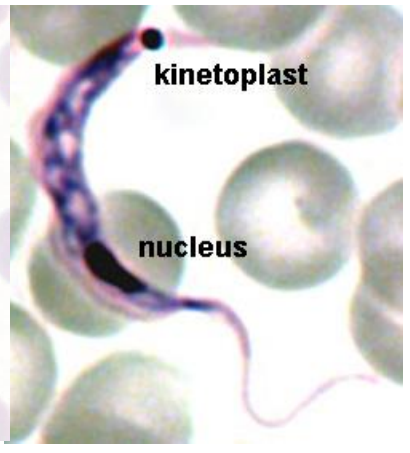
SYMPTOMS

DIAGNOSIS

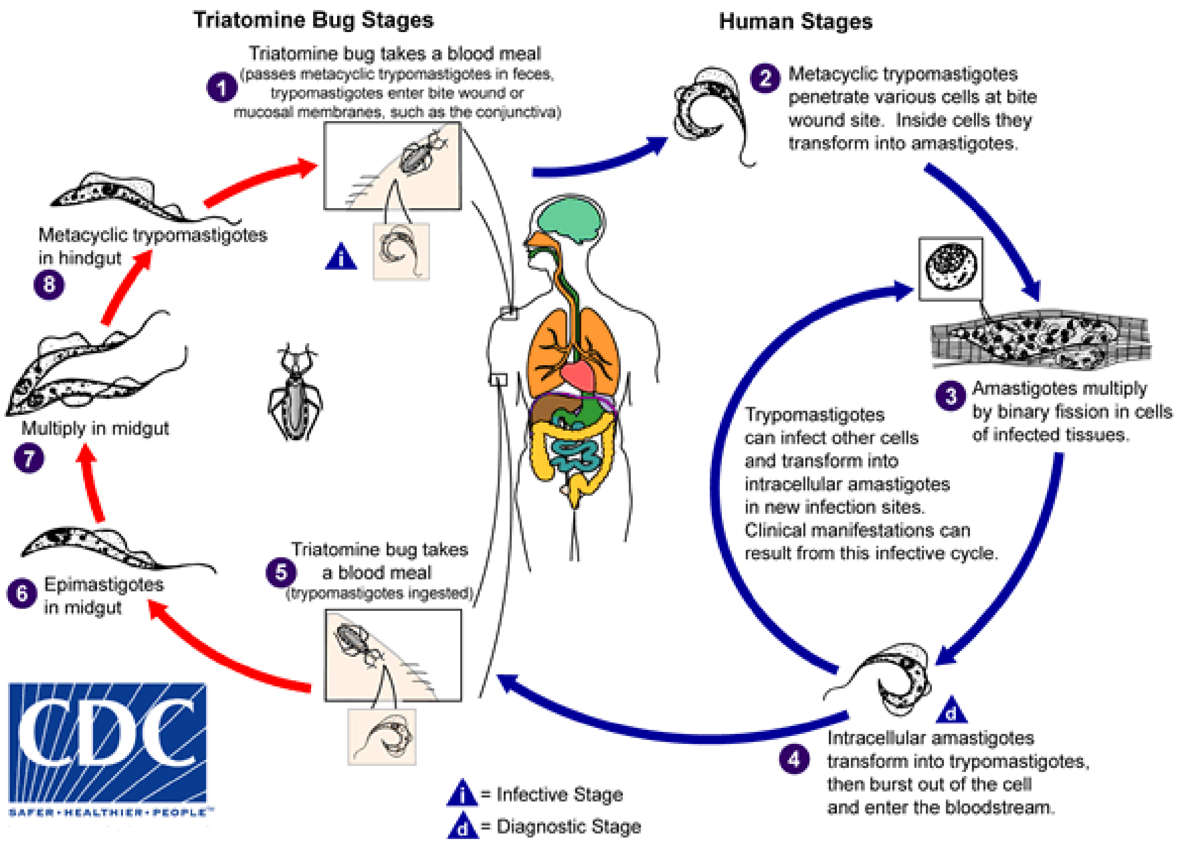
TREATMENT, PREVENTION & CONTROL



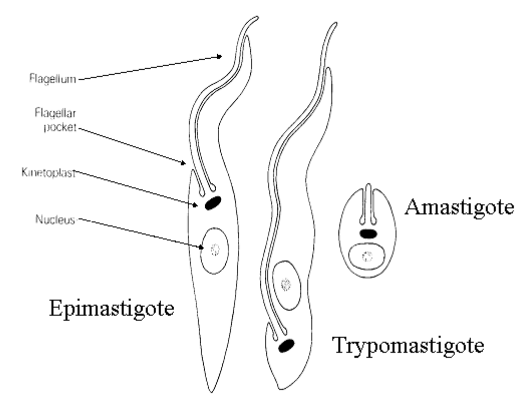


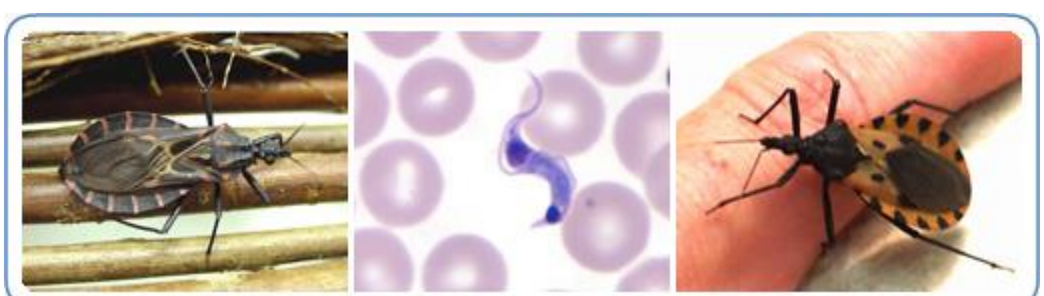


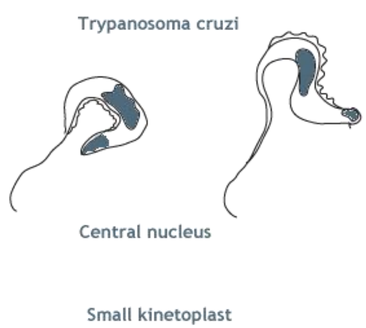
Lifecycle of *Trypanosoma cruzi*

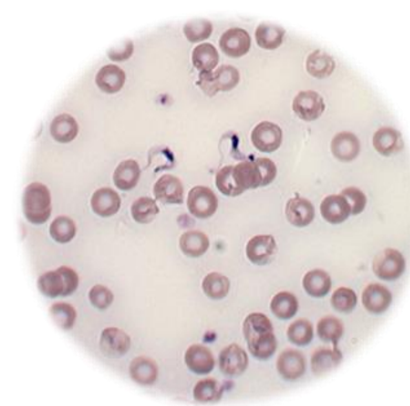


Morphology of *Trypanosoma cruzi*









Blood Protozoa parasite- Malaria Disease (Plasmodium)

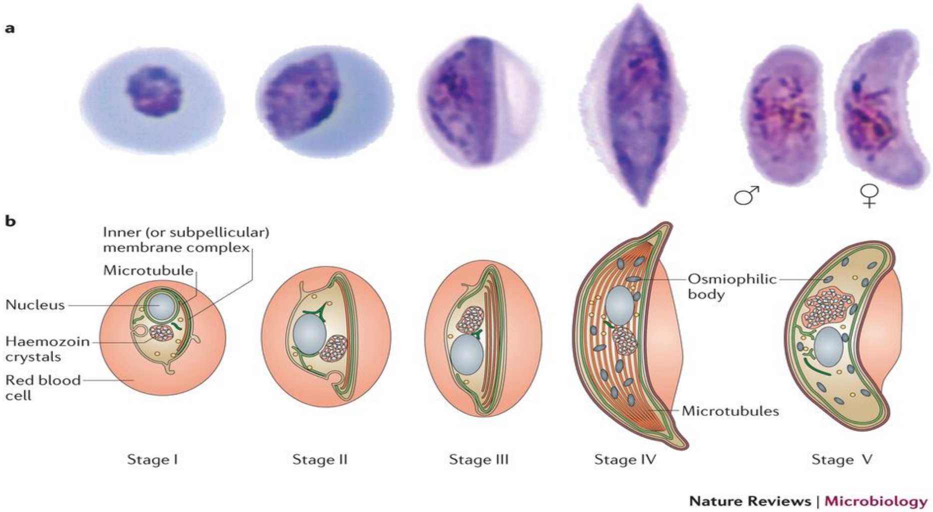
CAUSATIVE AGENT

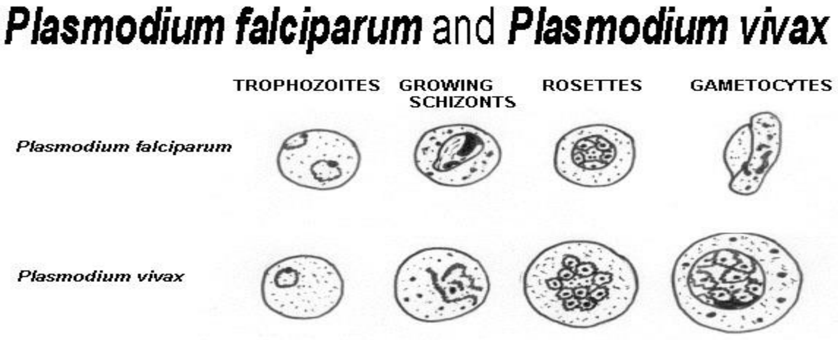
TRANSMISSION

SYMPTOMS

DIAGNOSIS

TREATMENT, PREVENTION & CONTROL

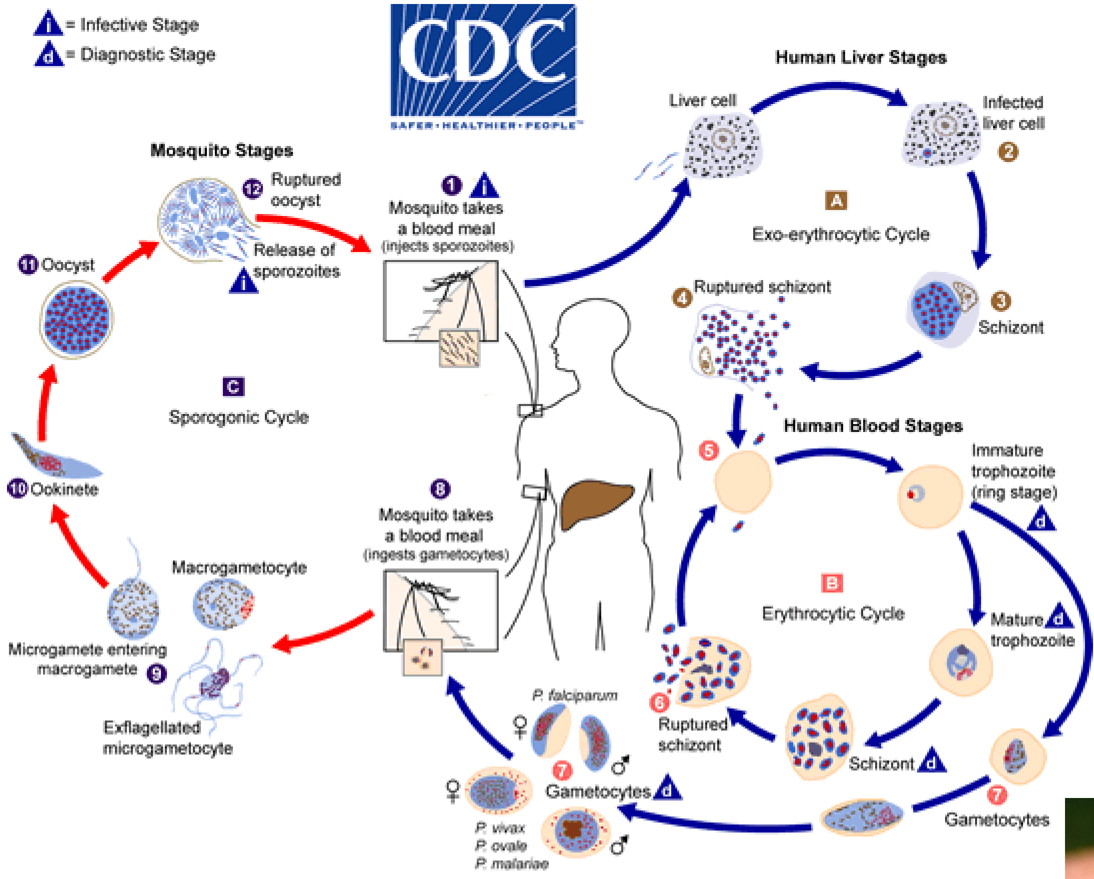


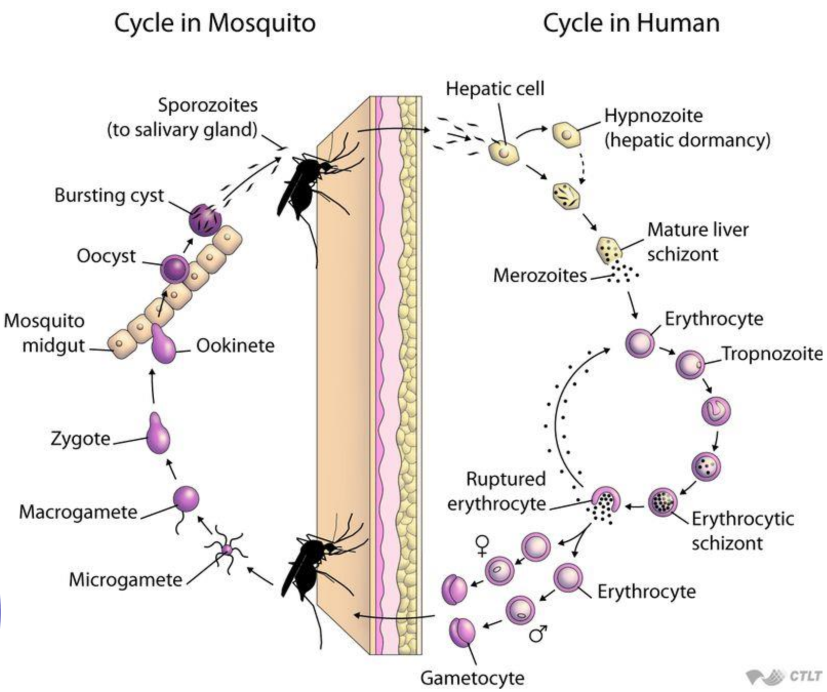


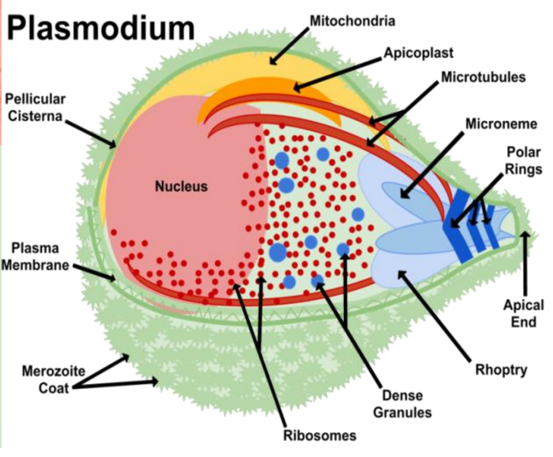
Key Morphological Differences Between Human *Plasmodium* Species in Blood Smears

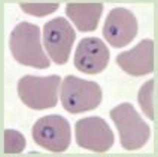
falciparum	vivax	ovale	malariae
• numerous rings • smaller rings • no trophozoites or schizonts • cresent-shaped gametocytes	• enlarged erythrocyte • Schüffner's dots • 'ameboid' trophozoite	• similar to *P. vivax* • compact trophozoite • fewer merozoites in schizont • elongated erythrocyte	• compact parasite • merozoites in rosette

Lifecycle of *Plasmodium*

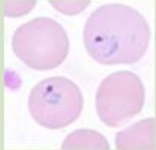




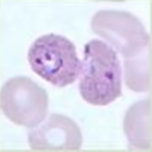




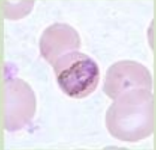
Ring-form trophozoites of *P. falciparum* in a thin blood smear.



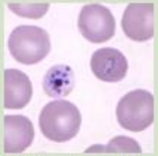
Ring-form trophozoites of *P. vivax* in a thin blood smear.



Trophozoites of *P. ovale* in a thin blood smear.



Band-form trophozoites of *P. malariae* in a thin blood smear.



Schizont and ring-form trophozoite of *P. knowlesi* in a thin blood smear.

Toxoplasmosis Disease (Toxoplasma gondii)

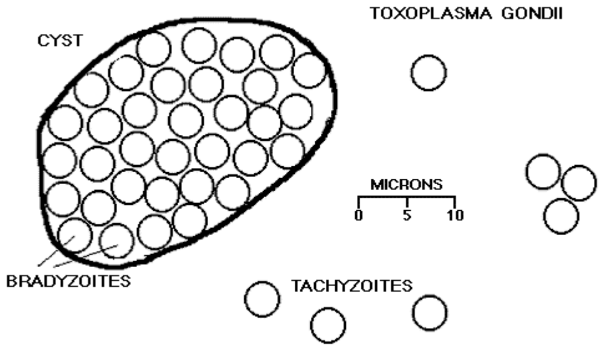
CAUSATIVE AGENT

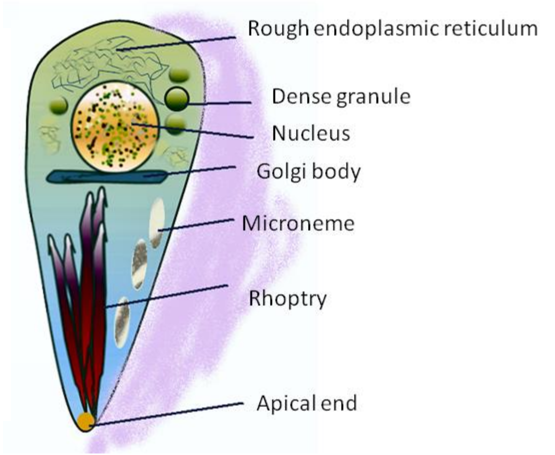
TRANSMISSION

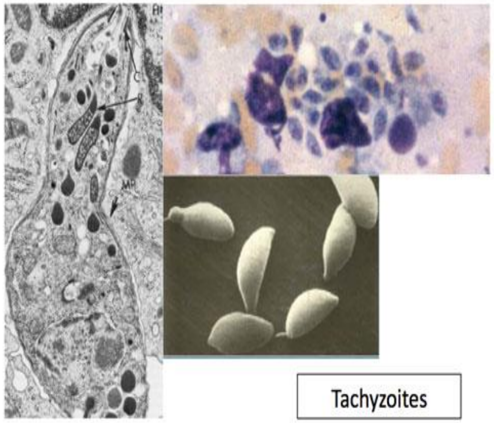
SYMPTOMS

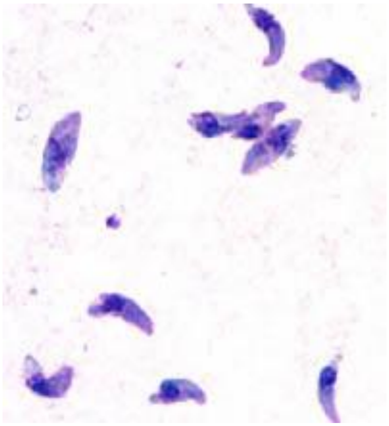
DIAGNOSIS

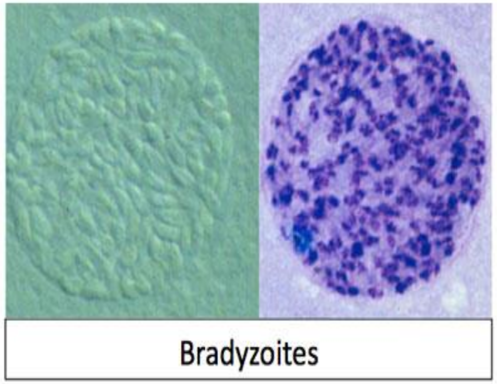
TREATMENT, PREVENTION & CONTROL

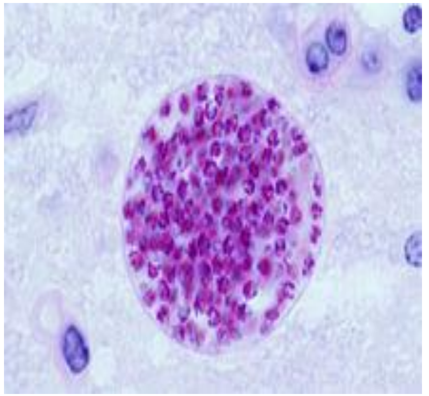




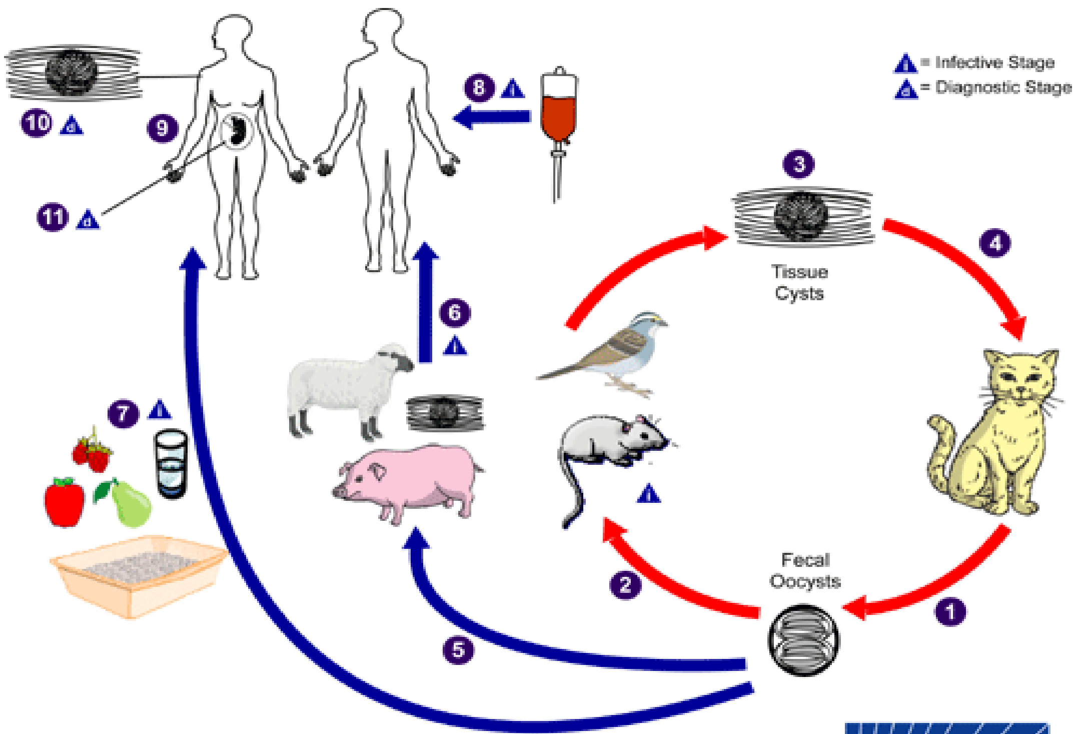


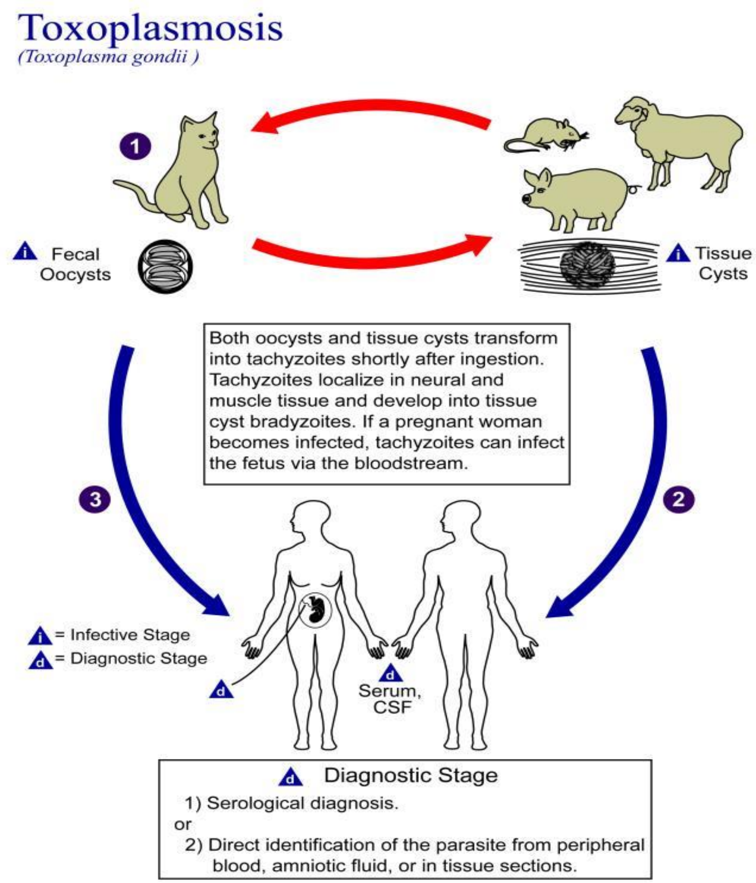


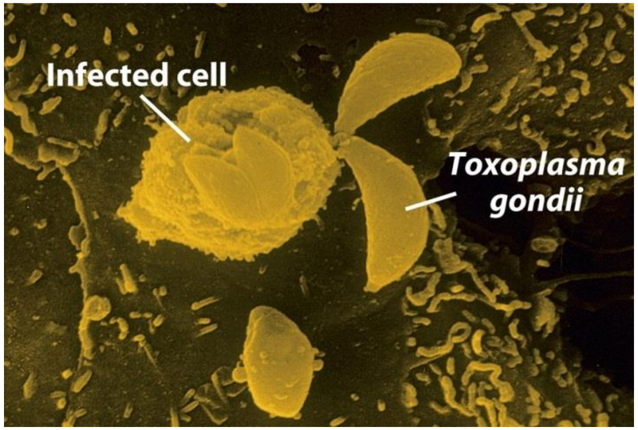


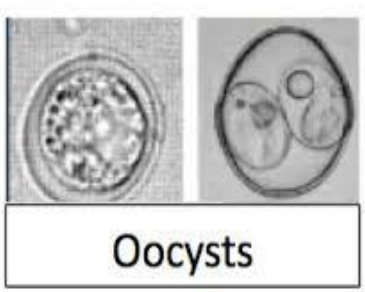


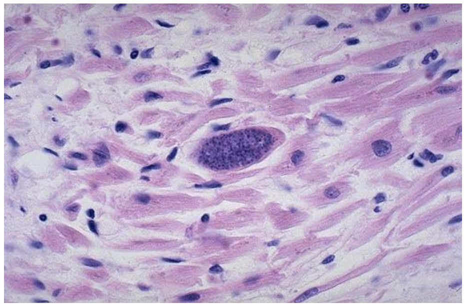
Lifecycle of *Toxoplasma gondii*











Cryptosporidiosis Disease (Cryptosporidium parvum)

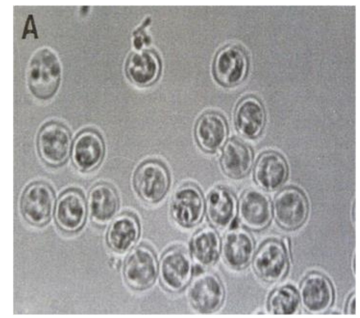
CAUSATIVE AGENT

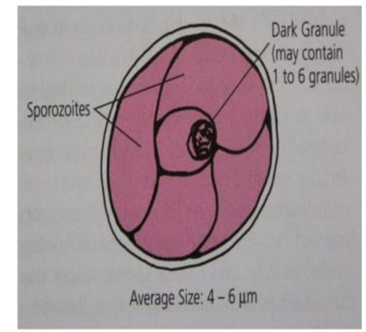
TRANSMISSION

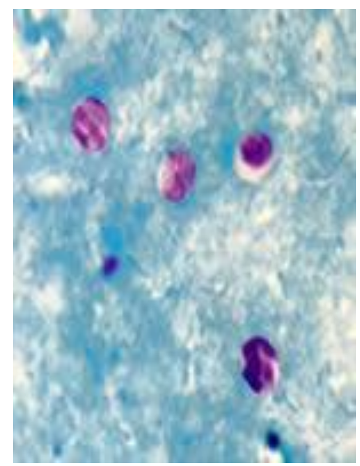
SYMPTOMS

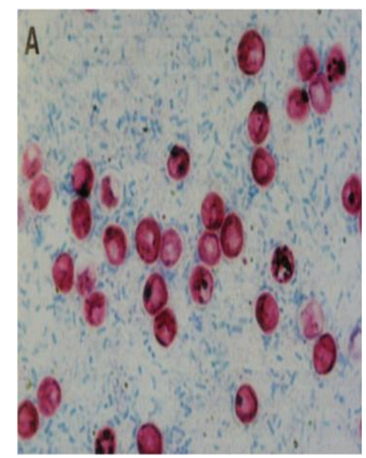
DIAGNOSIS

TREATMENT, PREVENTION & CONTROL









Lifecycle of *Cryptosporidium parvum*