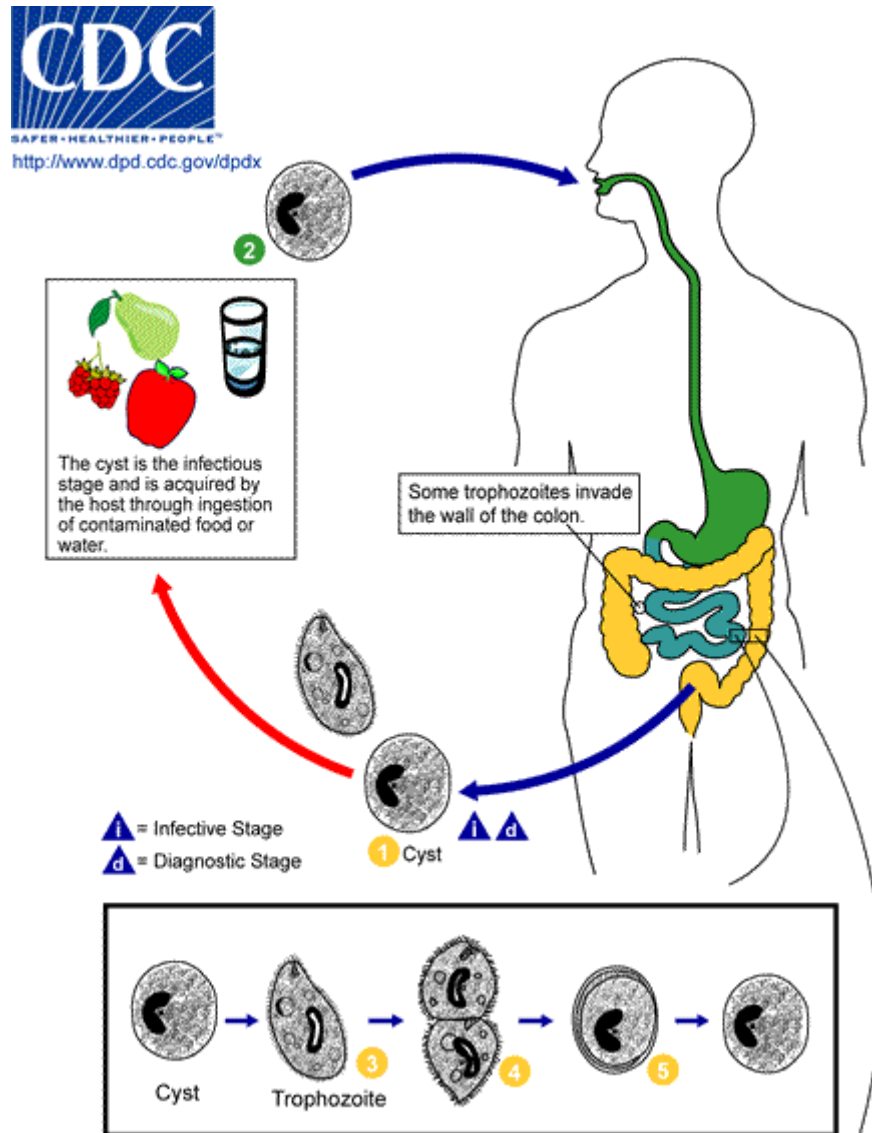


# Balantidiasis

## Causal Agent:

*Balantidium coli*, a large ciliated protozoan parasite.

## Life Cycle:



Cysts are the parasite stage responsible for transmission of balantidiasis **1**. The host most often acquires the cyst through ingestion of contaminated food or water **2**. Following ingestion, excystation occurs in the small intestine, and the trophozoites colonize the large intestine **3**. The trophozoites reside in the lumen of the large intestine of humans and animals, where they replicate by binary fission, during which conjugation may occur **4**. Trophozoites undergo encystation to

produce infective cysts 5. Some trophozoites invade the wall of the colon and multiply. Some return to lumen and disintegrate. Mature cysts are passed with feces 1.

### **Geographic Distribution:**

Worldwide. Because pigs are an animal reservoir, human infections occur more frequently in areas where pigs are raised. Other potential animal reservoirs include rodents and nonhuman primates.

### **Clinical Features:**

Most cases are asymptomatic. Clinical manifestations, when present, include persistent diarrhea, occasionally dysentery, abdominal pain, and weight loss. Symptoms can be severe in debilitated persons.

### **Laboratory Diagnosis:**

Diagnosis is based on detection of trophozoites in stool specimens or in tissue collected during endoscopy. Cysts are less frequently encountered. *Balantidium coli* is passed intermittently and once outside the colon is rapidly destroyed. Thus stool specimens should be collected repeatedly, and immediately examined or preserved to enhance detection of the parasite.

### **Diagnostic findings**

- Microscopy
- Morphologic comparison with other intestinal parasites

### **Treatment:**

The drug of choice is tetracycline\*, with metronidazole\* and iodoquinol\* as alternatives. Tetracycline is contraindicated in pregnancy and in children less than 8 years old

\* This drug is approved by the FDA, but considered investigational for this purpose.