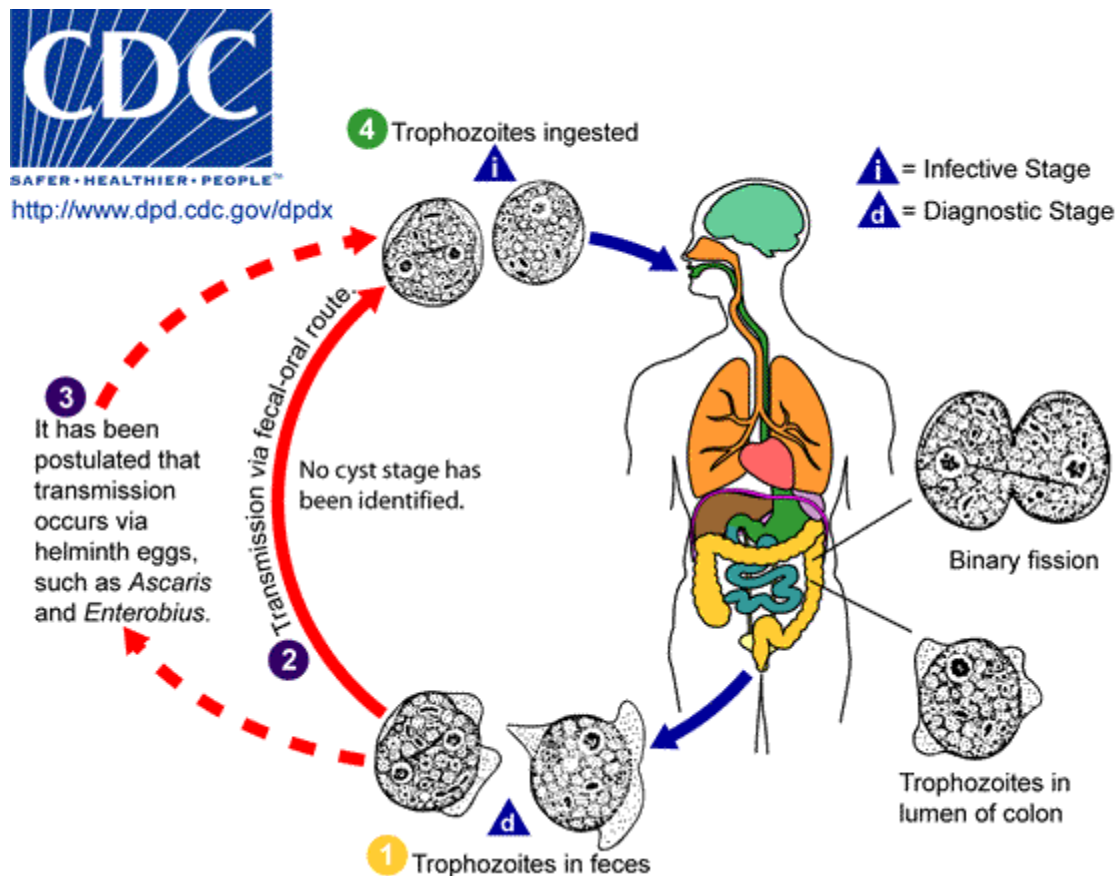


# *Dientamoeba fragilis* infection

## Causal Agent:

Despite its name, *Dientamoeba fragilis* is not an ameba but a flagellate. This protozoan parasite produces trophozoites; cysts have not been identified. Infection may be either symptomatic or asymptomatic.

## Life Cycle:



The complete life cycle of this parasite has not yet been determined, but assumptions were made based on clinical data. To date, the cyst stage has not been identified in *D. fragilis* life cycle, and the trophozoite is the only stage found in stools of infected individuals **1**. *D. fragilis* is probably transmitted by fecal-oral route **2** and transmission via helminth eggs (e.g., *Ascaris*, *Enterobius* spp.) has been postulated **3**. Trophozoites of *D. fragilis* have characteristically one or two nuclei (**1**, **4**), and it is found in children complaining of intestinal (e.g., intermittent diarrhea, abdominal pain) and other symptoms (e.g., nausea, anorexia, fatigue, malaise, poor weight gain).

## Geographic Distribution:

Worldwide.

### **Clinical Features:**

Symptoms that have been associated with infection include diarrhea, abdominal pain, anorexia, nausea, vomiting, fatigue, and weight loss.

### **Laboratory Diagnosis:**

Infection is diagnosed through detection of trophozoites in permanently stained fecal smears (e.g., trichrome). This parasite is not detectable by stool concentration methods. *Dientamoeba fragilis* trophozoites can be easily overlooked because they are pale-staining and their nuclei may resemble those of *Endolimax nana* or *Entamoeba hartmanni*.

### **Diagnostic findings**

- Microscopy
- Morphologic comparison with other intestinal parasites

### **Treatment:**

Safe and effective drugs are available. The drug of choice is iodoquinol. Paromomycin\*, tetracycline\*, (contraindicated in children under age 8, pregnant and lactating women) or metronidazole can also be used.

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