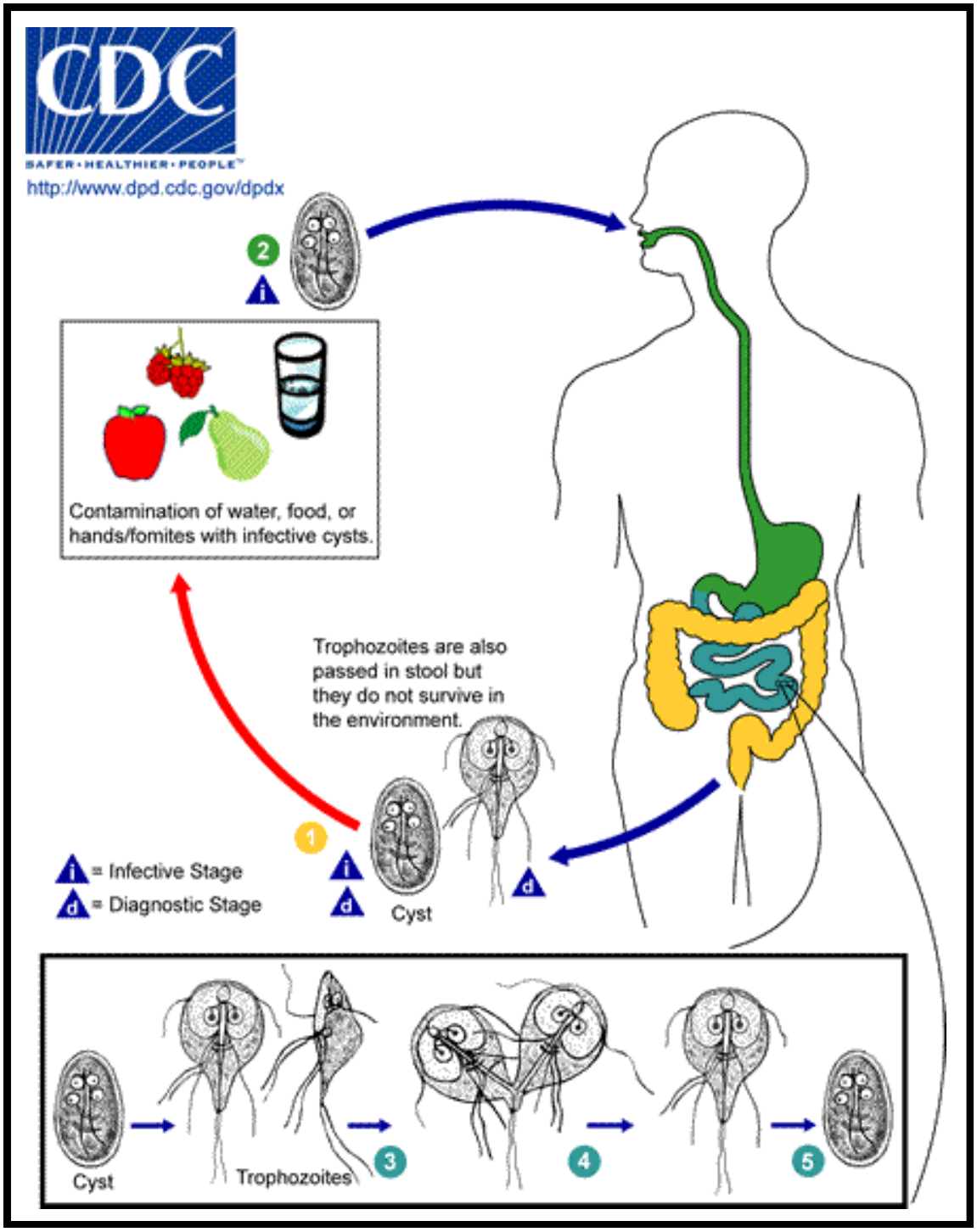

GIARDIASIS LIFE CYCLE

Causal Agent: *Giardia intestinalis* is a protozoan flagellate (Diplomonadida). This protozoan was initially named *Cercomonas intestinalis* by Lambl in 1859. It was renamed *Giardia lamblia* by Stiles in 1915 in honor of Professor A. Giard of Paris and Dr. F. Lambl of Prague. However, many consider the name, *Giardia intestinalis*, to be the correct name for this protozoan. The International Commission on Zoological Nomenclature is reviewing this issue.

Cysts are resistant forms and are responsible for transmission of giardiasis. Both cysts and trophozoites can be found in the feces (diagnostic stages) 1. The cysts are hardy and can survive several months in cold water. Infection occurs by the ingestion of cysts in contaminated water, food, or by the fecal-oral route (hands or fomites) 2. In the small intestine, excystation releases trophozoites (each cyst produces two trophozoites) 3. Trophozoites multiply by longitudinal binary fission, remaining in the lumen of the proximal small bowel where they can be free or attached to the mucosa by a ventral sucking disk 4. Encystation occurs as the parasites transit toward the colon. The cyst is the stage found most commonly in nondiarrheal feces 5. Because the cysts are infectious when passed in the stool or shortly afterward, person-to-person transmission is possible. While animals are infected with *Giardia*, their importance as a reservoir is unclear.

Life cycle image and information courtesy of DPDx.