



GIARDIASIS

1. **Agent:** *Giardia intestinalis*, (formerly *G. lamblia*), a protozoan parasite that exists as trophozoite and cyst.
2. **Identification:**
 - a. **Symptoms:** Infection principally of the upper small bowel. Often asymptomatic or mildly symptomatic. A variety of intestinal symptoms may occur and include chronic and recurrent diarrhea; steatorrhea; abdominal cramps; bloating; frequent loose, pale, fatty, malodorous stools; fatigue; and weight loss. Malabsorption of fats or of fat-soluble vitamins may occur.
 - b. **Differential Diagnosis:** Other enteric infections and parasites.
 - c. **Diagnosis:** Microscopic examination of fecal specimens. Three specimens taken 2-3 days apart will identify 80-90 percent of infections. Antigen detection by direct fluorescent antibody (DFA) assay is available. Examination of duodenal fluid (by aspiration or by string test) and mucosal biopsy may be more sensitive, but are rarely necessary.
3. **Incubation:** Variable; may be a few days to several months; most common 5-25 days.
4. **Reservoir:** Humans and many other animals, including cats, dogs, cattle, beavers, rodents, and birds. *Giardia* species are not host specific.
5. **Source:** Feces of humans and other animals.
6. **Transmission:** Transmission is fecal-oral through direct person-to-person contact or via water and, less commonly, food vehicles.
7. **Communicability:** Variable; months to years; as long as carrier state persists.
8. **Specific Treatment:**

Recommended: Metronidazole, tinidazole, or nitazoxanide

Alternatives: Furazolidone; paromomycin for treatment of severe symptomatic disease in pregnant women.

Treatment of asymptomatic cyst passers is not recommended except possibly to prevent transmission from a toddler to a pregnant woman; also in patients with cystic fibrosis or hypo-gammaglobulinemia.

9. **Immunity:** Short lived.

REPORTING PROCEDURES

1. Report within 7 calendar days from identification, *California Code of Regulations*, Title 17, Section 2500.
2. **Case Definition:** A case that meets the clinical description and the criteria for laboratory confirmation, the detection of *Giardia* organisms, antigen, or DNA in stool, intestinal fluid, tissue samples, biopsy specimens or other biological sample.

3. **Report Form:**

PARASITE EPIDEMIOLOGIC CASE HISTORY (acd-parasite)¹

PARASITE CONTACT ROSTER²

4. **Epidemiologic Data:**
 - a. Travel history.
 - b. Child contact, particularly diapered children in child care situations.
 - c. Consumption of untreated surface water.
 - d. Sexual orientation and recent sexual behavior.
 - e. Animal contact.

¹ <http://www.publichealth.lacounty.gov/acd/Diseases/EpiForms/ParasiticEpiForm.pdf>

² <http://www.publichealth.lacounty.gov/acd/Diseases/EpiForms/ParasiteContactRoster.pdf>



- f. Exposure to known cases.
- g. History of colonic irrigation, when and where.
- h. Problems with water or septic system.
- i. Occupation of case and occupation of household members.
- j. Recreational water use

CONTROL OF CASE, CONTACTS (See Table 1) & CARRIERS

Public Health Nursing Home Visit Protocol:
Home visit as necessary – a face to face interview is conducted as necessary.

Refer to “[Public Health Nursing Home Visit AS NECESSARY \(HVAN\) Algorithm](#)” (B-73 Part IV [Public Health Nursing Home Visit Protocol](#))³.

Investigation is required for outbreaks and for single cases. Initiate investigation within 3 days.

CASE:

1. **Sensitive Occupations or Situations:**
Currently Symptomatic: Restrict/exclude until 48 hours after resolution of signs and symptoms and on treatment if indicated.
No clearance required.

Previously Symptomatic in the Past 48-72 Hours: No restriction.

2. **Child ≤ 5 years in group setting:**
Currently Symptomatic: Restrict/exclude until 48 hours after resolution of signs and symptoms and on treatment if indicated.
No clearance required.

Previously Symptomatic in the Past 48-72 Hours: May return to group care if asymptomatic for 48 hours.
No clearance required.

3. **Non-sensitive Occupation or Situation:**
No action.

CONTACTS:

1. **Sensitive Occupations or Situations:**
Currently Symptomatic: Treat as a case.
Asymptomatic: No restriction.
2. **Child ≤ 5 years in group setting:**
Currently Symptomatic: Treat as a case.
Asymptomatic: No restriction.

CARRIER:

Refer to treatment above. Release as for case.

PREVENTION-EDUCATION

1. Stress hand washing and personal hygiene.
2. Dispose of feces properly.
3. Boil or disinfect water (chlorine or iodine tablets) of unknown potability, e.g., during international travel and when hiking or camping.
4. Advise about the risk of anal intercourse and oral-anal sexual practices.
5. Stress importance of proper hygiene regarding handling and disposal of pet feces.
6. Stress bathing before recreational water use, avoid accidental swallowing of recreational water.

DIAGNOSTIC PROCEDURES

1. **Microscopic:**

Container: Feces-Parasite.

Laboratory Form: [Public Health Laboratory Test Requisition Form H-3021](#)⁴ (Rev. 01/14)

Examination Requested: Ova & Parasites (O&P) for Giardia. Check appropriate boxes on laboratory form.

Material: Feces. Follow collection instructions provided with container.

³ <http://publichealth.lacounty.gov/acd/procs/b73/HomeVisitProtocol.pdf>

⁴ <http://www.publichealth.lacounty.gov/lab/docs/H-3021%20Test%20Request%20Form.pdf>



Storage: Do not refrigerate; protect from overheating.

Remarks: Mix thoroughly with PVA preservative. Do not collect specimen(s) for 7-10 days after barium, mineral oil, bismuth, antibiotics, antimalarials, or antidiarrheal preparations such as kaolin have been ingested.

Container: Feces-Parasite

Laboratory Form: [Public Health Laboratory Test Requisition Form H-30214 \(Rev. 01/14\)](#)

Examination Requested: Giardia DFA. Check appropriate boxes on laboratory form.

Material: Feces in 10% formalin.

2. Antigen Detection:

Storage: Do not refrigerate; protect from overheating

TABLE 1. CONTROL OF CASE AND CONTACT

SETTING	CASE		CONTACT	
	Currently Symptomatic	Previously Symptomatic in the Past 48-72 Hours	Currently Symptomatic	Asymptomatic
SOS	<ul style="list-style-type: none"> Restrict/exclude until 48 hours after resolution of signs and symptoms, and on treatment if indicated. No clearance required. 	<ul style="list-style-type: none"> No restriction. 	<ul style="list-style-type: none"> Restrict/exclude until 48 hours after resolution of signs and symptoms, and on treatment if indicated. No clearance required. 	<ul style="list-style-type: none"> No restriction
Child < 5 years	<ul style="list-style-type: none"> Restrict/exclude until 48 hours after resolution of signs and symptoms, and on treatment if indicated. No clearance required. 	<ul style="list-style-type: none"> May return to group care if asymptomatic for 48 hours. No clearance required. 	<ul style="list-style-type: none"> Restrict/exclude until 48 hours after resolution of signs and symptoms, and on treatment if indicated. No clearance required. 	<ul style="list-style-type: none"> No restriction.
Not SOS	<ul style="list-style-type: none"> No action. 	<ul style="list-style-type: none"> No action. 	<ul style="list-style-type: none"> No action. 	<ul style="list-style-type: none"> No action.