



# CRYPTOSPORIDIOSIS

1. **Agent:** *Cryptosporidium parvum*, a protozoan parasite that exists as a trophozoite and oocyst.
2. **Identification:** A parasitic disease of humans and animals.
  - a. **Symptoms:** Principally diarrhea, which can be watery and profuse, and with cramping abdominal pain. Children may have anorexia and vomiting, but these are less common in adults; fever, malaise, and nausea are less common in all ages. In the immunocompromised, e.g. HIV disease, illness can be unremitting and ultimately fatal due to chronic malabsorption and wasting.
  - b. **Differential Diagnosis:** Other diarrheal diseases, including parasitic, viral, and bacterial.
  - c. **Diagnosis:** Examination of stool for oocysts, after special concentration and staining; detection of various life cycles in intestinal biopsy. Difficult to detect unless looked for specifically.
3. **Incubation:** Average of 7 days; range 1-12 days, but not precisely known.
4. **Reservoir:** Humans and animals, including domestic cattle, dogs, and cats.
5. **Source:** Oocysts survive for prolonged periods of time in environment after excretion by animals or humans.
6. **Transmission:** Fecal-oral, person-to-person, waterborne, animal-to-person.
7. **Communicability:** Oocysts appear in stool at onset of symptoms, and continue for several weeks after recovery. May survive for months under proper humidity and temperature.
8. **Specific Treatment:** Generally self-limited in the immunocompetent person. Nitroxanide approved for treatment of diarrhea in immunocompetent. Improved immune status of immunosuppressed will decrease symptoms of cryptosporidiosis.

9. **Immunity:** None known.

## REPORTING PROCEDURES

1. Report within 1 working day of identification of a case or suspected case, *California Code of Regulations*, Title 17, Section 2500.
2. **Report Form: PARASITE EPIDEMIOLOGIC CASE HISTORY (T-102)** available online at:  
<http://lapublichealth.org/acd/EpiForms/Ameb,Crypto,Giardiasis-T-102.pdf>
3. **Epidemiologic Data:**
  - a. Exposure to animals.
  - b. Sexual orientation.
  - c. History of colonic irrigation. When and where.
  - d. Emigration from or travel to a developing country within 6 months prior to onset. Specify dates and places.
  - e. Exposure to carrier and other persons with diarrheal illness within incubation period.
  - f. Occupation of case and household members.
  - g. Consumption of or exposure to nonpotable water: pools, lakes, rivers, etc. Specify dates and places.

## CONTROL OF CASE, CONTACTS & CARRIERS

Contact within 24 hours to determine if sensitive occupation or situation (SOS) involved. Otherwise, investigate within 3 days.

### CASE:

1. **Sensitive Occupation:** Restrictions should be individualized based on case's hygiene and severity of symptoms. If severely symptomatic, remove from SOS until diarrhea is reduced. Clearance specimens are not mandated. Chronically immunosuppressed patients are unlikely to recover; permanent removal from



SOS may be appropriate only for cases that demonstrate poor hygiene and no ability to improve their practice.

2. **Non-sensitive Occupation or Situation:** Case may be closed without release specimens, provided household contacts are not symptomatic and in sensitive occupations.

#### **CONTACTS:**

Household members or persons who share a common source exposure should be tested only if symptomatic. If positive, handle as a case. If negative or asymptomatic, no restrictions.

#### **CARRIERS:**

Immunosuppressed patients remain infected chronically.

#### **PREVENTION-EDUCATION**

1. Stress hand washing and personal hygiene.
2. Advise about increased risk with genital-anal and oral-anal sex.
3. Dispose of feces in a safe, sanitary fashion.
4. Take precautions with food and water when traveling to endemic areas.
5. Advise regarding risk associated with colonic irrigation.
6. Protect water supply from fecal contamination.

#### **DIAGNOSTIC PROCEDURES**

1. **Microscopic:**

**Container:** Feces-Parasite.

**Laboratory Form:** Test Requisition Form H-3021 (Rev. 9/07) or online request form available at:

<http://lapublichealth.org/lab/docs/H-3021%20Test%20Request%20Form.pdf>

**Examination Requested:** Cryptosporidium. Check appropriate boxes on laboratory form.

**Material:** Feces. Follow instructions provided with container.

**Amount:** 20-30 ml liquid stool.

**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.

2. **Antigen Detection:**

**Container:** Feces-Parasite.

**Laboratory Form:** Test Requisition Form H-3021 (Rev. 9/07) or online request form.

**Examination Requested:** Cryptosporidium.

**Material:** Feces in 10% formalin.

**Amount:** 20-30 ml.

**Storage:** Do not refrigerate; protect from overheating.

**COUNTY OF LOS ANGELES - DEPARTMENT OF HEALTH SERVICES  
ACUTE COMMUNICABLE DISEASE CONTROL UNIT  
PARASITE EPIDEMIOLOGIC CASE HISTORY**

**DEMOGRAPHIC INFORMATION**

Health District: \_\_\_\_\_ Census Tract: \_\_\_\_\_

Disease:  Cryptosporidiosis  Amebiasis  Giardiasis  Other \_\_\_\_\_

1. Last Name: \_\_\_\_\_ First Name: \_\_\_\_\_

2. Street: \_\_\_\_\_ City: \_\_\_\_\_ Zip: \_\_\_\_\_

3. Telephone: Home ( ) \_\_\_\_\_ Work ( ) \_\_\_\_\_

4. Birthdate: / / 5. Age: \_\_\_\_\_ 6. Sex:  Female  Male  Unknown

7. Race/Ethnicity: Asian/Pacific Islander\*  Black  Hispanic  White  Other  Unknown

\*If Asian/Pacific Islander, please check one of the following:

<input type="checkbox"/> Asian Indian	<input type="checkbox"/> Cambodian (non-Hmong)	<input type="checkbox"/> Chinese	<input type="checkbox"/> Filipino	<input type="checkbox"/> Hmong	<input type="checkbox"/> Japanese
<input type="checkbox"/> Korean	<input type="checkbox"/> Laotian (non-Hmong)	<input type="checkbox"/> Thai	<input type="checkbox"/> Vietnamese (non-Hmong)	<input type="checkbox"/> Other Asian	
<input type="checkbox"/> Guamanian	<input type="checkbox"/> Hawaiian	<input type="checkbox"/> Samoan	<input type="checkbox"/> Other Pacific Islander		

8. Occupation \_\_\_\_\_

9. If case is in sensitive occupation/situation (SOS):  
Employer/Situation: \_\_\_\_\_  
Address: \_\_\_\_\_  
City: \_\_\_\_\_  
Telephone: ( ) \_\_\_\_\_

10. If household member is in SOS:  
Employer/Situation: \_\_\_\_\_  
Address: \_\_\_\_\_  
City: \_\_\_\_\_  
Telephone: ( ) \_\_\_\_\_

**DISEASE HISTORY**

11. Onset Date: / /

12. Duration of symptoms (In days): \_\_\_\_\_

13. Date of first positive stool specimen: / /

14. Symptoms	Yes	No	Unknown
Acute diarrhea (<8 days)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Chronic diarrhea (>7 days)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Blood in stool	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pale, fatty stools	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Abdominal cramps	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bloating	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Gas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fever (highest temp _____°)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fatigue	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Weight loss ( _____ #)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Other \_\_\_\_\_

15. Was physician consulted by this case?  Yes  No  
If Yes,  
Physician Name: \_\_\_\_\_  
Physician Telephone: ( ) \_\_\_\_\_

16. Was this case hospitalized?  Yes  No  
If Yes,  
Hospital name: \_\_\_\_\_  
Date of admission: / /

17. Did the case die?  Yes  No  
If Yes,  
Date of death: / /

18. Was treatment given?  Yes  No  
If Yes,  
Name of drugs \_\_\_\_\_

**EPIDEMIOLOGY**

19. For Amebiasis Only: Was serological test performed to detect extraintestinal involvement?  Yes  No  
If yes, result: \_\_\_\_\_ If positive, which organ was affected? \_\_\_\_\_

20. For Cryptosporidium Only: Is case known to be HIV positive?  Yes  No  
If yes, send copy of this report to HIV Epidemiology Program.

21. What is sexual preference of case?  Female  Male  Both  Not applicable

22. Is this case an immigrant from another country?  Yes  No  Unknown  
If Yes,  
Country of origin: \_\_\_\_\_  
Month/Year of immigration: / /

23. Has the case had contact with any other confirmed cases of this disease?  Yes  No  Unknown  
If yes, fill out Contact Worksheet, H-1851.

Name:

District:

IN THE SIX MONTHS PRIOR TO DISEASE ONSET, DID THE CASE

Yes No Unknown

24. Travel to another country? If yes, What country? Dates of Travel: / / To / /

25. Consume untreated surface water? If yes, Where and what type of water? Date: / /

26. Work or reside in an institution for the developmentally disabled? If yes, Institution: Telephone: ( )

27. Attend a day care center, preschool or babysitting group? If yes, Name: Telephone: ( )

28. Receive colonic irrigation (enemas)? If yes, Where performed? Telephone: ( ) Date: / /

29. Participate in camping, hiking, swimming, or fishing? If yes, Specify place: Last date: / /

30. Consume unpasteurized milk or milk product? If yes, Type of product, brand and place of purchase

31. Experience plumbing problems in the home? Explain

32. Have contact with any animals? Explain

EPIDEMIOLOGIC DATA

Remarks: Use Progress Note for routine remarks. This space is only to expand on the questions above.

Suspected source (If known):

Date Opened / / Date Closed / / Investigator's Signature:

Investigator's Name and Title: (Please Print) Telephone: ( )

DHO's Signature: Date:

ACDC Reviewer: Report? Yes No