

CAMPYLOBACTERIOSIS FACT SHEET

Agent: *Campylobacter jejuni*, and less commonly, *Campylobacter coli*.

Brief Description: Campylobacteriosis is an enteric disease caused by bacteria of the genus *Campylobacter*. Typical symptoms include diarrhea, abdominal cramps, malaise, fever, nausea, and vomiting, but asymptomatic infections occur. Stool may contain blood and white cells. The illness generally lasts 2-5 days. Prolonged illness may occur in adults, and relapse is possible. In the immunocompromised, *Campylobacter* may spread to the bloodstream and cause a serious life-threatening infection. Reactive arthritis, febrile seizures, and Guillain-Barré² Syndrome are uncommon complications of *Campylobacter* infections.

Reservoir: Animals, most frequently poultry and cattle. Most raw poultry is contaminated with *C. jejuni*. Puppies, kittens, other pets, swine, sheep, rodents, and birds may also be sources of human infection.

Mode of Transmission: By ingestion of the organism in under-cooked chicken and pork, contaminated food and water, or raw milk. Contact with infected pets (especially puppies and kittens), farm animals or infected infants may also be a source of transmission.

Incubation Period: Usually 2-5 days, but ranges from 1-10 days.

Lab Criteria for Diagnosis:

- Isolation of *Campylobacter* from any clinical specimen.

Diagnostic Testing:

A. Culture Referral

1. Specimen Needed: Pure culture.
2. Outfit: Cary-Blair medium^a, available from testing laboratory.
3. Form: 3410.
4. Lab Test Performed: *Campylobacter* identification.

5. Lab Performing Test: Bacteriology Laboratory,^b Georgia Public Health Laboratory (GPHL), in Decatur.

B. Culture

1. Specimen Needed: Feces.
2. Outfit: Stool culture; Para-Pak C&S.
3. Form: 3416.
4. Lab Test Performed: *Campylobacter* culture.
5. Lab Performing Test: Bacteriology Laboratory, GPHL in Decatur.

C. Culture in Outbreak Situations

1. Specimen: At least one serving portion of suspected food, if available. Immediately obtain and refrigerate food specimens. If frozen, keep frozen. If not frozen, ship with freezer packs. Broad testing of all foods served is discouraged. Coordinate with the Epidemiology Branch regarding which food(s) should be tested.
2. Outfit: Sterile plastic bags, label and instructions.
3. Form: 3450
4. Lab Test Performed: *Campylobacter* culture
5. Lab Performing Test: Bacteriology Laboratory, GPHL in Decatur.

Case Classification:

- **Probable:** a clinically compatible case that is epidemiologically linked to a confirmed case.
- **Confirmed:** a case that is laboratory confirmed.

Period of Communicability: Throughout the course of infection. Usually from several days to weeks. An untreated person may excrete *Campylobacter* spp. for up to seven weeks.

Treatment: Usually none indicated, except rehydration therapy for patients with diarrhea.

Antibiotics, such as erythromycin, tetracyclines, or quinolones, can be used early in the illness when *Campylobacter* has been identified or to eliminate the carrier state.

Outbreak Investigation: Outbreaks should be investigated to determine the possible source of infection and prevent additional illness. The questionnaire should place emphasis on food (especially poultry, raw foods and milk), non-chlorinated water, exposure to pets, food-handling procedures, the possibility of cross-contamination, cooking times and temperatures, and food handler health and hygiene. The District or local Environmentalist should collect appropriate samples of food and forward epidemiologically suspect foods to the State Public Health Laboratory in coordination with the Epidemiology Branch (404-657-2588). Infected persons should be excluded from food handling and the care of children or patients until symptoms resolve. Stress proper handwashing with soap and water. Complete the “Investigation of a Foodborne Outbreak” form and send a copy to Epidemiology Branch as soon as the investigation is complete.

Reporting: Report all cases **WITHIN 7 DAYS** electronically through the State Electronic Notifiable Disease Surveillance System (SENDSS) at <http://sendss.state.ga.us>, or complete and mail a GA Notifiable Disease Report Form (#3095). Report any cluster of cases **IMMEDIATELY** by phone to the local health department, District Health Office, or the Epidemiology Branch at 404-657-2588. If calling after regular business hours, it is very important to report cases to the Epidemiology Branch answering service. If applicable, complete CDC form 52.13, “Investigation of A Foodborne Outbreak,” and fax to the Epidemiology Branch at 404-657-7517 as soon as possible.

Reported Cases of Campylobacteriosis in Georgia, 1993-1999

Year	Number of Cases
1996	793
1997	766
1998	769
1999	729

References and Further Reading:

1. Centers for Disease Control and Prevention. Outbreak of *Campylobacter* Enteritis Associated with Cross-Contamination of Food — Oklahoma, 1996. *MMWR* 1998; 47(07): 129-131.
2. Chin J, ed. *Campylobacter* Enteritis. In: Control of Communicable Diseases Manual. 17th ed. Washington, DC: American Public Health Association, 2000: 9-81.
3. Centers for Disease Control and Prevention. Case Definitions for Infectious Conditions under Public Health Surveillance. *MMWR* 1997; 46(RR10): 1-55.
4. U.S. Food & Drug Administration, Center for Food Safety & Applied Nutrition. *Campylobacter jejuni*. In: Foodborne Pathogenic Microorganisms and Natural Toxins Handbook.

Links:

- CDC *Campylobacter* Fact Sheet – http://www.cdc.gov/ncidod/dbmd/diseaseinfo/campylobacter_g.htm
- FDA Bad Bug Book – <http://vm.cfsan.fda.gov/~mow/chap4.html>