



Campylobacteriosis (*Campylobacter* species) Infection

The Michigan Department of Health and Human Services (MDHHS) has adopted the 2015 CDC national case definition for *Campylobacter* infection, or campylobacteriosis, to facilitate case ascertainment across jurisdictions. This definition takes into account not only traditional culture-based tests but also culture independent diagnostic tests (CIDTs) for detecting *Campylobacter* in stool specimens. CIDTs are used by an increasing number of clinical laboratories. According to the CDC, available data about the performance characteristics of these CIDTs indicate there is variability in the sensitivity, specificity, and positive predictive value depending on the test and manufacturer. Therefore, it is useful to collect information on the test type and manufacturer of the CIDT that is used to diagnose a case. Culture confirmation of positive CIDT specimens is recommended, especially for outbreak-related cases.

Positive *Campylobacter* results from culture-based or culture-independent tests should be reported to your local health department through the Michigan Disease Surveillance System. For surveillance purposes, MDHHS is recommending that local health departments classify any positive results from *Campylobacter* CIDTs as 'probable' cases and proceed with case follow-up.

Note: Positive results from CIDTs were previously reported as 'suspect' cases based on the 2012 case definition. Due to changes to the case definition in 2015, CIDT-positive cases should now be classified as probable.

2015 Case Definition

Clinical Description: An illness of variable severity commonly manifested by diarrhea, abdominal pain, nausea and sometimes vomiting. The organism may also rarely cause extra-intestinal infections such as bacteremia, meningitis or other focal infections.

Confirmed Case: Isolation of *Campylobacter* spp. in any clinical specimen.

Probable Case: Detection of *Campylobacter* spp. in a clinical specimen using a culture independent diagnostic test (CIDT).

Epidemiologic Linkage:

Probable: A clinically compatible case that is epidemiologically linked to a case that meets the probable or confirmed laboratory criteria for diagnosis.

Lab Reports in MDSS

- Occasionally the lab test name does not match the test result. For example, a stool culture test will have a *Campylobacter* antigen result. Please interpret these with caution and review additional information, if available, in order to determine the correct case definition (confirmed or probable).

Results

Reported Test Name : Campylobacter jejuni+Campylobacter coli Ag in Stool/Stool Culture

Coded Result :

Campylobacter Antigen

Numeric Result :

- Extra-intestinal specimens, such as wound or blood, that test positive for *Campylobacter* are considered cases. Routine case investigation should include collection of epi-history and patient education.





Interview Tips

When interviewing cases please ask about common sources of *Campylobacter* infection. Common sources include, but are not limited to the following:

- Consumption of raw or undercooked meat or poultry
- Consumption of raw or unpasteurized milk or dairy products (ask about cow-share programs)
- Untreated surface water or recreational water (ask about water source and any exposures to lakes or rivers)
- International travel
- Contact with pets, livestock, or other animals (ask about exposures to petting zoos, farms, fairs, or other venues)
- Contact with diapered children with diarrhea (ask about daycare attendance or employment)

Epi-Linked Cases

- During an outbreak investigation, create a new case in MDSS for ill contacts who are epi-linked to a probable or confirmed case. Epi-linked cases without any supporting laboratory results should be classified as ‘probable.’
- For sporadic cases, local health departments are encouraged to create a new case for each epi-link from a single household setting. Minimally, all ill contacts should be included in the original case’s detailed form (under contact information, as shown below). If additional space is needed, information can be entered in the comments section at the end of the form.

| Contact Information | | | | |
|---|--|-----------------|---|----------------------------|
| Number of OTHER persons in the household who are ILL 3 | | | Total number of persons in the household (including ill) 5 | |
| <i>List all contacts with concurrent or similar illness (list additional information in comments section). When a household has one or more secondary cases, please ensure that the food history for the primary case is as detailed as possible.</i> | | | | |
| Name of Contact | Date of Onset (mm/dd/yyyy) | Address & Phone | Relation | Describe HIGH RISK factors |
| () | () | () | () | () |
| Jane Doe | 10/30/2015  | same as case | Mom | |
| Janine Doe | 10/31/2015  | same as case | Sister | |
| Joe Doe | 11/03/2015  | same as case | Brother | goes to daycare |
| |  | | | |