Campylobacteriosis

PROTOCOL CHECKLIST

- Enter available information into Merlin upon receipt of initial report
- Review information on the disease and its epidemiology (see page 2), case definition (see page 4), and laboratory testing (see page 5)
- Prioritize reported cases for follow up, and investigate and interview as appropriate (see page 7)
  - Contact provider if necessary to gather more information
  - Interview patient
    - Review disease facts (see page 2)
      - Modes of transmission
      - Incubation period
      - Symptoms
    - Ask about exposure to relevant risk factors (see page 7)
      - Travel
      - Consumption of raw or undercooked meat or poultry
      - Consumption of raw or unpasteurized milk or dairy products
      - Restaurant meals
      - Food at public gatherings
      - Source of drinking water
      - Recreational water exposure
      - Contact with pets, livestock, or other animals
      - Contact with diapered children with diarrhea
      - Occupational exposure
    - Identify symptomatic contacts
    - Determine whether this patient is part of an outbreak
    - Determine if an infected patient or symptomatic contact is in a sensitive situation (see page 9)
      - Recommend exclusions for patients or symptomatic contacts
    - Provide education on controlling further spread for symptomatic patients (see page 8)
      - Practice proper hand hygiene
      - People with diarrhea should not prepare food for others
      - People with diarrhea should not use recreational water venues
    - Address patient's questions or concerns
- Follow-up on special situations, including outbreaks or patients in relevant sensitive situations (see page 9)
- Enter additional data obtained from interview into Merlin (see page 8)
1. DISEASE REPORTING

A. Purpose of reporting and surveillance
   1. To detect people with campylobacteriosis in such a way that public health, medical, or behavioral action can prevent spread from the reported patient.
   2. To detect outbreaks of illnesses due to this agent, early enough to make a difference to the course of the outbreak.
   3. To allow a better understanding of the descriptive epidemiology of cases, in order to focus primary case prevention efforts, and formulate better prevention strategies.
   4. To detect outbreaks of illnesses due to these agents, in order to better understand the events that lead to outbreaks and thus be able to focus outbreak prevention efforts (for possible future outbreaks). Note that there are numerous other ways that outbreaks are commonly detected, and case follow-up is not the most common.

B. Legal reporting requirements
   Laboratories and physicians are required to report persons infected with Campylobacter to the county health department (CHD) within one working day of identification/diagnosis.

C. County health department investigation responsibilities
   1. Prioritize reported cases for follow-up (see Section 5 for more information):
      a. Group 1: cases in people where information available at the time of the initial case-report indicates they are part of an outbreak or are in a sensitive situation. Sensitive situations for enteric diseases generally include attendees or employees of a daycare/childcare setting, food handlers, or employees in a healthcare setting with direct patient care. Person-to-person transmission of campylobacteriosis in childcare or school settings is very uncommon, so additional follow-up for people in daycare/childcare settings will rarely be necessary.
      b. Group 2: cases in people whose case-report is received while they are likely to still be symptomatic and infectious. See Section 5B, item 2b for more information on determining whether a person is likely to still be symptomatic.
      c. Group 3: all other reported cases.
   2. Follow up with prioritized cases and administer appropriate measures to control further spread, as appropriate. See Section 6 for recommendations on controlling further spread.
   3. Report all confirmed and probable cases in Merlin.
   4. Review reported cases by street address, reporting source, race, ethnicity, age group, onset or report date, etc. to detect possible clusters of infected individuals.

Note: The use of culture independent methods as standalone tests for the direct detection of Campylobacter in stool appears to be increasing. Culture confirmation of culture-independent (e.g., EIA) test positive specimens is ideal, but people who have only a positive EIA or other similar test, without a culture
result (suspected cases), should be managed the same way as culture-positive people.

2. THE DISEASE AND ITS EPIDEMIOLOGY

A. Etiologic agent

*Campylobacter* are gram-negative bacteria. Although several species of *Campylobacter* can cause human illness, *C. jejuni* is the most common cause of gastroenteritis. Infections are rarely reported due to *C. coli*, *C. larii*, *C. fetus*, and *C. upsaliensis*. The species associated with peptic ulcer, formerly *C. pylori*, has been reclassified into the genus *Helicobacter*.

B. Description of illness

*C. jejuni* can cause a spectrum of disease ranging from mild, uncomplicated gastroenteritis to severe disease similar to ulcerative colitis. Most people with campylobacteriosis report diarrhea, cramping, abdominal pain, and fever. The diarrhea may be bloody and can be accompanied by nausea and vomiting. The illness typically lasts one week. Some infected persons do not have any symptoms. In persons with compromised immune systems, *Campylobacter* occasionally spreads to the bloodstream and causes a serious life-threatening infection.

C. Reservoirs

*Campylobacter* organisms are found in the gastrointestinal tract of domestic and wild animals and birds; notably cattle, poultry, and dogs. *C. jejuni* grows best at the body temperature of a bird, and seems to be well adapted to birds, which can carry it without becoming ill. These bacteria are fragile. They cannot tolerate drying and can be killed by oxygen. They grow only in places with less oxygen than the amount in the atmosphere. Freezing reduces the number of *Campylobacter* bacteria on raw meat.

D. Modes of transmission

People become ill by eating the organism. Most transmission is probably foodborne, reflecting inadequate cooking or mishandling of contaminated food. Commonly recognized vehicles or mechanisms include:

1. Handling or eating undercooked/raw poultry or meat.
2. Unpasteurized (raw) milk or dairy products.
3. Contaminated and inadequately treated drinking water.
4. Contact with animals, especially young animals with diarrhea.
5. Contact with poultry.

Direct person-to-person spread is rare.

Campylobacteriosis usually occurs in single, apparently sporadic cases, but can also occur in outbreaks. Most cases of campylobacteriosis are associated with eating raw or undercooked poultry meat or result from cross-contamination of other foods by these items. Infants may get the infection through contact with poultry packages in shopping carts or by sitting in shopping carts where meat was previously carried. Outbreaks of *Campylobacter* are usually associated with unpasteurized milk or contaminated water. Animals can also be infected, and some people have acquired...
the infection from contact with the stool of an ill dog or cat. The organism is not usually spread person-to-person, but can happen if the infected person is producing a large volume of diarrhea. Outbreaks in childcare settings are very rare.

Many chicken flocks are infected with *Campylobacter* even though the birds show no signs of illness. *Campylobacter* can be easily spread from bird to bird through a common water source or through contact with infected feces. When an infected bird is slaughtered, *Campylobacter* organisms can be transferred from the intestines to the meat. In 2005, *Campylobacter* was present on 47% of raw chicken breasts tested through the FDA-NARMS Retail Food program. *Campylobacter* is also present in the giblets, especially the liver.

Unpasteurized milk can become contaminated if the cow has a *Campylobacter* infection in the udder or the milk is contaminated with manure. Surface water and mountain streams can become contaminated from infected feces from cows or wild birds.

This infection is common in the developing world, and travelers to developing countries are thus at risk for becoming infected with *Campylobacter*.

Only very small number of *Campylobacter* organisms (fewer than 500) are needed to cause illness in humans. Even one drop of juice from raw chicken meat can infect a person. One way to become infected is to cut poultry meat on a cutting board, and then use the unwashed cutting board or an unwashed utensil to prepare vegetables or other raw or lightly cooked foods. The *Campylobacter* organisms from the raw meat can thus spread to the other foods.

**E. Incubation period**

1-10 days; usually 2–5 days.

**F. Period of communicability**

The organism is shed in the feces for a few days to a few weeks, but direct person-to-person transmission is surprisingly uncommon (with the possible exception of contact with infected infants and incontinent adults). A chronic carrier state is unlikely. Most patients treated with antibiotics stop shedding after 72 hours of treatment.

**G. Treatment**

Fluid and electrolyte replacement (oral or IV) is the mainstay of treatment for persons with campylobacteriosis. Erythromycin or azithromycin can shorten the duration of illness when given early in the infection. Treatment is primarily indicated for persons experiencing high fever, bloody diarrhea, or more than eight stools per day, or for those whose symptoms are prolonged or worsening at the time of diagnosis. Antimicrobials do not prolong the period of shedding as they do with salmonellosis.

**H. Prophylaxis**

None indicated.

**I. Campylobacteriosis in Florida**
DOH receives approximately 900 to 1,150 reports of campylobacteriosis per year. This is only a very small fraction of all infections that occur. The number of cases reported tends to increase in the summer months. Incidence is highest in children less than five years old. Less than 10% of cases are reported as outbreak-associated, and the majority of these were groups of two to four family members who all became ill.

3. CASE DEFINITION

A. Clinical description
   A diarrheal illness of variable severity.

B. Laboratory criteria for diagnosis
   **Confirmed:** isolation of *Campylobacter* spp in a clinical specimen.
   **Suspect:** detection of *Campylobacter* spp in a clinical specimen using non-culture based laboratory methods.

C. Case classification
   **Confirmed:** a case that meets the confirmed laboratory criteria for diagnosis.
   **Probable:** a clinically compatible case that is epidemiologically linked to a confirmed case of campylobacteriosis.
   **Suspect:** a case that meets the suspect laboratory criteria for diagnosis.

D. Comment
   The use of non-culture methods as stand-alone tests for the direct detection of *Campylobacter* in stool appears to be increasing. There is limited data available about the performance characteristics of these assays. Non-culture test positive specimens should be culture confirmed if possible.

   Note that neither the confirmed nor the suspected surveillance case definitions require clinical symptoms.

4. LABORATORY TESTING

A. Criteria for diagnosis
   The diagnosis of campylobacteriosis is most commonly made by isolation of *Campylobacter* from stool. *Campylobacter* can also be cultured from other sites such as blood, wound exudates or abscesses.

   Isolating the organism from stool requires special techniques that may not be routinely performed in some laboratories. The use of non-culture methods as stand-alone tests for the direct detection of *Campylobacter* in stool appears to be increasing.
B. Services available at the Bureau of Public Health Laboratories (BPHL)
   1. BPHL routinely screens stool specimens by culture for *C. jejuni* and *C. coli*, as well as provides pure isolate confirmation and speciation of *Campylobacter* species.
   2. Culturing food items is generally non-productive in sporadic cases; however, implicated food items may be cultured by BPHL during outbreak investigations. Please consult BPHL and your Regional Environmental Epidemiologist to discuss culturing food items.
   3. Serogroup and serotype testing is not available at BPHL for *Campylobacter*.

C. Testing requests
   1. Specimens/isolates should be forwarded to BPHL to assist in public health decision making, to determine the etiology of outbreaks, and for epidemiologic studies.

   Note: Rule 64D-3 does NOT require *Campylobacter* isolates be forwarded to BPHL routinely for confirmation.

   2. Submitting specimens/isolates to BPHL
      a. All submissions should be accompanied by Clinical Lab Submission Form 1847 (http://www.doh.state.fl.us/lab/addpages/BOL_Forms.html).
      b. Electronic Laboratory Ordering (ELO) may also be used by entering request into the HMS State Laboratory System, placing bar coded label on the Cary-Blair vial, and writing the date collected on the vial.

   3. Specimen collection
      a. A small portion (acorn size) of formed stool or equal portion of liquid stool should be transferred aseptically to a modified Cary-Blair transport vial that is properly labeled (name, date of birth, date collected).

      Note: for stool specimens, simply mark test 1900 on the Clinical Lab Submission Form 1847 and all enteric pathogens are automatically screened (*Salmonella*, *Shigella*, *Campylobacter*, *E. coli* O157).

      b. For isolate submission, subculture a pure single colony of the suspect *Campylobacter* species on a general purpose bacterial slant (TSA slant, chocolate slant, etc.), properly label (name, date of birth, date collected), and incubate the suspect slant for 18-24 hours at 35-37°C before shipping to the laboratory to ensure viable growth.

      Note: please write “suspect *Campylobacter* for confirmation and speciation” in the comment section of the Clinical Lab Submission Form 1847.

   4. Packaging and shipping
      a. Specimens and isolates for *Campylobacter* testing should be sent to the Jacksonville BPHL laboratory.
      b. Place labeled vial in the proper inner/outer container (aluminum screw-cap inner container with spill absorber holds the primary vial and that is then placed in an outer cardboard screw-cap container). Please place the Clinical Lab Submission Form 1847 in a plastic Ziploc bag between the inner and outer container. Package according to International Air Transport Association
(IATA) regulations, labeling the outer shipping container: UN3373, Biological Substance Category B.
c. Specimens and isolates should be sent at ambient temperature or cooler, but cool packs should not be in direct contact with vials.
d. [http://www.doh.state.fl.us/lab/PDF_Files/Packaging_Flowchart_0422051.pdf](http://www.doh.state.fl.us/lab/PDF_Files/Packaging_Flowchart_0422051.pdf)
e. [http://www.doh.state.fl.us/lab/PDF_Files/Packaging_Flowchart_notes_0422051.pdf](http://www.doh.state.fl.us/lab/PDF_Files/Packaging_Flowchart_notes_0422051.pdf)
5. Contact the regional laboratory with questions: [http://www.doh.state.fl.us/lab/addpages/BOL_Contacts.html](http://www.doh.state.fl.us/lab/addpages/BOL_Contacts.html).

## 5. CASE INVESTIGATION

All people with a positive Campylobacter result, regardless of laboratory method, should be investigated and managed as follows.

### A. Prioritize case reports for further investigation and interview based on INITIAL case report:

1. Rationale for prioritization
   a. People with these enteric infections are most infectious to others while they are symptomatic.
   b. Most transmission occurs early as gastrointestinal illnesses, before the nature of the illness is recognized, not from people who are convalescing and no longer have diarrhea. This highlights the importance of excluding people who have diarrhea of any cause from being present in sensitive situations.
   c. Educating an infected person about how they likely got infected and how they can avoid getting infected again in future is not a high-priority public health activity.
   d. Our public health goal should be to intervene with people who are still symptomatic from the infection. If a person with a reported case is already free of diarrhea by the time CHD staff contact him/her, there is little value in doing an interview or an educational intervention.

2. Prioritization groups and actions
   a. Group 1: the report appears (before any interviewing is done) to be for a person in a sensitive situation (i.e., a food handler or an employee in a healthcare setting with direct patient care are the most important sensitive situations for campylobacteriosis), to be part of an outbreak (regardless of how long it has been since event date), or to be part of a laboratory-defined cluster.

Note: CHD staff can detect some outbreaks and sensitive situations before they contact individual reported patients. For example, some case reports will include the information that the person is in a sensitive situation and the person reporting a case (e.g. physician or infection preventionist) should be asked for this information both routinely and as individual case reports are taken. CHD staff should review the reported cases of each disease (by apparent ethnicity, street address, report source, race, onset or report date, age group, etc.) in order to detect apparent clusters, which would put the reported cases that are part of that cluster in Group 1. Some people will self-report that they are part of outbreaks, and some outbreaks will be reported to or come to a CHD’s attention in other ways.
Action: locate and interview case (see 5B below). Take needed follow-up action. If the case is part of a laboratory cluster, follow laboratory cluster protocol [INSERT LINK]. Enter all available information in Merlin and report the case.

b. Group 2: cases in people whose case-report is received while they are likely to be symptomatic and infectious (see table and notes below).

The table below shows the number of days since earliest known date (event date) when interview attempts should be made. Use the column that corresponds to the earliest known date for each case. For example, if the earliest date you have for a case is onset on September 10, you would interview up to six days later, or September 16. If the earliest date you have for a case is from specimen collected on September 23, you would interview up to four days later, September 27. If the earliest date you have for a case is a laboratory report from September 18, you would only interview within one day.

<table>
<thead>
<tr>
<th>Usual duration of illness (in days)</th>
<th># of days from onset date</th>
<th># of days from diagnosis date</th>
<th># of days from specimen collection date</th>
<th># of days from lab report date</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>6</td>
<td>1</td>
<td>4</td>
<td>1</td>
</tr>
</tbody>
</table>

Action: locate and interview the case to determine whether the person may have put or be putting others at risk in a sensitive situation; is part of a recognized or unrecognized outbreak; and convey a brief, focused educational intervention about how to avoid infecting others. If the case turns out to be in a sensitive situation or part of an outbreak, take necessary follow-up action. See Section 6 for recommendations on controlling further spread and Section 7 for recommended exclusions for symptomatic cases in sensitive situations. Enter all available information in Merlin and report the case.

c. Group 3: all other reported cases.

Action: mail or e-mail information to case or guardian, if an address is available. An interview is not necessary. Enter all available information in Merlin and report the case.

B. Investigate and interview as necessary based on case report prioritization

1. The purpose of an investigation, interview, and/or counseling is to:
   a. Determine whether the person with the reported case may have put or be putting others at risk in a sensitive situation;
   b. Determine whether the person with the reported case is part of a recognized or unrecognized outbreak, as a trigger to further investigation; and
c. Convey a highly focused, brief educational intervention to a person who is still symptomatic (or their parent or guardian) about how to avoid infecting others.

2. Contact the case to complete an interview as soon as possible after being reported to optimize recall.
   a. If contact information for the patient is not received in the initial case report, contact the reporting physician or laboratory to obtain contact information.
   b. Make at least three phone call attempts to reach the case, if still within the prioritization time frame.
   c. Calls should be made at different times of the day, with at least one attempt in the evening.

3. Currently, there is no standard Campylobacteriosis Case Report Form or Extended Data screen in Merlin.

4. Items to cover during interview include:
   a. Provide brief background on disease, including possible modes of transmission, incubation period, symptoms, etc.
   b. Activities during exposure period (five days before onset):
      i. Travel outside Florida or the United States. Determine dates of travel.
      ii. Handling or consumption of raw or undercooked poultry or meat.
      iii. Consumption of raw milk or other unpasteurized dairy products.
      iv. Restaurant meals. Obtain the name of the restaurant(s), date(s), and location(s) of the meal(s) and food items consumed.
      v. Public gathering where food was consumed (e.g., birthday parties, picnics, etc.). Obtain the date, location, and sponsor of the event and food items consumed.
      vi. Source(s) of drinking water as well as water from streams or lakes.
      vii. Recreational water exposure. This includes swimming, playing, or other exposure to lakes, streams, swimming pools, water parks or wading pools where water may have been swallowed.
      viii. Contact with pets, livestock, or other animals (including farms and petting zoos).
      ix. Contact with diapered children with diarrhea, or children in childcare or other setting for preschool children.
      x. Occupational exposures. Evaluate the potential for exposure to human or animal excreta.
      xii. Note: If the patient reports no gastrointestinal symptoms, the patient seems to be an instance of secondary transmission, or the infection was acquired outside of the U.S., there is no need to collect exposure information for the exposure period.
   c. Determine if others (e.g., family, friends, co-workers, customers, patients, etc.) are known or thought to be ill with similar symptoms. If so, inquire about possible common source exposures. Obtain the name, phone number or address and clinical information of the other ill people. Anyone meeting the probable case definition should be reported and investigated in the same manner as a confirmed case.
   d. Determine if the case or any of their symptomatic household or other close contacts are associated with sensitive situations. Sensitive situations for enteric diseases generally include attendees or employees of a daycare/childcare setting, food handlers, or employees in a healthcare setting with direct patient care. Person-to-person transmission of campylobacteriosis in childcare or school settings is very uncommon, so additional follow-up for people in daycare/childcare settings will rarely be necessary. Determine the...
dates and times he/she worked to determine the risk of transmission to others. See Section 7 for recommended exclusions for symptomatic cases or contacts in sensitive situations.

e. Provide basic instruction to cases and potentially exposed contacts about hand washing after defecation, diaper changing, and before food preparation; about the importance of proper food handling and adequate cooking for meat; and, in general, provide pointers about minimizing fecal contamination in daily life. See Section 6 for recommendations on controlling further spread.

C. Environmental evaluation

During routine case investigations of campylobacteriosis, if a particular food or water exposure is suspected as the likely source of infection, then the CHD investigator should complete the Tri-Agency Foodborne Illness Survey/Complaint Form (http://www.foodandwaterdisease.com/forms/Tri-Agenty_Foodborne_Illness_Form_Electronic_2-16-2011.pdf). The CHD investigator should record that complaint in their complaint log, and forward it to the appropriate agency with jurisdiction.

For each interviewed sporadic case of campylobacteriosis with an environmental exposure that could affect many people (e.g., a restaurant, water park, or high-risk commercially distributed food item), review complaint logs and recent campylobacteriosis cases in Merlin for additional cases that may be linked to the same facility or exposure source. When a community outbreak of campylobacteriosis is identified, most or all cases will be in the high-priority Group 1 and be a high priority for interview and investigation. A joint investigation/environmental assessment for single, sporadic cases of campylobacteriosis is not necessary. If additional cases are suspected or an outbreak is detected, the regional environmental epidemiologist should be notified and a joint investigation/environmental assessment will be conducted with the appropriate regulatory authority. Investigation guidelines and forms for when and how to perform a joint investigation/environmental assessment are available on the Food and Waterborne Disease Program’s Investigation Tools webpage (http://www.foodandwaterdisease.com/investigation_information.htm). Technical assistance is also available from your Regional Environmental Epidemiologist, if needed (http://www.foodandwaterdisease.com/contact_docs/RegionalEpidemiologist_ContactsList.pdf).

D. Merlin data entry

Create a case in Merlin under disease code CAMPYLOBACTERIOSIS - 03840. Enter the data collected into Merlin, being sure to include all required fields on the Basic Data screen, complete the Case Symptoms screen, and attach all relevant labs. Please attach ALL labs received via electronic laboratory reporting (ELR) to the case.

6. CONTROLLING FURTHER SPREAD

A. Patient/household education on prevention recommendations
1. Case reports prioritized for investigation (i.e., part of an outbreak, in a sensitive situation, or still likely to be symptomatic) should be educated on preventing transmitting infection to others.
   a. Wash hands after using the toilet, changing diapers, handling soiled clothing or linens.
   b. People with diarrhea should not prepare food for others.
   c. People with diarrhea should not use recreational water venues (e.g., pools, lakes, interactive fountains, water parks) until two weeks after symptoms are resolved.

2. General information on preventing disease may also be covered.
   a. Wash hands after handling pets, pet waste, pet food and treats made from animal products, fowl, other animals, raw meat, or raw poultry, and always before food preparation.
   b. Avoid eating raw or undercooked meat, especially poultry.
   c. Avoid cross-contamination of ready to eat foods with raw foods of animal origin via cooking surfaces and utensils. Wash food preparation surfaces and utensils thoroughly after contact with raw meat or poultry, especially before handling and preparing food that will be served raw.
   d. Avoid unpasteurized milk and other unpasteurized products including soft cheeses, juices, and cider.
   e. Avoid drinking or swallowing untreated surface water. Untreated water should be boiled or otherwise disinfected before consumption.

B. Isolation of cases
   People with diarrhea (regardless of diagnosis, if any) should stay home from daycare, school, or work until they are asymptomatic for 24 hours. Follow-up or release from isolation based on stool culture results is not required. See Section 7 for recommended exclusions for symptomatic cases in sensitive situations.

C. Management of contacts
   1. Symptomatic contacts: symptomatic contacts should be investigated and managed in the same manner as a person with a confirmed case. Symptomatic contacts of confirmed cases meet the probable case definition and should be reported in Merlin. See Section 7 for recommended exclusions for symptomatic contacts in sensitive.
   2. Asymptomatic contacts: contacts who are symptom-free may be permitted to continue in their sensitive situation.

D. Laboratory testing during outbreaks
   1. Laboratory testing should be performed to assist in public health decision making and for epidemiologic studies.
   2. Symptomatic contacts may be asked to submit stool specimens to establish the etiology of the outbreak.
   3. Once the etiologic agent for the outbreak has been identified (4-6 specimens) further testing is usually not required for public health purposes.

E. Food or water is implicated as the source of an outbreak
   Contact your Regional Environmental Epidemiologist for investigation assistance and guidance (http://www.foodandwaterdisease.com/contact_docs/RegionalEpidemiologist_ContactsList.pdf).
7. MANAGING SENSITIVE SITUATIONS

A. Determining a sensitive situation

Sensitive situation is not defined in Rule 64D-3 in relation to any particular disease. The examples provided in Rule 64D-3 are all related to enteric infections, but we should not assume that all sensitive situations are equal for all diseases, especially given the markedly different age distributions, and presumed different risk of transmission by age.

Section 64-D3-3.037(3) specifically gives CHD directors the authority to decide what is a sensitive situation, and provides broad authority to take necessary action to control disease.

For example, a CHD director may use his/her discretion to designate an elementary school, or the lower grades of an elementary school, as a sensitive situation, but he/she is not required to do so. This decision should be based on evidence of transmission within a particular setting.

Person-to-person transmission of campylobacteriosis in childcare or school settings is very uncommon, so additional follow-up for people in daycare/childcare settings will rarely be necessary.

B. Case or symptomatic contact attends or works at a day care facility

1. Exclusion: before returning to a day care facility, patient should be asymptomatic for 24 hours. Follow-up or release from isolation based on stool culture results is not required.

2. Outbreak: defined as ≥2 cases of gastrointestinal illness with similar symptoms occurring within 72 hours among children or staff who do not live in the same household; if the etiologic agent is known, an outbreak is defined as two or more cases occurring within the incubation period for the disease.

   a. If an outbreak is identified, do a sanitary inspection and consult the Guidelines for Control of Outbreaks of Enteric Disease in Child Care Settings (http://www.doh.state.fl.us/Disease_ctrl/epi/surv/enteric.pdf).

   b. Phase 1: Campylobacteriosis outbreak suspected or confirmed; phase 1 continues for two incubation periods after control measures have been put into place.

      i. Exclusion: all persons with diarrhea, vomiting, or other gastrointestinal symptoms should be excluded until asymptomatic for 24 hours.

      ii. Children who develop symptoms while at the day care should be isolated from other children until the parent or guardian removes the child from the facility.

      iii. Personal control measures: require all persons (including, but not limited to: children, parents, siblings, staff, visitors, and service personnel) to wash hands upon entering the facility, after using the bathroom, after assisting with toileting or diaper changes, after playing outside, and before and after handling food or eating. Adults will supervise children’s hand washing, infants’ hands will be washed after diaper changes and staff involved in food preparation should not change diapers.
iv. Environmental control measures
- Ensure that hand toys are limited to single child use between cleaning and sanitizing
- Ensure that food is served in individual portions
- Prohibit use of swimming pools
- Prohibit playing with dough or clay
- Regularly clean tables and other contact surfaces during the day using an appropriate germicide
- Clean and sanitize potty chairs after each use
- Clean frequently during the day and sanitize at least once a day

C. Case or symptomatic contact is a food handler
1. Exclusion: before returning to food handling, patient must be asymptomatic.
2. Contact your Regional Environmental Epidemiologist
   (http://www.doh.state.fl.us/environment/medicine/foodsurveillance/about_us.htm)

D. Case or symptomatic contact works at a healthcare or residential care facility
   Exclusion: before returning to a healthcare or residential care facility, patient must be asymptomatic.

8. IMPORTANT LINKS

A. Additional Resources:
   http://www.doh.state.fl.us/Disease_ctrl/epi/htopics/popups/campy.htm

B. Tri-Agency Foodborne Illness Survey/Complaint Form
   (http://www.foodandwaterdisease.com/forms/Tri-Agency_Foodborne_Illness_Form_Electronic_2-16-2011.pdf)

C. Food and Waterborne Disease Program – Investigation Tools
   http://www.foodandwaterdisease.com/investigation_information.htm

D. Food and Waterborne Disease Program – Contact List
   http://www.foodandwaterdisease.com/contact_docs/RegionalEpidemiologist_ContactsList.pdf

E. APHA Media Advocacy Manual:
   http://www.apha.org/NR/rdonlyres/A5A9C4ED-1C0C-4D0C-A56C-C33DEC7F5A49/0/Media_Advocacy_Manual.pdf

9. REFERENCES
