

TIP SHEET for *Cyclospora* Case Investigations

- **Disease:** *Cyclospora* is a parasite that commonly causes gastrointestinal illness known as cyclosporiasis. Most people experience profuse, watery diarrhea; anorexia, nausea, vomiting, weight loss, and abdominal cramps can also occur. Infection is usually self-limited, but untreated people may have relapsing symptoms for weeks to months. Cases are not usually hospitalized. *Cyclospora* is endemic in many resource-limited countries and most MA cases diagnosed during non-summer months (September through April) often report international travel.
- **Transmission & Incubation Period:** Cyclosporiasis can be acquired by consuming fresh produce (both imported and domestic) that is contaminated with *Cyclospora* oocysts. Humans are the only known host of the parasite. Oocysts are passed through stool into the environment. If conditions are favorable, they can sporulate in days to weeks and become infectious. Because of this longer sporulation period, direct person-to-person spread is unlikely and transmission is primarily foodborne. Symptoms usually begin 1 week after exposure but can range from 2 days to 2 weeks.

<p style="text-align: center;">① Notification</p>	<ul style="list-style-type: none"> • LBOHs have primary responsibility to investigate cases of <i>Cyclospora</i> in their jurisdiction. • From May 1 to August 31, <i>Cyclospora</i> cases warrant immediate case investigation and will flow into your “LBOH Notification for Immediate Disease” workflow to ensure timely collection of the case’s food exposures prior to becoming ill. An MDPH epidemiologist will be assigned to ensure complete case follow up. • Outside of these months, cases warrant routine investigation. New events will flow into your “LBOH Notification for Routine Disease” workflow.
<p style="text-align: center;">② Get Prepared</p>	<ul style="list-style-type: none"> • Familiarize yourself with the disease: MDPH Fact Sheets, MDPH Guide to Surveillance • Review foodhandler exclusion criteria from 105 CMR 300 for cases and their household contacts. Implementing the Exclusion of Food Handlers with Reportable Conditions A food handler is defined as any person directly preparing or handling food; any person handling clean dishes or utensils; any person who dispenses medications by hand, assists in feeding, or provides mouth care. <ul style="list-style-type: none"> ▪ In healthcare: this includes those who set up trays for patients to eat, feed or assist patients in eating, give oral medications or give mouth/denture care. ▪ In child care programs, schools, and community residential programs: this includes those who prepare food for clients to eat, feed or assist clients in eating, or give oral medications. • Review demographic and laboratory information available in MAVEN for the case.
<p style="text-align: center;">③ Contact Ordering Provider</p>	<ul style="list-style-type: none"> • The name and facility of the ordering provider can be found in the lab tab in the case’s MAVEN event. If ordering provider is a hospital, reach out to the hospital Infection Preventionist. • During call with provider’s office: <ul style="list-style-type: none"> ○ Confirm case’s contact information, collect additional phone number(s) or email address ○ Obtain symptom onset date and clinical presentation ○ Collect information on any potential exposures identified during visit (e.g., travel) ○ Request case’s occupation and employer, if available ○ Ask if the case has been informed of their diagnosis • If the ordering provider cannot be reached in a timely manner, proceed to case interview.
<p style="text-align: center;">④ Contact Case</p>	<ul style="list-style-type: none"> • Introduce yourself, why you are calling, what you will use information for, and who has access to the information they provide. • Complete all questions in the Demographic and Clinical question packages. • Complete all questions in the Risk/Exposure question package for the 14 days prior to symptom onset.

<p style="text-align: center;">④</p> <p style="text-align: center;">Contact Case</p>	<ul style="list-style-type: none"> For cases reported between May 1 and August 31, an additional question package will be populated by the assigned MDPH epidemiologist labeled “CNHGQ [year] - Cyclospora Food History Questionnaire.” <ul style="list-style-type: none"> This question package collects food history information outlined in CDC’s Cyclospora National Hypothesis Generating Questionnaire (CNHGQ). If the case spent any part of their incubation period in the US, complete all questions in the CNHGQ question package for the days spent in the US. If the case was outside of the US for the full 14 days prior to illness onset, do not complete the CNHGQ question package. To improve the recall of activities or restaurants they may have dined at, encourage the case to look at their work and/or personal calendars, credit card or bank statements, and photos on their phone. If a case cannot recall what they ate, ask case to answer questions based on what they typically eat. 	
<p style="text-align: center;">⑤</p> <p style="text-align: center;">Prevent Further Transmission</p>	<p>Food handlers</p>	<ul style="list-style-type: none"> If individual meets the 105 CMR 300 definition of a food handler (see definition in “Get Prepared” above), they must be excluded from food handling duties until meeting clearance criteria: <ul style="list-style-type: none"> In non-outbreak circumstances: after diarrhea has resolved. Implementing the Exclusion of Food Handlers with Reportable Conditions
<p style="text-align: center;">⑥</p> <p style="text-align: center;">Notify DPH as Needed</p>	<ul style="list-style-type: none"> Suspected outbreaks are reportable to MDPH within 24 hours. If case investigation indicates that two or more people from different households became ill with similar symptoms after a common exposure, notify the Division of Epidemiology: (617) 983-6800. 	
<p style="text-align: center;">Other Notes</p>	<ul style="list-style-type: none"> It is recommended that three call attempts are made at different times of day to reach a case for interview. Consider texting or emailing a case requesting a call back if they are not responsive. Completion of all exposure questions in the MAVEN Risk and CNHGQ Question Packages is essential for detecting outbreaks and preventing further transmission. Many exposure questions for this disease will appear as child questions based upon specific answers in earlier questions. 	
<p style="text-align: center;">Additional Resources</p>	<ul style="list-style-type: none"> June 2022 webinar: <i>Cyclospora</i> and <i>Vibrio</i> Case Investigations Slides, Recording MDPH Division of Epidemiology: (617) 983-6800 	