

TIP SHEET for *Listeria* Case Investigations

- Disease:** Listeriosis is a relatively uncommon but often severe invasive infection caused by the bacterium *Listeria monocytogenes*. Symptoms vary depending on the part of the body affected and can generally include fever and flu-like symptoms like muscle aches and fatigue. Among individuals who are not pregnant, symptoms can also include confusion, loss of balance, stiff neck, headache, or seizures. Gastrointestinal illness symptoms are often not reported among individuals with listeriosis. Individuals are usually hospitalized for their illness. The mortality rate is 15-20%. Infections during pregnancy can result in spontaneous abortion, fetal death, preterm delivery, and neonatal illness or death.
- Transmission & Incubation Period:** Transmission of *Listeria* bacteria is primarily foodborne and commonly implicated food items include deli meats, unpasteurized milk, and soft cheeses. *Listeria* outbreaks have also implicated other sources including ice cream, mushrooms, and leafy greens. *Listeria* is not spread person to person. Disease occurs most frequently among pregnant people, their fetuses or newborn infants, adults aged 65 or older, and individuals with weakened immune systems due to underlying medical conditions (e.g., cancer, liver or kidney disease, diabetes). The incubation period is 1 to 14 days but can be 2-4 weeks longer for pregnancy-associated cases.

<p style="text-align: center;">①</p> <p>Notification</p>	<ul style="list-style-type: none"> LBOHs have primary responsibility to investigate cases of listeriosis in their jurisdiction. New cases will flow into your “LBOH Notification for Immediate Disease” workflow. An MDPH epidemiologist will be assigned to ensure complete case follow up.
<p style="text-align: center;">②</p> <p>Get Prepared</p>	<ul style="list-style-type: none"> Familiarize yourself with the disease: MDPH Fact Sheets, MDPH Guide to Surveillance Review demographic and laboratory information available in MAVEN for the case. Review the CDC Listeria Initiative Case Report Form (a fillable PDF document), attached to the MAVEN event by the assigned MDPH epidemiologist prior to conducting interview.
<p style="text-align: center;">③</p> <p>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. It is likely that the case is or has been hospitalized. Reach out to the hospital Infection Preventionist (IP) to obtain the following: <ul style="list-style-type: none"> Confirm case’s contact information, next of kin information, collect additional phone number(s) or email address. Obtain symptom onset date and clinical presentation. Determine case’s current status and if they are well enough to be interviewed.
<p style="text-align: center;">④</p> <p>Contact Case</p>	<p>Please note: If the case is still hospitalized, you could contact the nursing station where the case is currently, ask if the case is well enough to respond to questions, and if so, be transferred to their room to go through the questionnaire. If the case is not well enough to respond to questions, the next of kin or healthcare proxy should be interviewed.</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 the CDC Listeria Initiative Case Report Form (fillable PDF document) attached to the MAVEN event. <ul style="list-style-type: none"> 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. Whenever possible, obtain shopper card or loyalty program number(s) for grocery stores where a case consumed food from during their incubation period.

<p style="text-align: center;">⑤</p> <p>Notify DPH as Needed</p>	<ul style="list-style-type: none"> • Create a MAVEN foodborne illness complaint if the case reports any of the following during their incubation period: <ul style="list-style-type: none"> ○ Eating a food consistent with <i>Listeria</i> infection, especially high-risk foods like raw milk, deli-meats, soft cheeses, pre-cut melon/fruit, ice cream, with sufficient details available (name of establishment and location are required, product brand and type and date of purchase/consumption or best estimate should also be available).
<p>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 or their next of kin/healthcare proxy for interview. Given cases are often hospitalized, consider calling the nursing station and ask to be transferred to the case's room. You can also consider texting or emailing a case requesting a call back if they are not responsive. <ul style="list-style-type: none"> ○ If a case cannot be reached, attempts should be made to contact the next of kin or healthcare proxy. ○ Completion of all exposure questions in the CDC Listeria Initiative Case Report Form is essential for detecting outbreaks and preventing further transmission.
<p>Additional Resources</p>	<ul style="list-style-type: none"> • May 2022 webinar: Introduction to Enteric (Gastrointestinal Illness) Disease Case Investigations, Slides, Recording • MDPH Division of Epidemiology: (617) 983-6800