

COUNTY EXECUTIVE

GALE R. BURSTEIN, MD, MPH, FAAP COMMISSIONER OF HEALTH DEPARTMENT OF HEALTH

HEALTH ADVISORY # 318

July 24, 2014

MANAGEMENT OF PERSONS POSSIBLY EXPOSED TO *LISTERIA MONOCYTOGENES* ASSOCIATED WITH WAWONA PACKING COMPANY'S FRESH WHOLE PEACHES, PLUMS, NECTARINES, AND PLUOTS

Please distribute to Healthcare Providers, Infection Control Departments, Emergency Departments, Employee Health Services, Infectious Disease Departments, Pediatrics, Directors of Nursing, Medical Directors, and all patient care areas.

SUMMARY

- On July 19, 2014, Wawona Packing Company of Cutler, California voluntarily recalled certain lots of whole peaches (white and yellow), nectarines (white and yellow), plums and pluots packed between June 1, 2014 and July 12, 2014 due to the potential for contamination of the products with *Listeria monocytogenes*.
- To date, no illnesses have been linked to this recall.
- Providers should consider *L. monocytogenes* in the differential diagnosis of patients presenting with symptoms such as high fever, severe headache, stiffness, nausea, abdominal pain and diarrhea, particularly those patients with an exposure history of Wawona Packing Co.'s fresh whole peaches, plums, nectarines, and pluots.
- Routine screening or treatment of asymptomatic persons possibly exposed to recalled products is not recommended.
- For patients with illness suggestive of invasive listeriosis, testing should include blood culture and other tests, such as culture of cerebrospinal fluid, as indicated by the clinical presentation.
- Stool testing for *Listeria* has not been evaluated as a screening tool for listeriosis and, in general, is not recommended for the diagnosis of listeriosis.
- Suspect or confirmed cases should be reported promptly to the LHD where the patient lives. Erie County residents should be reported to Epidemiology and Surveillance at (716) 858-7697 during normal business hours and (716) 961-7898 after hours.

BACKGROUND

On July 19, 2014, Wawona Packing Company of Cutler, California voluntarily recalled certain lots of whole peaches (white and yellow), nectarines (white and yellow), plums and pluots packed between June 1, 2014 and July 12, 2014 due to the potential for contamination of the products with *L. monocytogenes*. The recall was initiated based on the results of internal company testing. Prior to the recall, products were shipped directly to retailers and wholesalers who resell the products. The company issued a nationwide recall because they do not know the locations of the companies that purchased the products from their direct customers. Several retailers, including ALDI, Costco, Kroger, Trader Joe's, Walmart and Wegmans, have announced a connection to the recall. To date, no illnesses have been linked to the recalled fruits. Information about the recall is available at: <u>http://www.fda.gov/Safety/Recalls/ucm405943.htm</u>.

EPIDEMIOLOGY AND CLINICAL PRESENTATION

Invasive listeriosis — illness with isolation of *L. monocytogenes* from a normally sterile site, typically blood or cerebrospinal fluid — is a serious infection, usually caused by eating food contaminated with the bacterium. The disease primarily affects older adults, pregnant women, newborns, and adults with immunocompromising conditions. Risk increases with increasing age over 50 years. Although exposure to *L. monocytogenes* is common, the risk of invasive listeriosis after exposure is very low, with an incidence rate of ~0.3/100,000 in the general population and ~3/100,000 in population subgroups at elevated risk.

Symptoms typically begin within a month after exposure but can range from three to 70 days. Listeriosis can present in different ways. In older adults and people with immunocompromising conditions, septicemia and meningitis are the most common clinical presentations. In older adults and immunocompromised persons, symptoms of listeriosis may include headache, stiff neck, confusion, loss of balance, and/or convulsions. Pregnant women may experience a fever and other non-specific symptoms, such as fatigue and aches, followed by miscarriage, still birth, or bacteremia and meningitis in their newborns. Immunocompetent people may experience acute febrile gastroenteritis or no symptoms.

Physicians evaluating patients presenting with flu-like symptoms, high fever, severe headache, stiffness, nausea, abdominal pain, vomiting or diarrhea and exposure to fresh whole peaches, plums, nectarines, and pluots, should include *L. monocytogenes* in their differential diagnosis.

MEDICAL MANAGEMENT OF PERSONS EXPOSED TO L. monocytogenes

In 2011, the Centers for Disease Control and Prevention (CDC) convened an expert panel to discuss medical management of persons at elevated risk for invasive listeriosis may seek medical care because of concern that they have been exposed to *L. monocytogenes*. A suggested frame work for medical management of such individuals was released on September 19, 2011. CDC redistributed these recommendations on July 22, 2014 in response to inquiries from health care providers and concerned members of the public about the Wawona Packing Company of peaches, plums, nectarines, and pluots related to possible *L. monocytogenes* contamination. It was the consensus of an expert panel that no testing or treatment is indicated for an asymptomatic person with elevated risk of invasive listeriosis who ate a product recalled because of *L. monocytogenes* contamination. NYSDOH does not recommend routine screening or treatment of asymptomatic persons exposed to recalled products. The CDC recommendations are attached below.

DIAGNOSIS AND TESTING

For patients with illness suggestive of invasive listeriosis, testing should include blood culture and other tests, such as culture of cerebrospinal fluid, as indicated by the clinical presentation. Primary specimen testing should be performed following routine laboratory protocols and primary specimens should not be sent to New York State Wadsworth Center Laboratory; however *Listeria* isolates cultured from primary specimens should be submitted as per the 2010 Laboratory Reporting of Communicable Diseases.

Stool testing for Listeria has not been evaluated as a screening tool for listeriosis and, in general, is not recommended for the diagnosis of listeriosis. Ingestion of Listeria occurs frequently because the bacterium is commonly present in the environment. Therefore, intermittent fecal carriage and shedding of Listeria is frequent (about 5% in unselected populations, but substantial variation exists) and rarely indicative of infection. Stool culture for Listeria may also have low sensitivity.

REPORTING

All suspect and laboratory *L. monocytogenes* cases should be reported promptly by telephone for Erie County residents to the Erie County Department (ECDOH) of Health Epidemiology and Surveillance Office at (716) 858-7697 during normal business hours and (716) 961-7898 after hours.

CONTACT PHONE NUMBER

ECDOH Epidemiology and Surveillance Office: (716)858-7697 during normal business hours and (716)961-7898 after hours.

ADDITIONAL INFORMATION:

Recall information: http://www.fda.gov/Safety/Recalls/ucm405943.htm.

CDC General Listeria information: http://www.cdc.gov/listeria/index.html

Health Category Definitions:

Health Alert FLASH: conveys the highest level of importance due to a large-scale, catastrophic public health emergency; warrants immediate action or attention

Health Alert Priority: conveys the highest level of importance; warrants immediate action or attention to a health problem or situation

Health Advisory: provides important information for a specific incident or situation; may not require immediate action

Health Update: provides updated information regarding an incident or situation; no immediate action necessary

The Erie County Department of Health does not provide medical advice. The information provided on the Erie County Department of Health website is not an attempt to practice medicine and is not intended as a substitute for professional medical advice, diagnosis, or treatment. It is for informational purposes only. Always seek the advice of your personal physician or other qualified health provider with any questions you may have regarding a medical condition or issue. Never disregard professional medical advice or delay in seeking it because of the content found on the Erie County Department of Health website or this correspondence. The ECDOH Health Alert & Advisory System is an e-mail notification system designed to alert community partners about important health related information. You can sign up to receive alerts & advisories at http://www2.erie.gov/health/index.php?q=node/59.



Public Health Service DEPARTMENT OF HEALTH & HUMAN SERVICES Centers for Disease Control and Prevention (CDC)

MEMORANDUM

| Date: | September 19, 2011 |
|----------|--|
| From: | Enteric Diseases Epidemiology Branch Division of Foodborne, Waterborne, and Environmental Diseases National Center for Emerging and Zoonotic Infectious Diseases Centers for Disease Control and Prevention |
| Subject: | Suggested framework for medical management of persons at elevated risk for invasive listeriosis who are exposed to <i>Listeria monocytogenes</i> |
| To: | The Record |

Purpose

Outbreak investigations or routine monitoring of food production and processing facilities may lead to identification and recall of a food contaminated with *Listeria monocytogenes*. In these situations, persons at elevated risk for invasive listeriosis may seek medical care because of concern that they have been exposed to to *L. monocytogenes*. This document provides a suggested framework for medical management of these persons. It is not intended either as a practice guideline or as a modification of existing guidelines or practices in managing patients with confirmed or suspected listeriosis.

Introductory notes

- Invasive listeriosis—illness with isolation of *Listeria monocytogenes* from a normally sterile site, typically blood or cerebrospinal fluid—is very rare, with an incidence rate of ~0.3/100,000 in the general population and ~3/100,000 in population subgroups at elevated risk.
- Groups at elevated risk for invasive disease include pregnant women, persons with immunocompromising conditions, and older adults. Risk increases with increasing age over 50 years.
- Pregnancy-associated listeriosis can lead to fetal loss, preterm delivery, and neonatal sepsis and meningitis. In most, but not all, cases of fetal or neonatal infection, the mother has a history of symptoms consistent with listeriosis.
- The risk of invasive listeriosis after exposure to *L. monocytogenes* is very low; exposure is common, but disease is rare.
- When a specific food is recalled (for example, melon grown at a specific farm) because of *L. monocytogenes* contamination, persons seeking medical care may know that they ate that general class of food (ie, melon) but may not know if it was the specific type or brand that was recalled. In this situation the likelihood of exposure to *L. monocytogenes* will depend on the commercial distribution of the specific implicated or recalled food product.
- Little scientific evidence is available to inform decisions regarding management of persons at elevated risk of invasive listeriosis who have been exposed to *L. monocytogenes* and who are either asymptomatic or mildly symptomatic. Therefore, this suggested framework is based to a large extent on expert professional opinion.

- Patient management decisions for asymptomatic or mildly symptomatic persons are appropriately made on a case-by-case basis, informed by clinical judgment and the likelihood of exposure of the patient. Consultation with a specialist in infectious disease may be considered
- The suggested framework discusses stool culture for *L. monocytogenes*, but stool culture has not been evaluated as a screening tool. It may have low sensitivity unless enrichment procedures are performed and, in many areas, may not be available routinely.

Suggested framework for medical management

Pregnant women

1. Exposed, asymptomatic:

Most experts believe that no testing or treatment is indicated for an asymptomatic pregnant woman who ate a product recalled because of *L. monocytogenes* contamination. Such a patient should be instructed to return if she develops symptoms of listeriosis within 2 months of eating the recalled product. Symptoms may include fever and myalgias, often preceded by diarrhea or other gastrointestinal symptoms.

2. Exposed, afebrile, mild symptoms:

A pregnant woman who ate a product recalled because of *L. monocytogenes* contamination who is afebrile and has signs and symptoms consistent with a minor gastro-intestinal or flulike illness, such as mild myalgias or mild nausea, vomiting, or diarrhea, could be managed expectantly (as for an exposed, asymptomatic woman); this is a reasonable approach to limit low-yield testing and supports judicious use of antimicrobial agents. Alternatively, such a patient could be tested with blood culture and/or stool culture for *Listeria*, where such testing is available. If diagnostic testing is performed, some experts would withhold antibiotic therapy unless at least a culture yielded *Listeria monocytogenes*. Others would initiate antibiotic therapy while culture results were pending, and then stop treatment if culture(s) were negative. The antibiotic regimen could consist of oral ampicillin or amoxicillin, although it is important that both the clinician and the patient know that no effectiveness data exist for this scenario. If stool culture is positive, therapy could continue for 10-14 days.

3. Exposed, fever and symptoms consistent with invasive listeriosis:

An exposed pregnant woman with fever (>100.6° F, >38.1° C) and signs and symptoms consistent with invasive listeriosis, for whom no other cause of illness is known should be tested and treated for presumptive listeriosis. The febrile illness may be accompanied by myalgias and headache, and may have been preceded by diarrhea or other gastrointestinal symptoms.

- a) Diagnostic testing should include blood culture and other tests, such as culture of cerebrospinal fluid, as indicated by the clinical presentation.
- b) The antimicrobial regimen should be the standard therapy for listeriosis, typically including IV ampicillin and gentamicin for 14 to 21 days for nonallergic patients.
- c) If blood culture is negative and symptoms resolve, antibiotic therapy may be discontinued.

4. Exposed, history of symptoms in past 4 weeks, currently asymptomatic:

Most experts believe that no testing or treatment is indicated for an asymptomatic pregnant woman who ate a product recalled because of *L. monocytogenes* contamination and who experienced symptoms that have resolved. Any such patient should be instructed to return for medical care if she develops symptoms of listeriosis within 2 months of eating the recalled product. Diagnostic testing, such as culture of blood or amniotic fluid, has been considered in such patients, depending on the clinical scenario.

Other Persons with Elevated Risk of Invasive Listeriosis

(older adults, immunocompromised persons)

1. Exposed, asymptomatic:

Most experts believe that no testing or treatment is indicated for an asymptomatic person with elevated risk of invasive listeriosis who ate a product recalled because of *L. monocytogenes* contamination. Such a patient should be instructed to return if he or she develops symptoms of listeriosis within 2 months of eating the recalled product. Symptoms may include fever and myalgias, often preceded by diarrhea or other gastrointestinal symptoms. In older adults and immunocompromised persons, symptoms of listeriosis not infrequently include headache, stiff neck, confusion, loss of balance, and/or convulsions.

2. Exposed, afebrile, mild symptoms:

A person with elevated risk of invasive listeriosis who ate a product recalled because of *L. monocytogenes* contamination who is afebrile and has signs and symptoms consistent with a minor gastro-intestinal or flu-like illness, such as mild myalgias or mild nausea, vomiting, or diarrhea, could be managed expectantly (as for an exposed, asymptomatic person); this is areasonable approach to limit low-yield testing and support judicious use of antimicrobial agents. Alternatively, such a patient could be tested with stool culture and/or with blood culture for *Listeria*, where such testing is available. If diagnostic tests are performed, some experts would withhold antibiotic therapy unless cultures yielded *Listeria monocytogenes*. Others would initiate antibiotic therapy while culture results were pending and then stop treatment if the cultures were negative. The antibiotic regimen could consist of oral ampicillin or amoxicillin, although it is important that both the clinician and the patient know that no effectiveness data exist for this scenario. If stool culture is positive, therapy could continue for 10-14 days.

3. Exposed, fever and symptoms consistent with invasive listeriosis:

An exposed person with elevated risk of invasive listeriosis with fever (>100.6° F, >38.1° C) and signs and symptoms consistent with listeriosis, for whom no other cause of illness is known should be tested and treated for presumptive listeriosis. The febrile illness may be accompanied by myalgias, often preceded by diarrhea or other gastrointestinal symptoms, and, in older adults and immunocompromised persons, not infrequently include headache, stiff neck, confusion, loss of balance, and/or convulsions, as stated above.

- a. Diagnostic testing should include blood culture and other tests, such as culture of cerebrospinal fluid, as indicated by the clinical presentation.
- b. The antimicrobial regimen should be the standard therapy for listeriosis, typically including IV ampicillin and gentamicin for 14 to 21 days for nonallergic patients.
- c. If blood culture is negative and symptoms resolved, antibiotic therapy may be discontinued.

4. Exposed, history of symptoms in past 4 weeks, currently asymptomatic:

Most experts believe that no testing or treatment is indicated for an asymptomatic person with elevated risk of invasive listeriosis who ate a product recalled because of *L. monocytogenes* contamination and experienced symptoms that have resolved. Any such patient should be instructed to return for medical care if he or she develops symptoms of listeriosis within 2 months of eating the recalled product.