## Listeria food contamination – Microbiology cultures August 4, 2014

- > A recall of Listeria-contaminated fruits occurred in July 2014.
- > To date, no cases of listeriosis have been associated with this contamination.
- > Those at elevated risk for invasive listeriosis include pregnant women, newborns, the immunocompromised, and older adults (> 50 years of age).
- > Stool testing for *Listeria* has not been evaluated as a screening tool for listeriosis and, is generally not recommended for the diagnosis of listeriosis.
- > Clinical microbiology laboratories should contact their State Public Health Laboratory for guidance if stool or food culture for *Listeria* is requested.

The Wawona Packing Co., a California fruit packing company, announced a recall of peaches, plums, nectarines and pluots due to the potential of products being contaminated with Listeria monocytogenes. The Wawona Packing Co. has voluntarily recalled the fruit packed between June 1 and July 17, 2014. <sup>1</sup>

Groups at elevated risk for invasive disease include pregnant women, newborns, persons with immunocompromising conditions, and older adults (> 50 years of age). The risk of invasive listeriosis following exposure to *L. monocytogenes* is very low (exposure is common, but disease is rare). Symptoms may include fever, muscle aches, and GI symptoms, which may progress to stiff neck, confusion, loss of balance, and convulsions.

In recall situations, people may seek medical care because of concern that they have been exposed to *L. monocytogenes*.

## The following information from the CDC provides a suggested framework for medical management of exposed patients.<sup>2</sup>

- **1. Exposed, asymptomatic:** Most experts believe that no testing or treatment is indicated for at risk patients who ingested a recalled product. Such a patient should be instructed to return if they develop related symptoms within 2 months of eating the fruit (fever and myalgias, often preceded by diarrhea or other gastrointestinal symptoms).
- **2. Exposed, afebrile, mild symptoms:** An at-risk patient who ingested a recalled product and who is afebrile but has signs and symptoms consistent with a minor gastrointestinal or flu-like illness (mild myalgias or mild nausea, vomiting, or diarrhea) could be managed expectantly. This is a reasonable approach to limit low-yield testing and supports judicious use of antimicrobial agents.

Alternatively, testing with blood culture and/or stool culture for *Listeria*, may be done where such testing is available. Some experts would withhold antibiotic therapy unless a culture yielded *L. monocytogenes*. Others would initiate antibiotic therapy while culture results were pending, and then stop treatment if cultures are negative.

NOTE: 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. Intermittent fecal carriage and shedding of Listeria is frequent (about 5% in unselected populations, but substantial variation exists) and is rarely indicative of infection. Stool culture for Listeria may also have low sensitivity.

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

An at risk, exposed patient 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. Diagnostic testing should include blood culture and other tests, such as culture of cerebrospinal fluid, as indicated by the clinical presentation.

## References:

- $1. \quad http://www.wawonapacking.com/WawonaPackingJuly312014 Expanded Recall Notice.pdf$
- CDC, September 19, 2011, The Enteric Diseases Epidemiology Branch, Division of Foodborne, Waterborne, and Environmental Diseases. Suggested framework for medical management of persons at elevated risk for invasive listeriosis who are exposed to *Listeria monocytogenes*:
  <a href="http://www.google.com/url?url=http://www.idph.state.ia.us/IDPHChannelsService/file.ashx%3Ffile%3DA1180D82-4F8E-473B-9500-FAA8C718B903&rct=j&frm=1&q=&esrc=s&sa=U&ei=FxHcU8ucMdProASyh4DAAQ&ved=0CBQQFjAA&usg=AFQjCNEtn18jQ0V3qU\_IdoOIseblty8PUQ</a>