

Listeria Backgrounder

Listeria monocytogenes

Listeria monocytogenes is an environmental pathogenic bacteria that can commonly be found in soil, water and vegetative matter. Because of the inherent association between Listeria and agricultural environments, the potential exists for Listeria to be introduced onto a variety of fresh produce products. Foods linked to contamination with Listeria monocytogenes include fresh produce and nuts, ready-to-eat deli meat products, cheese and dairy products. There are 17 species of Listeria, but only Listeria monocytogenes is a food safety hazard.

Symptoms of Listeria monocytogenes vary depending on the infected individual's immune system. The disease primarily affects pregnant women, newborns, older adults, and people with weakened immune systems. It's rare for people in other groups to get sick with Listeria infection. It has an incubation period of 3-70 days.

The annual incidence of laboratory-confirmed listeriosis in the United States is about 0.24 cases per 100,000 people. Approximately 800 laboratory-confirmed cases are reported annually to the Centers for Disease Control's (CDC's) National Notifiable Disease Surveillance System. However, many cases are not detected or reported, and CDC estimates that approximately 1,600 cases occur annually in the United States.

Listeria monocytogenes and the food packing and processing environment:

Listeria monocytogenes has an unusual ability to multiply at refrigeration temperatures. It can also form biofilms, making it difficult to remove once established in a food facility. Proper cleaning and sanitation programs are imperative for control of this pathogen in a food facility. Environmental monitoring programs assess the effectiveness of cleaning and sanitation as well as identify hard-to-clean areas in the facility. Generic Listeria species tests are commonly used as indicators of risk for routine environmental testing in food facilities.

FDA Draft Guidance: "Control of Listeria monocytogenes in Ready-To-Eat Foods: Guidance for Industry"

<https://www.fda.gov/downloads/Food/GuidanceRegulation/GuidanceDocumentsRegulatoryInformation/UCM535981.pdf>

Previous cases of Listeria monocytogenes and apples:

Michigan – December 2017

FDA Website - Jack Brown Produce, Inc. Recalls Gala, Fuji, Honeycrisp and Golden Delicious Apples Due to Possible Health Risk

<https://www.fda.gov/Safety/Recalls/ucm589722.htm>



California/caramel apples – December 2014

CDC Report - Multistate Outbreak of Listeriosis Linked to Commercially Produced, Prepackaged Caramel Apples Made from Bidart Bros. Apples (Final Update)

<https://www.cdc.gov/listeria/outbreaks/caramel-apples-12-14/index.html>