



# Listeria Facts and Control Strategies for Produce Processing Plants

## Risk and dangers of *Listeria monocytogenes* in your facility:

- *Listeria monocytogenes* is a bacterium that thrives in cold, wet environments.
- *L. monocytogenes* can cause food-borne illness and is associated with a high mortality rate compared to other food-borne illness pathogens.
- *L. monocytogenes* grows at refrigeration temperatures, survives freezing, and tolerates high salt and acid concentrations.
- *L. monocytogenes* thrives in biofilms and once established in a facility, *Listeria* is very difficult to remove.
- Foods susceptible to *L. monocytogenes* contamination include:
  - Ready-to-eat (RTE) produce (cut and whole) including sprouts
  - Salads
  - Crab
  - Shrimp
  - Dips
  - Deli meats,
  - Sandwiches
  - Soft cheeses
  - Dairy products
- *L. monocytogenes* can enter your plant on shoes, clothing, carts, pallets, and forklifts.
- *L. monocytogenes* often populates floors, drains, conveyors, and loading docks.

## Control Measures to Prevent Product Contamination:

- Ensure tight controls between ready to eat (RTE ) processing areas and raw ingredient (non-RTE) areas such as:
  - Personnel
  - Equipment
  - Food movement
  - Cleaning procedures
  - Positive air-flow
- Provide written Sanitation Standard Operating Procedures (SSOP's) for food and non-food contact equipment and the proper implementation, verification, and validation of sanitation procedures.
- Document SSOP training, application dates, times, and personnel.

## Sanitation Procedures:

- Give special attention to the prevention of cross-contamination, food-contact areas and other plant areas that are difficult to clean and may harbor *Listeria*. Some Examples:
  - Drains
  - Coolers
  - Condensate
  - Equipment
  - Conveyors
  - Mops
  - Sponges
  - Any water collection area
- Use appropriate designated tools to allow scrubbing of food and non-food contact surfaces to remove soils and biofilms.
- Power washing should only be used in limited applications where overspray will not contaminate other equipment and products.
- Use appropriate detergent and sanitizer applications.
- Conduct post-cleaning inspection and documentation of procedure dates, times, and personnel.

### **Listeria testing in the facility:**

- Develop a scientifically valid testing (environmental monitoring) plan that includes specific testing locations of both food and non-food contact equipment (Zone 1 – Zone 4) which includes the timing and frequency for collecting and testing samples.
- Environmental monitoring is required under [CFR 117 Subpart C](#) unless the facility is exempt as listed by [Subpart A CFR 117.5](#) or documented to be exempt by FDA attestation.
- Develop a corrective action and correction plan upon receiving positive sample results.

### **For more information about Listeria:**

- *Listeria* training for plant personnel is available in seven (7) languages at:  
<https://phpa.health.maryland.gov/OEHFP/OFPCHS/Pages/Food-Processing-Guidance.aspx>
- 3 C's of *Listeria*: Characteristics, Contamination, and Control webinar:  
[https://www.youtube.com/watch?reload=9&time\\_continue=11&v=I8NSscc-B2o](https://www.youtube.com/watch?reload=9&time_continue=11&v=I8NSscc-B2o)
- FDA Draft Guidance on Control of *Listeria* RTEFoods-2017-01-10 <https://www.fda.gov/regulatory-information/search-fda-guidance-documents/draft-guidance-industry-control-listeria-monocytogenes-ready-eat-foods>
- MDH Office of Food Protection– *Listeria* Prevention and FSMA rules in Manufactured Foods factsheet  
<https://phpa.health.maryland.gov/OEHFP/OFPCHS/Pages/Food-Processing-Guidance.aspx>
- New York Integrated Food Safety Center of Excellence:  
<https://nyfoodsafety.cals.cornell.edu/>