



Common Foodborne Pathogens: *Listeria monocytogenes*

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What is *Listeria monocytogenes*?

Listeria monocytogenes is a bacterium commonly found in soil, water, sewage, and decaying plant material. *L. monocytogenes* is a particularly hardy pathogen, capable of surviving in damp areas, and on stainless steel and glass within the food processing environment. Once established, it is difficult to eliminate and may often be the cause of post-process food contamination.

Although easily killed by heat, refrigeration does not prevent the growth of this organism. In fact, *L. monocytogenes* is unique among foodborne pathogens in that it not only survives but can grow at refrigeration temperatures! Foods most associated with this illness are refrigerated foods that are not reheated before consumption.

Who Gets Listeriosis?

Listeriosis is a severe infection caused by *L. monocytogenes*. Most healthy persons do not experience symptoms of listeriosis following ingestion of small amounts of *L. monocytogenes*.

Those at highest risk of developing symptoms include pregnant women, the immunocompromised, young children, and the elderly. Ingesting only a very small concentration can cause these populations to become ill. These populations can become ill by consuming a very small concentration.

Symptoms of Listeriosis

The most common symptoms of listeriosis include a mild flu-like illness with persistent fever, muscle aches, nausea, or diarrhea.



Figure 1. *Listeria monocytogenes* as seen from a microscope. ([CDC](#))

If the infection progresses to the nervous system, headache, confusion, loss of balance, and convulsions may occur. Infection during pregnancy may lead to miscarriage, stillbirth, premature delivery, or infection of the fetus.

For some people, it can take up to 10 weeks to have symptoms.

Proper Food Handling Techniques to Avoid Infection

Heat ready-to-eat foods (i.e., hotdogs, deli meats) and leftovers until they are steaming hot. Do not consume unpasteurized milk or dairy products. Cook all poultry, meats, and seafood to correct internal temperatures. Rinse fruits and vegetables thoroughly with water, especially those that will not be cooked. Refrigerate or freeze ingredients and leftovers immediately after use. Discard refrigerated leftovers within 4 days.

Recent *Listeriosis* Outbreaks in the U.S.

- In 2024, a multistate outbreak of 26 cases, including 23 hospitalizations, and 2 deaths was linked to eating queso fresco and cotija cheese.
- In 2023, a multistate outbreak of 19 cases, including 18 hospitalizations was linked to eating leafy greens.
- In 2023, a multistate outbreak of 11 cases, including 10 hospitalizations and 1 death, linked to peaches, nectarines, and plums.
- In 2022, a multistate outbreak of 16 cases, 13 hospitalizations, and 1 death was linked to eating deli meat and cheese.

Commonly Associated Foods

- Deli and ready-to-eat foods (i.e. hot dogs, deli meats)
- Unpasteurized dairy products
- Raw fruits and vegetables
- Refrigerated pâtés, meat spreads and smoked seafood

Safe Food Handling Checklist

- Heat ready-to eat foods (hot dogs, deli meat) until steaming hot. **This is especially important for high risk populations**
- Wash fruits and vegetables with water
- Refrigerate/Freeze ingredients and leftovers after use
- Cook raw meats, poultry, and seafood to correct internal temperatures:
 - Seafood, steaks, chops, roasts = 145°F
 - Ground meats (except poultry), eggs = 160°F
 - All poultry, leftovers, and casseroles = 165°F

References

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