

Listeria Outbreak Linked to Deli Meat and Cheese



Investigation Notice

Posted March 29, 2023

This outbreak is over. Even when there are no ongoing *Listeria* outbreaks, people who are pregnant, aged 65 or older, or have a weakened immune system should reheat deli meat and deli-sliced cheese to an internal temperature of 165°F or until steaming hot to kill any germs.

Fast Facts

- Illnesses: 16
- Hospitalizations: 13
- Deaths: 1
- [States](#): 6
- Recall: No
- Investigation status: Closed

Listeria in Deli Meat and Deli-Sliced Cheese

Deli meats (cold cuts, lunch meats, hot dogs, and pâtés) and deli-sliced cheeses are known sources of *Listeria* illnesses. This is because *Listeria* can easily spread among food, food preparation surfaces like deli slicers, and hands. *Listeria* is a hardy germ that can be difficult to fully remove once it is present in a deli or a food processing facility. It can survive and grow at cold temperatures in a refrigerator.

Outbreak Investigation Summary

[Data](#) showed that deli meat and cheese bought at deli counters in multiple states were the likely sources of this outbreak.

- Of 12 people interviewed, 11 reported eating meat or cheese from deli counters.

- The outbreak strain of *Listeria* was found in open packages of mortadella, ham, and salami sliced at the deli, as well as a deli in Brooklyn, New York.

A single deli or food source was not identified. It is difficult for investigators to identify the specific source of outbreaks linked to deli meats and cheeses. This is because *Listeria* spreads easily between food and the deli environment, and it can live for a long time in deli display cases and on equipment. A contaminated food likely introduced the outbreak strain of *Listeria* into delis in multiple states.

What People at High Risk Should Do

Listeria is especially harmful if you are pregnant, aged 65 or older, or have a weakened immune system due to certain medical conditions or treatments. Other people can be infected with *Listeria*, but they rarely become seriously ill.

If you are pregnant, aged 65 or older, or have a weakened immune system:

- **Reheat deli meat and deli-sliced cheese to an internal temperature of 165°F or until steaming hot to kill any germs.**
 - If you prefer, you can let it cool before eating it.
 - You can also choose safer cheese options that don't need to be reheated. This includes hard cheeses (like cheddar and parmesan) that aren't from the deli counter, feta, string cheese, cottage cheese, and cream cheese.
- **Take steps to prevent getting sick from *Listeria*.**
 - Learn which foods are more likely to have *Listeria*, and choose [safer food options](#).
 - Follow CDC on [Facebook](#), [Instagram](#), or [Twitter](#) to stay up to date on multistate foodborne outbreaks.

What Businesses Should Do

- Follow [USDA-FSIS best practices](#) for controlling *Listeria* contamination in deli areas.

Listeria Symptoms

- *Listeria* is especially harmful to people who are pregnant, aged 65 or older, or have weakened immune systems. This is because *Listeria* is more likely to spread beyond their gut to other parts of their body, resulting in a severe condition known as invasive listeriosis.
 - **For people who are pregnant**, *Listeria* can cause pregnancy loss, premature birth, or a life-threatening infection in their newborn.
 - **For people who are 65 years or older or who have a weakened immune system**, *Listeria* often results in hospitalization and sometimes death.
- Symptoms usually start within 2 weeks after eating food contaminated with *Listeria*, but may start as early as the same day or as late as 10 weeks after.
 - **Pregnant people** usually have fever, muscle aches, and tiredness.
 - **People who are not pregnant** usually have fever, muscle aches, and tiredness. They may also get a headache, stiff neck, confusion, loss of balance, or seizures.

Investigation Details

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CDC, public health and regulatory officials in several states, the U.S. Department of Agriculture's Food Safety and Inspection Service (USDA-FSIS), and the U.S. Food and Drug Administration (FDA) investigated a multistate outbreak of *Listeria monocytogenes* infections.

Epidemiologic and laboratory data showed that meat and cheese from deli counters made people sick. A single deli or food source was not identified.

As of March 29, 2023, this outbreak is over.

Epidemiologic Data

A total of 16 people infected with the outbreak strain of *Listeria* were reported from 6 states. Sick people's samples were collected from April 17,

2021, to September 29, 2022. The true number of sick people in this outbreak is likely higher than the number reported, and the outbreak may not have been limited to the states with known illnesses. This is because some people recover without medical care and are not tested for *Listeria*.

Public health officials collected many different types of information from sick people, including their age, race, ethnicity, other demographics, and the foods they ate in the month before they got sick. This information provided clues to help investigators identify the source of the outbreak.

Sick people ranged in age from 38 to 92 years, with a median age of 74, and 62% were male. Of 15 people with race or ethnicity information available, 13 were White, 1 was African American/Black, 1 was Asian, and no one reported Hispanic ethnicity. Eleven people were of Eastern European background or spoke Russian.

Of 14 people with healthcare information available, 13 were hospitalized. One person got sick during their pregnancy, resulting in pregnancy loss. Additionally, one death was reported from Maryland.

Of the 12 people interviewed, 11 reported eating meat or cheese from deli counters. Among seven sick people in New York, five bought sliced deli meat or cheese from at least one location of NetCost Market, a grocery store chain that sells international foods. Sick people from other states purchased deli meats or cheeses from other delis.

NetCost Market delis are unlikely to be the only source of illnesses because some sick people in the outbreak did not shop at a NetCost Market. A contaminated food likely introduced the outbreak strain of *Listeria* into delis in multiple states.

Laboratory Data

Public health investigators used the [PulseNet](#) system to identify illnesses that were part of this outbreak. CDC PulseNet manages a national database of DNA fingerprints of bacteria that cause foodborne illnesses. DNA fingerprinting is performed on bacteria using a method called [whole genome sequencing \(WGS\)](#).

WGS showed that bacteria from sick people's samples were closely related genetically. This suggests that people in this outbreak got sick from the same food.

In 2021, health officials in New York state and New York City found the outbreak strain of *Listeria* in several environmental and food samples:

- Environmental samples from a NetCost Market deli in Brooklyn
- Several open packages of mortadella and ham that were sliced at the same NetCost Market deli in Brooklyn
- Sliced salami that a sick person bought from a NetCost Market deli in Staten Island

NetCost Market voluntarily closed the deli temporarily in Brooklyn after [New York officials \[PDF – 2 pages\]](#) notified them about the sampling results. NetCost Market performed a deep cleaning and then reopened the deli in Brooklyn after further environmental testing did not find *Listeria*.

In September 2022, the outbreak strain was found at the same Brooklyn NetCost Market deli; however, the most recent illness with NetCost Market exposure was in October 2021. After a deep cleaning, additional environmental testing did not find *Listeria* in the deli.

Public Health Actions

Even when there are no ongoing outbreaks, CDC advises people at [higher risk of *Listeria* illness](#) to reheat deli meat and deli-sliced cheese to an internal temperature of 165°F or until steaming hot.