



# Listeria monocytogenes Outbreak Linked to Ready-to-Eat Chicken

*Outbreak Investigation After Action Review, Report 2021-08*

## Highlights

- Close collaboration among public health partners led to a recall 11 days after initial outbreak notification.
- Whole genome sequencing (WGS) of isolates generated by the U.S. Department of Agriculture’s Food Safety and Inspection Service (FSIS) routine sampling provided investigators with key data, highlighting the importance of these analyses to generate hypotheses and inform outbreak investigations.
- Ill people in this outbreak were unable to provide specific details on what they ate before getting sick, but all ate meals at institutions. Menus from these institutions proved to be useful in gathering epidemiologic evidence and guiding traceback.

### Outbreak at a Glance

Illnesses	3
States included	2
Hospitalizations	3
Deaths	1

### Response at a Glance

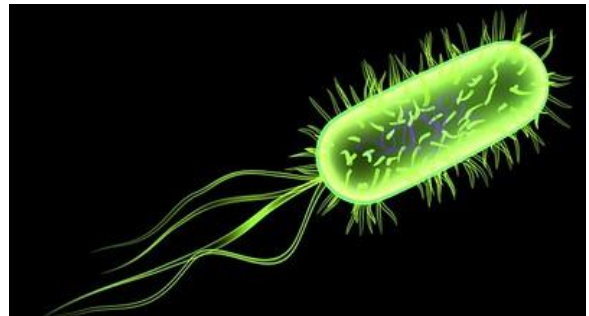
Recall or Public Health Alert	Yes
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State of residence of people infected with *Listeria monocytogenes*



## What Happened?

From June 24 to July 22, 2021, public health officials in multiple States, the Centers for Disease Control and Prevention (CDC), and FSIS investigated an outbreak of three *Listeria monocytogenes* (*Lm*) illnesses linked to ready-to-eat (RTE) chicken. All ill people ate their meals at institutions before getting sick and limited exposure information was available.



Investigators used institution menus to gather details on foods ill people may have eaten.

The three clinical *Lm* isolates were genetically indistinguishable from two RTE chicken isolates collected by FSIS from two different federally inspected establishments during routine testing. Investigation revealed that one of these establishments (Establishment A) supplied RTE chicken to the other establishment. Further investigation identified that Establishment A also supplied RTE chicken to the institutions where ill people had eaten. Strong WGS evidence and traceback data led Establishment A to conduct a recall of approximately 8.9 million pounds of RTE chicken 11 days after initial outbreak notification.

## What we Learned from this Outbreak



### FSIS Routine Sampling and Whole Genome Sequencing

FSIS routine sampling is important both to ensure that Federal establishments are producing safe products in sanitary environments, and to provide data on FSIS-regulated products and establishments to CDC's PulseNet database. Genetic data from isolates collected as part of routine sampling are uploaded to PulseNet, allowing investigators to compare these isolates to other food, animal, environmental, and clinical samples. When an outbreak is detected, such data can provide epidemiologists with key clues to generate hypotheses, guide investigations, and solve outbreaks quickly to prevent further illnesses.

### Communication



Close communication, coordination, and data sharing between FSIS, CDC, State public health partners, and industry facilitated the rapid response to this outbreak. Continuing to foster relationships with public health partners will enable FSIS to quickly respond to future outbreaks.

# What Can You Do to Prevent or Solve the Next Outbreak?

Industry	Public Health Partners	Consumers
<p><i>Lm</i> can grow and persist in environments (e.g., drains) where other pathogens typically do not. Disruptions to the production environment, like during construction, may allow <i>Lm</i> to spread to other areas of a production facility. Producers of RTE products should have robust plans for identifying and controlling <i>Lm</i> to ensure they are complying with the <a href="#">regulatory requirements of the <i>Listeria</i> rule</a>. Recommendations for establishments that produce post-lethality exposed RTE products can be found in the <a href="#">FSIS compliance guideline for controlling <i>Lm</i></a>.</p>	<p>Continue to work closely with local, State, and Federal partners to detect and investigate outbreaks. Email <a href="mailto:FoodborneDiseaseReports@usda.gov">FoodborneDiseaseReports@usda.gov</a> to notify FSIS if FSIS-regulated products may be involved in an outbreak.</p>	<p>If you think you have a foodborne illness, see a health care provider for treatment. Your health care provider can test you and, if the tests show you have a reportable foodborne illness, your State or local public health officials should be notified. If you suspect a food product made you sick, <a href="#">report the problem</a> to FSIS or the appropriate public health agency.</p>

## Helpful Links

- [FSIS Recall 023-2021](#), July 3, 2021
- [CDC Food Safety Alert](#), final update September 10, 2021
- [CDC \*Listeria\* Prevention](#)
- [Report a Problem with Food](#)
- [More information about FSIS' response to foodborne outbreaks](#)