Outbreak of *Salmonella* Newport Infections Linked to Onions

Final Update

Updated October 8, 2020 at 4:00 PM ET

This outbreak appears to be over, but recalled onions could still be in homes or freezers. If you have recalled onions and products, don't eat them. Throw them away.

CDC, public health and regulatory officials in several states, the US Food and Drug Administration (FDA) and Canada investigated a multistate outbreak of Salmonella Newport infections linked to onions.

Advice to Consumers, Restaurants, and Retailers

At A Glance

- Reported Cases: 1,127
- States: 48
- Hospitalizations: 167
- Deaths: 0
- Recall: Yes

- **Do not eat, sell, or serve any recalled onions or products.**
  - Recalled onions and products should no longer be available in grocery stores. However, onions have a long shelf-life and may still be in homes or freezers.
  - Check to see if you have any recalled onions or products. If you have any recalled onions or products or if you can't tell where your onions are from, don't eat them. Throw them away.
  - Restaurants and retailers should check storage coolers for recalled products. Do not sell or serve recalled products.
- **Wash and sanitize**external icon any surfaces that may have come in contact with the onions or their packaging.
  - These surfaces may include countertops, storage bins, refrigerator drawers, knives, and cutting boards.
  - FDA recommends that food processors, restaurants, and retailers who received recalled onions use extra vigilance in cleaning and sanitizing any surfaces that may have come in contact with these products, to reduce the risk of cross-contamination.
- **Protect** yourself and your customers from *Salmonella.*

- Learn more about *Salmonella* and food safety steps you can take to prevent getting sick.
- Contact a healthcare provider if you have consumed a recalled product and are experiencing symptoms of *Salmonella* infection.

Symptoms of *Salmonella* Infection

- Most people infected with *Salmonella* develop diarrhea, fever, and stomach cramps 6 hours to 6 days after being exposed to the bacteria.
- The illness usually lasts 4 to 7 days, and most people recover without treatment.
- In some people, the illness may be so severe that the patient needs to be hospitalized. *Salmonella* infection may spread from the intestines to the bloodstream and then to other places in the body.
- Children younger than 5 years, adults 65 years and older, and people with weakened immune systems are more likely to have a severe illness.
- For more information, see symptoms of *Salmonella* infection.

Final Outbreak Information

- As of October 8, 2020, this outbreak appears to be over.
- A total of 1,127 people infected with the outbreak strain of *Salmonella* Newport were reported from 48 states. There were 167 hospitalizations and no deaths reported.
- Epidemiologic and traceback evidence showed that red onions from Thomson International Inc. were the likely source of this outbreak. Other onion types (such as white, yellow, or sweet yellow) were also likely to be contaminated because the onions were grown and harvested together.
- On August 1, 2020, Thomson International Inc. recalled all red, yellow, white, and sweet yellow onions because they may be contaminated with *Salmonella*.

Investigation Details

October 8, 2020

CDC, public health and regulatory officials in several states, FDA, and Canada investigated a multistate outbreak of *Salmonella* Newport infections linked to onions.

Public health investigators used the PulseNet system to identify illnesses that were part of this outbreak. PulseNet is the national subtyping network of public health and food regulatory agency laboratories coordinated by CDC. DNA fingerprinting is performed on *Salmonella* bacteria isolated from ill people by using a standardized laboratory and data analysis method called whole genome sequencing (WGS). CDC PulseNet manages a national database of these sequences that are used to identify possible outbreaks. WGS gives investigators detailed information about the bacteria

causing illness. In this investigation, WGS showed that bacteria isolated from ill people were closely related genetically. This means that people in this outbreak were likely to share a common source of infection.

A total of 1,127 people infected with the outbreak strain of *Salmonella* Newport were reported from 48 states. A list of the states and the number of cases in each can be found on the Map of Reported Cases page.

Illnesses started on dates ranging from June 19, 2020, to September 11, 2020 . Ill people ranged in age from less than 1 to 102 years, with a median age of 41. Fifty-eight percent of ill people were female. Of 705 ill people with information available, 167 people were hospitalized. No deaths were reported.

Whole genome sequencing analysis of 732 bacterial isolates from ill people did not predict any antibiotic resistance in 730 isolates; one isolate had predicted resistance to ampicillin, and one isolate had predicted resistance to tetracycline. Standard antibiotic susceptibility testing of eight clinical isolates by CDC's National Antimicrobial Resistance Monitoring System (NARMS) laboratory showed no resistance. This resistance should not affect the choice of antibiotic used to treat most people.

Investigation of the Outbreak

Epidemiologic and traceback evidence showed that red onions from Thomson International Inc. were the likely source of this outbreak. Other onion types (such as white, yellow, or sweet yellow) were also likely to be contaminated because the onions were grown and harvested together.

In interviews, ill people answered questions about the foods they ate and other exposures in the week before they became ill. Ninety-one percent of people reported eating onions or foods likely containing onions in the week before their illness started. Of the 208 people who were asked what types of onions they ate, 137 (66%) ate red onions, 130 (63%) ate white onions, and 110 (53%) ate yellow onions. Most ill people reported eating more than one type of onion.

FDA and states reviewed records where ill people purchased or ate onions and foods containing onions. This traceback investigation identified Thomson International Inc. as the likely source of red onions.

The Public Health Agency of Canada (PHAC) and The Canadian Food Inspection Agency (CFIA) also investigated an outbreak of *Salmonella* Newport infections in Canada that was related genetically by WGS to the U.S. outbreak. Their investigation identified red onions from Thomson International Inc. as the likely source of their outbreak.

On August 1, 2020, Thomson International Inc. recalled all red, yellow, white, and sweet yellow onions because they may be contaminated with *Salmonella*. Other companies also recalled onions or foods made with recalled onions. Consumers, restaurants, and retailers should not eat, serve, or sell recalled onions and products.

As of October 8, 2020, this outbreak appears to be over. FDA is continuing their investigation to find the root cause of this outbreak.