

Salmonella Outbreak Linked to BrightFarms Packaged Salad Greens



Food Safety Alert

Posted October 6, 2021

This outbreak is over. Stay up to date on food recalls and outbreaks to avoid getting sick from eating contaminated food.

Fast Facts

- Illnesses: 31
- Hospitalizations: 4
- Deaths: 0
- [States](#): 4
- Recall: Yes
- Investigation status: Closed



What You Should Do

Vegetables, including leafy greens, are an important part of a healthy and balanced diet. However, they can sometimes be contaminated with harmful germs.

The safest vegetable is cooked; the next safest is washed.

If you eat raw leafy greens:

- **Wash** your hands, utensils, and surfaces before and after preparing leafy greens.
- **Clean** leafy greens before eating or cutting them.
 - Discard outer leaves on whole heads of lettuce and any torn or bruised leaves.
 - Rinse under running water and use your hands to gently rub the surface of the leaves.
 - Dry with a clean cloth or paper towel.
- **Separate** leafy greens from raw meat, poultry, and seafood.
- **Refrigerate** leafy greens within 2 hours. Refrigerate within 1 hour if they have been exposed to temperatures above 90°F (such as a hot car or picnic).

Investigation Details

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CDC, public health and regulatory officials in several states, and the U.S. Food and Drug Administration (FDA) investigated a multistate outbreak of *Salmonella* Typhimurium infections.

[Epidemiologic, laboratory, and traceback data](#) showed that BrightFarms brand packaged salad greens made people sick.

As of October 6, 2021, this outbreak is over.

Epidemiologic and Traceback Data

A total of 31 people infected with the outbreak strain of *Salmonella* Typhimurium were reported from 4 states. The true number of sick people in an outbreak is likely much higher than the number reported, and the outbreak may not be limited to the states with known illnesses. This is because many people recover without medical care and are not tested for *Salmonella*.

Illnesses started on dates ranging from June 10, 2021, to August 18, 2021. Sick people ranged in age from less than 1 year to 86 years, with a median age of 44, and 60% were female. Four people were hospitalized, and no deaths were reported.

State health officials interviewed people about the foods they ate in the week before they got sick and collected shopper card records to determine what products they bought. Of the 27 people interviewed, 26 (96%) reported eating leafy greens. Among those 26 people, 22 (85%) reported eating prepackaged salads. This percentage was significantly higher than the 38% of respondents from the [FoodNet Population Survey](#) who reported eating prepackaged salads in the prior week. This comparison suggests that people in this outbreak got sick from eating prepackaged salads.

Interview data and shopper card records show that 15 people ate or bought a variety of BrightFarms packaged salad greens before they got sick, including Sunny Crunch, 50/50 Spring & Spinach, Harvest Crunch, and Butter Crisp. FDA conducted a traceback investigation and identified BrightFarms greenhouse farm in Rochelle, Illinois, as the likely source of packaged salad greens bought by sick people.

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.

FDA visited BrightFarms greenhouse farm in Rochelle, Illinois, and collected samples for testing. They found a different *Salmonella* strain (*Salmonella* Liverpool) in an indoor pond where BrightFarms grew lettuce. The PulseNet system did not identify anyone who got sick from this strain. FDA also found the outbreak strain of *Salmonella* Typhimurium in an outdoor storm water drainage pond beside the farm. However, investigators were unable to determine how this pond became contaminated.

Testing of four sick people's samples using standard [antibiotic susceptibility testing](#) methods by CDC's [National Antimicrobial Resistance Monitoring System \(NARMS\)](#) laboratory showed no resistance. [WGS analysis](#) of bacteria from 30 sick people's samples did not predict resistance to any antibiotics. One person's sample was predicted to be resistant to ampicillin. Most people with *Salmonella* illness recover without antibiotics. However, if antibiotics are needed, this resistance is unlikely to affect the choice of antibiotic used to treat most people.

Public Health Actions

On July 15, 2021, BrightFarms recalled their packaged salad greens produced in the Rochelle, Illinois, greenhouse farm.

On July 21, 2021, BrightFarms updated their recall to add Michigan as an additional state where recalled products were distributed.

On July 28, 2021, BrightFarms updated their recall to include their Baby Spinach product after *Salmonella* was found in their indoor pond.