

Salmonella Outbreak Linked to Alfalfa Sprouts



Food Safety Alert

Posted February 28, 2023

This outbreak is over. Learn what you can do to protect yourself from getting sick from *Salmonella*.

Fast Facts

- Illnesses: 63
- Hospitalizations: 10
- Deaths: 0
- [States](#): 8
- Recall: Yes
- Investigation status: Closed



Outbreak Investigation Summary

[Data](#) showed that alfalfa sprouts made people in this outbreak sick.

- Of the 50 people interviewed, 35 (70%) reported eating alfalfa sprouts.

- Eight of the people who got sick in this outbreak confirmed they had purchased Sun Sprouts brand alfalfa sprouts from their local grocery store. On December 29, 2022, SunSprout Enterprises [recalled](#) four lots of raw alfalfa sprouts.

What You Should Do

[Cook sprouts](#) thoroughly to reduce your risk of illness.

Eating raw or undercooked sprouts may lead to food poisoning. That's because the warm, humid conditions needed to grow sprouts are also ideal for germs to multiply.

It's especially important to avoid raw sprouts if you are in a group more likely to get seriously sick from food poisoning: adults aged 65 and older, children younger than age 5, people with weakened immune systems, and pregnant people.

Investigation Details

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CDC, public health and regulatory officials in several states, and the U.S. Food and Drug Administration (FDA) collected [different types of data](#) to investigate a multistate outbreak of *Salmonella* Typhimurium infections.

Epidemiologic and traceback data showed that SunSprout Enterprises raw alfalfa sprouts were the source of this outbreak.

As of February 28, 2023, this outbreak is over.

Epidemiologic Data

A total of 63 people infected with the outbreak strain of *Salmonella* Typhimurium were reported from eight states (see [map](#)).

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 week before they got sick. This information provided clues to help investigators identify the source of the outbreak.

Illnesses started on dates ranging from December 2, 2022, to February 2, 2023 (see [timeline](#)). Sick people ranged in age from less than one to 83 years, with a median age of 42, and 61% were female. Of 43 people with race and ethnicity information, 42 are White and 1 is African American/Black; No one reported Hispanic ethnicity. Of 59 people with information available, 10 were hospitalized.

The true number of sick people in this outbreak was likely much higher than the number reported, and the outbreak may not have been limited to the states with known illnesses. This is because many people recover without medical care and are not tested for *Salmonella*.

State and local public health officials interviewed people about the foods they ate in the week before they got sick. Of the 50 people interviewed, 35 (70%) reported eating alfalfa sprouts. This percentage was significantly higher than the 8.7% of respondents who reported eating sprouts in the [FoodNet Population Survey](#)—a survey that helps estimate how often people eat various foods linked to diarrheal illness. This difference suggests that people in this outbreak got sick from eating alfalfa sprouts.

Laboratory and Traceback Data

Public health investigators used the [PulseNet](#) system to identify illnesses that may be 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 are closely related genetically. This suggests that people in this outbreak got sick from the same food.

[WGS analysis](#) of bacteria from 63 people's samples did not predict resistance to any antibiotics. Standard [antibiotic susceptibility testing](#) by CDC's [National](#)

[Antimicrobial Resistance Monitoring System \(NARMS\)](#) laboratory is currently underway.

FDA's traceback evidence indicated that the restaurants and grocery stores identified in this outbreak received raw alfalfa sprouts from SunSprout Enterprises. Additionally, eight of the individuals identified in this outbreak confirmed they had purchased Sun Sprouts-brand alfalfa sprouts from local grocery stores.

Public Health Actions

On December 29, 2022, SunSprout Enterprises [recalled](#) four lots of raw alfalfa sprouts, lot numbers 4211, 5211, 3212, and 4212. The sprouts were distributed to food service and grocery customers in Nebraska, Kansas, and Iowa between late November and mid-December 2022. Recalled sprouts had best-by dates between 12/10/2022 and 1/7/2023.