

Salmonella Outbreak Linked to Cucumbers



Food Safety Alert

Posted July 2, 2024

Fast Facts

- - Illnesses: 449 (38 new Africana, 215 Braenderup new)
 - Hospitalizations: 125 (11 new Africana, 50 Braenderup new)
 - Deaths: 0
 - [States](#): 31 states and the District of Columbia (1 new Africana, 26 Braenderup)
 - Recall: Yes
 - Investigation status: Active (first posted on June 5, 2024)



Outbreak Investigation Summary

Epidemiologic, traceback, and laboratory data show that cucumbers were contaminated with *Salmonella* and made people sick. Testing identified the *Salmonella* Braenderup strain in untreated canal water used by a grower in Florida. Cucumbers from this grower are no longer in season and any sold previously are no longer on shelves.

What You Should Do

Follow these [four food safety steps](#) to prevent getting sick from *Salmonella*.

- **Clean:** Wash your hands, utensils, and surfaces often. Rinse fruits and vegetables under running water before eating, cutting, or peeling.
- **Separate:** Keep food that won't be cooked separate from raw meat, poultry, and seafood.
- **Cook:** Use a food thermometer to make sure you have cooked your food to a [temperature high enough to kill germs](#).
- **Chill:** Refrigerate perishable food (food that goes bad) within 2 hours. If the outside temperature is hotter than 90°F, refrigerate within 1 hour. Thaw food in the refrigerator, not on the counter.

Symptoms of *Salmonella*

- Most people infected with *Salmonella* experience diarrhea, fever, and stomach cramps.
 - Symptoms usually start 6 hours to 6 days after swallowing the bacteria.
 - Most people recover without treatment after 4 to 7 days.
- Some people—especially children younger than 5 years, adults 65 years and older, and people with weakened immune systems—may experience more severe illnesses that require medical treatment or hospitalization.

Investigation Details

Posted July 2, 2024

July 2, 2024

CDC, public health and regulatory officials in several states, and the U.S. Food and Drug Administration (FDA) are collecting [different types of data](#) to investigate a multistate outbreak of *Salmonella* Africana and *Salmonella* Braenderup infections. Epidemiologic, traceback and laboratory data show that cucumbers were contaminated with *Salmonella* and made people sick.

CDC and FDA combined these two outbreak investigations as they shared several similarities, including where and when illnesses occurred, the demographics of ill people and the foods they reported eating before they became sick.

Epidemiologic Data

As of July 2, a total of 449 people infected with one of the outbreak strains of *Salmonella* Africana and *Salmonella* Braenderup have been reported from 31 states and the District of Columbia (see [map](#)). Of these illnesses, 215 people were infected with the newly added *Salmonella* Braenderup strain. Illnesses started on dates ranging from March 11, 2024, to June 4, 2024 (see [timeline](#)). Of 360 people with information available, 125 have been hospitalized and no deaths have been reported.

The true number of sick people in this 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*. In addition, recent illnesses may not yet be reported as it usually takes 3 to 4 weeks to determine if a sick person is part of an outbreak.

Public health officials collect 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 provides clues to help investigators identify the source of the outbreak.

The table below has information about sick people in this outbreak (“n” is the number of people with information available for each demographic).

Table of demographic information (n is the number of people with information available)

Demographics	Information
Age (n=447)	Range from <1 to 94 years Median age of 45
Sex (n=445)	66% female 34% male
Race (n=360)	84% White 11% African American/Black <1% Native American or Alaska Native

Table of demographic information (n is the number of people with information available)

Demographics	Information
	3% Asian 0% Native Hawaiian or other Pacific Islander <1% Middle Eastern/North African <1% reported more than one race
Ethnicity (n=351)	90% non-Hispanic 10% Hispanic

State and local public health officials are interviewing people about the foods they ate in the week before they got sick. Of the 188 people interviewed, 129 (69%) reported eating cucumbers. This percentage was significantly higher than the 50% of respondents who reported eating cucumbers 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 cucumbers.

Laboratory and Traceback Data

Public health investigators used the [PulseNet](#) system to identify illnesses that may have been 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 means that people in this outbreak likely got sick from the same type of food.

[WGS analysis](#) of bacteria from 214 people's samples had no predicted resistance; bacteria from 235 people's samples predicted resistance to one or more of the following antibiotics: amoxicillin-clavulanic acid, ampicillin, azithromycin, cefoxitin, ceftiofur, ceftriaxone, ciprofloxacin, fosfomycin, and tetracycline. More information is available at the [National Antimicrobial Resistance Monitoring System \(NARMS\)](#) site. Most people with *Salmonella* illness recover without antibiotics. However, if antibiotics are needed, some illnesses in this outbreak may be difficult to treat with some commonly recommended antibiotics and may require a different antibiotic choice.

FDA's traceback investigation identified Bedner Growers, Inc., in Florida as a supplier of cucumbers in this outbreak. This one grower does not account for all illnesses in this outbreak.

FDA collected samples at the grower in Florida and identified *Salmonella* Braenderup in untreated canal water. WGS determined that the *Salmonella* found in the water is the same strain of *Salmonella* Braenderup that made people in this outbreak sick. Additional soil and water samples collected at Bedner Growers, Inc. were positive for other strains of *Salmonella*. CDC and FDA are looking to see if these strains have caused illness in people.

Public Health Actions

Bedner Growers, Inc. in Florida, where the positive sample was collected, is no longer growing and harvesting cucumbers for the season.