# *Salmonella* Outbreak Linked to Salami Sticks

Food Safety Alert

Posted December 8, 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: 34
- Hospitalizations: 7
- Deaths: 0
- States: 10
- Recall: Yes
- Investigation status: Closed




Recalled Food

**Citterio brand Premium Italian-Style Salame Sticks**

- Sold at stores nationwide
- “Best by” dates through January 23, 2022
- See recall notice for more information

California officials found *Salmonella* in two packages of unopened Citterio brand Premium Italian-Style Salame Sticks. Among 27 people who were interviewed about foods they ate before getting sick, 25 (93%) reported eating or maybe eating this product.

### What You Should Do

**Check your home for recalled products. If you have any left:**

- Do not eat them. Throw them away or return them to where you bought them.
- Wash surfaces and containers that may have touched the recalled product using hot soapy water or a dishwasher.

**Always follow these four food safety steps:**

- **Clean**: Wash your hands, utensils, and surfaces often.
- **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 food is exposed to temperatures above 90°F (like a hot car or picnic), refrigerate within 1 hour. Thaw food in the refrigerator, not on the counter.

**Stay up to date on food recalls and outbreaks to avoid getting sick from eating contaminated food.**

# Investigation Details

Posted December 8, 2021

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

December 8, 2021

CDC, public health and regulatory officials in several states, and the U.S. Department of Agriculture's Food Safety and Inspection Service (USDA-FSIS) investigated a multistate outbreak of *Salmonella* I 4,[5],12:i:- infections.

Epidemiologic, traceback, and laboratory data showed that Citterio brand Premium Italian-Style Salame Sticks made people sick.

As of December 8, 2021, this outbreak is over.

### Epidemiologic and Traceback Data

A total of 34 people infected with the outbreak strain of *Salmonella* I 4,[5],12:i:- were reported from 10 states. The true number of sick people in this outbreak was likely much higher than the number reported, and this 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*.

Illnesses started on dates ranging from September 18, 2021, to October 30, 2021. Sick people ranged in age from 1 to 75 years, with a median age of 8. Most of the sick people (79%) were younger than 18, and 58% were female. Of 27 people with information available, 7 were hospitalized. No deaths were reported.

State and local public health officials interviewed people about the foods they ate in the week before they got sick. Among 27 people interviewed, 26 (96%) reported eating salami sticks and 25 (93%) reported eating or maybe eating Citterio brand Premium Italian-Style Salame Sticks.

### 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 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.

California officials found *Salmonella* in two unopened packages of Citterio brand Premium Italian-Style Salame Sticks that they collected for testing. WGS identified in these products a different strain of *Salmonella* (*Salmonella* Derby) that was not closely related to samples from sick people. PulseNet did not find any illnesses caused by this strain of *Salmonella* Derby.

WGS analysis of bacteria from 28 people's samples, two salami stick samples, and one raw ground pork sample predicted resistance to one or more of the following antibiotics: ampicillin, fosfomycin, kanamycin, streptomycin, sulfamethoxazole, and tetracycline. Standard antibiotic susceptibility testing at CDC's National Antimicrobial Resistance Monitoring System (NARMS) laboratory is currently underway. Most people with *Salmonella* illness recover without antibiotics. However, if antibiotics were needed, this resistance was unlikely to affect the choice of antibiotic used to treat most people.

### Public Health Actions

On November 10, 2021, Euro Foods recalled approximately 119,091 pounds of Citterio brand Premium Italian-Style Salame Sticks products.

## Previous Updates

### November 12, 2021

Epidemiologic, traceback, and laboratory data show that Citterio brand Premium Italian-Style Salame Sticks may be contaminated with *Salmonella* and are making people sick.

### Epidemiologic and Traceback Data

Since the last update on October 28, 2021, 10 more illnesses have been reported. A total of 31 people infected with the outbreak strain of *Salmonella* I 4,[5],12:i:- have been reported from 10 states. Illnesses started on dates ranging from September 18, 2021, to October 18, 2021.

Sick people range in age from 1 to 75 years, with a median age of 7. Most of the sick people (77%) are younger than 18, and 61% are female. Of 24 people with information available, 6 have been hospitalized. No deaths have been reported.

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*. 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.

State and local public health officials are interviewing people about the foods they ate in the week before they got sick. Among 23 people interviewed, all

(100%) reported eating salami sticks, and 22 (96%) reported eating or maybe eating Citterio brand Premium Italian-Style Salame Sticks.

### Laboratory Data

California officials found *Salmonella* in two unopened packages of Citterio brand Premium Italian-Style Salame Sticks that they collected for testing. Whole genome sequencing (WGS) is being conducted to determine if the *Salmonella* in these products is the same as the outbreak strain.

WGS analysis of bacteria from 26 people's samples and one raw ground pork sample predicted resistance to one or more of the following antibiotics: ampicillin, kanamycin, streptomycin, sulfamethoxazole, and tetracycline. Standard antibiotic susceptibility testing by CDC's National Antimicrobial Resistance Monitoring System (NARMS) laboratory is currently underway. 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 November 10, 2021, Euro Foods recalled approximately 119,091 pounds of Citterio brand Premium Italian-Style Salame Sticks products.

## October 28, 2021

Epidemiologic data show that Citterio brand Premium Italian-Style Salame Sticks may be contaminated with *Salmonella* and are making people sick.

### Epidemiologic Data

As of October 27, 2021, one more illness has been reported. A total of 21 people infected with the outbreak strain of *Salmonella* I 4,[5],12:i:- have been reported from 8 states. Illnesses started on dates ranging from September 18, 2021, to October 3, 2021.

Sick people range in age from 2 to 75 years, with a median age of 12. Most of the sick people (81%) are younger than 18, and 62% are female. Of 18 people with information available, 6 have been hospitalized. No deaths have been reported.

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*. 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.

State and local public health officials are interviewing people about the foods they ate in the week before they got sick. Among 15 people interviewed, all (100%) reported eating salami sticks, and 14 (93%) reported eating or maybe eating Citterio brand Premium Italian-Style Salame Sticks. Thirteen people bought Citterio brand Premium Italian-Style Salame Sticks from Trader Joe's, and one person bought them from Wegmans grocery store.

### Laboratory Data

WGS analysis of bacteria from 14 people's samples and one raw ground pork sample predicted resistance to one or more of the following anibiotics: ampicillin, kanamycin, streptomycin, sulfamethoxazole, and tetrracycline. Standard antibiotic susceptibility testing by CDC's National Antimicrobial Resistance Monitoring System (NARMS) laboratory is currently underway. 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

CDC is continuing to advise not to eat, sell, or serve Citterio brand Premium Italian-Style Salame Sticks regardless of where they were purchased.

## October 23, 2021

CDC, public health and regulatory officials in several states, and the U.S. Department of Agriculture's Food Safety and Inspection Service (USDA-FSIS) are collecting different types of data to investigate a multistate outbreak of *Salmonella* I 4,[5],12:i:- infections.

Epidemiologic data show that Citterio brand Premium Italian-Style Salame Sticks may be contaminated with *Salmonella* and are making people sick.

### Epidemiologic Data

As of October 22, 2021, 20 people infected with the outbreak strain of *Salmonella* I 4,[5],12:i:- have been reported from eight states. Illnesses started on dates ranging from September 18, 2021, to October 3, 2021.

Sick people range in age from 2 to 75 years, with a median age of 11. Most of the sick people (80%) are younger than 18, and 65% are female. Of 11 people with information available, 3 have been hospitalized. No deaths have been reported.

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*. 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.

State and local public health officials are interviewing people about the foods they ate in the week before they got sick. Among nine people interviewed, all (100%) reported eating salami sticks. This percentage was significantly higher than the 39.8% of respondents who reported eating salami, pepperoni, or other Italian-style meat in the FoodNet Population Survey -a survey that helps estimate how often people eat various foods. This comparison suggests that people in this outbreak got sick from eating salami sticks.

Of the nine people who reported eating salami sticks, eight ate or may have eaten Citterio brand Premium Italian-Style Salame Sticks purchased from Trader Joe's grocery stores.

### Laboratory Data

Public health investigators are using 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 10 people's samples and one raw ground pork sample predicted resistance to one or more of the following antibiotics: ampicillin, kanamycin, streptomycin, sulfamethoxazole, and tetracycline. Standard antibiotic susceptibility testing by CDC's National Antimicrobial Resistance Monitoring System (NARMS) laboratory is currently underway. 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

CDC is advising not to eat, sell, or serve Citterio brand Premium Italian-Style Salame Sticks regardless of where they were purchased.

Trader Joe’s has voluntarily stopped selling this product in its stores nationwide until we learn more.

Investigators are working with Citterio to determine next steps and if additional products may be contaminated.