Outbreak Investigation of Salmonella: Cucumbers (June 2024)

Outbreak is over. FDA's investigation is complete.

Product

There is no product linked to illnesses on the market and no ongoing risk to the public.



Images of Additional Products

Symptoms of *Salmonella (/food/foodborne-pathogens/salmonella-salmonellosis)* Infection

Symptoms include diarrhea, fever, and abdominal cramps. Illness usually occurs within 12 to 72 hours after eating contaminated food and usually lasts four to seven days. Children younger than five, the elderly, and people with weakened immune systems are more likely to have severe infections.

Status

Ended.

Recommendation

- Product of concern is past shelf life.

- Contact your healthcare provider if you think you may have symptoms (/food/foodborne-pathogens/salmonella-salmonellosis) of a *Salmonella* infection.

Current Update

August 22, 2024

The FDA and CDC, in collaboration with state and local partners, investigated a multistate outbreak of *Salmonella* Africana and *Salmonella* Braenderup infections with 551 illnesses in 34 states and the District of Columbia. As reported by CDC, as of August 22, 2024, this outbreak is over.

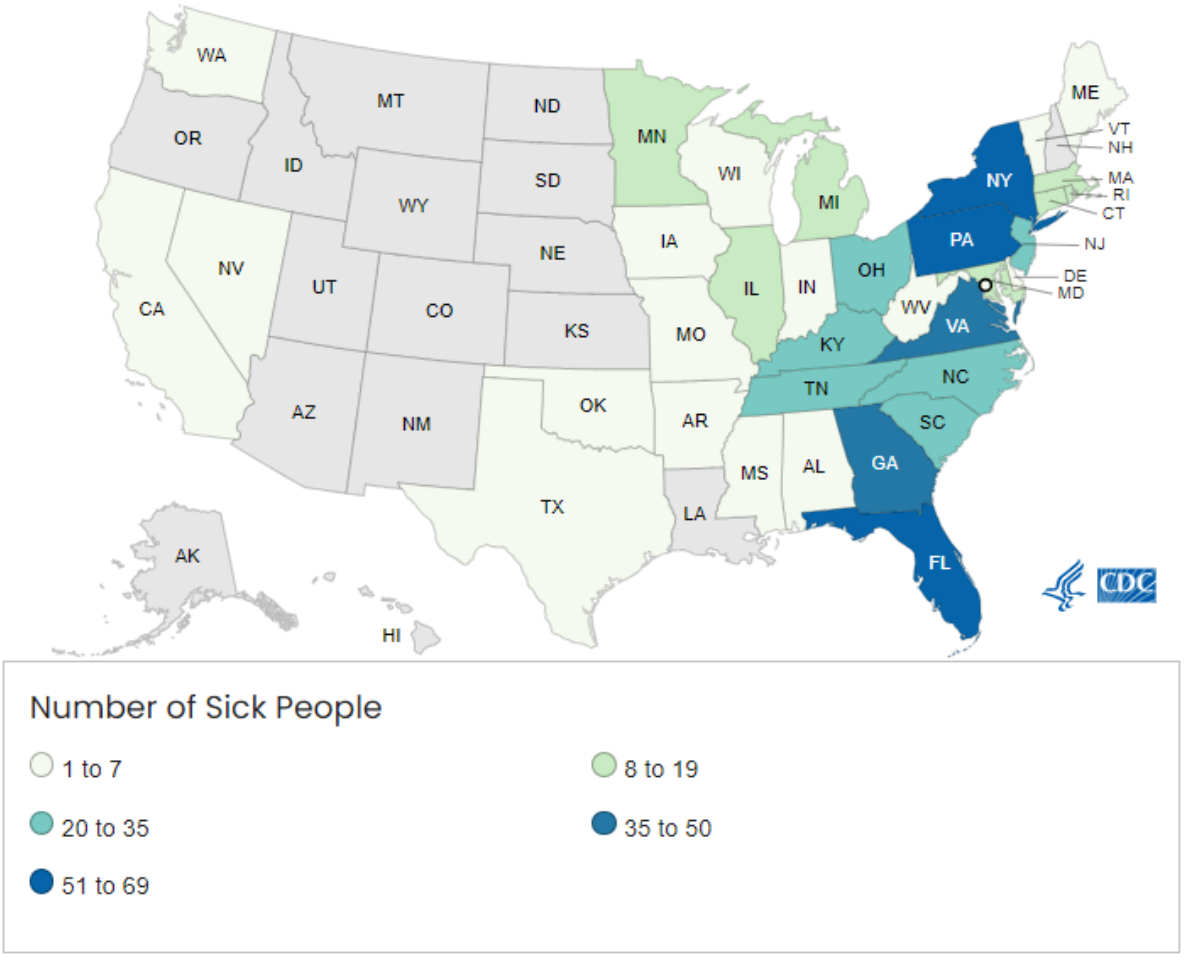
Laboratory, epidemiological, and traceback data have determined that cucumbers from Bedner Growers, Inc., of Boynton Beach, Florida, and Thomas Produce Company, of Boca Raton, Florida, are likely sources of illnesses in this outbreak; however, these growers do not account for all the illnesses in this outbreak. Additionally, Bedner Growers, Inc.'s and Thomas Produce Company's cucumber growing and harvesting season is over. There is no product from these farms on the market and likely no ongoing risk to the public.

FDA conducted an onsite inspection at both Bender Growers, Inc. and Thomas Produce Company and collected samples. *Salmonella* Braenderup was detected in samples of canal water at both farms. Whole Genome Sequencing (/food/microbiology-research-food/whole-genome-sequencing-wgs-program) analysis determined that the water used by Thomas Produce Company contained *Salmonella* that is a match to a strain of *Salmonella* Braenderup that caused some of the illnesses in this outbreak. Additionally, as previously reported, the water used by Bedner Growers, Inc. is also contained *Salmonella* that was a match to a different strain of *Salmonella* Braenderup that caused some of the illnesses in this outbreak.

Additional types of *Salmonella* were detected in both soil and water samples collected at both Bedner Growers, Inc. and Thomas Produce Company. Multiple other strains of *Salmonella*, unrelated to this outbreak investigation, found at Bedner Growers, Inc. and Thomas Produce Company matched clinical isolates from illnesses in the National Center for Biotechnology Information's (NCBI (https://www.ncbi.nlm.nih.gov/pathogens/tree)) database that occurred in 2024 and previous years.

Food safety is a shared responsibility that involves growers, packers, distributors, retailers, and regulators. While FDA's traceback investigation is complete, FDA is committed to working with all stakeholders to advance this critical work to improve prevention of future outbreaks.

Case Count Map Provided by CDC



Case Counts

Total Illnesses: 551
Hospitalizations: 155
Deaths: 0
Last Illness Onset: July 26, 2024
States with Cases: AL, AR, CA, CT, DE, DC, FL, GA, IL, IN, IA, KY, ME, MD, MA, MI, MN, MO, MS, NV, NJ, NY, NC, OH, OK, PA, RI, SC, TN, TX, VA, VT, WA, WI, WV

Useful Links

- CDC Investigation Notice (https://www.cdc.gov/salmonella/africana-06-24/index.html)
- Fresh Start Produce Sales, Inc. Recall (/safety/recalls-market-withdrawals-safety-alerts/fresh-start-produce-sales-initiates-recall-whole-cucumbers-because-possible-health-risk)
- Food Safety Tips for Retailers and Consumers During an Outbreak (/food/outbreaks-foodborne-illness/food-

safety-tips-consumers-retailers-during-outbreak-foodborne-illness)

- Food Safety Resources for Produce Shippers and Carriers During a Foodborne Illness Outbreak (/food/outbreaks-foodborne-illness/food-safety-resources-produce-shippers-and-carriers-during-foodborne-illness-outbreak)
- Who to Contact
- What is *Salmonella*? (/food/foodborne-pathogens/salmonella-salmonellosis)

Recalled Product







Previous Updates

August 14, 2024

The FDA and CDC, in collaboration with state and local partners, are investigating a multistate outbreak of *Salmonella* Africana and *Salmonella* Braenderup infections with 449 illnesses in 31 states and the District of Columbia. While originally reported as two separate outbreaks, CDC and FDA combined these two outbreak investigations as they shared several similarities, including when and where illnesses occurred, the demographics of ill people, and the foods they

reported eating before they became sick. Laboratory, epidemiological, and traceback data have determined that cucumbers from Bedner Growers, Inc., of Boynton Beach, Florida, and Thomas Produce Company, of Boca Raton, Florida, are likely sources of illnesses in this outbreak; however, these growers do not account for all the illnesses in this outbreak.

Based on traceback information collected, Thomas Produce Company supplied cucumbers to multiple points of service where ill people reported eating cucumbers. As part of the investigation, FDA conducted an onsite inspection at Thomas Produce Company and collected samples. *Salmonella* Braenderup was detected in samples of canal water used by Thomas Produce Company. Whole Genome Sequencing (/food/microbiology-research-food/whole-genome-sequencing-wgs-program) analysis determined that the water used by Thomas Produce Company contained the *Salmonella* that is a match to a strain of *Salmonella* Braenderup that is causing some of the illnesses in this outbreak.

Additional types of *Salmonella* were detected in both soil and water samples collected at both Bedner Growers, Inc. and Thomas Produce Company. Multiple other strains of *Salmonella*, unrelated to this outbreak investigation, found at Bedner Growers, Inc. matched clinical isolates from illnesses in the National Center for Biotechnology Information's (NCBI (https://www.ncbi.nlm.nih.gov/home/about/)) database that occurred in previous years. CDC and FDA are working to determine whether other positive samples from Thomas Produce Company match historical clinical isolates.

Bedner Growers, Inc.'s and Thomas Produce Company's cucumber growing and harvesting season is over. There is no product from these farms on the market and likely no ongoing risk to the public.

Food safety is a shared responsibility that involves growers, packers, distributors, retailers, and regulators. While FDA's traceback investigation is complete, FDA is committed to working with all stakeholders to advance this critical work to improve prevention of future outbreaks.

July 2, 2024

The FDA and CDC, in collaboration with state and local partners, are investigating a multistate outbreak of *Salmonella* Africana and *Salmonella* Braenderup infections with 449 illnesses in 31 states and the District of Columbia. While originally reported as two separate outbreaks, CDC and FDA combined these two outbreak investigations as they shared several similarities, including when and where illnesses occurred, the demographics of ill people, and the foods they reported eating before they became sick. Laboratory, epidemiological, and traceback data have

determined that cucumbers from Bedner Growers, Inc., of Boynton Beach, Florida, are a likely source of illnesses in this outbreak; however, this grower does not account for all the illnesses in this outbreak.

As part of the investigation, FDA conducted an onsite inspection at Bedner Growers, Inc., a grower that supplies Fresh Start Produce Sales, Inc. FDA collected samples as part of this inspection and *Salmonella* Braenderup was detected in samples of untreated canal water used by Bedner Growers, Inc. Whole Genome Sequencing (/food/microbiology-research-food/whole-genome-sequencing-wgs-program) analysis determined that the *Salmonella* found in the water used by Bedner Growers, Inc. is a match to a strain of *Salmonella* Braenderup that is causing some of the illnesses in this outbreak. Additional types of Salmonella were detected in both soil and water samples collected at Bedner Growers, Inc. CDC and FDA are looking to see if these strains have caused illness in people.

Additionally, based on traceback information collected, Bedner Growers, Inc. supplied cucumbers to multiple points of service where ill people reported purchasing or eating cucumbers. FDA is continuing to conduct traceback to identify other possible points of contamination.

As of July 1, 2024, a total of 449 people infected with the outbreak strains of *Salmonella* Africana and *Salmonella* Braenderup have been reported from 31 states and the District of Columbia. Of these illnesses, 215 people were infected with the newly added *Salmonella* Braenderup. Of the 188 people interviewed, 129 (69%) reported eating cucumbers.

Bedner Growers, Inc.’s cucumber growing and harvesting season is over. There is no product from this farm on the market and likely no ongoing risk to the public. Additionally, this grower does not account for all the illnesses in the outbreak.

June 12, 2024

The FDA and CDC, in collaboration with state and local partners, are investigating a multistate outbreak of *Salmonella* Africana infections potentially linked to cucumbers.

Based on epidemiological information collected by CDC for the *Salmonella* Africana investigation (https://www.cdc.gov/salmonella/africana-06-24/index.html), as of June 12, 196 people infected with the outbreak strain of *Salmonella* Africana have been reported from 28 states and the District of Columbia. Of the 85 people interviewed, 63 (74%) reported eating cucumbers.

CDC and FDA are also investigating an outbreak of *Salmonella* Braenderup infections, with 185 illnesses in 24 states. The two outbreaks share several similarities, including where and when illnesses occurred and the demographics of ill people. Investigators are working to determine whether the two outbreaks could be linked to the same food vehicle. Information will be provided on the source of the *Salmonella* Braenderup outbreak as it becomes available.

As part of the *Salmonella* Africana investigation, state partners in the Pennsylvania Department of Agriculture collected samples of cucumbers from several retail locations in their state. One sample supplied by Fresh Start Produce Sales, Inc., of Delray, Florida, tested positive for *Salmonella*. The specific strain of *Salmonella* found on Fresh Start Produce Sales, Inc. recalled cucumbers was identified as *Salmonella* Bareilly and does not match any ongoing outbreaks.

The investigations are ongoing to determine the source(s) of contamination and what products are linked to illnesses. FDA will update this advisory should additional consumer safety information become available.

June 5, 2024

The FDA and CDC, in collaboration with state and local partners, are investigating a multistate outbreak of *Salmonella* Africana infections potentially linked to cucumbers.

Based on epidemiological information collected by CDC for the *Salmonella* Africana investigation (https://www.cdc.gov/salmonella/africana-06-24/index.html), as of June 4, 162 people infected with the outbreak strain of *Salmonella* Africana have been reported from 25 states and the District of Columbia. Of the 65 people interviewed, 47 (72%) reported eating cucumbers.

CDC and FDA are also investigating an outbreak of *Salmonella* Braenderup infections, with 158 illnesses in 23 states. The two outbreaks share several similarities, including where and when illnesses occurred and the demographics of ill people. Investigators are working to determine whether the two outbreaks could be linked to the same food vehicle. Information will be provided on the source of the *Salmonella* Braenderup outbreak as it becomes available.

As part of the *Salmonella* Africana investigation, state partners in the Pennsylvania Department of Agriculture collected samples of cucumbers from several retail locations in their state. One sample supplied by Fresh Start Produce Sales, Inc., of Delray, Florida, tested positive for *Salmonella*. Additional analysis is ongoing to determine the specific strain of *Salmonella* that was detected on the cucumbers and if they are linked to an outbreak.

In response to the positive sample, Fresh Start Produce Sales, Inc. has recalled cucumbers grown in Florida. English and mini cucumbers are not included in this recall. Cucumbers distributed by Fresh Start Produce Sales, Inc. are from a variety of growers. The grower that likely supplied potentially contaminated cucumbers is no longer growing and harvesting cucumbers for the season.

The investigations are ongoing to determine the source(s) of contamination and whether these or other products are linked to illnesses. FDA will update this advisory should additional consumer safety information become available.

Who to Contact

Consumers who have symptoms should contact their health care provider to report their symptoms and receive care.

To report a **complaint** or **adverse event** (illness or serious allergic reaction), you can

- Call an FDA Consumer Complaint Coordinator (/safety/report-problem-fda/consumer-complaint-coordinators)if you wish to speak directly to a person about your problem.
- Complete an electronic Voluntary MedWatch form (https://www.accessdata.fda.gov/scripts/medwatch/medwatch-online.htm) online.
- Complete a paper Voluntary MedWatch form (/media/85598/download) that can be mailed to FDA.

Submit Questions/Get Assistance (/fcic)

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