
Multistate Outbreak of *Salmonella* Infections Linked to Alfalfa Sprouts from One Contaminated Seed Lot (Final Update)

This outbreak appears to be over. However, sprouts are known to cause foodborne illness and outbreaks. More information about steps to reduce your risk of getting sick from eating sprouts is available on the [Advice to Consumers page](#).

Posted May 13, 2016 12:00 PM ET

Highlights

- CDC, multiple states, and the U.S. Food and Drug Administration (<http://www.fda.gov/Food/RecallsOutbreaksEmergencies/Outbreaks/ucm487329.htm>) (FDA) investigated a multistate outbreak of *Salmonella* infections.
 - Twenty-six people infected with the outbreak strains of *Salmonella* Muenchen (25 people) or *Salmonella* Kentucky (1 person) were reported from 12 states.
 - Eight ill people were hospitalized. No deaths were reported.
- Collaborative investigative efforts of state, local, and federal public health and regulatory officials indicated that alfalfa sprouts produced by multiple sprouters from one lot of contaminated seeds were the likely source of this outbreak.
- This outbreak appears to be over. According to FDA, no sprouts from the contaminated seed lot are expected to be on the market.
- Sprouts are known to cause foodborne illness and outbreaks. More information about steps to reduce your risk of getting sick from eating sprouts is available on the Advice to Consumers page.

Outbreak Summary

Introduction

CDC collaborated with public health officials in multiple states and the U.S. Food and Drug Administration

(<http://www.fda.gov/Food/RecallsOutbreaksEmergencies/Outbreaks/ucm487329.htm>)

(FDA) to investigate a multistate outbreak of *Salmonella* infections.

Public health investigators used the PulseNet system to identify illnesses that were part of this outbreak. PulseNet, coordinated by CDC, is the national subtyping network of public health and food regulatory agency laboratories. PulseNet performs DNA fingerprinting on *Salmonella* bacteria isolated from ill people by using techniques called pulsed-field gel electrophoresis (PFGE) and whole genome sequencing (WGS). PulseNet manages a national database of these DNA fingerprints to identify possible outbreaks.

A total of 26 people infected with the outbreak strains of *Salmonella* Muenchen (25 people) or *Salmonella* Kentucky (1 person) were reported from 12 states. A list of states and the number of cases in each can be found on the Case Count Map page.

Among people for whom information was available, illnesses started on dates ranging from November 26, 2015 to April 7, 2016. Ill people ranged in age from 12 years to 73, with a median age of 38. Seventy-six percent of ill people were female. Among 26 ill people with available information, 8 (31%) were hospitalized, and no deaths were reported.

Investigation of the Outbreak

Collaborative investigative efforts of state, local, and federal public health and regulatory officials indicated that alfalfa sprouts produced by multiple sprouters from one lot of contaminated seeds were the likely source of this outbreak.

State and local public health officials interviewed ill people to obtain information about foods they might have eaten and other exposures in the week before they became ill. Of the 22 ill people who were interviewed, 17 (77%) reported eating or possibly eating sprouts in the week before illness started. When asked about the type of sprouts eaten, 16 (94%) of these 17 ill people reported eating alfalfa sprouts.

In February 2016, state and local health and regulatory officials in several states performed traceback investigations from multiple restaurants where ill people ate sprouts. These investigations indicated that Sweetwater Farms of Inman, Kansas supplied alfalfa sprouts to all of these locations.

FDA and Kansas Department of Agriculture conducted an inspection at Sweetwater Farms and collected samples of irrigation water and alfalfa sprouts. Testing of these samples isolated *Salmonella* Kentucky and *Salmonella* Cubana. *Salmonella* Muenchen was not

isolated. A review of the CDC PulseNet database identified one recently reported person infected with the same DNA fingerprint of *Salmonella* Kentucky and this ill person was added to the outbreak case count.

On February 19, 2016, the Kansas Department of Health and Environment issued a warning to consumers to not eat alfalfa sprouts produced by Sweetwater Farms and the company withdrew alfalfa sprouts from the market. On February 26, 2016, Sweetwater Farms informed FDA that it would withdraw all of its sprout products from the market.

After the actions by Sweetwater Farms were taken, people infected with the outbreak strain of *Salmonella* Muenchen continued to be reported. Many of these ill people reported eating alfalfa sprouts before they got sick. Traceback investigations indicated that several sprouters other than Sweetwater Farms produced the alfalfa sprouts consumed by these ill people. Additional investigation determined that all of these sprouters, as well as Sweetwater Farms, had used a common lot of alfalfa seeds to produce alfalfa sprouts. FDA tested samples of seeds from this lot and isolated *Salmonella* Cubana with the same DNA fingerprint of the *Salmonella* Cubana isolated in irrigation water from Sweetwater Farms. FDA reports that the seed supplier contacted sprouters who received the lot of contaminated seeds and asked that they return them. According to FDA, no sprouts from the contaminated seed lot are expected to be on the market.

This outbreak appears to be over. However, contaminated sprouts are known to cause foodborne illness and outbreaks. More information about steps to reduce your risk of getting sick from eating sprouts is available on the [Advice to Consumers page](#).

Previous Outbreak Updates

> Initial Announcement

At A Glance

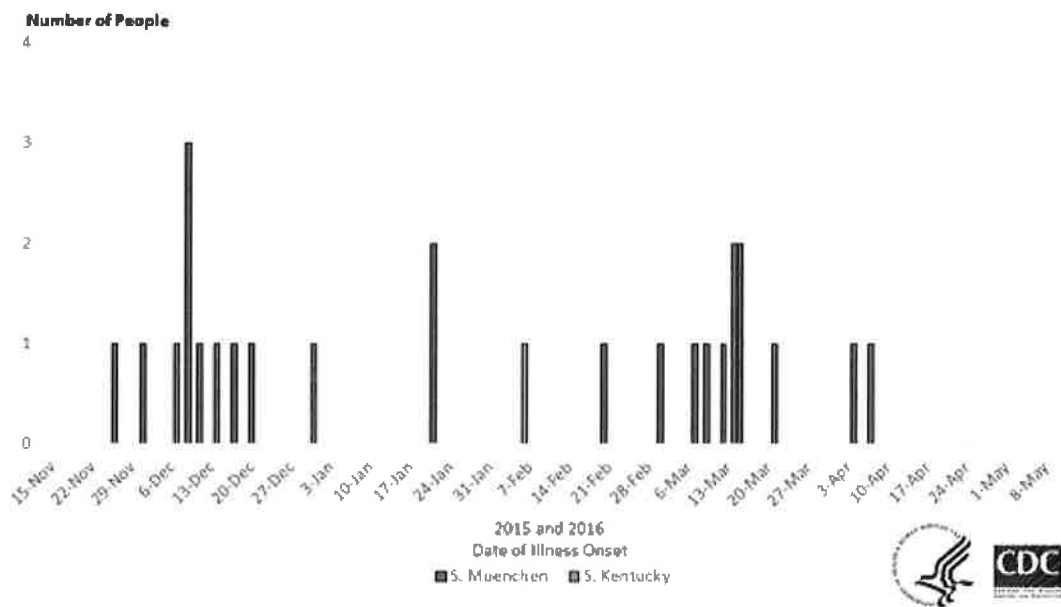
- Case Count: 26
- States: 12
- Deaths: 0
- Hospitalizations: 8
- Recall: No



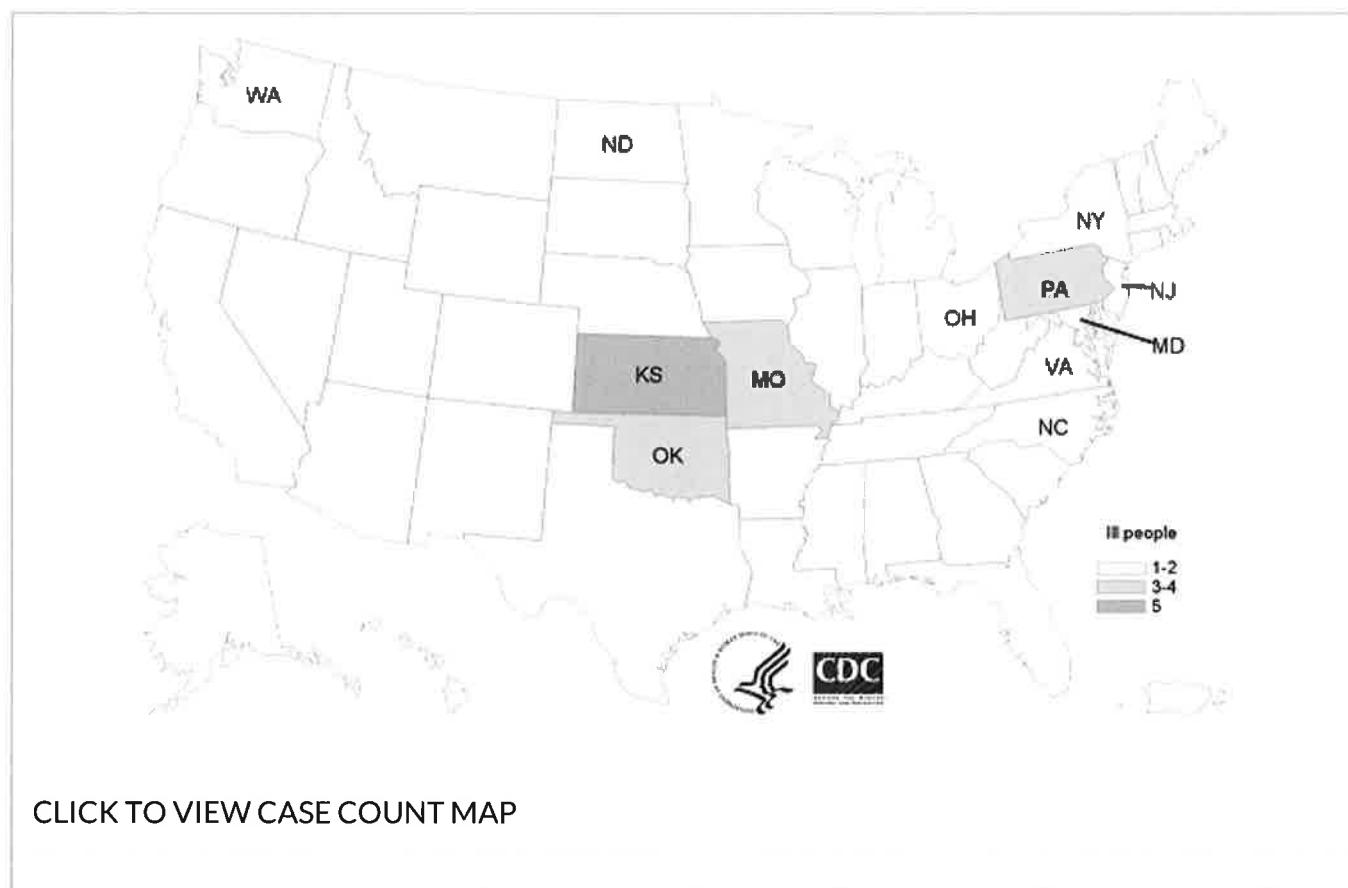
Image of alfalfa sprouts.

More Information

- [Advice to Consumers & Retailers](#)
- [Signs & Symptoms](#)
- [Key Resources](#)



[CLICK TO VIEW EPI CURVE GRAPHS](#)



[CLICK TO VIEW CASE COUNT MAP](#)

Page last reviewed: February 23, 2016

Page last updated: May 13, 2016

Content source: Centers for Disease Control and Prevention (<http://www.cdc.gov/>)

National Center for Emerging and Zoonotic Infectious Diseases (NCEZID) (</ncezid/index.html>)

Division of Foodborne, Waterborne, and Environmental Diseases (DFWED) (</ncezid/dfwed/index.html>)