



## Salmonella

### Multistate Outbreak of *Salmonella* Stanley Infections Linked to Raw Cashew Cheese (Final Update)

Posted January 31, 2014 2:00 PM ET

This outbreak appears to be over. However, *Salmonella* is an important cause of human illness in the United States. More information about *Salmonella*, and steps people can take to reduce their risk of infection, can be found on the [CDC \*Salmonella\* Web Page \(/salmonella/index.html\)](/salmonella/index.html).



#### At a Glance:

- **Case Count: 17** (</salmonella/stanley-01-14/epi.html>)
- **States: 3** (</salmonella/stanley-01-14/map.html>)
- **Deaths: 0**
- **Hospitalizations: 3**

#### More Information:

- [Recall & Advice to Consumers \(/salmonella/stanley-01-14/advice-consumers.html\)](/salmonella/stanley-01-14/advice-consumers.html)
- [Signs & Symptoms \(/salmonella/stanley-01-14/signs-symptoms.html\)](/salmonella/stanley-01-14/signs-symptoms.html)
- [Key Resources \(/salmonella/stanley-01-14/key-resources.html\)](/salmonella/stanley-01-14/key-resources.html)

#### Highlights

- **[Read the Advice to Consumers » \(/salmonella/stanley-01-14/advice-consumers.html\)](/salmonella/stanley-01-14/advice-consumers.html)**
- A total of 17 persons infected with the outbreak strain of *Salmonella* Stanley were reported from three states.
  - Most of the ill people were reported from California (88%).
  - The number of ill persons identified in each state was as follows: California (15), Nevada (1), and Wyoming (1).
  - 20% of ill persons were hospitalized. No deaths were reported.
- Collaborative investigative efforts of state, local, and federal public health and regulatory agencies indicated that raw cashew cheese produced by The Cultured Kitchen of West Sacramento, California was the source of this outbreak.
  - Cashew cheese is a non-dairy product made from raw cashews and other ingredients.
- On December 31, 2013, The Cultured Kitchen voluntarily [recalled \(http://www.fda.gov/Safety/Recalls/ucm380115.htm\)](http://www.fda.gov/Safety/Recalls/ucm380115.htm)  [its raw cashew cheese due to a risk of contamination with \*Salmonella\*. \(http://www.cdc.gov/Other/disclaimer.html\)](http://www.cdc.gov/Other/disclaimer.html)
  - The recall affected all six varieties of raw cashew cheese produced by The Cultured Kitchen with an expiration date of April 19, 2014 or earlier.
  - Photos of the recalled products are [available !\[\]\(a852c5461f8be0331350e2cc706daa68\_img.jpg\) \[PDF - 888 KB\] \(http://www.cdph.ca.gov/pubsforms/Documents/fdbFrCUL1a.pdf\)](http://www.cdph.ca.gov/pubsforms/Documents/fdbFrCUL1a.pdf)  [. \(http://www.cdc.gov/Other/disclaimer.html\)](http://www.cdc.gov/Other/disclaimer.html)

- CDC recommends that consumers do not eat the recalled raw cashew cheese and discard any remaining product in their homes.
  - Retailers and food establishments should not sell or serve the recalled raw cashew cheese.
  - People who think they have become ill after eating the recalled raw cashew cheese should talk to their health care provider.
- This outbreak appears to be over. However, the recalled cashew cheese products have a long shelf-life, and they may still be in peoples' homes. Consumers unaware of the recall could continue to eat these products and potentially get sick.

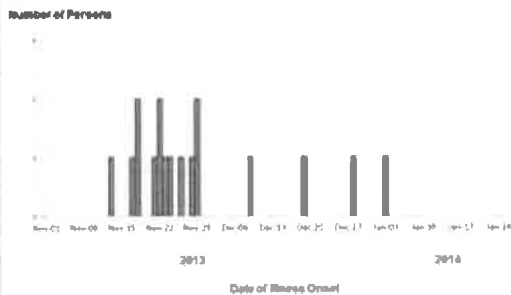
### Latest Case Count Map



[\(/salmonella/stanley-01-14/map.html\)](/salmonella/stanley-01-14/map.html)

[Click map to view updated & previous case count maps. \(/salmonella/stanley-01-14/map.html\)](/salmonella/stanley-01-14/map.html)

### Latest Epi Curve



[\(/salmonella/stanley-01-14/epi.html\)](/salmonella/stanley-01-14/epi.html)

[Click graph to view updated & previous epi curve graphs. \(/salmonella/stanley-01-14/epi.html\)](/salmonella/stanley-01-14/epi.html)

## Outbreak Summary

### Introduction

CDC collaborated with public health officials in several states and the U.S. Food and Drug Administration (FDA) to investigate a multistate outbreak of *Salmonella* Stanley infections. Results from this investigation indicated that raw cashew cheese produced by The Cultured Kitchen of West Sacramento, California was the source of this outbreak.

Public health investigators used DNA “fingerprints” of *Salmonella* bacteria obtained through diagnostic testing with pulsed-field gel electrophoresis, or PFGE, to identify cases of illness that were part of this outbreak. They used data from PulseNet (</pulsenet/>), the national subtyping network made up of state and local public health laboratories and federal food regulatory laboratories that performs molecular surveillance of foodborne infections. This strain of *Salmonella* Stanley is rare in the PulseNet database and had been seen only 20 times prior to this outbreak.

A total of 17 ill persons infected with the outbreak strain of *Salmonella* Stanley were reported from three states. Most of the ill people were reported from California (88%). The number of ill persons identified in each state was as follows: California (15), Nevada (1), and Wyoming (1). One ill person identified in Utah likely acquired their infection during international travel and


was excluded from the case count. Since the last update on January 3, 2014, three ill persons were reported from California.

Among persons for whom information was available, illness onset dates ranged from November 13, 2013 to January 3, 2014. Ill persons ranged in age from 2 years to 83 years, with a median age of 27 years. Fifty-three percent of ill persons were male. Among 15 ill persons with available information, three (20%) were hospitalized. No deaths were reported.

## Investigation of the Outbreak

Epidemiologic and traceback investigations conducted by officials in local, state, and federal public health, agriculture, and regulatory agencies indicated that consumption of raw cashew cheese produced by The Cultured Kitchen was the source of this outbreak of *Salmonella* Stanley infections. Cashew cheese is a non-dairy product made from raw cashews and other ingredients.

In interviews, ill persons answered questions about foods consumed and other exposures during the week before becoming ill. Eleven (73%) of 15 ill persons interviewed reported eating raw cashew cheese in the week before becoming ill. Among those who had brand information available, 11 (100%) of 11 ill persons reported that they had eaten The Cultured Kitchen brand raw cashew cheese or had purchased it at a retail location that sold this brand.

On December 31, 2013, The Cultured Kitchen of West Sacramento, California, recalled (<http://www.fda.gov/Safety/Recalls/ucm380115.htm>)  (<http://www.cdc.gov/Other/disclaimer.html>) all six flavors of its raw cashew cheese due to a risk of contamination with *Salmonella*. The recall affected products with an expiration date of April 19, 2014 or earlier. The cashew cheese products were sold in eight-ounce plastic containers in the following flavors: herb, smoked cheddar, pepper jack, habanero cilantro lime, basil pesto and white cheddar.

Testing conducted by the California Department of Public Health isolated the outbreak strain of *Salmonella* Stanley from an opened package of The Cultured Kitchen brand smoked cheddar cashew cheese collected from an ill person's home. Additionally, testing conducted of a sample of fermenting cashews collected at The Cultured Kitchen isolated *Salmonella* Weltevreden. No ill persons linked to this outbreak have been identified with *Salmonella* Weltevreden. The cashew is a tropical tree nut, and cashews are not produced commercially in the United States. The source of these cashews has not been determined.

This outbreak appears to be over. However, the recalled cashew cheese products have a long shelf-life, and they may still be in peoples' homes. Consumers unaware of the recall could continue to eat these products and potentially get sick.

*Salmonella* is an important cause of human illness in the United States. More information about *Salmonella* and steps people can take to reduce their risk of infection can be found on the CDC *Salmonella* Web Page (</salmonella/general/prevention.html>).

## Progression of the Outbreak Investigation

### January 31, 2013

#### Final Case Count Update

A total of 17 ill persons infected with the outbreak strain of *Salmonella* Stanley were reported from three states. Most of the ill people were reported from California (88%). The number of ill persons identified in each state was as follows: California (15), Nevada (1), and Wyoming (1). Since the last update on January 3, 2014, three ill persons were reported from California.

Among persons for whom information was available, illness onset dates ranged from November 13, 2013 to January 3, 2014. Ill persons ranged in age from 2 years to 83 years, with a median age of 27 years. Fifty-three percent of ill persons were male. Among 15 ill persons with available information, three (20%) were hospitalized. No deaths were reported.

## Final Investigation Update

Testing conducted by the California Department of Public Health isolated the outbreak strain of *Salmonella* Stanley from an opened package of The Cultured Kitchen brand smoked cheddar cashew cheese collected from an ill person's home. Additionally, testing conducted of a sample of fermenting cashews collected at The Cultured Kitchen isolated *Salmonella* Weltevreden. No ill persons linked to this outbreak have been identified with *Salmonella* Weltevreden.

---

## Initial Announcement

January 3, 2014

CDC is collaborating with public health officials in several states and the U.S. Food and Drug Administration (FDA) to investigate a multistate outbreak of *Salmonella* Stanley infections. Results from this ongoing investigation indicate that raw cashew cheese produced by The Cultured Kitchen of West Sacramento, California is the likely source of this outbreak.

Public health investigators are using DNA "fingerprints" of *Salmonella* bacteria obtained through diagnostic testing with pulsed-field gel electrophoresis, or PFGE, to identify cases of illness that may be part of this outbreak. They are using data from [PulseNet \(/pulsenet/\)](#), the national subtyping network made up of state and local public health laboratories and federal food regulatory laboratories that performs molecular surveillance of foodborne infections. This strain of *Salmonella* Stanley is rare in the PulseNet database and has been seen only 20 times prior to this outbreak.

A total of 14 ill persons infected with the outbreak strain of *Salmonella* Stanley have been reported from three states. Most of the ill people have been reported from California (85%). The number of ill persons identified in each state is as follows: California (12), Nevada (1), and Wyoming (1). One ill person identified in Utah likely acquired their infection during international travel and was excluded from the case count.

Among persons for whom information is available, illness onset dates range from November 13, 2013 to December 9, 2013. Ill persons range in age from 2 years to 77 years, with a median age of 27 years. Fifty percent of ill persons are female. Among 12 ill persons with available information, 3 (25%) reported being hospitalized. No deaths have been reported.

This outbreak can be visually described with a chart showing the number of persons who became ill each day. This chart is called an [epidemic curve or epi curve \(/salmonella/stanley-01-14/epi.html\)](#). Illnesses that occurred after December 12, 2013 might not yet be reported due to the time it takes between when a person becomes ill and when the illness is reported. This takes an average of 2 to 4 weeks. Additionally, the recalled raw cashew cheese has a long shelf-life and may still be in people's homes, and illnesses may continue to be reported. Please see the [Timeline for Reporting Cases of Salmonella Infections \(/salmonella/outbreaks/reporting\\_timeline.html\)](#) for more details.

## Investigation of the Outbreak

Epidemiologic and traceback investigations conducted by officials in local, state, and federal public health, agriculture, and regulatory agencies indicate that consumption of raw cashew cheese produced by The Cultured Kitchen is the likely source of this outbreak of *Salmonella* Stanley infections. Cashew cheese is a non-dairy product made from raw cashews and other ingredients.

In interviews, ill persons answered questions about foods consumed and other exposures during the week before becoming ill. Seven (64%) of 11 ill persons interviewed reported eating raw cashew cheese in the week before becoming ill. Among those who had brand information available, six (86%) of these 7 ill persons reported that they had eaten The Cultured Kitchen brand raw cashew cheese or had purchased it at a retail location that sold this brand.

CDC and state and local public health partners are continuing laboratory surveillance through PulseNet to identify additional ill persons and to interview ill persons about foods eaten before becoming ill. FDA is continuing to work closely with CDC and state partners in this investigation.

---

Page last reviewed: January 3, 2014

Page last updated: January 31, 2014

Content source: [Centers for Disease Control and Prevention](#)

[National Center for Emerging and Zoonotic Infectious Diseases \(NCEZID\)](#)

[Division of Foodborne, Waterborne, and Environmental Diseases \(DFWED\)](#)

---

Centers for Disease Control and Prevention 1600 Clifton Rd. Atlanta, GA  
30333, USA  
800-CDC-INFO (800-232-4636) TTY: (888) 232-6348 - [Contact CDC-INFO](#)

