

## ***Salmonella* Bredeney Infections Associated with Peanut Butter**

July

Aitkin County/Multiple states

On August 10, 2012, the Minnesota Department of Health (MDH) Public Health Laboratory identified a *Salmonella* Bredeney isolate with MDH pulsed-field gel electrophoresis (PFGE) subtype designation BDY9. The case was interviewed as part of routine surveillance activities. On August 23, PulseNet (the national molecular subtyping network for foodborne bacterial disease surveillance) noticed matches to *S. Bredeney* BDY9 in multiple states. By September 10, 21 cases had been reported in 13 states, and the Centers for Disease Control and Prevention (CDC) initiated a multi-state investigation.

In Minnesota, a case was defined as a Minnesota resident with laboratory-confirmed infection with *S. Bredeney* PFGE subtype BDY9.

Cases were contacted for an interview by phone regarding illness history and potential exposures. A questionnaire developed by CDC was used in addition to the Minnesota routine *Salmonella* surveillance form.

Information collected from case interviews was shared with CDC, other states, and the United States Food and Drug Administration (FDA).

CDC coordinated a multi-state investigation of cases. FDA conducted the plant investigation and initiated recalls.

One case was identified in Minnesota. The case had illness onset on July 27, 2012. The case was hospitalized for 6 days and recovered. The case had diarrhea, vomiting, fever, and cramps. The case was interviewed on August 13, before knowing that she was part of the outbreak. At that time, the case reported eating Creamy Valencia Peanut Butter from Grocery Chain A in the week prior to illness onset.

Nationally, 42 cases with the outbreak strain of *S. Bredeney* were reported from 20 states: Arizona, California, Connecticut, Illinois, Louisiana, Massachusetts, Maryland, Michigan, Minnesota, Missouri, Nevada, New Jersey, New Mexico, New York, North Carolina, Pennsylvania, Rhode Island, Texas, Virginia and West Virginia. Illness onset dates ranged from June 14 to September 21, 2012. The median age of cases was 7 years (range, 1 year to 79 years). Fifty-nine percent were male. Among the 36 cases with available information, 10 (28%) were hospitalized. No deaths were reported [1].

Among the 33 cases with available information, 25 (78%) reported shopping at Grocery Chain A. All 25 of these cases reported eating one of two Grocery Chain A's branded peanut butter products in the week before illness onset: 23 (92%) cases reported eating Grocery Chain A Valencia Creamy Salted Peanut Butter made with Sea Salt, and 2 (8%) cases reported eating Grocery Chain A Valencia Peanut Butter with Roasted Flaxseed [1].

On September 22, Grocery Chain A recalled its Creamy Salted Peanut Butter, which was manufactured by Sunland, Inc. in Portales, New Mexico. On September 24, Sunland, Inc. announced a recall of its peanut butter and other products containing nuts and seeds manufactured between May 1, 2012 and September 24. The recall was further expanded on October 4 and October 12, 2012, to include over 300 products, including raw and roasted shelled and in-shell peanuts [1].

The outbreak strain of *S. Bredeney* was isolated from open jars of peanut butter obtained from cases' homes by the Washington State Department of Agriculture laboratory, the New Jersey Department of Health laboratory, and the Virginia Division of Consolidated Laboratory Services [1].

The FDA conducted an investigation of the Sunland, Inc. manufacturing plant. The FDA isolated *Salmonella* from five peanut butter and shelled raw peanut samples that the company's internal testing had found to be negative. Two of those samples yielded the outbreak strain of *S. Bredeney*. The outbreak strain of *S. Bredeney* and other serotypes of *Salmonella* were also recovered from environmental samples taken at the plant during the investigation. Additionally, the FDA investigation uncovered that since 2009, Sunland distributed lots of peanut and nut butters that tested positive for *Salmonella* through the firm's internal testing program. As a result of the findings of the investigation at the manufacturing plant, FDA suspended Sunland, Inc.'s facility registration, thus prohibiting the company from introducing food into commerce [1].

This was a multi-state outbreak of *S. Bredeney* infections associated with consumption of peanut products produced by Sunland, Inc. The outbreak led to several peanut product recalls. It also led to a suspension of the company's registration, thus prohibiting it from producing food. One case associated with this outbreak was identified in Minnesota.

## Reference

1. Centers for Disease Control and Prevention. Multistate Outbreak of *Salmonella* Bredeney Infections Linked to Peanut Butter Manufactured by Sunland, Inc. <http://www.cdc.gov/salmonella/bredeney-09-12/index.html>