

Nationwide E. Coli O157:H7 Outbreak: Questions & Answers

An outbreak of E. coli O157:H7 infection is being investigated. Currently the investigation indicates that fresh spinach and salad blends containing fresh spinach are a likely source for this outbreak. FDA advises at this time that people not eat any fresh spinach or salad blends containing fresh spinach that are consumed raw.

Natural Selection Foods, LLC, of San Juan Bautista, California is currently recalling all of its products that contain fresh spinach with "Best if Used by Dates" of August 17, 2006 through October 1, 2006. (See additional information about brands associated with Natural Selection Foods below). Other companies and brands of fresh spinach and fresh spinach containing products may also be involved in this outbreak; FDA and CDC continue to investigate this possibility.

Another company, River Ranch, of California, is currently recalling its spring mix containing spinach. River Ranch obtained bulk spring mix containing spinach from Natural Selections. The following brands are involved: Farmers Market, Hy Vee, Fresh and Easy.

To date, 109 cases of illness related to this outbreak have been reported to the Centers for Disease Control and Prevention (CDC) in 19 states including 16 cases involving a type of kidney failure called hemolytic uremic syndrome (HUS) and one death.

What is E. coli O157:H7?

The E. coli O157:H7 is a bacterium that causes diarrhea that is often bloody; the diarrhea can be accompanied by abdominal cramps. Fever may be absent or mild. Symptoms usually occur within 2-3 days following exposure, but may occur as soon as 1 day following exposure or up to one week following exposure. Healthy adults can typically recover completely from E. coli O157:H7 exposure within a week. However, some people, especially young children and the elderly, can develop Hemolytic Uremic Syndrome (HUS) as a result of exposure to E. coli O157:H7, a condition that can lead to serious kidney damage and even death.

What does FDA advise people to do?

Currently, the FDA advises that people not eat any fresh spinach or salad blends containing fresh spinach that are consumed raw. Individuals who believe they may have experienced symptoms of illness after consuming fresh spinach or salad blends containing fresh spinach are urged to contact their health care provider.

What is an outbreak?

An outbreak is defined by the CDC as two (2) or more cases of the same disease

are related to a common exposure.

In what states have illnesses been reported?

To date, the states that have reported illnesses include: California, Connecticut, Idaho, Indiana, Kentucky, Maine, Michigan, Minnesota, Nevada, New Mexico, New York, Ohio, Oregon, Pennsylvania, Utah, Virginia, Washington, Wisconsin, and Wyoming. The implicated product was also distributed to Canada and Mexico. This outbreak is ongoing, therefore the number of illnesses and states involved may continue to increase.

What company and brands are included in the current recall?

Natural Selection Foods, LLC, of San Juan Bautista, California, is recalling all of its products that contain fresh spinach in all the brands they pack with "Best if Used by Dates" of August 17, 2006 through October 1, 2006. Products include fresh spinach and any salad blend containing fresh spinach. Products that do not contain fresh spinach are not part of this recall.

Natural Selection Foods, LLC brands include: Natural Selection Foods, Pride of San Juan, Earthbound Farm, Bellissima, Dole, Rave Spinach, Emeril, Sysco, O Organic, Fresh Point, River Ranch, Superior, Nature's Basket, Compliments, Trader Joe's, Ready Pac, Jansal Valley, Cheney Brothers, Coastline, D'Arrigo Brothers, Green Harvest, Mann, Mills Family Farm, Premium Fresh, Pro-Mark, Snoboy, The Farmer's Market, Tanimura & Antle, President's Choice, Cross Valley, and Riverside Farms.

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When was the onset of the first illness related to this outbreak?

The first illness connected to this outbreak thus far began on August 2, 2006, although most illnesses reported to date cluster with onsets from August 26 - September 9, 2006.

What advice does FDA have for the industry?

Commercial food establishments should not sell fresh spinach or salad blends containing fresh spinach to consumers. Nor should food establishments utilize fresh spinach or salad blends containing fresh spinach as an uncooked ingredient in food products to be consumed by their customers. Commercial food establishments should also avoid opening and minimize the handling of fresh spinach and other fresh spinach containing products to prevent the potential for cross contamination of other foods and food-contact surfaces.

Who is working on this outbreak?

FDA continues to work closely with the U.S. Centers for Disease Control and Prevention (CDC) and state and local health departments to determine the cause

and scope of this outbreak.

Is the government conducting tests?

Yes. The federal (principally CDC and the FDA) and state governments are working together to analyze samples from ill persons and product samples in an attempt to quickly identify the source(s) of the outbreak.

The outbreak strain of E. coli O157:H7 from ill persons is being "fingerprinted" at public health laboratories around the country, as part of PulseNet (the network of public health laboratories that sub-type bacteria). All E. coli O157:H7 strains associated with this outbreak have the same "fingerprint" (DNA pattern).

The states are collecting and analyzing samples of suspect foods. FDA has offered assistance to the states analyzing such samples as needed.

What steps has FDA taken to reduce the potential for outbreaks, specifically E. coli O157:H7 outbreaks, associated with raw produce?

The FDA developed the Lettuce Safety Initiative in response to recurring outbreaks of E. coli O157:H7 in lettuce. The primary goals of the initiative are to reduce public health risks by focusing on the product, agents and areas of greatest concern and to alert consumers early and respond rapidly in the event of an outbreak. On August 24, 2006, the State of California Department of Health Services and Department of Food and Agriculture and the FDA met with industry and academia to further clarify the goals, objectives and the next steps for the Lettuce Safety Initiative. This meeting was facilitated by the Western Institute for Food Safety and Security. This initiative is based on the 2004 Produce Safety Action Plan, intended to minimize the incidence of food borne illness associated with the consumption of fresh produce.

Since 1995, there have been 19 outbreaks of foodborne illness caused by E. coli O157:H7 for which lettuce or leafy greens were implicated as the outbreak vehicle. Although tracebacks to growers were not conducted (or "not conclusive") in all of the outbreak investigations, a majority of the outbreaks, including the recent outbreak in September of 2005, traced product back to California, many of which were from the Salinas Valley, though not exclusively.

Does the FDA's advice not to eat any fresh spinach or salad blends containing fresh spinach apply to both organic and non-organic products?

Yes.

Can people cook the fresh spinach or salad blends containing fresh spinach?

As stated above, the FDA is currently recommending that the public not consume fresh (uncooked) spinach or salad blends containing fresh spinach. However, E. coli O157:H7 in spinach can be killed by cooking at 160 degrees Fahrenheit for 15 seconds. If consumers choose to cook the spinach they should follow these cooking instructions and also remember to take steps to avoid cross-contamination of the fresh spinach with other foods and food contact surfaces and to wash hands,

utensils, and surfaces with hot, soapy water before and after handling the spinach.

Have there been previous outbreaks involving fresh spinach?

Yes. A previous outbreak involving fresh spinach occurred in California in October of 2003. Sixteen (16) cases of illness were reported and two (2) people died. The causative agent was E. coli O157:H7.

When did FDA first receive information regarding the current outbreak?

FDA first became aware of the current outbreak on September 13, 2006. FDA will continue to release additional information as it becomes available.