

**1- Salmonella Enteritidis Outbreak in Shell Eggs, U.S. Food & Drug Administration,
November 30, 2010; summary, Egg Safety Final Rule, July 7, 2009**



U.S. Food & Drug Administration



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Salmonella Enteritidis Outbreak in Shell Eggs

Updated November 30, 2010

Current Updates:

On October 18, 2010, FDA announced in a [Note to Correspondents](#)¹ that it has authorized Hillandale Farms of Iowa to resume shipping shell eggs to its customers. The authorization was made on October 15, 2010 in a [letter to Hillandale Farms](#)² confirming that the firm had taken corrective actions adequate to allow it to begin shipping eggs to customers.

In a second [Note to Correspondents](#)³ issued on October 18, 2010, FDA announced that it has issued a [warning letter to Wright County Egg](#)⁴ advising the firm to continue to refrain from shipping its eggs to customers at this time due to insanitary conditions at its facilities.

NEW On November 30, 2010, FDA sent a [letter](#)⁵ to Quality Egg, LLC notifying that the company was authorized to begin shipping shell eggs directly to the consumer market from two hen houses at Wright County Egg. Based on multiple FDA inspections of the farm, as well as numerous environmental samples and shell egg samples, FDA concluded that distribution of shell eggs from these two houses was warranted.

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Origin of the Investigation

Since May 2010, CDC has identified a nationwide, four-fold increase in the number of *Salmonella* Enteritidis (SE) isolates through PulseNet⁷, the national subtyping network made up of state and local public health laboratories and federal food regulatory laboratories. CDC received reports of approximately 200 SE cases every week during late June and early July. This compares to an average of some 50 reports of SE to the CDC each week over the past five years. Many states have also reported similar increases since May 2010.

Epidemiologic investigations conducted by public health officials in California, Colorado, and Minnesota revealed several restaurants or events where more than one person ill with this type of SE had eaten. Information from these investigations suggested that shell eggs were the likely source of infections in many of these restaurants or events.

Investigation Update: [Multistate Outbreak of Human *Salmonella* Enteritidis Infections Associated with Shell Eggs](#)⁸, from CDC

Traceback and Recall

FDA, CDC, and state partners conducted traceback investigations and found many of these restaurants or events received shell eggs from a single firm, Wright County Egg, in Galt, Iowa.

On August 13, 2010, Wright County Egg of Galt, Iowa, conducted a nationwide voluntary [recall](#)⁹ of shell eggs that it had shipped since May 19, 2010. Shell eggs from Wright County Egg were sold to distributors and wholesalers in 22 states and Mexico, who then distributed the shell eggs further throughout the country. According to Wright County Egg of Iowa, 380 million of their shell eggs are being recalled under many different brand names. On August 19, Hillandale Farms of Iowa initiated an additional recall of eggs that went to grocery stores, distributors, and wholesalers in 14 states; these entities then distributed the shell eggs further throughout the country. In all, more than 500 million eggs are now involved in the nationwide recall.

The recalled shell eggs were packaged under several brand names including: Lucerne, Albertson, Mountain Dairy, Ralph's, Boomsma's, Sunshine, Hillandale, Trafficanda, Farm Fresh, Shoreland, Lund, Dutch Farms and Kemps. A complete [list of recalled brands](#)¹⁰ is available as well as [FDA's searchable database](#)¹¹ created for this particular recall.

Recall Information

- [How can I tell if my eggs have been recalled?](#)¹²
 - [Search and Browse Egg Recalls](#)¹³
 - [Shell Egg Company Press Releases](#)¹⁴
- [483 Inspectional Observations on the Egg Recall](#)¹⁵
 - [Question and Answers Concerning 483 Inspectional Observations](#)¹⁶

- [Questions and Answers about FDA's Investigation into the *Salmonella* Enteritidis Outbreak Involving the Recall of Shell Eggs](#)¹⁷
- [More Information on the Recall of Shell Eggs...](#)¹⁸

Public Information on the Investigation

FDA has conducted an extensive investigation at both Wright County Egg and at Hillandale Farms of Iowa. The investigation involved environmental and product sampling, and records review in order to help identify the source of the contamination. On August 27, FDA announced that six positive samples that match the DNA fingerprint of the outbreak strain of SE had been collected from both Wright County Egg and Hillandale Farms of Iowa. On August 30, FDA made its [inspectional observations](#)¹⁹, also known as 483s, available on the FDA website. These reports detail multiple violations of the Egg Safety Rule at both companies. A set of [Questions and Answers](#)²⁰ on these reports, as well as a [recap](#)²¹ of the findings, is also included.

In order to keep the public informed of any new developments, FDA has also been updating its [Frequently Asked Questions](#)²² regarding the outbreak investigation on [FDA.gov](#).

Resources from FDA and Other Government Agencies

FDA is collaborating with Federal and state partners to investigate a nationwide increase of *Salmonella* Enteritidis (SE) infections. Partners include the Centers for Disease Control and Prevention (CDC), the U.S. Department of Agriculture, and state public health and agriculture officials. Joint FDA/CDC field investigation teams are working to identify potential sources of SE infection in shell eggs.

For more information:

- [Fresh Eggs: Playing It Safe](#)²³, from FoodSafety.gov, the gateway to Federal food safety information
- [Playing It Safe, What Consumers Need to Know](#)²⁴, from FDA
- [Consumers Check for Recalled Eggs](#)²⁵, from FDA
- [FDA Improves Egg Safety](#)²⁶, from FDA
- [Tips to Reduce Your Risk of *Salmonella* from Eggs](#)²⁷, from CDC

Tips for Consumers

- Don't eat recalled eggs or products containing recalled eggs. Recalled eggs might still be in grocery stores, restaurants, and consumers' homes. Consumers who have recalled eggs should discard them or return them to their retailer for a refund. Individuals who think they might have become ill from eating recalled eggs should consult their health care providers.
- Keep shell eggs refrigerated at ≤45° F (≤7° C) at all times.
- Discard cracked or dirty eggs.
- Wash hands, cooking utensils, and food preparation surfaces with soap and water after contact with raw eggs.
- Eggs should be cooked until both the white and the yolk are firm and eaten promptly after cooking.
- Do not keep eggs warm or at room temperature for more than 2 hours.
- Refrigerate unused or leftover egg- containing foods promptly.
- Avoid eating raw eggs.
- Avoid restaurant dishes made with raw or undercooked, unpasteurized eggs. Restaurants should use pasteurized eggs in any recipe (such as Hollandaise sauce or Caesar salad dressing) that calls for raw eggs.
- Consumption of raw or undercooked eggs should be avoided, especially by young children, elderly persons, and person with weakened immune systems or debilitating illness.

Information for Retail Food Stores and Food Service Establishments

- In retail and food service establishments, pasteurized egg products or pasteurized in-shell eggs are recommended in place of pooled eggs or raw or undercooked shell eggs. If used, raw shell eggs should be fully cooked. If shell eggs are served undercooked, a consumer advisory should be posted in accordance with the Food Code.
- In hospitals, nursing homes, adult or childcare facilities, and senior centers, pasteurized egg products or pasteurized in-shell eggs should be used in place of pooled eggs or raw or undercooked eggs.
- Eggs should be purchased or received from a distributor refrigerated and stored refrigerated at ≤ 45° F (≤7° C) at all times.

Information for Shell Egg Producers

- Flock-based SE-control programs that include routine microbiologic testing are mandatory for producers with more than 50,000 hens, as of July 9, 2010, under FDA's egg safety rule.
- This new regulation is part of a coordinated strategy between the FDA and USDA's Food Safety and Inspection Service (FSIS). The FDA and the FSIS will continue to work closely together to ensure that egg safety measures are consistent, coordinated, and complementary.
- FDA continues to work with United Egg Producers and other industry organizations to educate producers and those who store and/or transport eggs about the new requirements.

Information for Industry

Additional resources for industry related to the *Salmonella* Enteritidis Outbreak in Shell Eggs

- [District Recall Coordinators Contact Information](#)²⁸
- [Egg Safety Final Rule](#)²⁹
- [Guidance for Industry: Prevention of *Salmonella* Enteritidis in Shell Eggs During Production, Transportation, and Storage; Small Entity Compliance Guide](#)³⁰ (April 2010)
- [Draft Guidance for Industry: Prevention of *Salmonella* Enteritidis in Shell Eggs During Production, Storage, and Transportation](#)³¹ (August 2010)

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7. <http://www.cdc.gov/pulsenet/>
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27. <http://www.cdc.gov/Features/SalmonellaEggs/>
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U.S. Food and Drug Administration
10903 New Hampshire Avenue
Silver Spring, MD 20993
Ph. 1-888-INFO-FDA (1-888-463-6332)

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Egg Safety Final Rule

July 7, 2009

The U.S. Food and Drug Administration today announced a regulation expected to prevent each year approximately 79,000 cases of foodborne illness and 30 deaths caused by consumption of eggs contaminated with the bacterium *Salmonella* Enteritidis.

The regulation requires preventive measures during the production of eggs in poultry houses and requires subsequent refrigeration during storage and transportation.

Egg-associated illness caused by *Salmonella* is a serious public health problem. Infected individuals may suffer mild to severe gastrointestinal illness, short term or chronic arthritis, or even death. Implementing the preventive measures would reduce the number of *Salmonella* Enteritidis infections from eggs by nearly 60 percent.

The rule requires that measures designed to prevent *Salmonella* Enteritidis be adopted by virtually all egg producers with 3,000 or more laying hens whose shell eggs are not processed with a treatment, such as pasteurization, to ensure their safety.

Details about the regulation can be found below.

- [The Final Rule](#)
- [Consumer Update](#)
- [Press Release](#)
 - [FDA: New Final Rule to Ensure Egg Safety, Reduce Salmonella Illnesses Goes Into Effect](#)
July 9, 2010
 - [FDA: New Public Health Regulation to Improve Egg Safety and Reduce Salmonella Illnesses](#)
July 7, 2009
- [Public Meetings](#)
- [Testing methodology for *Salmonella* Enteritidis \(SE\)](#)
- [Egg Rule At A Glance](#)



Information for Consumers

- [Playing It Safe With Eggs](#)
What Consumers Need to Know

Information for Industry

- [Guidance for Industry: Prevention of Salmonella Enteritidis in Shell Eggs During Production, Storage, and Transportation](#)
- [Draft Guidance for Industry: Questions and Answers Regarding the Final Rule, Prevention of Salmonella Enteritidis in Shell Eggs During Production, Storage, and Transportation](#)
- [Guidance for Industry: Food Labeling: Safe Handling Statements, Labeling of Shell Eggs; Refrigeration of Shell Eggs Held for Retail Distribution; Small Entity Compliance Guide](#)

Information from Other Government Agencies

- [Centers for Disease Control and Prevention - Salmonella enteritidis](#)
- [USDA Fact Sheet - Shell Eggs from Farm to Table](#)

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