Timeline: Nationwide Outbreak of *Salmonella Enteritidis* (SE) Infections Associated with Shell Eggs, United States, 2010

### May 1 – September 9

**May - Early June**

Several local outbreaks of SE infections with pulsed-field gel electrophoresis (PFGE) pattern 4 are reported to CDC by state public health authorities, with some evidence that infections are related to egg-containing foods. In none of these clusters are shell eggs specifically implicated. Two clusters appear to have a common source of a pasteurized liquid egg product, but 2 others are distinctly different from each other and do not support a link. FDA and FSIS participate in assessment of these 4 clusters. An intense investigation of the liquid egg manufacturer is completed; advanced laboratory methods determine outbreaks are not related to each other.

**June 27 – Mid July**

CA reports 4 additional clusters associated with breakfast-style restaurants.

**July 21**

CDC notes general sustained nationwide increase in SE pattern 4 infections; preliminary investigation results are shared with FDA & USDA/FSIS.

**July 28**

CA reports to CDC bakery clusters associated with custard-filled pastries containing eggs.

**August – September**

CDC continues surveillance for SE PFGE pattern 4 infections and restaurant clusters.

**July 29**

Preliminary data from 6 CA clusters identify a common egg supplier: WCE in Galt, IA. CO notifies CDC of restaurant cluster of SE infections; raw egg-containing food implicated and preliminary lab results of food testing suggest *Salmonella* positive.

**August 4**

MN reports 4 clusters to CDC, including the one in May; 3 associated with eggs from Iowa farms, including same farm as source of 6 CA clusters. States are notified of preliminary CA egg source results. CDC requests epidemiologic and any egg source information on all identified clusters of SE infections in the United States.

**August 6**

CO identifies WCE as egg source for restaurant outbreak.

**August 10**

FDA contacts and begins daily dialogue with WCE.

**August 12**

FDA starts inspection at WCE in Galt, IA.

**August 13**

WCE issues nationwide voluntary recall of shell eggs from 3 farms. Recall notice posted on FDA’s website.

**August 18**

Based on additional traceback information and concerns discovered during FDA investigation, WCE expanded recall to include 2 additional farms. Recall notice posted on FDA’s website.

**August 20**

Hillandale Farms issued nationwide voluntary recall of shell eggs. Recall notice posted on FDA’s website.

**August 26**

Form FDA-483, Inspectional Observations, issued to WCE.

**Late July - Early August**

FDA closely monitors state and CDC investigations to identify food vehicle associated with increase in SE infections. FDA requests traceback records from certain states.

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**July 9**

FDA Egg Rule implemented.

**August 4**

FDA reviews preliminary records from multiple states and assigns investigators to collect complete traceback records from restaurants and distributors in CA & CO.

**August 6**

FDA selects 3 geographically distinct clusters (MN, CO, CA) of illness to focus complete documented(tracebacks. FDA had previously been collecting and analyzing traceback records for some of these clusters.

**August 9**

FDA SE Incident Management Group activated.

**August 10**

FDA issues voluntary recall of shell eggs from 3 farms. Recall notice posted on FDA’s website.

**August 19**

FDA starts inspection at Hillandale Farms.

**August 30**

Form FDA-483, Inspectional Observations, issued to WCE.

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**May - Early June**

USDA and FDA complete intensive investigation of pasteurized liquid egg manufacturer as result of CDC and state epidemiological data. Preliminary traceback of shell eggs show no common source.

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**Outbreak Identification and Source Implication**

29 restaurant/event clusters are reported from 11 states; 15 of 29 clusters with likely egg source as Wright County Eggs (WCE); 1 cluster of 29 with likely source as Hillandale Farms.

**June 27**

CA reports 4 additional clusters associated with breakfast-style restaurants.

**July 28**

CA reports to CDC bakery clusters associated with custard-filled pastries containing eggs.

**July 30**

CDC, FDA and USDA/FSIS conference call to discuss investigation updates.

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**Ill persons by week of report to CDC PulseNet**

From May 1 to September 14, 2010, a total of 2,752 illnesses were reported. However, some ill persons from this period have not been reported yet, and some of these ill persons may not be related to this outbreak. Based on the previous 5 years of reports to PulseNet, 1,144 total SE illnesses would be expected during this same period. This means there are approximately 1,608 reported illnesses that are likely to be associated with this outbreak.

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**Ill persons by week of illness onset**

Illnesses that began during this time may not yet be reported.

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**Recalls, and Results of Product testing**

**July 9**

Recall notice posted on FDA’s website.

**August 20**

Hillandale Farms issued nationwide voluntary recall of shell eggs. Recall notice posted on FDA’s website.

**August 26**

Form FDA-483, Inspectional Observations, issued to WCE.