Salmonella Typhimurium Outbreak Linked to Chicken Salad

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Food Safety and Inspection Service:

Using Data to Inform Decision Making

**EPIDEMIOLOGY**
Who, What, When, Where, How

**TRACEBACK/TRACEFORWARD**
Determine source or distribution; documentation is key

**LABORATORY**
Food, clinical; Whole genome sequencing and PFGE

**ENVIRONMENTAL HEALTH**
Assessments and inspection
Food Safety and Inspection Service:

FSIS Notification

2/9/18: Iowa notified FSIS
Food Safety and Inspection Service:

**Retail Assessments and Traceback**

- FSIS and Iowa investigators visited Retail A locations

- Environmental assessment findings did not indicate cross-contamination or other food safety concerns at retail

- Chicken salad was manufactured at Est. X in Iowa

- Product distributed regionally through Retail A distribution center to all Retail A locations
Food Safety and Inspection Service:

**FSIS Activities**

- **2/13/18:** Iowa issues consumer advisory; Iowa collects 2 non-intact retail samples
- **2/14/18:** FSIS collects 1 intact sample from Retail A Distribution Center; FSIS issues a Public Health Alert
- **2/15/18:** FSIS collects 2 intact samples from Retail A locations
Dual jurisdiction establishment, coordination with FDA

FSIS visited Est. X in February 2018 to review records and assess production of the chicken salad
  – No factors likely to have contributed to the outbreak were identified

13 food contact and non-food contact samples collected
  – Samples tested negative for *Salmonella*
Food Safety and Inspection Service:

Laboratory Testing

<table>
<thead>
<tr>
<th>Location</th>
<th>Sample</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retail A: Location 1</td>
<td>Chicken salad</td>
<td>Positive</td>
</tr>
<tr>
<td>Retail A: Location 2</td>
<td>Chicken Salad</td>
<td>Positive</td>
</tr>
<tr>
<td>Retail A Distribution Center</td>
<td>Chicken Salad</td>
<td>Negative</td>
</tr>
<tr>
<td>Retail A: Location 3</td>
<td>Chicken Salad</td>
<td>Negative</td>
</tr>
<tr>
<td>Retail A: Location 4</td>
<td>Chicken Salad</td>
<td>Negative</td>
</tr>
<tr>
<td>Establishment X</td>
<td>Environmental</td>
<td>Negative</td>
</tr>
</tbody>
</table>
Food Safety and Inspection Service:

Using Data to Inform Decision Making

**Epidemiology**

Chicken salad exposure; 87% case-patients interviewed reported eating chicken salad from Retail A locations.

**Traceback/Traceforward**

Chicken salad at Retail A locations produced at Est. X.

**Laboratory**

Iowa retail samples positive for *Salmonella Typhimurium*.

**Environmental Health**

No indications of cross-contamination at retail; case-patients report purchasing product from various Retail A locations.
Recall

2/21/18: Est. X recalls chicken salad
Lessons Learned

• Early notification and identification of an outbreak enabled industry stakeholders and public health officials to act quickly

• Earlier communication between partners enhanced coordination and facilitated effective response

• Product testing can help support regulatory action
Food Safety and Inspection Service:  

**FSIS Action Items**

- Published template for including FSIS in Foodborne Illness Outbreak Response Procedures
- Published information on what FSIS needs to take regulatory action
- Updating FSIS Directive, *Policy on use of results from non-FSIS laboratories*
Food Safety and Inspection Service:
Template for Including FSIS in Procedures

Template for Including FSIS in Foodborne Illness Outbreak Response Procedures

Information in this recommended template may be adapted by public health partners (e.g., state health and agriculture departments) for including FSIS in foodborne illness outbreak response procedures.

FSIS Foodborne Illness Outbreak Investigation Procedures


FSIS Notification

In addition to following established procedures for notifying other entities (e.g., CDC), public health partners should notify FSIS as soon as possible of illness outbreaks potentially associated with FSIS-regulated products (including meat, poultry, and processed egg products). An entity/person should be designated to have primary responsibility for notifying FSIS. Ideally, contacts should be established prior to an outbreak. Here is how to notify FSIS:

- Send an email to FoodborneDiseaseReports@usda.gov. This email account is monitored by the Office of Public Health Science, Applied Epidemiology Staff (OPHS-AES) during both normal work hours and after hours (evenings, weekends, and holidays). You may also contact individual OPHS-AES members by phone or email.
- Include on the email your contact(s) in the Office of Enforcement, Investigation, and Audit, Compliance and Investigations Division (OIEA-CID). See CID Regional contacts (https://www.fsis.usda.gov/wps/portal/informational/districtoffices#oiea).
- You may also contact the local Office of Field Operations (OFO) District Office. See OFO District contacts (https://www.fsis.usda.gov/wps/portal/informational/districtoffices#ofo).

Provide Investigative Information to FSIS

When notifying FSIS of a foodborne illness outbreak, public health partners should provide as many details about the outbreak and the investigation as possible, as outlined here: Information Helpful to FSIS During Foodborne Illness Investigations (https://www.fsis.usda.gov/InvestigationInfo).
Thank you!