A Rapid One Week Response

*Salmonella* Braenderup in Potato Salad

Melanie Harris, MPA
IA RRT Coordinator
Iowa Department of Inspections and Appeals
Iowa Food Protection Rapid Response Team (RRT)

• FDA-funded initiative
  • Began in Iowa in late 2012

• Iowa RRT Goals:
  • Improve the proficiency of food and feed emergency response
  • Increase communication and collaboration between federal, state and local response partners

• Made up of:
  • Core RRT
    • Iowa Department of Inspections and Appeals (DIA)
    • Iowa Department of Public Health (IDPH)
    • Iowa Department of Agriculture and Land Stewardship (IDALS)
  • Coordinating Council (existing key senior staff)
Potato Salad Outbreak
the story begins...
July 18, 2016

- Health departments identified an increase in *Salmonella* cases in Iowa County via routine surveillance.

- Investigation started.
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- Big G Food Store Traditional or Zesty Potato Salad was identified as the common exposure.
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• IDPH notified IA Rapid Response Team (IA RRT) of the findings.
• IA RRT contacted Big G Food Store and requested that all Traditional and Zesty potato salad be removed from retail sale and held for product testing.
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July 23, 2016
• IA RRT collected potato salad samples and delivered them to the State Hygienic Laboratory (SHL) for testing.
• Case interviews continued.
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**July 25, 2016**
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- Approximately 34/100 people who attended the funeral were ill.
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- Big G Food Store deli and kitchen production was ceased and environmental samples were collected.
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July 27, 2016
- Lab testing at SHL found the same Salmonella bacteria in the potato salad as the clinical samples.
- Twenty-three clinical specimens and seven potato salad samples tested positive with Salmonella Braenderup (PFGE pattern JBPX01.0039).
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**July 28, 2016**
- Two of the environmental samples, tested presumptive positive for *Salmonella* by PCR:
  - the **stacked buckets** in the walk-in cooler and
  - the **handle of the sprayer** at the 3 compartment sink

- The stacked buckets were used to hold raw chicken.
- The buckets were also used to hold the potato salad.
Environmental Investigation

Potato salad in walk-in cooler

Sample of potato salad

Sprayer at compartment sink

Stacked buckets in walk-in
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• The stacked buckets in the walk-in cooler and the handle of the sprayer at the 3 compartment sink were used to hold raw chicken.
• The buckets were also used to hold the potato salad.

August 2, 2016
• Second round of environmental sampling conducted after professional cleaning.
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August 4, 2016
- Whole Genome Sequencing (WGS) showed that isolates from five clinical specimens and the potato salad were highly related with 0-5 SNPs difference.
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- IDPH in collaboration with a LPHA identified an increase in the number of Salmonella cases in Iowa County via routine surveillance.
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August 8, 2016
- Big G Food Store deli and kitchen reopened after the 2nd round of environmental samples showed all negatives.

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In summary...

- In total 55 cases (32 related to funeral) were part of this investigation.
- SHL identified *Salmonella* Braenderup with PFGE pattern JBPX01.0039 in 23 clinical isolates and seven food samples.
- Whole genome sequencing performed on five clinical isolates and potato salad sample were highly related with 0-5SNPs difference.