S. Saintpaul Outbreak
Traceback Investigation:
Minnesota State Perspective

2013 InFORM
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Minnesota Department of Agriculture
Objectives

• Describe relationship among EH, Epi, and Lab partners
• Describe how local, state, and federal agencies collaborate
• Identify key lessons learned
Initial MN Timeline

2/28
MDH Lab identifies 3 matching isolates

3/11
MDH notifies MDA of cluster MN has 5 cases

3/20
MDA begins traceback of cucumbers, tomatoes

2/28/2013

3/3
CDC notifies PH officials of nationwide cluster 6 cases in 3 states

3/4/2013

3/11/2013

3/11
Begin request for purchase data

3/18/2013

3/18
CDC Multi-state call

3/20
CDC Multi-state call 41 cases in 14 states

3/22/2013
Exposures of Interest?

MN: All 5 had shopper cards; 4 of 5 provided permission
Getting Started – Investigational Traceback

Onset 2/15
Chain A
Loc. 1

Onset 2/17
Chain B
Loc. 1

Onset 2/18
Chain B
Loc. 2

Onset 2/20
Chain A
Loc. 2

Compari Tomatoes

Mini Cucumbers

English Cucumbers

Mini Cucumbers

Roma Tomatoes
Best Practice: Conducting Traceback Investigations

- Traceback initiation
- Coordination
- Documentation
  - Templates
  - Interview guides
- Investigational vs. Regulatory
- Email OP-ORA@fda.hhs.gov to receive a PDF copy
Evolving Investigation, Narrowing Focus

- March 27 FDA CORE call
  - 51 cases in 15 states
  - 82% of interviewed claimed cucumber exposure
  - Establish single POC for retail/restaurant chains
  - Coordinated tracebacks
  - “Epi alone is not going to solve this”
Lab: Household Samples

• 2 households had cucumbers that were purchased as the same time as those consumed prior to illness
  – English cucumber (no packaging/marks)
  – Mini cucumbers (in open packaging)

• Both tested **negative** for *Salmonella*
Identifying the Source

- CA, TX, MN, & FDA conducting tracebacks
- SD case – distribution through a large MN produce wholesalers (Distributor A)
- FDA CORE finds convergence among CA, TX, SD cases (~4/10/2013)
- FDA taking action to determine if adulterated product still in marketplace
Identifying the Source

- FDA posts Import Alert on 4/25 for 2 cucumber growers in Mexico
- MN has 4 additional cases – total to 9
  - 9th case: onset 4/19/2013, eaten at Chain A restaurant common to cases in other states
  - On 5/2, Local HD initiates traceback
  - Cucumbers sourced through Distributor A
  - Converges with other traceback legs
  - Urine specimen isolate, onset potentially earlier
Closing the Loop on MN Cases

• 10 cases: 9 primary, 1 secondary case
• 5 traceback legs initiated: 4 cucumber, 1 tomato, 1 cucumber & tomato
  – 1 leg converged
• 2 add’l cases ate at other Chain A locations
• Implicated cucumbers distributed through 2 major producer wholesalers
Newly Identified Best Practice: Using Credit Card Info to Get Receipts

- Shopper cards useful but may have gaps
- Credit card use likely more consistent
- Some retailers can reprint receipts from:
  - CC transaction ID
  - Date
  - Purchase total
Summary

• Investigational tracebacks have strengths and weaknesses; MN will continue

• Continue to re-evaluate, hone, and reassess exposures

• **Inter**-disciplinary communication is important: Epi-EH/Regulatory-Lab

• **Intra**-disciplinary communication is equally important: FDA-State-Local regulatory
Rapid Response Teams FY13 (2013-2014 Grant Year)

**Map of Regions and States:**
- **CER (Central Region):** Includes states like MN (MIN-DO), NE (NWE-DO), and WI (DET-DO).
- **SER (Southwest Region):** Includes states like TX (DAL-DO), NM (NOL-DO), and AZ (PAR).
- **NER (Northeast Region):** Includes states like NY (NYK-DO), VT (NER), and MA (NWE-DO).
- **SEA-DO (Pacific Region):** Includes states like CA (LOS-DO & SAN-DO) and OR (PAR).

**Legend:**
- Green = Original RRT State (Joined 2008/2009)
- Blue = New RRT State (Joined 2012)

**Rapid Response Teams (RRTs):**

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<th>Region</th>
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<th>New RRTs</th>
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**Summary:**
- 14 Districts have RRTs
- 1 District has 3 RRTs
- 3 Districts have 2 RRTs
- 10 Districts have 1 RRT