NEARS

National Environmental Assessment Reporting System
formerly known as National Voluntary Environmental Assessment Information System (NVEAIS)

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Food Safety News

Chipotle Closes Some Restaurants in WA and OR Following E. Coli Outbreak

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Update: AP now reports that Washington and Oregon health officials are investigating an E. coli outbreak linked to six Chipotle restaurants in Washington state and Oregon, health officials said Saturday. Three people in the Portland area and at least 19 people in Washington have become sick after eating at the Medford food chain since Oct. 14.

According to the Oregon Health Authority, people in Clackamas and Washington counties in Oregon, and Clark, King, Skagit and Cowlitz counties in Washington have reported symptoms of infection.

One-third of those sickened have been hospitalized, but no one has died from the infection. Those affected are between ages 11 and 64.

Chipotle officials said Saturday morning that the company was working with health officials to figure out what caused the outbreak:

“After being notified by health department officials in the Seattle and Portland areas that they were investigating approximately 20 cases of E. coli, including people who ate at six of our restaurants in those areas, we immediately closed all of our restaurants in the area out of an abundance of caution, even though the vast majority of those restaurants have no reported problems. We are working with health department officials to determine the cause of this issue. We offer our deepest sympathy to those who have been affected by this situation.”

Previous coverage follows:

The Skagit Valley Herald reports that the Skagit County Department of Public Health announced Friday that it has closed Chipotle Mexican Grill in Burlington, WA, pending an investigation of several E. coli infections among recent diners.

Of five cases under investigation since Oct. 15, four individuals were hospitalized, according to a health department news release. Results of specimens sent to the state health lab for analysis are expected early next week.

The Department of Public Health advised those who have had close contact with someone ill with symptoms of E. coli infection to see a doctor. Symptoms include diarrhea (often bloody), abdominal cramps, vomiting and nausea.

Is there any place that compiles a list of repeat offenders? I mean, I feel like I hear Chipotle an awful lot in these sorts of things. But it’s hard to know if this is because I’m not hearing about other chains since Chipotle is such a media darling, or if they really are disproportionately affected.

No you are right this would be the third outbreak associated with Chipotle that I have heard of this year. I’m wondering if its bad food safety practices in houses that is causing this or can it be traced back to a food supplier? Either way something needs to change and fast or they won’t be around much longer.
Driving to Improve Food Safety Are We There Yet?

National Environmental Reporting System (NEARS)
Food Safety Goal and Priorities

- **Centers for Disease Control and Prevention**
  - National Center for Environmental Health
    - Division of Emergency and Environmental Health Services

- **Goal**
  - Improve environmental public health practice to prevent foodborne outbreaks

- **Priorities**
  - Improve reporting of environmental factors that contribute to foodborne outbreaks
  - Strengthen federal, state, local, and industry policies and practices
Environmental Factor Data Assists to Prevent Foodborne Outbreaks

The Road Less Traveled

Environmental Health Specialists Network (EHS-Net)

Surveillance

Evidence-based Practice

Practice-based Research

Road Work Ahead
OUTBREAK INVESTIGATIONS
Foodborne Outbreak Investigation Components

- **Epidemiological**
  - Determine the who, what, when, where of an outbreak

- **Laboratory**
  - Identify or confirm the agent causing the outbreak

- **Environmental**
  - Assess how and why the agent got into the environment and spread
  - Recommend steps to stop outbreaks and prevent future ones
The Environmental Component of a Foodborne Outbreak Investigation

- Environmental Health Specialists

- Continuously focus on
  - People
  - Process
  - Equipment
  - Economics
  - Food

- Identify how and why an outbreak occurs

- Assist in the development of effective interventions to prevent future foodborne outbreaks
Environmental Assessment as part of a Foodborne Outbreak Investigation

- **Environmental Assessment**
  - Describes how the environment contributes to the introduction and/or transmission of agents that cause illness

- **Objectives of an environmental assessment**
  - Identify contributing factors
  - Identify environmental antecedents
  - Generate recommendations for informed interventions
Environmental Assessment as part of a Foodborne Outbreak Investigation

**Contributing Factors**
- Factors that caused the outbreak
- *How* the outbreak occurred

**Environmental Antecedents**
- Factors that led to the contributing factors
- *Why* the outbreak occurred
Environmental Assessment as part of a Foodborne Outbreak Investigation

**Outbreak**
- Norovirus
- Outbreak caused by sandwiches eaten at a restaurant

**Contributing Factors**
- Worker did not properly wash hands after using restroom
- Worker prepared sandwiches using bare hands
- Worker worked while ill

**Environmental Antecedents**
- Hand sinks did not have soap
- Restaurant did not have disposable gloves
- No paid sick leave
Conducting an Environmental Assessment as part of a Foodborne Outbreak Investigation

Step 1 • Planning and Preparation

Step 2 • Site Visit

Step 3 • Assess Information and Identify Contributing Factors

Step 4 • Make Recommendations for Control Strategies

Step 5 • Reporting
Why Improve Reporting of Environmental Assessment Data that Contribute to Foodborne Outbreaks

- **Environmental assessment data are key to…**
  - Understand how and why outbreaks occur
  - Develop appropriate guidelines, policies and practices
  - Prevent future outbreaks

- **Limited information on environmental assessment data have been reported to CDC**

- **Engagement of environmental (regulatory) officials responsible for the environmental investigation**

- **Link to National Outbreak Reporting System (NORS)**
Sites Reporting Environmental Assessment Data to NEARS

- California Department of Health
- Connecticut Department of Health
- Iowa Department of Inspections and Appeals
- Minnesota Department of Health
- New York State Health Department
- North Carolina Department of Health and Human Services
- Rhode Island Department of Health
- Tennessee Department of Health
- Wisconsin Department of Health
- Davis County Health Department (Utah)
- Fairfax County Health Department (Virginia)
- Harris County Health Department (Texas)
- Kansas City Health Department (Missouri)
- New York City Department of Health and Mental Hygiene
- Southern Nevada Health District

STATE

LOCAL
SURVEILLANCE
National Outbreak Reporting System (NORS)

Information gaps

Collects outbreak data on date and location of the outbreak, the number of people who became ill and their symptoms, and the pathogen that caused the outbreak.
Collects outbreak data on contributing factors and their environmental antecedents.
NEARS Data Reporting Instrument

- Part 1: General Characterization of Outbreak
- Part 2: Establishment Description
- Part 3: Manager Interview
- Part 4: Establishment Observation
- Part 5: Suspected/Confirmed Food
- Part 6: Sampling
- Part 7: Contributing Factors
Health department is notified of possible outbreak.

People get sick and may or may not seek treatment.

People are exposed to a hazard.

The Flow of Outbreak Data
The Flow of Outbreak Data

MILE 4
Health department conducts an environmental assessment as part of outbreak investigation

MILE 5
Health department enters environmental assessment data into NEARS

MILE 6
CDC reviews environmental assessment data for accuracy and analysis
Immediate Outcomes for Reporting Outbreak Data to NEARS

- Increase reporting of environmental assessment data

- Access to practical information about conducting environmental assessments
  - Helps improve participants’ outbreak investigation ability and expertise

- Access to a free data entry and storage system
  - NEARS data is immediately accessible after entry
NEARS Data

Improve Foodborne Outbreak Response

- Identify program factors that lead to contributing factors and confirmed (vs. suspected) foodborne outbreaks
  - Outbreak response timeliness
  - Quality of communication
  - Specific investigation activities (manager interviews, sampling, epi investigation)
NEARS Data

Improve Retail Food Safety

- Identify contributing factors associated with specific foodborne outbreaks
  - More complete data on contributing factors

- Identify environmental antecedents associated with foodborne outbreaks
  - Bacterial outbreaks
    - Lack of consumer advisories and temperature policies
  - Viral outbreaks
    - Lack of ill worker policies
    - Customer access to food
2014 NEARS Data

- 111 outbreaks reported
  - (CA, CT, MN, NY, NYS, RI, TN, WI)

- Norovirus (47%) most commonly reported identified primary agent

- Restaurants (87%) most commonly reported facility type

- Contributing factors identified in 58% of outbreaks
  - C10 (22%), C12 (17%), C11 (6%)
2014 NEARS Data

Number of Visits to Complete Environmental Assessment

- 1 Visit: 55%
- 2 Visits: 22%
- 3 Visits: 10%
- 4 Visits: 5%
- 5 or more Visits: 8%
2014 NEARS Data

Establishments with Ill Worker Policies

- Yes: 87%
- No: 10%
- Unsure: 3%

Quality of Communication Between the Food Regulatory Program and the Communicable Disease Control Program

- Very Good: 65%
- Good: 22%
- Fair: 11%
- Poor: 1%
- Very Poor: 1%
<table>
<thead>
<tr>
<th><strong>Initial Exposure Date:</strong></th>
<th>3/7/2014</th>
</tr>
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<tbody>
<tr>
<td><strong>Date First Ill:</strong></td>
<td>3/8/2014</td>
</tr>
<tr>
<td><strong>Facility:</strong></td>
<td>Restaurant (sit-down dining)</td>
</tr>
<tr>
<td><strong>Agent:</strong></td>
<td>Norovirus (Genogroup II)</td>
</tr>
<tr>
<td><strong>Estimated total primary cases:</strong></td>
<td>12</td>
</tr>
<tr>
<td><strong>Symptoms:</strong></td>
<td>Abdominal cramps, vomiting, diarrhea</td>
</tr>
<tr>
<td><strong>Number laboratory confirmed:</strong></td>
<td>4</td>
</tr>
<tr>
<td><strong>Implicated Food:</strong></td>
<td>Cranberry coleslaw (cabbage)</td>
</tr>
</tbody>
</table>

**Epidemiological evidence to implicate food worker.**

<table>
<thead>
<tr>
<th><strong>Date establishment was identified for an EA:</strong></th>
<th>3/10/2014</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Date of first contact with establishment mgmt:</strong></td>
<td>3/10/2014</td>
</tr>
<tr>
<td><strong>Establishment Type:</strong></td>
<td>Restaurant (complex), American (menu type), Saturday busiest day of the week, 800 meals served daily</td>
</tr>
<tr>
<td><strong>Contributing Factor(s):</strong></td>
<td>C12-Other mode of contamination (excluding cross-contamination) by a food handler/worker/preparer who is suspected to be infectious</td>
</tr>
<tr>
<td><strong>Establishment Observation:</strong></td>
<td>Hanks sink properly equipped, adequate glove supply, no bare hand contact w/ RTE foods</td>
</tr>
<tr>
<td><strong>Health Policies:</strong></td>
<td>Written ill worker policy, written policy or procedure to restrict or exclude ill workers</td>
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Managers receive paid sick leave. Food workers were **not** noted as receiving paid sick leave.
NEARS PARTICIPATION
Benefits of Reporting Environmental Assessment Data to NEARS

Environmental Health Programs

- Annual report from CDC summarizing your NEARS data
- Collaboration/communication with other states/localities participating in NEARS
- Scientific publication opportunities
- Document and track foodborne outbreak response data
- Meet FDA Retail Food Regulatory Program Standards
  - Standard 5 recommendations
Anticipated Benefits of Reporting Environmental Assessment Data to NEARS

Epidemiology, Laboratory, and Environmental Health Programs

- Robust national description of outbreak data
- Prevention of cases and deaths
- Fewer social and economic disruptions (including disruptions to food production and manufacturing) when epidemics are prevented
- Cost savings
- Social and psychological benefits stemming from less apprehension when outbreaks are rare or non-existent

How to Begin Reporting Your Program’s Foodborne Outbreak Environmental Assessment Data to NEARS

1. Commit to conducting foodborne outbreak environmental assessments

2. Complete NEARS Registration Forms
   - State Notice and Acknowledgment of Local Participation
   - Notice of Participation Form

3. Complete CDC’s free online environmental assessment training

Visit the following website for more information:
Only YOU Can Prevent Foodborne Outbreaks

www.cdc.gov/nceh/ehs/nears
Thank You!

For more information please contact Centers for Disease Control and Prevention

1600 Clifton Road NE, Atlanta, GA 30333
Telephone, 1-800-CDC-INFO (232-4636)/TTY: 1-888-232-6348
E-mail: cdcinfo@cdc.gov    Web: www.cdc.gov

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.