

## Investigation of a Gastroenteritis Outbreak – Sedgwick County, February 2012



### **Background**

On February 21, 2012, at 11:37 a.m., the Kansas Department of Agriculture (KDA) notified the Kansas Department of Health and Environment (KDHE) of a foodborne illness complaint. The complainant stated that she and eight others became ill with gastrointestinal symptoms after eating takeout from a Sedgwick County fast food restaurant. KDHE notified the Sedgwick County Health Department (SCHD) at 11:39 a.m., and SCHD began the outbreak investigation within one hour by interviewing the complainant, who provided contact information for additional affected individuals. In response to this report, an outbreak investigation was also initiated immediately by staff from KDA and the Food Safety and Protection Division of the City of Wichita's Office of Environmental Health.

### **Methods**

Suspect cases were interviewed by telephone. A case was defined as any individual experiencing vomiting and/or diarrhea within 48 hours of eating the fast food takeout purchased the evening of February 20, 2012.

The inspection of the fast food restaurant was conducted on February 21, 2012, at 2:00 p.m. Employee surveys were distributed to identify ill food handlers and their specific food handling duties.

### **Results**

Six suspect cases were identified and interviewed; the initial estimate of nine total individuals was incorrect. The six individuals represented three separate households. All were residents of Sedgwick County, and all met the case definition.

The ages of cases ranged from 10 to 62 years (median age, 39 years). Three (50%) cases were male.

All individuals reported diarrhea, and four individuals also reported vomiting (Table 1.). The median incubation period was 5.5 hours from the time of meal (range, 0.25 to 9.25 hours). The duration of illness was reported for two individuals; it ranged from 26 to 61 hours.

**Table1: Clinical Information for Cases (n=6)**

<b>Symptoms</b>	<b># with Symptom (%)</b>
Diarrhea	6 (100%)
Nausea	6 (100%)
Vomiting	4 (67%)
Abdominal Pain	4 (67%)
Muscle Aches	1 (17%)
Fever	1 (17%)

Two individuals sought care from a healthcare provider. Stool specimen collection kits were offered by SCHD, but no stool specimens were collected.

No common exposures other than the restaurant were reported among the three households. All individuals consumed fried chicken. Some reported consuming macaroni and cheese, potato wedges, and biscuits. Illnesses could not be conclusively linked to a food item.

The restaurant inspection by KDA revealed four critical violations: Five metal pans had dried food debris on the interior surface, chemical sanitizer concentration was too low, hot water capacity was too small, and an improper plumbing fixture was identified. Two of these violations were corrected during the inspection. Fourteen employee surveys were returned to KDHE. No employees reported symptoms of gastrointestinal illness.

### **Conclusions**

No definitive diagnosis was obtained for the six cases. Neither the etiology of the outbreak nor the vehicle of transmission could be determined.

The restaurant inspection occurred in a timely manner, and a follow-up inspection was scheduled to ensure that the two remaining critical violations had been corrected.

The investigation could have been assisted by the collection of stool specimens. Ill cases were offered specimen collection kits, but declined to retrieve them from SCHD.

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On: March 8, 2012*

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