Outbreak Gastrointestinal Illness Associated with Attendance at a Conference -- Overland Park, August 2008: Preliminary Report

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Background

On August 11, 2008, the Kansas Department of Health and Environment (KDHE), Office of Surveillance and Epidemiology (OSE) was notified by KDHE, Bureau of Consumer Health that six individuals reported becoming ill with gastrointestinal symptoms either during or immediately following a conference that was held on August 5 – August 7 at the Overland Park Convention Center, 6000 College Blvd., Overland Park, KS. Johnson County Health Department was notified on August 11. Johnson County Health Department, in conjunction with KDHE-OSE, began an outbreak investigation to determine the source of illness and to implement appropriate control measures. A specific questionnaire was developed using Perseus Survey Solutions and launched on the World Wide Web. Attendees of the conference were notified by email of the gastrointestinal illness outbreak investigation and were provided a link to the survey.

Key Findings

- 187 (63%) of the 296 conference participants for whom an email address was known responded to the survey. The survey assessed the following: 1) hotels where attendees stayed; 2) food items that were eaten at the conference and at other food establishments; and 3) reports of illness.
- Twenty-three (12%) of the respondents reported gastrointestinal illness. Of those reporting illness, 19 (83%) met the case definition. A case was defined as an individual who attended the conference and became ill with vomiting or diarrhea during or after the conference.
- The 19 cases represented 15 different organizations in Kansas and Missouri.
- The most common symptom was diarrhea (95%) followed by abdominal cramps (76%), and nausea (64%). Symptom information was incomplete for some cases.
- Three stool specimens have been collected. One specimen was positive for norovirus genogroup II; microbiological testing is pending for the other two specimens.
- Onset of illness ranged from August 5 – August 11 (Figure 1).
- Ages of cases ranged from 27 - 64 years (median = 43 years); 13 (68%) were female.
- Johnson County Environmental Department conducted an inspection of the main kitchen at the conference center on August 13. Four critical violations were observed: 1) date marking - several food items were not dated; 2) date marking disposition - chicken breast and cubed ham were out of date; 3) toxic items stored - cleaners and butane were stored on food preparation tables; and 4) cross contamination - raw poultry was stored over pasteurized eggs. All violations were corrected onsite.
- Preliminary analysis has not identified any hotels where cases stayed or any of the food establishments reported as being associated with illness. The only commonality among cases is attendance at the conference. No meal or specific food item has yet been implicated; however, statistical analysis is ongoing.
Conclusion

This was an outbreak of a gastrointestinal illness associated with attendance at a conference. The epidemiologic and clinical data collected for this outbreak are consistent with a point-source outbreak. A majority of those that became ill had onset dates of illness on August 6, which was one day after the conference began. Human clinical specimens were collected and testing will soon be completed. Preliminary statistical analysis of foods consumed during the conference has not implicated a food vehicle, but additional investigation into the possible food source that caused this outbreak is continuing.

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