

Norovirus Gastroenteritis Associated with a Restaurant

February

Hennepin County

On February 15, 2011, the Minnesota Department of Health (MDH) foodborne illness hotline received a complaint of gastrointestinal illness regarding a party of 25 individuals from several different businesses who had eaten a catered box lunch together on February 9, 2011. The lunch was catered by a restaurant in Maple Grove and consumed at a company in Brooklyn Park. MDH notified the Hennepin County Human Services and Public Health Department (HSPHD) epidemiology and environmental health units on February 15, and an investigation was initiated.

A list of business lunch attendees was obtained from the organizer, and HSPHD epidemiologists interviewed lunch attendees about food consumption and illness history. A list of customers from February 9 was obtained from the restaurant, and HSPHD epidemiology also interviewed the additional patrons about food consumption and illness history. A case was defined as an individual who either attended the business lunch or who had otherwise eaten food from the restaurant and who subsequently developed vomiting and/or diarrhea (≥ 3 loose stools in a 24-hour period). A stool sample collected from a consenting complainant group member was submitted to the MDH Public Health Laboratory for bacterial and viral testing.

HSPHD sanitarians visited the restaurant on February 15 to evaluate food preparation and handling procedures and to interview food workers about illness history and work duties.

There were no other shared meals identified among the catered lunch group. All 25 individuals in the group were interviewed and 13 (52%) met the case definition. One person was found to have not eaten the meal and another person reported symptoms but did not meet the case definition; both were excluded from analysis. Twelve cases (92%) reported diarrhea, nine (69%) reported cramps, eight (62%) reported vomiting, four (31%) reported fever, three (23%) reported headache, and none reported bloody stools.

The median incubation period from the lunch was 37.5 hours (range, 21 to 50 hours). The median duration of illness was 33 hours (range, 9 to 75 hours). A stool specimen collected from a case tested positive for norovirus GII.

The catered meal included three varieties of sandwich (ham, turkey, dagwood), a bag of chips, half an orange, and a cookie. Canned pop was also available. The food items were set out and individuals served themselves. None of the individual food items from the box lunch were found to be significantly associated with illness.

Twenty-nine other patrons were identified from the list of customers provided by the restaurant. Two of these patrons met the case definition. Both cases reported diarrhea and cramps; none reported vomiting, fever, or bloody stools. The median incubation period from the meal was 14.5 hours (range, 12 to 17 hours). The median duration of illness was 67 hours (range, 59 to 75 hours).

The two restaurant patron cases both reported eating a chef salad.

Illness histories and job duty information were obtained from the 19 restaurant employees. No employees reported having had gastrointestinal illness previous to or on the implicated meal date.

HSPHD sanitarians noted several critical violations when conducting an inspection of the restaurant. Critical violations included failure to wash hands after every possible contamination, some refrigerated ready-to-eat foods not date marked, and the slicer not cleaned or sanitized properly. Several non-critical violations were also noted, including the use of gloves after food preparation was complete, a beverage cooler being used for ready-to-eat foods, a thermometer not found in all coolers, reuse of food containers that are not NSF/commercial grade, gaskets for the reach-in cooler not properly maintained, gaps between hand sinks and the wall not properly caulked, some surfaces found to be unclean, no fingernail brush available at hand sink, sanitary towels missing at hand sink, lack of signage at hand sinks, improper storage of clothing, and a low-light level in parts of the walk-in cooler. The sanitarians provided steps to correct the critical and non-critical violations and further stressed the importance of proper handling of food and beverages, use of gloves when handling ready-to-eat foods, good handwashing, thorough disinfection, and exclusion of ill employees. The restaurant received no additional complaints and no reports of employee illness.

This was a foodborne outbreak of norovirus gastroenteritis associated with eating food from a restaurant. The vehicle of transmission and source of transmission were not identified.