

Suspected Viral Gastroenteritis Associated with a Restaurant

October

Hennepin County

On October 10, 2012, the Hennepin County Human Services and Public Health Department (HSPHD) epidemiology unit received a complaint of gastrointestinal illness following a meal at a restaurant in Plymouth on October 8. A second patron illness complaint from the restaurant was received by HSPHD on October 11. The Minnesota Department of Health (MDH) and HSPHD environmental health unit were notified on October 11, and an investigation was initiated.

A list of patrons identified from the restaurant's reservation list was provided to HSPHD. HSPHD epidemiologists interviewed the patrons about food consumption and illness history. A case was defined as a restaurant patron who developed vomiting and/or diarrhea (≥ 3 loose stools in a 24-hour period) after eating at the restaurant. No patrons agreed to submit stool samples to the MDH Public Health Laboratory for testing.

HSPHD sanitarians visited the restaurant on October 12 to evaluate food preparation and handling procedures and to interview food workers about illness history and work duties.

Five patrons were interviewed by HSPHD epidemiologists. While the restaurant supplied a list of names for HSPHD to call, only three additional patrons were interviewed. Only the two patrons from the original complaints met the case definition. Both reported vomiting and diarrhea, one reported cramps, one reported fever, and neither reported bloody stools. Incubation periods were 33 and 34 hours. One case reported symptom duration of 8 hours; the other was still experiencing symptoms at the time of interview.

The first case ate brunch at the restaurant on October 7 and had roast beef, scrambled eggs, an English muffin with egg and hollandaise sauce, a ham and cheese omelet, cheesy hash browns, fresh fruit, and water. Two dining companions accompanied this case to brunch, but the case refused to give their contact information to HSPHD. The second case consumed lunch at the restaurant on October 8 and ate a walleye sandwich, French fries, chicken wings, spicy green beans, and iced tea. Three others ate with the case, but none agreed to be interviewed by HSPHD.

Three controls were interviewed and reported eating a wide variety of foods. Each control dined with others (groups of 5, 17, and 20 people) and passed along the HSPHD epidemiology phone number to their dining companions. However, no additional patrons called in. The small number of cases and controls prevented a meaningful statistical analysis of specific food items.

HSPHD sanitarians visited the restaurant on October 12 and did not note any critical violations. The sanitarians provided norovirus education to the restaurant and a reminder that ill employees must be excluded from work for 72 hours following the resolution of gastrointestinal symptoms. They further stressed the importance of proper handling of food and beverages, use of gloves when handling ready-to-eat foods, good handwashing, and thorough disinfection. The restaurant conducted a full cleaning and disinfection of the facility and agreed to screen all employees daily for gastrointestinal illness before starting their shift.

Illness histories and job duty information were obtained from 77 restaurant employees. Six employees reported recent gastrointestinal illness. Five of the ill employees were servers and one was a host. Onset dates of illness were October 8 (n=2), October 9, 10, 12, and 14. One of the employees with an illness onset on October 8 reported working as a server at the restaurant while ill. The ill employees with later illness onsets were excluded from work until 72 hours after the resolution of symptoms.

This was a foodborne outbreak of suspected noroviral gastroenteritis associated with a restaurant in Plymouth. While an etiology was not confirmed, the incubation periods and symptoms were compatible with norovirus. The vehicle of transmission was not identified; however, the most plausible scenario is that ready-to-eat foods were contaminated by ill or recently ill food workers.