

Norovirus Gastroenteritis Associated with a Restaurant

February

Ramsey County

On February 24, 2017, the Minnesota Department of Health (MDH) foodborne illness hotline received a complaint reporting that two of two people from separate households had become ill with vomiting and diarrhea after eating lunch at a restaurant in White Bear Township on February 21. Ramsey County Environmental Health staff were contacted and an investigation was initiated.

On February 24, Ramsey County sanitarians visited the restaurant to perform an environmental health assessment, interview food workers, check the employee illness log, gather patron credit card receipts, and put all necessary interventions in place.

MDH staff interviewed restaurant patrons identified from credit card receipts and complaints.

A case was defined as a restaurant patron who developed vomiting and/or diarrhea (≥ 3 stools in a 24-hour period) after eating at the restaurant. Stool samples from consenting patrons were submitted to the MDH Public Health Laboratory (PHL) for bacterial and viral testing.

A total of three patrons were interviewed; of these, two (66%) met the case definition. The two cases were from the original complaint group. The incubation periods for cases were 37 and 38 hours. The durations of illness were 7 and 10 hours. Both cases reported vomiting, diarrhea, and cramps, and neither reported fever or bloody stools. One patron submitted a stool specimen to the MDH PHL, and it tested positive for norovirus GII.

Both cases reported eating the oriental chicken salad. Due to the limited number of cases and controls identified, a meaningful statistical analysis of food items could not be conducted.

Forty-seven of 50 employees were interviewed. Two employees had quit since the beginning of February, and one employee was out of the country; therefore, those employees were not interviewed. A total of four (9%) employees reported recent gastrointestinal illness. One employee had an onset of illness on February 16 (but did not work while ill), one had onset on February 21 (this employee came to work with a stomach ache, vomited while at work, and was then sent home), one had onset on February 23 (and reported working while ill on February 26), and one had onset on February 24 (but did not work while ill).

Two recently ill employees (the ones with illness onsets of February 23 and February 24) submitted stool specimens to the MDH PHL: both tested positive for norovirus GII, and one employee had a nucleic acid sequence identical to the patron specimen.

While visiting the restaurant, sanitarians noted that the restaurant had an illness log, but it was missing recent entries of illness reported by workers. They also observed a cook handling food, then using a wiping cloth from a sanitizer bucket to wipe off food contact surfaces, and then returning to food preparation, all while wearing the same pair of disposable gloves. Sanitarians provided norovirus education to the restaurant managers and had management screen all employees for recent gastrointestinal illness prior to starting their shift. Sanitarians also stressed the importance of changing gloves and handwashing when changing tasks, recording all employee illness in the illness log, excluding ill employees for an appropriate length of time, the use of gloves when handling ready-to-eat foods, good handwashing, and thorough disinfection of food contact surfaces.

This was a foodborne outbreak of norovirus gastroenteritis associated with a restaurant in White Bear Township. A specific vehicle of transmission was not identified. An ill or recently ill food worker was likely the source of illness.