

Norovirus Gastroenteritis Associated with a Restaurant

August

Hennepin County

On August 28, 2012, the Minnesota Department of Health (MDH) foodborne illness hotline received a call from an individual who had dined at a restaurant in Edina, Minnesota on August 24. The complainant reported that all three individuals from her party had developed symptoms of gastrointestinal illness after their meal; the individuals resided in two separate households. Sanitarians from the City of Edina were notified, and an investigation was initiated on August 28.

A list of patrons from August 24 and 25 was obtained from the restaurant. Epidemiologists from MDH interviewed restaurant patrons to obtain information on food/beverage consumption and illness history. A case was defined as a restaurant patron who subsequently developed vomiting and/or diarrhea (>3 loose stools in a 24-hour period). A stool specimen was obtained from one patron and submitted to the MDH Public Health Laboratory (PHL) for bacterial and viral testing.

A sanitarian from the City of Edina visited the restaurant to evaluate food preparation and handling procedures and to interview staff regarding recent illness and job duties.

Illness histories and exposure information were obtained from 74 restaurant patrons. Eight (11%) cases were identified. Three people reported illness but did not meet the case definition, and thus were excluded from further analysis. Of the eight cases, seven (88%) reported diarrhea, five (71%) of seven reported cramps, five (63%) reported vomiting, and three (43%) of seven reported fever. The median incubation period was 26 hours (range, 21 to 43 hours). The median duration of illness was 72 hours (range, 37 to 168 hours) for the four cases with known recovery times. The one patron stool sample received tested positive for norovirus GII.

Cases reported meal dates of August 24, 25, and 26. Consumption of roasted potatoes was significantly associated with illness (6 of 8 cases vs. 5 of 61 controls; odds ratio, 8.4; 95% confidence interval, 2.1 to 34.0; $p = 0.004$).

Illness histories and job duty information were obtained from 83 employees; two employees reported recently having a gastrointestinal illness, with onset dates of August 24 and 27. The employee with the August 24 onset date reported working while ill with diarrhea the morning of August 24, including cooking breakfast and preparation work (e.g., cutting and chopping vegetables) for lunch. A stool specimen was submitted to the MDH PHL from the employee with the August 27 onset date; the specimen tested negative for norovirus, *Campylobacter*, *E. coli* O157, *Salmonella*, and *Shigella*. Following the initial complaint on August 28, sanitarians and restaurant management established a screening protocol for employee illness. All employees with vomiting and/or diarrhea were excluded from work until 72 hours after the resolution of symptoms. The sanitarian also discussed the importance of handwashing for the prevention of norovirus transmission. Additionally, all foods that might have been prepared by an ill employee were discarded.

This was a foodborne outbreak of norovirus gastroenteritis associated with a restaurant in Edina. Roasted potatoes were implicated as the vehicle of transmission. An employee who would have been responsible for cooking/prepping the potatoes worked while actively ill with diarrhea. Since not all cases reported consuming roasted potatoes, it is likely that the ill employee contaminated other ready-to-eat food items as well.