

Norovirus Gastroenteritis Associated with a Restaurant

April

Ramsey County

On April 26, 2012, a restaurant in Roseville received a complaint of gastrointestinal illness among a group of 14 meal companions who ate dinner at the restaurant in Roseville on April 22. The restaurant forwarded the complaint to the Ramsey County Environmental Health (RCEH) sanitarian, who notified the Minnesota Department of Health (MDH). MDH staff interviewed the complainants and determined that the group had other recent common meals in addition to the meal at the restaurant.

On May 3, the restaurant received a second, independent complaint of illness in all four meal companions who also ate dinner at the restaurant in Roseville on April 22. Ramsey County Environmental Health was notified, and an investigation was initiated.

RCEH sanitarians visited the restaurant on April 27 to evaluate food preparation and handling procedures. RCEH sanitarians interviewed restaurant food workers after the second complaint on May 3. MDH staff interviewed the complainants 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. Stool samples collected from consenting restaurant patrons were submitted to the MDH Public Health Laboratory for bacterial and viral testing.

Eleven restaurant patrons were interviewed; 10 met the case definition, including 9 from the first complaint and 1 from the second complaint (repeated attempts to reach the other 3 members of the second complainant group were unsuccessful). The median incubation period for the cases was 41 hours (range, 14 to 105 hours). The median duration of illness was 3.5 days (range, 1 to 5 days). Nine (90%) cases reported diarrhea, eight (80%) vomiting, eight (80%) fever, four (40%) fever, and two (20%) bloody stools. Stool samples submitted by two ill patrons from the first complaint tested positive for norovirus GII. Two cases were likely due to secondary person-to-person transmission of norovirus from an ill household member and were excluded from further analysis.

The limited number of non-ill controls precluded a meaningful statistical analysis of food exposures. Five (63%) cases reported consuming ribs, five (63%) corn bread, four (50%) salad, two (25%) coleslaw, two (25%) onion strings, and one each (9%) chicken wings, French fries, and beans.

RCEH sanitarians interviewed 21 restaurant employees. One reported an onset of vomiting and diarrhea on April 23. This employee worked as a cashier and server on Sunday, April 22 but could not recall if they prepared foods. Following the initial complaint on April 26, 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.

This was an outbreak of norovirus gastroenteritis associated with a restaurant in Roseville. No vehicle was identified. The source of the contamination was not identified.