

Norovirus Gastroenteritis Associated with a Restaurant

March

Hennepin County

On April 3, 2017, the Minnesota Department of Health (MDH) foodborne and waterborne illness hotline received a complaint of gastrointestinal illness among two of three individuals from different households who ate at a restaurant in Excelsior, Minnesota on March 29. The meal companions did not report any other recent common exposures. The Hennepin County Human Services and Public Health (HCPH) Epidemiology (Epi) and Environmental Health (EH) Units were notified and an investigation was initiated.

HCPH health inspectors visited the restaurant on April 4 to evaluate food preparation and handling procedures, interview food workers about illness history and work duties, and gather additional patron contact information for March 29.

MDH staff interviewed the two ill patrons from the original complainant group. HCPH Epi staff interviewed additional restaurant patrons identified from credit card receipts from March 29. A case was defined as a restaurant patron who developed vomiting and/or diarrhea (≥ 3 loose stools in a 24-hour period) after eating food from the restaurant. Two patrons submitted stool samples to the MDH Public Health Laboratory (PHL) for bacterial and viral testing.

Four patrons were interviewed. The two patrons from the original complaint (50%) met the case definition. Both cases were female. The median case age was 43 years (range, 41 to 45 years). Both cases reported diarrhea, vomiting, cramps, and fever. Neither reported bloody stools, and neither visited a health care provider. Incubation periods were 34.5 and 35 hours. Both cases were still experiencing symptoms at the time of interview.

The two cases reported eating tortilla chips with a dip trio (bean dip, guacamole, and salsa). One case ate a Buffalo chicken taco, a beef and potato taco, and a Southern fried chicken taco. The other case ate a Southern fried chicken taco. Both cases drank ice water and a blueberry mojito.

Two controls were interviewed. Both controls reported eating grilled marinated shrimp tacos, sweet corn cakes, ice water, and soda; one control also ate a grilled mahi-mahi taco. The small number of cases and controls precluded a meaningful statistical analysis.

Illness histories and job duty information were obtained from all 34 restaurant employees. Four employees reported recent gastrointestinal illness. Two employees reported illness prior to the implicated meal date, and one employee reported illness starting on the implicated meal date. An employee with both server and bartender duties reported nausea, vomiting, and fever beginning on March 21 and resolving the afternoon of March 23. Another server reported vomiting, diarrhea, and cramps beginning on March 21 and resolving on March 22. A host reported vomiting beginning on March 29 and resolving on March 30; she did not work while ill. A fourth employee who works in the kitchen as a line cook reported nausea occurring sometime after March 15, but could not recall the exact date. This employee did not have any vomiting or diarrhea.

Two critical violations were observed by HCPH staff during the inspection. These included employees not washing their hands when returning to the bar area and employees having bare-hand contact with drink garnishes.

HCPH health inspectors provided norovirus education to the restaurant, including the recommendation to exclude employees from work for 72 hours following the resolution of gastrointestinal symptoms. They further stressed the importance of recording all employee illnesses in the illness log, excluding ill employees for an appropriate length of time, proper handling of food and beverages, use of gloves when handling ready-to-eat foods, good handwashing, and thorough disinfection using a sanitizer with a norovirus claim.

The two patron cases submitted stool specimens to the MDH PHL for testing; both specimens tested positive for norovirus GII.P16-GII.4 Sydney with identical Region BC nucleic acid sequences.

This was a foodborne outbreak of norovirus gastroenteritis associated with a restaurant. While the vehicle of transmission was not identified, the most plausible explanation for the outbreak is that ready-to-eat food items were contaminated by an ill or recently ill food worker.