Norovirus Gastroenteritis Associated with a Restaurant

March Washington County

On March 28, 2017, the Minnesota Department of Health received a foodborne illness complaint from a group of three individuals who became ill after eating at a restaurant in Woodbury on March 23. They reported no other common meals. All three reported diarrhea and vomiting starting 22.5 hours, 32.5 hours, and 36.5 hours after the meal. An investigation was initiated by Washington County Public Health & Environment (WCPHE) and the Minnesota Department of Health (MDH) on March 28.

WCPHE sanitarians visited the restaurant to evaluate food preparation and handling procedures, gather additional patron contact information, and interview food workers. A case was defined as a

restaurant patron who developed vomiting or diarrhea (≥3 loose stools in a 24-hour period) after eating food from the restaurant. Stool samples collected from consenting individuals were submitted to the MDH Public Health Laboratory (PHL) for bacterial and viral testing.

WCPHE and MDH staff interviewed nine restaurant patrons, and three (33%) met the case definition. The three reporting illness were from the original complainant group. The six additional patrons were identified through credit card receipts, catering, and reservation lists. None of the six additional patrons interviewed reported illness. The median incubation period for cases was 32.5 hours (range, 22.5 to 36.5 hours). The duration of illness for the one case who had recovered by the time of interview was 12 hours. The two additional cases reported ongoing duration of at least 72 hours. All three cases reported diarrhea and vomiting, two (67%) cramps, and none fever. One case submitted a stool specimen for testing at the MDH PHL, which tested positive for norovirus GII.P16-GII.4 Sydney.

Cases reported eating various items including beef enchilada, beef taco, beef taco salad, rice, beans, chips, salsa, water, margarita, and root beer; no specific food items were implicated in the statistical analysis.

WCPHE staff interviewed 50 of 51 (98%) restaurant employees, and 15 (30%) reported recent gastrointestinal illness. Employee illness onset dates range from March 15 to March 29. A server reported becoming ill with diarrhea on March 15 and did not work while actively ill. An assistant chef reported becoming ill with diarrhea and cramps on March 16 and recovered on March 20. The chef reported leaving work ill on March 16 and not returning until March 20. The chef handles and prepares large volumes of food. Four employees reported working while ill from March 25 to March 28. Three reported diarrhea and the fourth reported vomiting. Stool kits were provided to multiple employees, but none were returned for testing.

WCPHE sanitarians met with restaurant staff and conducted an outbreak assessment. Observations included lack of an employee illness log and illness policy, a service handwashing station with hot water turned off, multiple handwashing sinks missing paper towels, the dish machine not functioning properly, and improper food handling in multiple areas. Sanitarians discussed the importance of handwashing for the prevention of norovirus transmission, implemented a no bare-hand contact policy, ordered the restaurant to sanitize all food contact surfaces, ordered repair of the dish machine, ordered repair of handwashing sink, ordered proper sanitation of all utensils and dishes, instructed management to screen employees for vomiting and diarrhea at the beginning of each shift, and excluded all employees with vomiting and/or diarrhea from work until 72 hours after the resolution of symptoms. Numerous follow-up assessments were conducted at the establishment to verify the public health interventions were put into place and that issued orders were corrected.

This was a foodborne outbreak of norovirus gastroenteritis associated with a restaurant. A specific vehicle was not identified, but the source of contamination was likely an ill or recently ill food worker.