Suspected Norovirus Gastroenteritis Associated with a Restaurant

September Hennepin County

On September 8, 2017, the Minnesota Department of Health (MDH) Foodborne Disease Unit contacted Hennepin County Human Services and Public Health (HCPH) Epidemiology after they received a complaint of gastrointestinal (GI) illness from a party of two, living in two separate households, after eating at a restaurant in Maple Grove, Minnesota on September 6. HCPH Environmental Health (EH) was notified and an investigation was initiated.

HCPH EH sanitarians visited the restaurant on September 11 to initiate employee illness screening, evaluate food preparation and handling procedures, interview food workers about illness history and work duties, and gather additional patron contact information for September 6.

HCPH Epidemiology staff interviewed additional restaurant patrons identified from credit card receipts from September 6. 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. One patron stool sample was submitted to the MDH Public Health Laboratory (PHL) for bacterial and viral testing.

Twenty-nine patrons were interviewed. Four patrons (14%) met the case definition. Three cases (75%) were female. The median case age (of those for whom age was obtained) was 49.5 years (range, 42 to 57 years). All four cases reported diarrhea and cramps, two (50%) reported fever, and one (25%) reported vomiting. None reported bloody stools. The median incubation period was 20 hours (range, 11 to 32 hours). One case reported a duration of illness of 36 hours; two other cases were still experiencing symptoms at the time of interview. One case was unable to be reached to confirm date of recovery.

Once case submitted a stool specimen to the MDH PHL for testing; the specimen tested negative for norovirus and bacterial pathogens.

Three of the cases reported eating a variety of food items ordered off the menu including an Asian chicken salad, roasted prime rib sandwich with a cup of northern cheddar soup, waffle fries with

seasoned sour cream, a chicken Caesar wrap, and a chicken Caesar salad. Beverages included ice water, white sangria, and beer. One case was not able to confirm what they ate at the restaurant.

Twenty-six controls were interviewed. No food item was significantly associated with illness.

HCPH EH sanitarians visited the restaurant on September 11 to conduct environmental assessments and interview food workers, and continued interviewing employees via phone call until September 14. Illness histories and job duty information were obtained from all 76 restaurant employees. Two employees reported recent gastrointestinal illness, both of which occurred after the implicated meal date (reported onsets of September 8 and September 9). Symptoms in these employees resolved on September 9 and September 10, respectively. Both of the employees reported working on the implicated meal date; one employee reported packaging to-go food and making deliveries, and the other reported no food handling other than putting ice in drinks and preparing garnishes or skewers for cocktails. An employee reported witnessing a patron vomiting on a plate while standing in the buffet line. The vomit was caught by a plate, which was discarded after the incident, and the area around where the patron vomited was mopped. The family left without eating or using the restroom. Another employee mentioned that managers expect employees to work even while ill.

Critical violations noted by HCPH EH staff during the September 11 inspection were not date marking refrigerated ready-to-eat food, not date marking frozen food, and improper location of toxic materials. All critical violations were corrected on site. Additionally, HCPH EH staff noted a number of non-critical violations.

HCPH EH sanitarians 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. HCPH ED sanitarians also recommended that restaurant management periodically review the illness policy with all employees rather than just at time of hire.

This was a foodborne outbreak of gastroenteritis associated with a restaurant in Maple Grove. While an etiology was not confirmed, the incubation periods and symptoms were most compatible with norovirus gastroenteritis. The vehicle and source were not identified.