

Norovirus Gastroenteritis Associated with a Wedding Reception

August

Wright County

On August 15, 2017, the Minnesota Department of Health (MDH) foodborne illness hotline received a complaint of gastrointestinal illness among individuals who attended a wedding reception at an event center in Annandale on August 12. The wedding reception had been catered by a caterer in Clearwater. MDH Environmental Health (EH) was contacted, and an investigation was initiated immediately.

MDH EH sanitarians visited the event center and the caterer on August 15 to evaluate food preparation and handling procedures, gather additional patron contact information, and interview food workers. A case was defined as a wedding event attendee who developed vomiting or diarrhea (≥ 3 loose stools in a 24-hour period) after the event. Stool samples collected from consenting individuals were submitted to the MDH Public Health Laboratory for bacterial and viral testing.

Fifty-six wedding reception attendees were interviewed, and 40 (71%) met the case definition. Three individuals reported illness that didn't meet the case definition and were excluded from further analysis. The median incubation period for cases was 36 hours (range, 7.5 to 50.5 hours). Thirty-two (80%) cases reported vomiting, 32 (80%) reported cramps, 28 (70%) reported diarrhea, 16 (40%) reported fever, and none reported bloody stools. The median duration of illness for the 25 cases who had recovered at the time of interview was 34 hours (range, 6 hours to 68.5 hours). Four stool samples submitted by ill patrons tested positive for norovirus GII.P7-GII.7.

The reception was the only event that was attended by the majority of cases; only 28% of cases attended the rehearsal dinner and 10% attended the gift opening. No food items were statistically associated with illness. Cases and controls reported consuming prime rib, teriyaki chicken, mashed potatoes, gravy, carrots, Caesar salad, bread, cake, pizza, popcorn, and drinks.

The caterer had catered one other event that weekend, and the organizer for the event did not report any illness among attendees when she was contacted.

MDH EH sanitarians interviewed three event center employees, and none reported recent gastrointestinal illness. MDH EH sanitarians also interviewed 172 catering employees, and 7 reported recent gastrointestinal illness. A cashier developed diarrhea on August 4 at 12:00 p.m. and recovered on August 6. A manager developed diarrhea on August 11 and recovered later on August 11. A cook developed vomiting on August 12 at 8:00 a.m. and recovered on August 13; this cook worked while ill on August 12 and 13. A second cook developed diarrhea on August 12 at 3:00 p.m. and recovered on August 13 at 6:00 p.m.; this cook also worked while ill on August 12 and 13. A host developed vomiting on August 13 and recovered on August 14. A cashier developed vomiting on August 14 at 11:30 a.m. and recovered on August 14. A dishwasher developed diarrhea on August 15. Three employees who reported illness submitted stool samples, but all three were negative for norovirus and bacterial

pathogens. The sanitarians did not observe bare-hand contact with ready-to-eat food, and employees were observed using gloves. The facility was instructed to use the employee illness log, conduct additional training with staff on reporting illness, stop using a glass to scoop ice, and notify MDH EH when they receive an illness complaint. The sanitarians also discussed the importance of handwashing and appropriate glove use for the prevention of norovirus transmission, ordered the restaurant to sanitize all food contact surfaces, 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.

This was a foodborne outbreak of norovirus gastroenteritis associated with a wedding reception held at an event center in Annandale and catered by a caterer in Clearwater. The vehicle was not identified. The source of contamination was one or more infected food workers.