

Norovirus Gastroenteritis Associated with a Wedding Reception

October

Grant County

On October 18, 2011, the Minnesota Department of Health (MDH) foodborne illness hotline received a complaint of gastrointestinal illness in people who attended a wedding in Ashby, Minnesota on October 15. The wedding reception took place at the American Legion in Ashby. Approximately 200 persons attended the wedding reception. The MDH Fergus Falls district office was notified on October 18, and an investigation was initiated.

MDH obtained a list of wedding attendees and interviewed them about food consumption and illness history. A case was defined as a person who attended the wedding and subsequently developed vomiting and/or diarrhea (≥ 3 loose stools in a 24-hour period). Stool specimens were submitted to the MDH Public Health Laboratory for bacterial and viral testing.

On October 18, an MDH sanitarian contacted the American Legion regarding the wedding and found that the kitchen had been rented out by the wedding party; no food was prepared by the American Legion staff. A list of the food items served at the wedding reception was obtained from the bride.

Forty-five wedding attendees were interviewed, and 18 (40%) met the case definition. Of the 18 cases, 14 (78%) reported diarrhea, 14 (78%) reported vomiting, 13 (72%) reported cramps, 7 (39%) reported fever, and none reported bloody stools. The median incubation period from the time of the reception was 37 hours (range, 28 to 59 hours). The median illness duration was 52 hours (range, 22.5 to 63 hours). One case visited a medical provider; no cases went to the emergency room or were hospitalized.

Two stool specimens from attendees were submitted to MDH, and both tested positive for norovirus GII. All specimens tested negative for *Campylobacter*, *Salmonella*, Shiga toxin-producing *E. coli*, *Shigella*, and *Yersinia*.

Food items served at the reception came from multiple sources. Coleslaw, mashed potatoes, gravy, corn, buns, barbeque sauce, and punch were purchased and prepared by a family member. Pork loin from a grocery store in Alexandria, Minnesota was prepared at a meat market in Evansville, Minnesota. The wedding cake was purchased from a local bakery. Beverages were also available for purchase at the American Legion Bar. All of the foods were self-serve on a buffet line. No food item was significantly associated with illness.

There was a rehearsal dinner held at a church on the evening of October 14 and a gift opening held on October 16 (location unknown). Leftovers from the reception were served at the gift opening. Attending the rehearsal dinner or the gift opening was not statistically associated with illness, and multiple ill individuals did not attend either event.

A child was reportedly ill prior to the wedding reception and vomited at the church before the wedding ceremony. It is unknown where in the church the vomiting incident occurred. Both of the people who prepared food for the wedding reception were reported by others to have become ill the evening of the wedding. The two food preparers could not be reached for interview; however the Minnesota Department of Agriculture (MDA) spoke with the person who prepared the meat for the reception and

verified that he became ill after the wedding reception dance (exact time unknown). It is unknown exactly when the other food preparer became ill.

An inspector from MDA visited the meat market to review food safety practices and found records showing that the product had reached proper cooking temperatures. The inspector discussed the retail requirements that the establishment would need to meet in order to cater and told the establishment to discontinue catering activities until retail requirements are met.

This was a probable foodborne outbreak of norovirus gastroenteritis associated with eating at a wedding reception dinner. Because 40% of interviewed attendees were ill, there likely was contamination of one or more food items. No specific food vehicle was identified. Foods were most likely contaminated by a food preparer that was ill or in the incubation stage of illness. However, this was not confirmed, and person-to-person transmission could not be ruled out as the cause of the outbreak.