

Norovirus Gastroenteritis Associated with a Private Party

June

Washington County

On June 19, 2012, the Minnesota Department of Health (MDH) foodborne illness hotline received a complaint of 18 of 20 people becoming ill after attending a party held at a private home in White Bear Lake on June 16. Foods served at the party included three types of sandwiches ordered from a restaurant, chips, strawberries, watermelon, pasta salad, and cake. Sanitarians from MDH Food, Pools, and Lodging Services (FPLS) were contacted on June 19, and an outbreak investigation was initiated.

A list of party attendees was obtained from the host. Party attendees were interviewed by MDH staff about food consumption and illness history. A case was defined as a party attendee who subsequently developed vomiting and/or diarrhea (≥ 3 loose stools in a 24-hour period). Stool specimens were obtained from party attendees and submitted to MDH for bacterial and viral testing.

A sanitarian from MDH FPLS contacted the restaurant to inquire about any recent employee illness or customer illness complaints.

Illness histories and exposure information were obtained from 12 attendees. Seven (67%) cases were identified. Four additional individuals reported illness; however, three of their illness onsets were during the week prior to the party, and one illness onset was more than 72 hours after the party, most likely representing a secondary case.

All seven cases reported diarrhea, six (86%) reported vomiting, six (86%) reported cramps, and five (83%) of six reported fever. The median incubation period was 31 hours (range, 28 to 39 hours). The median duration of illness was 38 hours (range, 18 to 47 hours) for the four cases who had recovered at the time of interview.

The three individuals who were ill prior to the party all resided at the home where the party took place. One of the individuals helped prepare food for the party, including slicing the fruit and cutting the cake.

Three stool samples were received: one from a primary case, one from a secondary case, and one from the individual who was ill prior to the party and who helped prepare food. All three stool samples tested positive for norovirus GI. Nucleic acid sequencing was conducted on all three of the positive norovirus samples; the nucleic acid sequences were identical.

Due to the limited menu and the identification of only one non-ill controls, a meaningful statistical analysis could not be performed. However, all of the cases did report eating strawberries or watermelon.

No employees at the restaurant reported being recently ill with diarrhea or vomiting. Neither the restaurant nor MDH received any additional complaints of illness.

This was a foodborne outbreak of norovirus gastroenteritis associated with a birthday party. The same norovirus sequence was identified in samples submitted from a party guest and a previously ill individual who prepared food for the party. While a specific vehicle was not identified, one or more of the food items handled by the previously ill individual was the most plausible vehicle.