

Norovirus Gastroenteritis Associated with a Restaurant

January

Pine County

On January 11, 2007, the Minnesota Department of Health (MDH) foodborne illness hotline received an illness complaint associated with a meeting that was held at a casino in Hinckley, Minnesota during January 9 to 10. The complainant stated that 18 of 21 people who attended the meeting had subsequently become ill with vomiting or diarrhea. The meeting involved one pre-plated lunch at a restaurant in the casino on January 9; foods served included salad, rolls, beef tenderloin, potatoes, carrots, cauliflower, and desserts. Many of the meeting attendees also ate breakfast and dinner at the casino on January 9. MDH initiated an investigation on January 11.

The Indian Health Service (IHS) was contacted and IHS staff assessed food worker illness and food preparation practices at the restaurant. The Minnesota State Trooper's Association e-mailed all meeting attendees and asked them to call the MDH for a telephone interview. A case was defined as a meeting attendee with vomiting and/or diarrhea (≥ 3 loose stools in a 24-hour period) following the meeting. Stool samples were collected from five ill meeting attendees and submitted to the MDH Public Health Laboratory for bacterial and viral testing.

Interviews were completed for 16 meeting attendees. Of these, 12 (75%) met the case definition. Eleven (92%) cases reported diarrhea, 11 (92%) had cramps, 10 (83%) had vomiting, four (44%) had fever, and none reported bloody stools. Duration of illness information was available for 3 cases; the median duration was 65 hours (range, 18 to 92 hours). All five stool samples were positive for norovirus genogroup II and were sequenced; all viral sequences were identical.

One of the ill cases was only present for lunch on January 9. The median incubation period from that meal was 29 hours (range, 14 to 67 hours). Analysis of food items associated with illness was attempted, but the paucity of controls prevented a meaningful statistical analysis.

The IHS environmental health assessment revealed three cooks that reported vomiting and diarrhea in the week prior to the meeting, and all of them reported working banquets. It was unclear if these specific food workers had prepared food for the Minnesota State Trooper's Association meeting. The importance of handwashing and excluding food workers with gastrointestinal symptoms was emphasized.

This was a foodborne outbreak of norovirus gastroenteritis associated with a meal at a Hinckley restaurant. A specific food vehicle was not identified. The ultimate source of the outbreak likely was one or more infected food workers who contaminated ready-to-eat food items.