

Norovirus Gastroenteritis Associated with a Restaurant

October

Waseca County

On October 31, 2011, the Minnesota Department of Health (MDH) foodborne illness hotline received a complaint of gastrointestinal illness among two individuals from separate households after eating take-out food from a restaurant in Waseca, Minnesota on October 28. Additionally, a child of one of the individuals had developed stomach cramps without vomiting or diarrhea. Both ill individuals had eaten broasted chicken, mashed potatoes, gravy, and coleslaw; the child had eaten the same meal except coleslaw. Environmental Health (EH) specialists from Waseca County Public Health Services were notified and an investigation was initiated.

Waseca County EH specialists visited the restaurant on November 1 (the restaurant was closed on October 31) to evaluate food preparation and handling procedures. The restaurant was reluctant to provide patron contact information; a letter describing MDH's statutory authority and the purpose of the public health investigation was e-mailed to the restaurant owner. Patron names from credit card and check transactions from October 28 were provided by the restaurant.

MDH interviewed patrons to obtain information on food/beverage consumption and illness history. Restaurant employees were interviewed about food preparation and handling duties and illness history by MDH and Waseca County EH specialist.

A case was defined as a patron who developed vomiting and/or diarrhea (≥ 3 loose stools in a 24-hour period) after eating at the restaurant. Stool samples were submitted by consenting cases to the MDH Public Health Laboratory (PHL) for bacterial and viral testing.

A total of 38 patron interviews were completed. Only the two (5%) individuals from the original complaint met the case definition. Five patrons reported mild illness that did not meet the case definition, and two reported diarrhea with a biologically implausible incubation period (2.5 hours). The small number of cases precluded a meaningful statistical analysis. Most (n=24) of the non-ill patrons

consumed pizza. In addition to the two cases, two non-ill patrons consumed the broasted chicken. Only the two cases reported consuming coleslaw and mashed potatoes.

The incubation period for both cases was 17 hours. Both reported diarrhea and abdominal cramps, one reported vomiting, one reported fever, and neither reported bloody stools. Neither case visited a healthcare provider. One case had recovered at the time of interview; her illness duration was 43 hours. Both cases submitted a stool sample collected 4 days after illness onset to the MDH PHL for testing; one was positive for norovirus GI.6A.

Fifteen (94%) of the restaurant's 16 employees were interviewed by MDH or Waseca County EH specialists. A manager/supervisor who worked during October 26-28 reported that a household member had been ill with vomiting on October 24 or 25 for 24 hours or less. The employee had performed a variety of food preparation duties including: preparing chicken, cheese, and salad; shredding cabbage; making coleslaw; and managing the pizza and sandwich stations. The employee did not report any symptoms and refused to submit a stool sample. No other food worker illness was reported.

This was an outbreak of norovirus gastroenteritis probably associated with a restaurant. The outbreak vehicle was not identified. An asymptomatic employee who prepared various menu items and reported a household member with recent gastrointestinal illness was a plausible source of contamination.