

Sapovirus Gastroenteritis Associated with Catered Banquet

May

Ramsey County

On May 2, 2012, the Minnesota Department of Health (MDH) foodborne illness hotline received a complaint of gastrointestinal illness in people who attended a banquet in St. Paul on April 27. The banquet was catered by Caterer X in Maplewood. Approximately 80 persons attended the banquet. The City of Maplewood Environmental Health program was notified on May 2, and an investigation was initiated.

MDH interviewed the original complainants, and obtained a list of banquet attendees from event organizers. A case was defined as a person who ate at the banquet on April 27 or ate leftovers from the banquet and subsequently developed vomiting and/or diarrhea (≥ 3 loose stools in a 24-hour period).

On May 2, a sanitarian from the City of Maplewood contacted the caterer to evaluate food preparation and handling procedures and to interview employees regarding illness history and job duties. On May 3, MDH staff began interviewing attendees from the contact list that had been provided. On May 7, a sanitarian visited the licensed kitchen where the caterer prepares food and conducted an environmental assessment.

Forty-three attendees were interviewed, and 25 (58%) met the case definition. Five attendees reported illness that did not meet the case definition and were excluded from analyses. The median incubation period for cases was 39 hours (range, 2 to 111 hours). Three cases had an incubation of 2 hours. The median duration of illness was 25 hours (range, 20 to 62 hours). Twenty-four (96%) cases reported diarrhea, 14 (56%) reported cramps, 11 (44%) reported fever, 8 (32%) reported vomiting, and none reported bloody stools. One case visited a medical provider.

Four stool specimens from banquet attendees were submitted to MDH; all tested positive for sapovirus genotype GI and all specimens had identical nucleic acid sequences. The four stool specimens were negative for norovirus, *Campylobacter*, *Salmonella*, Shiga toxin-producing *E. coli*, *Shigella*, and *Yersinia*.

Food items prepared for the banquet by the caterer included roast beef, baked chicken, au gratin potatoes, Italian pasta salad, a vegetable tray (homemade veggie dip, carrots, broccoli, cucumber, cherry tomatoes, cauliflower), cheese tray (provolone and colby jack slices), buns, chocolate-covered strawberries, coffee, and cream. The banquet organizers purchased a cake from a bakery in St. Paul and supplied bottled water and canned soda in coolers filled with ice. All the foods were self-serve on a buffet line. All dishes, silverware, and linens were provided by the caterer.

No food items were significantly associated with illness in a univariate analysis. However, consuming baked chicken yielded an elevated odds ratio [OR] of 3.3 (19 of 24 cases vs. 7 of 13 controls; 95% confidence interval [CI], 0.8 to 14.2; $p = 0.14$) and taking home leftover food approached significance (11 of 24 cases vs. 2 of 13 controls; OR, 4.7; 95% CI, 0.8 to 25.7; $p = 0.08$). Two cases did not attend the banquet but consumed leftovers; one case had au gratin potatoes and roast beef, and one case had au gratin potatoes and baked chicken.

Illness histories and job duty information were obtained from three catering employees. No employees reported having had gastrointestinal illness previous to or on the implicated meal date. One employee reported becoming ill (fever, headache, cramps, nausea) on April 30 (after the implicated meal date) and had consumed roast beef, au gratin potatoes, and cake at the banquet.

During the establishment visit, the sanitarian stressed the importance of proper handling of food and beverages, use of gloves or utensils when handling ready-to-eat foods, good handwashing, and exclusion of ill food handlers.

This was a foodborne outbreak of sapovirus gastroenteritis associated with eating at a banquet in St. Paul, Minnesota. No food item was statistically associated with illness. The source of contamination was not identified. The occurrence of very short reported incubations among attendees suggests that one or more infectious attendee could have contaminated buffet items.