

Suspected Bacterial Intoxications Associated with a Catered Event

November

Hennepin County

On November 6, 2012, the food manager at a homeless shelter in Minneapolis contacted their local health department, Minneapolis Environmental Health (MPLS EH), to report complaints of gastrointestinal illness in 13 persons who had eaten a meal catered by a restaurant at a shelter on the evening of November 5. MPLS EH notified the Hennepin County Human Services and Public Health Epidemiology Unit (HSPHD Epi) and the Minnesota Department of Health (MDH); an investigation was initiated immediately. HSPHD Epi contacted the HSPHD Environmental Health Unit (HSPHD EH) because the restaurant was located in their jurisdiction.

On November 6, MPLS EH spoke with the food manager at the shelter and requested a list of persons who had eaten the catered meal on November 5. HSPHD epidemiologists conducted interviews with those who ate the catered meal to obtain information on food consumption and illness history. A case was defined as a person who subsequently became ill with vomiting and/or diarrhea (≥ 3 loose stools in a 24-hour period) after eating the catered meal on the evening of November 5.

On November 7, HSPHD EH spoke with the manager of the restaurant to ensure that the facility did not have any more of the product that was served at the shelter meal. Additionally, the environmentalist questioned managers about employee illness and discussed food flows for the catered event. On November 8, 2012, HSPHD EH visited the restaurant to conduct an onsite inspection of the facility.

Illness histories and exposure information were obtained from 29 persons who had eaten the catered meal on November 5. Twenty-two (76%) patrons met the case definition. Nineteen cases (86%) reported vomiting, 10 (45%) reported diarrhea, and 2 (9%) reported cramps. None reported fever. The median incubation period was 2.75 hours (range, 45 minutes to 6.5 hours). The median duration of illness was 14 hours (range, 10.75 to 36 hours) for the seven cases who had recovered from their symptoms at the time of the interview.

Cases reported eating a variety of food items including pulled pork sandwiches, pasta with meatballs in sauce, baked beans, coleslaw, cookie, and assorted beverages. Statistical analysis was done but none of the food items were statistically significant. Of the cases, 18 (82%) ate pulled pork, 22 (100%) ate pasta with meatballs, 11 (50%) ate beans, 9 (41%) ate coleslaw, 18 (82%) ate a cookie, 9(41%) had milk, and 13 (76%) of 17 had water.

On November 7 the manager of the restaurant reported that the van that carries the catered food was broken on the day of the event so the food was transported in a car from the catering facility in Maple Grove to the shelter in downtown Minneapolis. No temperature control measures were put in place during transport of the food and no temperatures were taken before the food left the catering facility. None of the catering staff had eaten the food and none reported illness.

During the inspection of the restaurant on November 8, HSPHD EH reviewed cooling procedures and found that there were no cooling logs or specific procedures in place in the establishment to verify if the cooling time and temperature requirements had been met for the foods served at the catered meal. HSPHD EH discussed how to properly cool food items and how to keep cooling logs and records to verify that proper cooling requirements are being met with the catering manager. On November 9, 2012, a follow up inspection was conducted by HSPHD EH to ensure that the cooling logs were being used, cooling procedures were meeting temperature requirements, and that catered food was being transported in a licensed vehicle.

This was an outbreak of foodborne illness associated with eating food at a homeless shelter, in Minneapolis, that had been catered by a restaurant. The etiology was not confirmed, but the distribution of incubations and symptoms were compatible with a bacterial intoxication caused by *Staphylococcus aureus* or *Bacillus cereus*. The cause of bacterial amplification was not specifically identified, but the environmental health investigation revealed the potential for time-temperature abuse.