

Suspected Bacterial Intoxications Associated with a Restaurant

March

Anoka County

On March 16, 2011, the Minnesota Department of Health (MDH) foodborne illness unit received a call from an individual who had dined at a restaurant in Blaine on March 15 with two other individuals from separate households. According to the complainant, all had become ill with vomiting several hours after eating their meal. Sanitarians from Anoka County Community Health and Environmental Services (ACCCHES) were notified on March 16, and an investigation was initiated.

Epidemiologists from MDH interviewed the original complainants about food/beverage consumption and illness history. A case was defined as a restaurant patron who developed vomiting and/or diarrhea (≥ 3 loose stools in a 24-hour period) after eating at the restaurant.

Sanitarians from ACCCHES visited the restaurant to evaluate food preparation procedures. No credit card receipts or customer contact information was available, so additional patrons could not be assessed for recent illness or food consumption history.

Illness histories and exposure information were obtained from three restaurant patrons. All three patrons met the case definition. All three cases reported vomiting, and the only case that answered the question reported cramps. No one reported diarrhea or fever. All three cases reported an incubation period of 6 hours. The median duration of illness was 10.5 hours for the one case who had recovered at the time of interview.

Cases reported eating beef fried rice, sweet and sour chicken, and orange chicken.

ACCCHES sanitarians noted several violations when conducting an inspection of the restaurant on March 17. Approximately 80 pounds of rice had been cooked on March 16 and cooled overnight in five large tubs with tight fitting lids inside of the walk-in cooler. At lunch time on March 17, an ACCCHES sanitarian determined the tubs of rice to have temperatures between 53-63° F. Restaurant staff had not taken temperatures of fried rice to be served. Education was provided on proper cooling methods, the time frame for the cooling of potentially hazardous foods, and the proper use of cooling logs.

This was a foodborne outbreak associated with a restaurant in Blaine. Illnesses were most compatible with a bacterial intoxication such as that caused by the emetic form of *Bacillus cereus*; however, the etiology of the outbreak could not be confirmed. The vehicle of transmission was not confirmed, but fried rice was the most plausible source. The outbreak most likely resulted from improper cooling procedures and improper hot- and cold-holding temperatures, which created a favorable environment for proliferation of the bacteria and elaboration of the toxin.