

***E. coli* O157:H7 Infections Associated with a Wedding**

September

Hennepin County

On September 16 and September 23, 2011, two cases of *E. coli* O157:H7 infection were interviewed as part of routine disease surveillance by Minnesota Department of Health (MDH) staff, before pulsed-field gel electrophoresis (PFGE) information was available. Both mentioned attending a wedding in Minneapolis on September 10 where rice and beef that were prepared in a private home were served. The second case mentioned knowing of another individual who had attended the same wedding and had been hospitalized for vomiting and diarrhea. An investigation was initiated.

Re-interview of one of the cases confirmed that both cases had attended the same wedding. Case isolates were indistinguishable by PFGE with Minnesota two-enzyme pattern designation MN1252ECB13.

E. coli O157:H7 is a reportable pathogen in Minnesota, and all cases are routinely contacted by MDH staff and asked to complete a telephone interview detailing the case's illness and exposure histories. A case was defined as an individual with a stool sample positive for the outbreak strain of *E. coli* O157:H7 after attending the September 10 wedding. Food samples were tested for *E. coli* O157:H7 at the Minnesota Department of Agriculture (MDA) laboratory.

The two original cases were the only cases identified. Illness onsets were September 13 and September 14, yielding incubation periods of 3 and 4 days, respectively. One of the cases had recovered at the time of interview; the duration of illness was 7 days. One case was a 12 year-old male and the other a 6 year-old female; both were Hispanic. Both cases had diarrhea, bloody stools, and cramps; one had vomiting and one had fever. One case was hospitalized for 5 days; neither developed hemolytic uremic syndrome.

The wedding was held in the rental room of a Minneapolis restaurant. The only food items served at the event were beef, rice, hot sauce, and cake. The cake was purchased at an unknown Mexican bakery and the other items were prepared by relatives in private homes. The beef served at the event was purchased by the groom or a relative as a whole cow slaughtered at one of the live animal markets in South St. Paul. The beef was cut into large bone-in pieces and boiled in water on a stove. Frozen cooked beef from the same cow was picked up from a case's home on September 28 and tested negative for *E. coli* O157:H7 at the MDA laboratory. Attempts to contact the groom for additional information about wedding attendees and foods served were unsuccessful. The two cases did not appear to know one another or have other exposures in common.

A third case with PFGE pattern MN1252ECB13 was identified in routine disease surveillance. This case was a Hispanic child from Minneapolis with illness onset on October 3; however, the case did not attend the wedding and denied any exposure to a live animal market and therefore was not included in the outbreak.

This was a probable foodborne outbreak of *E. coli* O157:H7 infections associated with a wedding at which privately prepared foods were served. Beef from a cow purchased at a live animal market was the most likely vehicle, but this was not confirmed.