Campylobacter jejuni Infections Associated with a Restaurant

September-October Dakota County

On October 22, 2012, review of a routine surveillance interview of a *Campylobacter jejuni* case reported to the Minnesota Department of Health (MDH) revealed that the case had eaten at Restaurant X in Apple Valley 4 days prior to illness onset on October 5. Review of previous *C. jejuni* cases identified an additional case that had eaten at Restaurant X on September 20. Sanitarians from MDH Food, Pools, and Lodging Services (FPLS) were contacted on October 22, and an outbreak investigation was initiated.

All *Campylobacter* cases reported to MDH are interviewed about exposures and food consumption as part of foodborne disease surveillance in Minnesota. Epidemiologists reviewed the information gathered during the interviews of *C. jejuni* cases to identify other potential cases associated with eating at the restaurant. A list of patrons from September 20-October 1 was obtained from the restaurant. MDH staff interviewed restaurant patrons to obtain information on food/beverage consumption and illness history.

Cases were defined as ill persons who had *C. jejuni* isolated from stool or who had diarrhea (≥3 loose stools in a 24-hour period) lasting ≥48 hours and who reported eating at Restaurant X in the week prior to onset of symptoms.

On October 22 and 23, MDH sanitarians visited the restaurant to evaluate food preparation and handling procedures and to interview staff regarding recent illness and job duties.

Illness histories and exposure information were obtained from 74 patrons. Nine (12%) cases were identified. One person reported illness but did not meet the case definition, and thus was excluded from further analyses.

Of the nine cases, all reported diarrhea and cramps, four (44%) reported fever, three (33%) reported vomiting, and two (22%) reported blood in their stools. Five (56%) cases were female. The median age of cases was 50 years (range, 33 to 58 years). The median incubation period was 3 days (range, 1 to 4 days) for the six cases with known meal dates. The median duration of illness was 4.5 days (range, 3 to 8 days) for the six cases who had recovered at the time of interview. One (11%) patient was hospitalized for 5 days as a result of their illness. Two cases had a stool specimen test positive for *Campylobacter jejuni*; one isolate was identified as pulsed-field gel electrophoresis (PFGE) subtype CMP235 and the other isolate was identified as PFGE subtype CMP236.

Cases with known meal dates reported eating at the restaurant from September 20 to October 1. Cases reported eating a variety of foods, including starters, sandwiches, burgers, and sides; no food item was significantly associated with illness.

An environmental health assessment of the restaurant on October 22 revealed eight critical violations and four non-critical violations, including possible routes of cross-contamination. A 20-foot prep table was observed to be used for preparation of both raw meats and ready-to-eat foods with no clear separation or designation between raw and ready-to-eat foods. Additionally, no procedures were in place to show that the prep table was cleaned and sanitized between uses. Furthermore, several cooked items (e.g., chicken, taco meat) were stored on top of raw beef and raw chicken in a walk-in cooler; food containers did not have any lids or other coverings. A repeat inspection on October 23 found that all cross-contamination issues had been corrected.

This was a foodborne outbreak of *Campylobacter jejuni* infections associated with Restaurant X in Apple Valley. No specific food vehicle was identified. The most likely cause of the outbreak was cross-contamination from raw meat to one or more ready-to-eat food items. As a result of the outbreak, the restaurant instituted measures to prevent cross-contamination.