**_Salmonella_ Typhimurium Associated with a Restaurant**

July Hennepin County

On August 18, 2017, the Minnesota Department of Health (MDH) Public Health Laboratory (PHL) identified a cluster of two *Salmonella* 4,5,12:i:- isolates with indistinguishable pulsed-field gel electrophoresis (PFGE) patterns (Minnesota designation TM1256) that were highly related by whole genome sequencing. The cases did not report any common restaurants upon initial interview. Re-interview of these cases identified a common restaurant exposure in Golden Valley, and a common food item, tuna salad, consumed on the same day, July 21. MDH informed Hennepin County Human Services and Public Health Department (HCPH) Epidemiology and Environmental Health, and an investigation was initiated immediately.

MDH staff interviewed the cases identified through routine surveillance about food consumption and illness history. HCPH Epidemiology staff interviewed additional restaurant patrons identified from catering orders placed on July 21. HCPH sanitarians visited the restaurant to evaluate food preparation and handling procedures, gather additional patron contact information, and interview food workers. A confirmed case was defined as a person infected with *Salmonella* with the PFGE pattern TM1256 highly related by whole genome sequencing (WGS), and who ate at the restaurant in Golden Valley in the week prior to illness. Stool samples collected from ill food workers were submitted to the MDH PHL for bacterial and viral testing.

Restaurant employees reporting recent illness were excluded from work until two consecutive stool samples collected at least 24 hours apart tested negative for *Salmonella* at the PHL.

The two confirmed cases reported illness onsets of July 27 and July 29. Both reported diarrhea and abdominal cramps. One also reported vomiting, fever, chills, headache, muscle aches, and joint pain. Both cases were adult females. Neither case was hospitalized, and neither died.

The restaurant provided HCPH Epidemiology with 14 receipts from catering orders placed on July 21. All were called, but only one patron answered and agreed to be interviewed. This patron was not ill and reported eating the chicken with dried cherries pasta salad and a vegetable sandwich. Another patron listed on a catering order reported that she did not eat the food, but passed along HCPH Epidemiology's phone number to the group who ate the food. No return calls were received.

HCPH sanitarians contacted the restaurant on August 18 to institute an employee illness screening form and to request patron contact information from the July 21 meal date.

Sanitarians visited the restaurant on August 21 to conduct an environmental assessment and interview employees. HCPH sanitarians interviewed all 28 restaurant employees; three employees reported recent gastrointestinal illness. A line cook reported a few episodes of diarrhea in August, but could not recall a specific date, and recovered after one day. A server reported one day of fever (~99° F) on July 16 and one day of nausea on July 20. A food handler who prepared salads, filled orders, and worked the counter reported blood in the stools (but no diarrhea), but could not recall a specific date. The three ill employees were excluded until they had submitted two negative stool specimens collected at least 24 hours apart. None of the workers tested positive on either of their samples.

During inspection, HCPH sanitarians reviewed the process of assembling the tuna salad – vegetables from the cooler were placed in a container with strained, canned tuna and chilled before mixing with vinaigrette and aioli. The aioli was also pre-chilled before mixing. No issues were observed with cross-contamination or temperature of the tuna salad. No bare-hand contact with ready-to-eat foods was observed. The sanitarians further discussed the importance of safe food handling for the prevention of cross-contamination, ordered the restaurant to sanitize all food contact surfaces, instructed management to screen employees for gastrointestinal symptoms at the beginning of each shift, and excluded all employees with vomiting and/or diarrhea and/or fever from work until two consecutive stool specimens were negative for *Salmonella*.

This was an outbreak of *Salmonella* 4,5,12:i:- infections associated with consumption of the tuna salad at a restaurant at lunch on July 21. No specific ingredient or source of contamination was identified.