

Minnesota is investigating an enteroinvasive *E. coli* (EIEC) outbreak associated with eating at a sushi restaurant in the Twin Cities metro area. The investigation was initiated when five *Shigella* cases in surveillance were interviewed and reported eating at the sushi restaurant. Specimen collection dates ranged from 12/22/2021 to 12/26/2021. All five were positive on Nanosphere Verigene at the clinical laboratories. However, all were negative for *Shigella* by culture at the MDH PHL. After further testing, 4/5 of the samples were *ipaH* positive, and EIEC was isolated. The 4 EIEC isolates were sequenced; all were 0-1 alleles different.

After calling patrons, we identified 16 total cases. Meal dates ranged from December 17 to 19, and onset dates ranged from December 18 to 24. The median incubation period for cases was 43 hours (range, 12 to 111 hours). All 16 cases reported experiencing diarrhea, 10 (67%) reported abdominal cramping, 6 (40%) reported fever, four (27%) reported bloody stools, and 3 (20%) reported vomiting. The median duration was 7 days (range, 4 to 10 days) among the 10 cases who had recovered by the time of interview.

In univariate analyses, three menu items/maki rolls were statistically associated with illness. All of these rolls include spicy tuna, made from ground tuna, mayonnaise, and siracha. In an ingredient-level analysis, only ground tuna was statistically associated with illness (14 of 15 cases vs 24/66 controls; OR, 24.5; 95% CI, 3.0 to 198.0;  $p < 0.001$ ).

The investigation continues. The Minnesota Department of Agriculture RRT staff are reviewing invoices and initiating a traceback.