Salmonella Zanzibar in rural South Australia

Ingrid G Tribe and Scott Cameron
Communicable Disease Control Branch, Department of Human Services, South Australia

In South Australia, human infection with Salmonella Zanzibar is uncommon. The last reported case of infection with this serovar was in 1995. In May 2001, 2 (1 male, 1 female, age range: 26 to 31 years) cases of Salmonella Zanzibar were investigated by the Communicable Disease Control Branch, Department of Human Services, South Australia. Hypothesis generating interviews sought demographic, illness, employment, travel, social activities, restaurant/take-away food consumption and animal contact information for the 7 day period prior to the onset of symptoms.

Case 1, a resident of a rural township in South Australia, reported no recent intrastate, interstate or overseas travel. The case reported purchasing food items from various local take-away and restaurant outlets in the 7 day period prior to the onset of illness. Case 2, a resident of metropolitan Adelaide, reported intermittent employment in the same rural township in the 7 day period prior to the onset of symptoms. Both cases reported eating at a local Italian restaurant between 5 and 7 May 2001. With the exception of individual serves of salmon bruschetta and antipasto, chicken-based pasta dishes were consumed by both cases. Case 2 however, was unable to recall the specific chicken based pasta dish consumed. An environmental investigation conducted 4 weeks after the exposures found food handling procedures were satisfactory. No evidence of cross-contamination could be identified. In addition, there were no reports of gastrointestinal illness in restaurant employees. However, a report of a presumptive case of food poisoning had been received by the local council. This complainant reported the consumption of a chicken-based pasta dish at the same Italian restaurant on 28 April 2001. The complainant did not seek medical attention.

Although the source for this outbreak was not established, an epidemiological investigation identified a link between infection with Salmonella Zanzibar and the consumption of prepared food at the restaurant. No further cases were notified. This event highlights the importance of investigatory public health action even when the numbers of case reports are low and the connection between cases is not obvious at first glance.