

Appendix 2: Food outbreak investigations – 2018-19

Outbreak Investigations

An outbreak is defined as an event where two or more people experience a similar illness after eating a common meal or food and epidemiological and/or microbiological evidence indicates the meal or food as the source of the illness. A summary of outbreaks investigated during 2018-19 and their settings are presented in Table 8 on page 66.

Outbreak 1 – Salmonella Oranienburg – Primary production

An increase in cases of *Salmonella* Oranienburg was identified in August 2018, with 27 cases notified between 1 August and 30 October 2018. Descriptive evidence from interviews with cases indicated that alfalfa sprout consumption was higher than expected. Trace back led to the identification of a common supplier of alfalfa sprouts. Authorised officers from SA Health conducted sampling of alfalfa sprouts from retail outlets and *S. Oranienburg* was identified in the product. A product recall and media release was undertaken on 9 September 2018.

Outbreak 2 – Salmonella Typhimurium 108 – Private function

Five cases of *Salmonella* Typhimurium (S.Tm) phage type 108, MLVA pattern 04-11-15-00-517 were reported in November 2018, all had attended the same wedding. The wedding was privately catered for by multiple people and held over several days. The investigation was limited as further information was not able to be obtained about attendees or food supplied for the event.

Outbreak 3 – Salmonella Typhimurium 9 – Restaurant

Five people were diagnosed with S.Tm phage type 9, MLVA 03-23-12/13-10-523, that all consumed food from the same café in December 2018. A variety of foods were consumed, several included aioli and eggs. All cases ate at the venue over a three-day period. Environmental Health officers (EHOs) from local council inspected the premises and identified issues around egg handling and the preparation of raw egg products. Samples of raw egg products from the premises did not detect *Salmonella*.

Outbreak 4 – Salmonella Typhimurium phage type 9 – Restaurant

Five cases of S.Tm phage type 9, MLVA 03-16-06-11-550 reported consumption of food from the same restaurant in January 2019. A variety of different foods were involved, including salads, egg dishes and burgers. EHOs from local council inspected the premises and issues were identified relating to the handling of eggs, the production of raw egg products, cleaning and sanitising. Food and environmental samples were collected from the premises and no *Salmonella* was detected.

Outbreak 5 – Salmonella Hessarek – Primary production

Ten cases of *Salmonella* Hessarek were reported between December 2018 and June 2019. Descriptive evidence from interviews indicated a high proportion of cases had consumed the same brand of eggs, which was also linked to an outbreak in 2017 where *S. Hessarek* was isolated from egg contents of the same egg brand.

Outbreak 6 – Salmonella Typhimurium phage type 9 – Bakery

Seventy-eight cases of *Salmonella* were linked to consumption of food from one of three linked bakery premises. The majority of the cases (74) were further typed as S.Tm phage type 9 and MLVA 03-15-08-11-550, with the remaining four unable to be typed as no culture was obtained. Cases occurred at the bakeries between 6 and 12 February 2019, with 75 cases (96 percent) reporting consumption of a Vietnamese-style meat roll. EHOs from local councils inspected the premises and identified shared foods and equipment between the premises that may have caused cross contamination. Multiple food and environmental samples across all three premises were collected by authorised officer from SA Health and many samples were positive for S.Tm phage type 9 MLVA 03-15-08-11-550. Issues with cross contamination, inadequate cooking of foods, and cleaning and sanitising practises were identified.

Outbreak 7 – Salmonella Typhimurium phage type 9 – Restaurant

Eleven cases of S.Tm with MLVA 03-23-12-10-523 reported consumption of food from the same restaurant over a three-day period in January-February 2019. Ten were typed as phage type 9 and one as phage type RDNC meaning the reaction did not conform. Nine cases reported consumption of dishes containing a raw egg based sauce (aioli, tartare or mayonnaise). An EHO from local council inspected the premises and identified issues with the preparation of raw egg based sauces, hand hygiene, cross contamination, cleaning and sanitation. Environmental samples were collected with no *Salmonella* detected. The premises ceased production of raw egg-based sauces.

Outbreak 8 – Salmonella Typhimurium phage type 135a – Restaurant

Three cases of S.Tm 135a with MLVA 03-14-10-11-523 reported eating at the same restaurant in the first week of February 2019. The cases all consumed different foods and attended on different days. An EHO from local council inspected the premises and no food safety issues were identified.

Outbreak 9 – Salmonella Typhimurium phage type 12a – Restaurant

Twelve people were unwell with gastroenteritis after eating at the same restaurant on the same day in February. Eleven of the cases were confirmed with S.Tm 12a, MLVA 04-18-11-00-490. A range of different types of sushi and sashimi were consumed. EHOs from the local council inspected the premises and recommendations were made regarding cleaning, sanitising and minimising cross-contamination. Environmental and food samples were submitted with no *Salmonella* detected.

Outbreak 10 – Salmonella Typhimurium phage type 135 – Restaurant

There was an increase in *Salmonella* cases in a regional area of SA. Interviews were conducted and 14 people diagnosed with S.Tm 135, MLVA 03-12-09-11-523, reported eating food prepared by the same food premises at one of two venues. A variety of foods were eaten, including Mexican style meat, rice bowls and salads. An EHO from local council inspected the premises and identified issues around temperature control, cleaning and sanitising, storage and skills and knowledge of safe food handling.

Outbreak 11 – Salmonella Typhimurium phage type 9 – Restaurant

Five people with S.Tm 9, MLVA 03-24-13-10-523 reported eating at the same restaurant. Four of the five ate at the venue on the same day, but were not known to each other. All consumed breakfast meals containing eggs. An EHO from local council inspected the premises and issues were identified around handling of raw eggs and food handler hygiene. Food and environmental samples were collected and no *Salmonella* was identified.