

Legionnaires' disease outbreak

The Infectious Diseases Unit of the Human Services Department, Victoria, has received five notifications of Legionnaires' disease, with onset of symptoms in late June and early July. All cases either lived or worked in the same suburban area, and were due to *Legionella pneumophila* sero-group 1. One death, in an elderly woman, was reported on 30 June. Investigations found two air conditioning cooling towers close to the suburban shopping district were positive for the same *Legionella pneumophila* sero-group. One of these towers tested positive for the same molecular sub-type as that found in sputum specimens from two of the cases, one of the cases had a different molecular sub-type, and no bacterial cultures were available from the other two cases. The

towers have since been closed, disinfected and reopened, and the associated organisations have been given written recommendations on further treatment to avoid re-infection.

Although there had been 29 other cases with four deaths in Victoria for the year, earlier cases were sporadic in nature. Due to the proximity in reporting time and location, and the usual low incidence for this time of year, these recent five cases were considered to be a cluster. There are usually about 20 to 40 cases of Legionnaires' disease per year in Victoria.

Salmonellosis outbreak

One hundred and two cases of *Salmonella* Oranienburg infection were notified to the Communicable Disease Control Branch (CDCB), South Australia, from March to June 1998. Food history questionnaires indicated that Italian food, in particular pasta, pizza and gelato featured highly in the food frequency analysis. A case-control study established an association between illness and the consumption of gelato.

Further to the epidemiological evidence, laboratory results identified *Salmonella* Oranienburg in gelato manufactured by a South Australian company. This was also supported by an environmental investigation conducted by the food unit of the South Australian Department of Human Services. Cases notified to the CDCB after the product was recalled had onset dates prior to the recall.

Editorial comment

Salmonella Oranienburg in Australia

Adapted from: National Enteric Pathogens Surveillance Scheme. Know your serovars. NEPSS Human Fourth Quarter Report Vol 2; 1998:10

Background

Samonella Oranienburg was first isolated in 1929 from a child with gastroenteritis, a resident of a Children's Home in Oranienburg near Berlin. The find was first described in Germany in 1930.

The presence of this serovar has been documented in Australia at least since 1950 and has been most commonly isolated in the far north-west of Western Australia from the human populations of the aboriginal communities and the wild animals, particularly the reptiles (lizards, snakes and crocodiles) which form part of their diet. It is also found in water supplies and other native animals in these tropical areas. Between 1950 and 1976 in Western Australia 191 of the 216 human cases notified were from the Pilbara (43) and Kimberley (148) regions.^{1,2}

There were 54 cases in Victoria from September to November 1975, with all isolates from persons returning from overseas on two airline flights in September.

Since 1986 the number of cases notified from all states and territories has averaged 61 cases per year and ranged from 37 to 106, the latter recorded in 1989 when elevated case numbers were recorded in New South Wales (Broken Hill and Moree), Western Australia (Perth and Kimberley region) and the Northern Territory where there was an outbreak among visitors to an outback homestead resort near Alice Springs.

The majority of nonhuman isolates since 1990 have been from meat meals, beef meat, raw egg pulp (special survey, Queensland), buffaloes (Northern Territory), reptiles both captive and wild, sewage sludge samples from New South Wales (special survey) and, in low numbers, various companion and farm animals in all States. Isolates of interest prior to 1990 were from imported gum tragacanth (1978), dried yeast (1979, 1980), cinnamon powder (1980) and sesame seeds (1988, ex Mexico).

Situation in 1998

In the first half of 1998 there have been 92 cases notified to the National Enteric Pathogens Surveillance Scheme, 75 of these from South Australia. Initial notifications were from young adults between 20 and 30 years (15), teenagers (11) and children (25, only 3 infants) with a higher proportion of females (65%); there were five males of 30 years and over but no females in this age group.

References

1. Iverson JB and Bamford VW. Enteric pathogens isolated in Western Australia 1950-1980. Report Part 1. Public Health Department, Western Australia, 1984.
2. Iverson JB, Bamford VW, Wyner V et al. *Salmonella* and *Edwardsiella* isolations from humans, animals, waters and effluents in tropical and temperate latitudes of Australia. The Occasional Report Paper 42. State Health Laboratory Services, Perth, Western Australia, 1991.