

## 4 ENTERIC DISEASES

### a Two clusters of typhoid fever cases identified in City of Cape Town

As part of ongoing surveillance, the NICD/NHLS, Provincial and City of Cape Town Communicable Diseases Co-ordinators have identified two separate clusters of typhoid cases in the City.

The first involves an extended family residing in the Southern sub-District. An 8-year-old girl diagnosed with appendicitis was transferred to Red Cross Children's Hospital from Victoria Hospital for surgery. A blood culture taken post-appendicectomy grew *Salmonella enterica* serotype Typhi (*Salmonella* Typhi). Her 14-year-old cousin was admitted to a district hospital in early August 2016: his blood culture grew *Salmonella* Typhi. A home visit identified 23 family members or contacts staying together in one apartment and sharing one bathroom. Investigations identified three asymptomatic carriers and two additional culture-positive cases of typhoid in the family. All persons were provided with appropriate treatment (ciprofloxacin 500-750 mg po bd for 7 days) and follow-up care. Health promotion activities were conducted by environmental health practitioners.

In the second week of September, two additional cases of typhoid were diagnosed in a different sub-district of Cape Town, in an area where typhoid cases had been identified between October 2015 and April 2016. The cases identified in September were found to be related to cases identified during January to March 2016 on molecular typing, suggesting that there is a common source. Further investigations are ongoing.

Molecular epidemiological work conducted by the Centre for Enteric Diseases, NICD has established that the two recent clusters are related to the prevailing South African clone, but are not linked to each other. The first cluster is a 'point source' outbreak. It is not yet clear if the cases in the second cluster have a common source. The NHLS, NICD, Provincial and City officials are engaged in ongoing investigation, follow-up and management of cases.

**Source:** Centre for Enteric Diseases, NICD-NHLS; (karenk@nicd.ac.za)