

4 ENTERIC DISEASES

a Typhoid fever cases at a home for mentally impaired persons

On 28 July 2016, the Outbreak Response Unit (ORU) was notified of two confirmed and one suspected case of typhoid fever in a home for mentally impaired persons in the City of Johannesburg, Gauteng Province. The two confirmed cases were diagnosed on blood culture. The ORU from the National Institute of Communicable Disease (NICD) together with the Johannesburg Health District Outbreak Response team visited the home on 29 July 2016.

Approximately 200 adults live in the home, and sleep in dormitories of three to six beds. There is a kitchen on the premises where food is prepared. Food is served in a common dining hall. Staff members at the home were interviewed and typhoid fever case investigation forms were completed for the two confirmed cases. It was noted that the two cases, who shared a room, were both transferred from another home for the mentally impaired in the month prior to the onset of illness, along with another 15 – 20 persons. None of the cases had travelled outside the home after admission. One case had been visited daily by a relative in the month prior to the onset of illness. A total of 18 rectal swabs was taken, 13 from close contacts of the cases and five from kitchen staff. Environmental samples were also taken and included water, fingernail swabs of staff members and food preparation surfaces in the kitchen. All

rectal swabs were negative for *Salmonella* Typhi. At the time of this report, results of the environmental sampling were not available.

Typhoid fever is caused by infection with *Salmonella enterica* subspecies *enterica* serotype Typhi. It is spread via faeco-oral contamination and may spread from person to person by direct contact or through ingestion of contaminated food or water. In this investigation, the source of infection has not been confirmed. The home from where the persons were transferred from and the visiting relative of the one case are possible sources of infection. Kitchen staff cannot be excluded since they do shift work and on the day of the visit, only one shift was present. Health promotion was conducted for staff and residents to prevent further spread of infection.

A total of 74 cases of typhoid fever has been confirmed in South Africa in 2016 to date (January to July 2016) with the majority (41, 55%) occurring in January and February 2016.

Source: Division of Public Health Surveillance and Response, NICD-NHLS