

b Staphylococcal food-borne illness outbreak, Tshwane District—Gauteng Province

On 31 May 2015, Tshwane District Health-Outbreak Response Unit was notified of an increased number of people presenting with abdominal cramps, vomiting, nausea and diarrhea after consuming lunch that was served at a local hotel on 30 May 2015. Patients presented in three local hospitals and all of them reportedly ate lunch after participating in a film shoot in Pretoria.

The lunch was prepared and provided by an external caterer. Three food handlers were involved in cooking and prepacking the lunch during the early hours of the morning (05h00 – 06h00) on 30 May 2015. The lunch was served to 183 people at intervals between 12h00 and 13h00 on the same day. The food items that were served were chicken, cabbage, yellow rice and brown onion sauce. Of 183 people who ate lunch 63 reportedly developed symptoms. Of the 63 cases, 51 received medical attention in the emergency departments of various hospitals. Most patients were dehydrated and were treated with intravenous fluids and discharged within three hours. There were no admissions or deaths reported.

Food samples (chicken, cabbage, yellow rice and brown onion sauce) were collected from the leftovers and were sent to National Health Laboratory Services and Infection Control Laboratory at Charlotte Maxeke on 1 June 2015 for further investigation. Staphylococcus enterotoxin A was isolated from the chicken and no other pathogens were isolated from other foods. There were no clinical specimens collected from any of the patients who presented in three local hospitals.

The environmental health practitioners visited the catering company to conduct further investigations; informal interviews with food handlers were also conducted. Environmental assessment was conducted in the kitchen, food storage and preparation area on the premises. None of the food handlers reported any illness. The environment was generally clean and the kitchen area was also clean with all utensils appropriately stored. No potential hazards for cross-contamination of food items were identified. Health education regarding safe food handling and preparation practices was given to the staff of the external catering company.

As illustrated in the epidemic curve (Figure 4.), the first case presented with symptoms at 13h00 following the food consumption at 12h00 on 30 May 2015. The number of cases peaked at 15h00 and 16h15 with thirteen and eight cases respectively. Onset of illness occurred at a mean of 2.7 hours after food consumption (range: 1 – 5 hours); and symptoms lasted a median of 24 hours (range: 2 – 48 hours). The epidemic curve clearly indicates a common or point source nature of the outbreak. Usually, the symptoms of staphylococcal food poisoning develop rapidly within 1 to 6 hours with a mean incubation period of 2.5 hours. The most common symptoms include nausea, violent vomiting, and abdominal cramps, with or without diarrhea. In many ways, this event represents a classic outbreak of staphylococcal food poisoning from food that was served during lunch in the hotel.

A suspected food-borne illness outbreak is defined as the occurrence of ≥ 2 epidemiologically-linked cases presenting with acute vomiting, diarrhoea, or abdominal pain. Case-patients are said to be epidemiologically linked if they have consumed common food. Health care workers are reminded to always collect clinical samples whenever a food-borne illness outbreak is suspected in order to assist the investigation process.

Food-borne illness outbreak falls in category A of the list of notifiable medical conditions in South Africa. These events should therefore be reported to the relevant health authority telephonically within 24 hours for an appropriate public health response to occur.

Source: Field Epidemiology Training Programme; Division of Public Health Surveillance and Response; Infection Control Laboratory, NHLS at Charlotte Maxeke Johannesburg Academic Hospital; Tshwane Communicable Diseases Control.

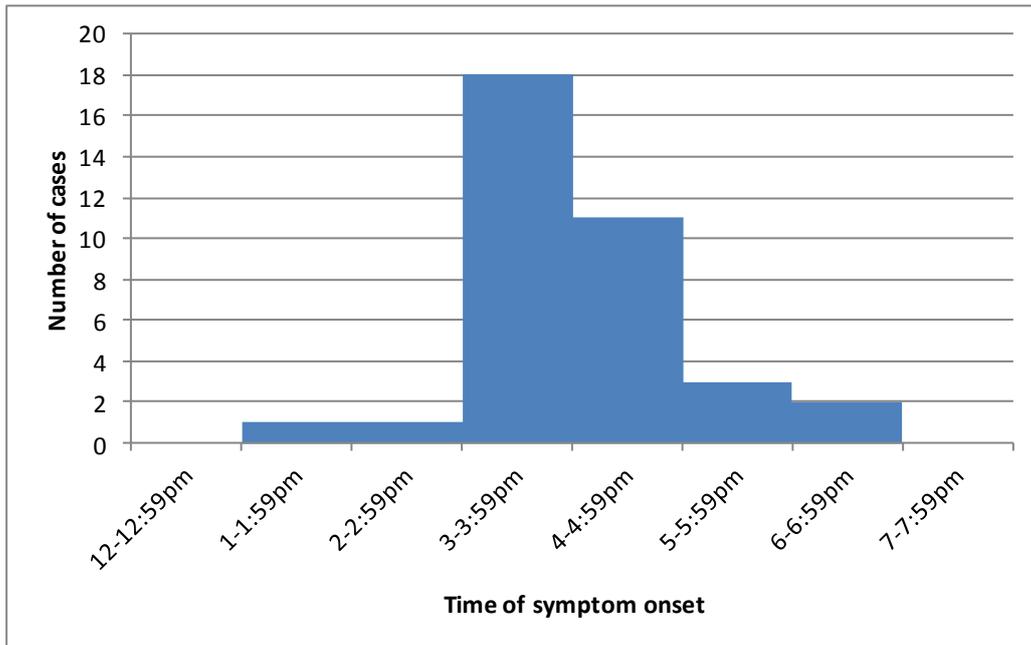


Figure 4. Epidemic curve by time of onset of symptoms Hotel X, Tshwane district, Gauteng Province, 30 May 2015.