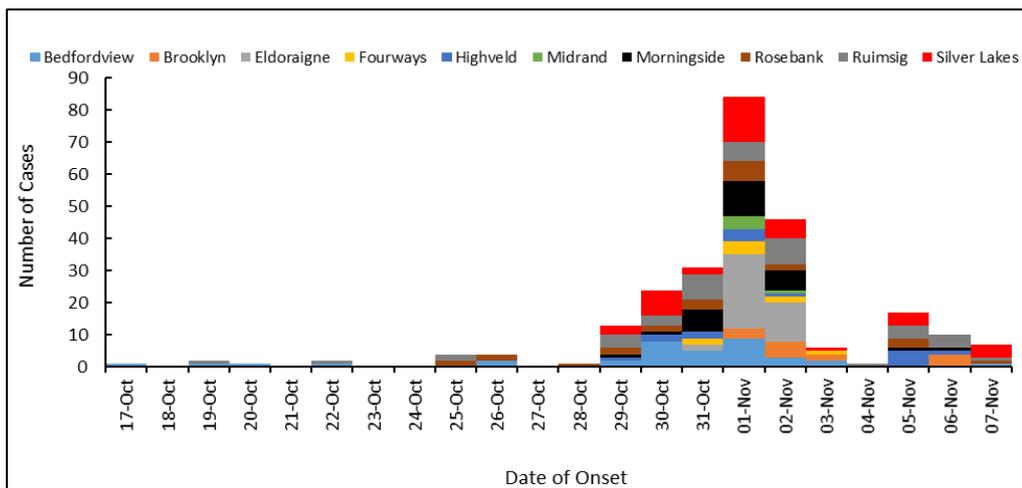


## b A suspected foodborne disease outbreak in children attending a multi-branch preschool in Gauteng Province, 2018

On 6 November 2018, a multi-branch preschool notified the NICD of a suspected foodborne disease outbreak at all 10 of its branches in Gauteng Province. A cross-sectional study was carried out across five of the 10 branches. Twenty-one questionnaires were administered to staff and nine clinical specimens were collected. One caterer supplies all the preschools with meals which are served to children and employees. Food retention samples for the 29<sup>th</sup> and 30<sup>th</sup> of October, and three rectal swabs from the caterer's food handlers were tested. A total of 243 children and 36 staff members across the ten branches presented with diarrhoea from 17 October to 7 November 2018 (Figure 1). Food retention samples were negative for *Salmonella* spp., *Staphylococcus aureus* and *Listeria monocytogenes*. Of the nine clinical specimens collected, seven were positive for astrovirus; these seven cases were from three different preschools. Astrovirus is transmitted by the faeco-oral route. Whilst less common than other enteric viruses (e.g. norovirus, rotavirus), astrovirus does cause sporadic disease and outbreaks. By finding the virus in clinical specimens

from three branches, it is likely to have been the causal pathogen. The outbreak most likely stemmed from common food supplied by the caterer to all the preschools. No pathogens were identified from specimens taken from the caterer's food handlers. However, food-handler specimens were received for testing a month after the outbreak started and astrovirus is typically shed for approximately three weeks. Only two food items from the composite meals served on 29 and 30 October 2018 were available for testing. It would have been appropriate to test all the food items prepared and served on those days. To prevent future outbreaks, staff involved in food preparation should pay special attention to hand hygiene in addition to routine food safety practices.

**Source:** Division of Public Health Surveillance and Response - Provincial Epidemiology Team, Outbreak Response Unit; Centre for Enteric Diseases, NICD-NHLS; Gauteng Provincial and District health departments (outbreak@nicd.ac.za)



**Figure 1.** Epidemic curve showing number of diarrhoeal cases at the preschools, stratified by branch, Gauteng Province, October and November 2018

## 4 INTERNATIONAL OUTBREAKS OF IMPORTANCE

### a Ebola virus disease outbreak, Democratic Republic of Congo (DRC)

The Ministry of Health (MoH) of the Democratic Republic of the Congo (DRC), declared a new outbreak of Ebola virus disease (EVD) on 1 August 2018. As of 10 December 2018, a total of 494 confirmed and probable EVD cases, including 283 deaths (case fatality rate 57.29%) has been reported. Of the 494 cases, 446 are confirmed and 48 are probable cases. Of the 283 deaths, 235 occurred in confirmed cases. These cases have been reported in 11 health zones in North Kivu Province and three health zones in Ituri Province. As of 3 December 2018, 144 confirmed cases have recovered and been discharged from Ebola Treatment Centres (ETCs). As of 4 December, a total of 44 healthcare workers has been infected, of which 41 are nurses and three are doctors. This highlights the public and private health centres as a

major source of amplification of the outbreak due to inadequate infection prevention and control (IPC) practices. Concerns have been raised regarding the disproportionate number of women and children infected during this outbreak.

#### Public health response

The MoH of the DRC is receiving support from WHO and partners in rapidly initiating response mechanisms in the affected areas. Priorities include the strengthening of surveillance, contact tracing, laboratory capacity, IPC, clinical management, vaccination, risk communication and community engagement, safe and dignified burials, response coordination, cross-border surveillance, and preparedness activities in neighbouring provinces and countries. Infection prevention and control