b Unprecedented increase of listeriosis, South Africa, 2017

Over the last few months the National Institute for Communicable Diseases (NICD) has received reports of a marked increase in the number of *Listeria monocytogenes* isolations across the country, but particularly in Gauteng Province. The increase has been noted in both public and private sectors. From data available as of 31 August 2017, 190 cases of listeriosis have been confirmed across the country during 2017 with the majority (n=122) being reported from Gauteng (Figure 5). In Gauteng, the population incidence rates have increased from 2 per million to 8 per million, with the highest incidence being recorded in City of Johannesburg at 12 per million (Figure 6). Amongst 122 Gauteng cases, 78 (64%) are paediatric patients of whom 63 are neonates (i.e. <28 days old). The ratio of males to females is 1:1.

Since September 2015, the Centre for Enteric Diseases, has received a limited number *L. monocytogenes* isolates from across the country, on which they have conducted molecular typing. Findings show that the majority of isolates submitted to their laboratory are of a single strain type, which is suggestive of a common source.

Listeriosis is a serious infection usually caused by eating food contaminated with the bacterium *L. monocytogenes*. Foodstuffs most frequently implicated are raw or unpasteurised milk and soft cheeses, vegetables, processed foods, ready-to-eat meats and smoked fish products. *L. monocytogenes* can proliferate in colder temperatures associated with refrigeration (4°C). Pregnant women, neonates, adults aged 65 or older, and people with weakened immune systems are vulnerable to *L. monocytogenes* infection as they have relatively impaired cell-mediated immunity.

An outbreak investigation to determine the source of the outbreak, with particular focus in Gauteng Province, is ongoing.

**Figure 5 (right).** Number of cases of laboratory-confirmed listeriosis by month of the year and by province, generated from NHLS and all private sector laboratories, 1 January 2013 – 31 August 2017

**Figure 6 (left).** The incidence of listeriosis per million general population in the districts of Gauteng calculated using laboratory-confirmed cases from NHLS and all private sector laboratories, for the period January-August 2013-2017. Population denominators were obtained from StatsSA.

**Source:** Division of Public Health, Surveillance and Response, NICD-NHLS; Centre for Enteric Diseases, NICD-NHLS (outbreak@nicd.ac.za)