

**Date of issue:** 14 March 2018, using data at close of business 12 March 2018

**Report issued by:** Centre for Enteric Diseases (CED) and Division of Public Health Surveillance and Response, Outbreak Response Unit (ORU), National Institute for Communicable Diseases (NICD)/ National Health Laboratory Service (NHLS).

**Cautionary note:** Data collection and cleaning is ongoing and case numbers will change from day to day. Cases of listeriosis will continue to occur up to four weeks or longer despite the recall, as the incubation period for listeriosis can be as long as 21 days with a reported maximum of 70 days

## **Summary**

- A total of 978 cases has been reported since 2017. Since the last situational update (8 March 2018), 11 additional cases have been reported to the NICD;
- Cases of listeriosis will continue to occur up to four weeks or longer after the recall of the implicated foodstuffs, as the incubation period for listeriosis can be as long as 21 days with a reported maximum of 70 days;
- Outcome at the end of hospitalisation is known for an additional 5 cases, bringing the total with known outcome to 674/978 (69%) patients. No additional deaths have been reported since the last situation update (8 March). Presently, 183/674 (27%) patients are known to have died.
- Health care workers are urged to continue with vigilance for new cases as persons who have consumed implicated processed meat products over the past few weeks may continue to present with listeriosis.

Following the declaration of the listeria outbreak in December 2017, a multi-sectoral outbreak response was initiated. Findings were shared by the Minister of Health, Dr Aaron Motsoaledi at a public media briefing on 4 March 2018. (statement available at [www.nicd.ac.za](http://www.nicd.ac.za)). In addition, the National Department of Health requested a full recall of implicated processed meat products. The NICD, the National and provincial departments of health, and the private medical sector are continuing with surveillance activities for cases. Current findings are summarized below

## **Descriptive epidemiology (as determined from available laboratory information systems data)**

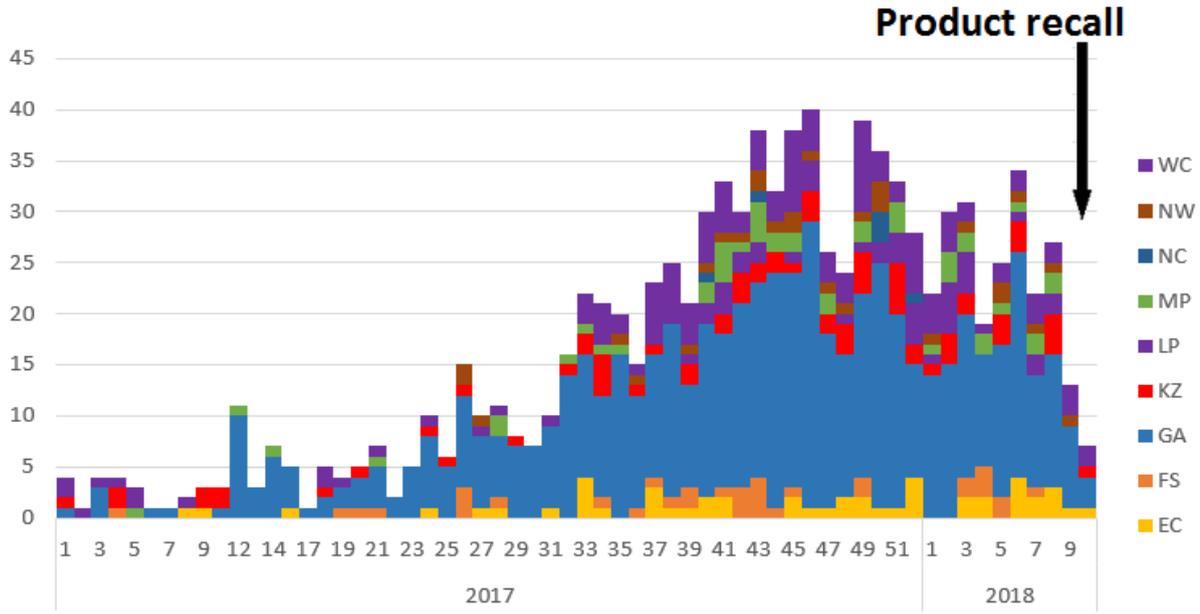
As of 12 March 2018, 978 laboratory-confirmed listeriosis cases have been reported to NICD from all provinces since 01 January 2017 (Figure 1). To date, 748 cases were reported in 2017, and 230 cases in 2018. Females account for 56% (532/948) cases where gender is reported. Where age was reported (n=946), ages range from birth to 92 years (median 19 years) and 42% (398/950) are neonates aged  $\leq 28$  days (Figure 2). Of neonatal cases, 96% (381/398) had early-onset disease (birth to  $\leq 6$  days). Most cases have been reported from Gauteng Province (59%, 581/981) followed by Western Cape (12%, 118/967) and KwaZulu-Natal (7%, 70/967) provinces. Cases have been diagnosed in both public (65%, 639/981) and private (35%, 342/981) healthcare sectors. Amongst 978 cases, 720 (73%) specimens that were positive for *Listeria monocytogenes* on blood culture, while 211 (22%) were positive on cerebrospinal fluid. 71/981 (7%) specimens were positive from a variety of other sites (stool, pus, abscess or other fluid). Four public sector patients had positive PCR test for *Listeria monocytogenes*, but these patients also had a positive culture.

## **Additional case data and outcome (where provided through completion of case investigation forms, provincial report or patient interview)**

Additional data on a limited number of cases is available where completed case investigation forms have been submitted or provincial investigations have been conducted. Race distribution amongst 310 cases is black (262, 86%), colored (22, 7%), white (25, 7%) and Asian (1, <1%). Outcome is known for 674/978 (69%) patients of whom 183 (27%) have died. Outcome by province and age category is tabulated and graphed below (Table 1 and Figure 2 respectively).

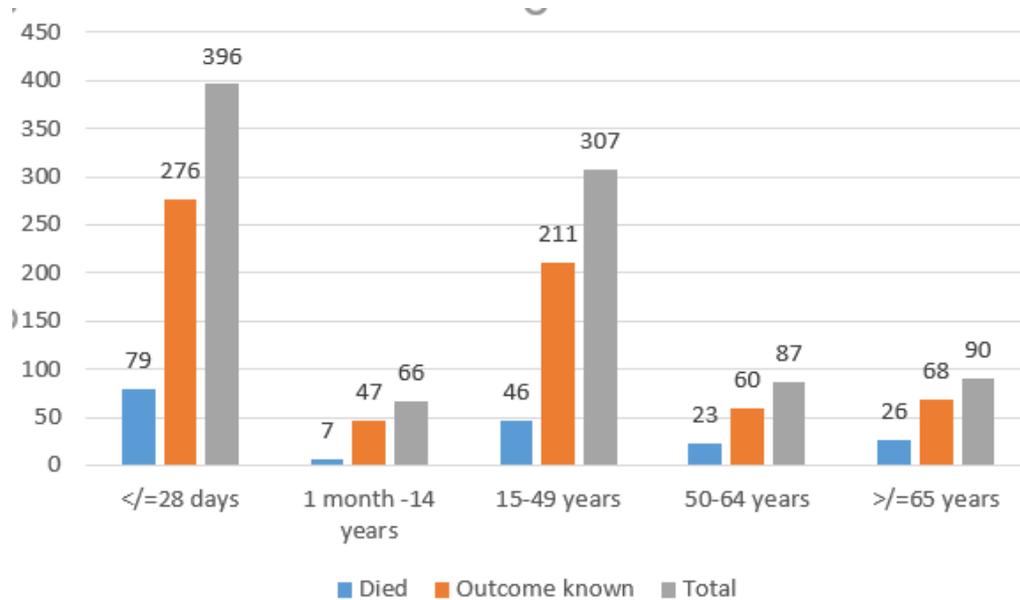
- ❖ All healthcare workers are requested to complete case investigation forms (CIFs – available on the website) for case-patients with listeriosis, and submit these to the NICD ().
- ❖ Clinical listeriosis management guidelines are available on the website ([www.nicd.ac.za](http://www.nicd.ac.za)).
- ❖ Where clinicians suspect listeriosis but specimens (including CSF and blood) are culture negative, a polymerase chain reaction (PCR)-based test can be performed at the NICD. PCR can also be performed on placenta samples for investigation of stillbirths/miscarriages. Please contact the Centre for Enteric Diseases on (011) 555 0343 for further details
- ❖ The NICD continues to operate its 24-hour hotline for healthcare workers.

**Figure 1: Epidemic curve of laboratory-confirmed listeriosis cases by epidemiological week and date of sample collection and province, South Africa, 01 January 2017 to 12 March 2018 (n=981)**



	EC	FS	GA	KZ	LP	MP	NC	NW	WC	Total
Died	10	8	98	11	7	10	3	7	29	183
Discharged	18	22	262	30	25	34	2	18	80	491
Pending	22	4	219	29	14	2	1	4	9	304
<b>Total</b>	<b>50</b>	<b>34</b>	<b>579</b>	<b>70</b>	<b>46</b>	<b>46</b>	<b>6</b>	<b>29</b>	<b>118</b>	<b>978</b>

**Table 1. Outcome of 978 persons with laboratory-confirmed listeriosis by province, as per 12 March 2018**



**Figure 2: Age distribution and outcome of laboratory-confirmed cases of listeriosis identified from 01 January 2017 to 12 March (n=946 where age was reported)**