

South Africa - Listeriosis

Disease outbreak news

20 March 2018

South Africa is experiencing an outbreak of listeriosis, a serious foodborne disease. This outbreak is ongoing since the beginning of 2017. Between 1 January 2017 and 14 March 2018, 978 laboratory-confirmed listeriosis cases have been reported to National Institute for Communicable Diseases (NICD) from all provinces. Further details on the epidemiology of this event can be found at (<http://www.nicd.ac.za/>). To date, 748 cases were reported in 2017, and 230 cases in 2018. Around 80% of cases are coming from three provinces: **581 (59%) from Gauteng**, 118 (12%) from Western Cape and 70 (7%) from KwaZulu-Natal provinces. The final outcome at the end of hospitalization is known for 674 (69%) of the cases of which 183 (27%) have died. This is comparable to the case fatality rate of other recorded listeriosis outbreaks worldwide. Most of the cases are in people with a higher risk for a severe disease outcome. These includes neonates, pregnant women, the elderly and immunocompromised persons. In this outbreak, 41.9% of the cases are newborns baby who got infected during pregnancy or delivery.

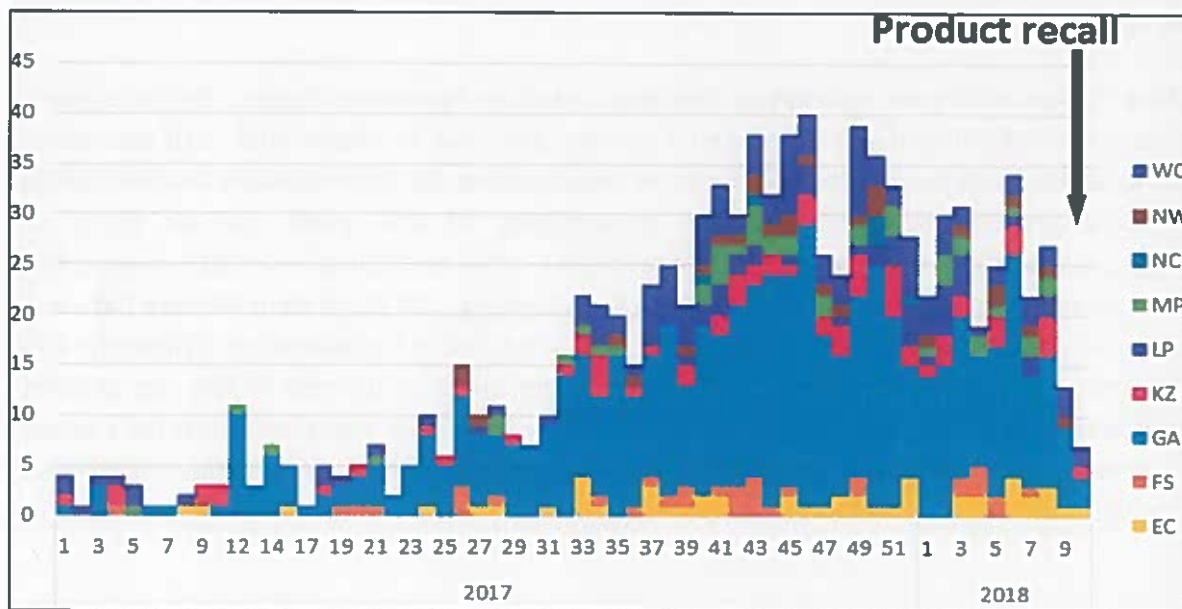
Recent results from the whole genome sequencing analysis showed that a strain of *Listeria monocytogenes* with the same sequence (ST6) as the outbreak strain was identified in a widely consumed ready-to-eat processed meat product (Polony). The same strain was also found in the processing environment of the manufacturer of the implicated product. This product is believed to be the source of the outbreak, and this was announced by the Ministry of Health South Africa on 4 March 2018.

The company and three of its retailers export to 15 countries in the African region: Angola; Botswana; DRC; Ghana; Lesotho; Madagascar; Malawi Mauritius; Mozambique; Namibia; Nigeria; Swaziland; Uganda; Zambia; and Zimbabwe. All have issued recalls for the implicated products.

In addition, environmental samples from other food production companies have also tested positive for listeria (but with strains different from the outbreak strain). These companies have issued food recalls. Some of their products have also been exported to some of the countries listed above.

Some of the investigated cases in South Africa are affected by a strain different from the main outbreak strain (based on whole genome sequencing) and this may indicate that more than one outbreak is ongoing. Comprehensive investigations to identify the source of these other outbreaks should be conducted.

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=978)



Source: National Institute for Communicable Diseases (NICD), South Africa.

Public Health Response:

- The Minister of Health held a press conference on 4 March 2018 to announce the source of the outbreak.
- Following the source identification; the national authorities have taken measures to limit further infections and associated mortality, including but not limited to the issuance of safety recall notices, compliance notices, and measures related to exportation of implicated products and risk communication with vulnerable groups.
- The Southern African Development Community (SADC) Health ministers held a meeting in Johannesburg on 15 March to share information and to enhance preparedness and response for Listeriosis. Health Ministers were further reminded of their rights and obligations under the IHR with regards to additional health measures for international travel and trade.
- Listeriosis has been made a notifiable medical condition in South Africa Since December 2017.
- National risk communication activities have been initiated since December 2017 around the WHO five keys to safer food messages.

WHO Risk assessment:

This is the largest ever outbreak of Listeriosis detected and reported worldwide. Due to the potentially long incubation period of listeriosis, further cases are expected before the impact of the food recall will be observed.

Following the identification of the source of this outbreak, WHO is now concerned that the export of implicated products may have resulted in Listeriosis cases in other countries. Details information on the implicated products batches exported to each of the identified 15 countries need to be shared with WHO/ International Food Safety Authorities Network (INFOSAN) Secretariat to facilitate efficient recalls of these products.

Recently, Namibia has reported a confirmed case of Listeriosis. It is important that this and possible other cases be properly investigated and their food source identified and the isolated strains should be sequenced to determine possible links to the main outbreak in South Africa. Some of these countries may not have established surveillance system and laboratory diagnostic measures in place to detect cases of listeriosis. WHO is ready to provide any support needed and has reached out to 16 African nations (two West African countries and 14 members of SADC) to provide support for preparedness and response.

An increase in public concern about the outbreak has been evident in the media reports and discussions in various social media platforms.

WHO advice:

Countries should strengthen their national food safety and disease surveillance systems as a prerequisite to prevent future similar events and ensure a safe food supply for their populations. Also, countries are urged to pay more attention to common foodborne pathogens such as *Salmonella species*, *Campylobacter jejuni*, *Escherichia coli* and *Listeria monocytogenes* and to make Listeriosis a notifiable disease if not yet done; to make the best use of a new [WHO manual to strengthen surveillance of and response to foodborne diseases](#), published in November 2017; and to refer to the WHO Factsheet on Listeriosis.

Responsible authorities are encouraged to proactively provide public health advice on the prevention and control of listeriosis. Risk communication mechanisms to address public concerns and to communicate about the ongoing actions taken to control the outbreak should be established.

WHO does not currently recommend any travel or trade restrictions in relation to this outbreak, other than the recall of processed meat products indicated by the South African government.

While, WHO understands the desire by sovereign governments to take measures to protect the health of their populations, States Parties to the IHR have obligations not to take actions that significantly interfere with international travel and trade which are not based on scientific principles and which may be viewed as excessive. Indeed such measures contravene the spirit and purpose of the IHR, and can impede public health objectives.

Currently, 12 countries have recalled the indicated processed meat products, and banned imports of the same, while 3 out of these countries have additionally banned imports of other food products. WHO continues to monitor the travel and trade measures taken by countries in relation to this outbreak and their compliance with requirements under the IHR.

For travelers, it is advisable to follow regular precautions for food hygiene: avoid uncooked food, avoid food that has been kept at room temperature for several hours, and always wash hands thoroughly with soap and water before preparing or consuming food. See the WHO Guide on safe food for travelers <http://www.who.int/foodsafety/publications/travellers/en/>, and WHO 5 Keys for Safer Food and <http://www.who.int/foodsafety/publications/5keysmanual/en/>.