



**15 February 2018**

**EIGHTH UPDATE ON LISTERIOSIS OUTBREAK IN SOUTH AFRICA**

By Dr Lucia Anelich

The [NICD](#) has provided the latest update on the listeriosis outbreak in South Africa – attached to this note as at 14 February 2018. The outbreak is across all nine provinces. The cases have jumped from 852 on 06 February to **872 (20 more)**, **BUT with a huge jump from 107 deaths to 164!**

**In summary to date:**

DATE	CONFIRMED CASES	DEATHS
05 December 2017	550	36
20 December 2017	647	60
03 January 2018	717	61
12 January 2018	748	67
16 January 2018	767	81
25 January 2018	820	82
06 February 2018	852	107
<b>15 February</b>	<b>872</b>	<b>164</b>

The strain that is **still most frequently isolated** belongs to **sequence type ST6**. This continues to indicate that these isolates originate **from a single source**, most likely a food product on the market or a series of food products produced in the same manufacturing environment. The source may even be products that are consistently contaminated from batch to batch by persistent *L. monocytogenes* in the environment of the facility, particularly if there is no environmental control programme with associated **effective** cleaning and disinfection in place.

**Other statistics in summary (see more in NICD report):**

Outcome data is available for 597 of the 872 cases. Of these 597 cases, 164 deaths have been reported which drops the mortality rate slightly from **34% on 25 January and 30% on 06 February to 27.5% on 15 February 2018**. This rate is **currently** (this will likely change as the disease progresses and more cases are traced) 2-7% higher than general mortality rates reported in other countries i.e. 20-25%. **Neonates ≤ 28 days continue to be the most affected group.**

**The source of the outbreak remains unknown.** By all accounts, the outbreak has not yet peaked and more cases and deaths can be expected if the source is not found soon.

I was also informed that the World Health Organization (WHO) had a team in South Africa a few weeks back to assist the National Authorities and the NICD with this outbreak. A few key facilities had been visited and there is apparently a “strong lead”.

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Dr Anelich stated in previous communiques that this was **the worst documented listeriosis outbreak in global history. It remains so.** Her international colleagues in European countries, Canada, Australia and the USA concur.

This communique, further information and interviews conducted can be found on the Anelich Consulting website at [www.anelichconsulting.co.za](http://www.anelichconsulting.co.za) and by clicking on links provided.

See <http://anelichconsulting.co.za/index.php/faq> for regularly updated answers to Frequently Asked Questions.

Contact Dr Lucia Anelich at [la@anelichconsulting.co.za](mailto:la@anelichconsulting.co.za) for further assistance and scientific advice based on international best practice.

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### **Listeriosis**

*Listeria monocytogenes* is the primary cause of the illness called listeriosis. The organism is an **environmental pathogen** and is found in soil, water, sewage, and decaying vegetation. It can be readily isolated from humans, domestic animals, raw agricultural commodities, and food packing and processing environments (particularly cool damp areas that can contaminate food). It can cause two types of illnesses:

- A mild, non-invasive illness (called listerial gastroenteritis), which shows typical symptoms of gastroenteritis i.e. fever and diarrhoea. This form of the illness is rarely diagnosed and usually passes quickly without severe effects;
- A **severe, invasive** illness (called **listeriosis**). Listeriosis is characterized by a relatively high mortality rate i.e. **~20-25%** compared to illnesses caused by most other foodborne pathogens (<1 % for *Salmonella* or *E. coli* O157). In the invasive form of the illness, the organism has moved beyond the gut and has infected other parts of the body.

Persons who have the greatest risk of experiencing listeriosis due to consumption of foods contaminated with *L. monocytogenes* are **pregnant women and their foetuses**, the **elderly (over 65 years of age)** and **persons with weakened immune systems**, for example, undernourished persons, people who have had organ transplants, those with HIV/AIDS, diabetes, cancer and other autoimmune diseases.

**Pregnant women:** Pregnant women are approximately **20 times more likely** than other healthy adults to get listeriosis. Pregnant women typically experience only fever and other flu-like symptoms, such as fatigue and muscle aches. However, infections during pregnancy can lead to miscarriage, stillbirth, premature delivery, or life-threatening infection of the newborn, such as meningitis.

- **People other than pregnant women:** Symptoms can include headache, stiff neck, confusion, loss of balance, and convulsions in addition to fever and muscle aches.

People with invasive listeriosis usually report symptoms starting **1 to 4 weeks** after eating food contaminated with *L. monocytogenes*; some people have reported symptoms starting as late as 70 days after exposure or as early as the same day of exposure (although this is very rare).

**Foods that have caused outbreaks are typically contaminated from the environment during manufacturing/processing or packing.**

Listeriosis is **mainly associated** with consumption of contaminated Ready-To-Eat (RTE) foods. Foods most often implicated in foodborne outbreaks **globally**, are:

- Ready-to-eat deli meats (polonies, ham products etc) and hot dogs
- Refrigerated pâtés or meat spreads
- Unpasteurized (raw) milk and dairy products
- Soft cheese made with unpasteurized milk, such as queso fresco, Feta, Brie, Camembert
- Refrigerated smoked seafood
- Raw sprouts
- Pre-packaged salads
- Ice cream (not as common)

It is killed by thorough cooking and by temperatures used for pasteurization of milk.