

Email: la@anelichconsulting.co.za Tel: +27 (0) 12 362 5960 Cell: +27 (0) 82 908 3166 Website: www.anelichconsulting.co.za

281 William Street • Brooklyn • 0181 South Africa

P O Box 36536 • Menlo Park • 0102 South Africa

# 08 March 2018

### ELEVENTH UPDATE ON LISTERIOSIS OUTBREAK IN SOUTH AFRICA

# By Dr Lucia Anelich

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The <u>NICD</u> has provided the latest update on the listeriosis outbreak in South Africa – attached to this note as at 08 March 2018. The outbreak remains across all nine provinces. The cases are up from 948 on 04 March to **967 (19 more**), with **183 deaths (3 more** than on 04 March), of which **79 are neonates;** 486 patients have been discharged from hospital and 298 are pending. Very worrying, is the number of deaths i.e. 7 for children aged 1-14 years. Unless there were underlying health issues or severe malnutrition, which would then have placed them in a high risk group, healthy children are highly unlikely to contract the invasive form of listeriosis.

DATE	CONFIRMED CASES	DEATHS
05 December 2017	550	36
20 December 2017	647	60
03 January 2018 🚽 📃	717 00	61
12 January 2018	748	67
16 January 2018	767	81
25 January 2018	820	82
06 February 2018	852	107
15 February 2018	872	164
20 February 2018	915	172
27 February 2018	945	176
04 March 2018	948	180
08 March 2018	967	183

#### In summary to date for your convenience:

No further information on the outbreak strain is given by the NICD, but it is likely that it remains the **ST6** strain. Prevention of **post-processing contamination** of food in a manufacturing facility is key, particularly after a product is cooked, meaning that it received a listericidal treatment (kill step). *L. monocytogenes* is known to be persistent in the environment of some facilities and could therefore

be a consistent source of post-processing contamination. A robust environmental control programme is vital, together with associated **effective** cleaning and disinfection.

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

Of the 967 cases, outcome data is available for 669 cases. Of these 669 cases, 183 deaths have been reported resulting in a consistent **27% mortality.** Neonates ≤ **28 days continue to be the most affected group.** 

#### **NEW** course launched!

*Listeria monocytogenes* – all you need to know to control it in your processing plant and how to establish appropriate microbiological criteria based on risk. Click <u>here</u> for more information. Shorter presentations are available for top management.

Dr Anelich stated on 05 January 2018 in a previous communique that this was **the worst documented listeriosis outbreak in global history**. **It remains so**. The World Health Organization followed suit and confirmed this.

This communique, further information and some interviews conducted can be found on the Anelich Consulting website at <u>www.anelichconsulting.co.za</u> and by clicking on links provided.

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

Contact Dr Lucia Anelich at <u>la@anelichconsulting.co.za</u> for further assistance and scientific advice based on international best practice.

# NEW! Dr Lucia Anelich launched a new website on 06 March 2018 on listeriosis facts. It is designed to provide factual information on listeriosis for everyone, especially consumers. URL is listeriosisfacts.co.za.

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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. ~20-30% 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 as these foods do not receive a listericidal treatment.