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## LISTERIOSIS OUTBREAK IN SOUTH AFRICA

You may have heard that South Africa is currently experiencing a listeriosis outbreak, with over 570 confirmed cases and 36 people who have died. This brief document is intended to provide you with scientific information on the illness, the causative organism and foods most often implicated. Further information can be found on the Anelich Consulting website at <http://www.anelichconsulting.co.za/index.php/faq>. Suggested further reading is provided at the end of this brief.

*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 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.

*L. monocytogenes* is mainly associated with Ready-To-Eat (RTE) foods and foods most often implicated globally, are:

- Ready-to-eat deli meats 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

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

Further Reading:

<http://www.anelichconsulting.co.za/index.php/faq>

<https://www.cdc.gov/listeria/technical.html#patient-mgmt>

<https://www.cdc.gov/listeria/technical.html#clinical-features>

<https://www.foodsafety.gov/poisoning/causes/bacteriaviruses/listeria/index.html>

[http://www.nicd.ac.za/wp-](http://www.nicd.ac.za/wp-content/uploads/2017/12/NICD_Situation_report_on_listeriosis_outbreak_South_Africa_04_December_2017.pdf)

[content/uploads/2017/12/NICD\\_Situation\\_report\\_on\\_listeriosis\\_outbreak\\_South\\_Africa\\_04\\_December\\_2017.pdf](http://www.nicd.ac.za/wp-content/uploads/2017/12/NICD_Situation_report_on_listeriosis_outbreak_South_Africa_04_December_2017.pdf)