
How to eradicate *Listeria* from your kitchen or small shop

1. What is Listeriosis?

Listeriosis is a serious disease caused by the bacterium, *Listeria monocytogenes*. It is transmitted to persons through the ingestion of contaminated food products. It typically causes pregnancy associated disease (fetal loss, still-birth, neonatal sepsis). Anyone who consumes food contaminated with *Listeria* can get listeriosis. However, persons at high risk of severe disease include pregnant women and their unborn babies, the elderly (>65 years), persons with underlying conditions such as diabetes, cancer, chronic liver or kidney disease, and persons with weakened immune systems due to HIV or cancer chemotherapy.

2. What food products are implicated in the 2017/18 South African Listeriosis outbreak?

A massive outbreak of listeriosis is currently underway in South Africa with over 700 cases reported during 2017 and over 900 cases since the outbreak began. Cases have been reported from all nine provinces, but particularly in Gauteng Province. According to the World Health Organization, this is the largest ever outbreak of the disease. Ready-to-eat, processed meat – specifically polony – from two South African companies – Enterprise®, and Rainbow® - is strongly associated with development of listeriosis. Shops have been instructed to remove products made at these factories from their shelves. The National Department of Health has released a notice indicating that persons should avoid all processed meat products that are sold as ready-to-eat meats.

3. What are the risks of spread of listeria in private homes and small retailers (shops)?

Food implicated in the outbreak, including polony and viennas, may be contaminated with *Listeria* bacteria on the inside and outside of their packaging. *Listeria* bacteria can 'cross-contaminate' other foods that are stored in the fridge. Therefore all persons who have had polony and other ready to eat meat products from these producers in their fridge should thoroughly clean and decontaminate their fridges, knives, cutting boards and kitchen surfaces. Shops (retailers) should thoroughly clean the shelves, fridges and surfaces where polony and ready to eat meat products are stored. Meat slicing machinery should be taken apart (dissembled), washed and disinfected as below.

4. How can surfaces and cutting machinery in kitchens or shops be cleaned and decontaminated?

All kitchen surfaces, retail surfaces, fridges and machinery should be washed thoroughly with warm water and soap. After this, surfaces, fridges and machinery should be decontaminated with a dilute solution of bleach (Jik®). Mix one teaspoon of unscented bleach to one litre of water. Flood the surface with the bleach and leave to stand

for 10 minutes. Take apart the cutting machinery and soak it in bleach, so that the bleach gets everywhere – into all the cracks. It is important to clean refrigerators regularly and to clean hands and kitchen surfaces often.

5. **What else can I do to keep my kitchen free from *Listeria*?**

Listeria can contaminate other food products through spills in the fridge.

- Clean up all spills in your fridge right away—especially juices from processed foods and raw meats. Consider using paper towels to avoid transferring germs from a cloth towel;
- Clean the inside walls and shelves of your refrigerator with warm water and liquid soap, then rinse. Once a month, clean the fridge with a mixture of bleach and water (one teaspoon of bleach with one litre of water).

Listeria can spread from one surface to another.

- Thoroughly wash food preparation surfaces with warm, soapy water. Every month, clean the surfaces with a mixture of bleach and water (one teaspoon of bleach with one litre of water).
- Wash cutting boards with warm, soapy water after each use. Nonporous acrylic, plastic, or glass boards can be washed in a dishwasher;
- Dish cloths, towels and cloth grocery bags should be washed often in hot water or in the hot cycle of a washing machine;
- It is also important to wash hands with warm water and soap for at least 20 seconds before and after handling food.

6. **How can Listeriosis be prevented?**

Unlike most other foodborne pathogens, *Listeria monocytogenes* can grow in refrigerated foods that are contaminated. To prevent this, it is recommended to have fridge temperatures below 4°C; and freezer temperatures below -18°C. Check the refrigerator temperature often and be sure to keep foods as cold as possible without causing them to freeze.

Always ensure that good basic food hygiene is followed. This includes:

- Thoroughly cook raw foods – all bacteria are killed at temperatures above 70°C;
- Wash your hands before preparing food, before eating and after going to the toilet;
- Wash raw vegetables and fruits thoroughly before eating;
- Separate raw and cooked food, and don't mix utensils and surfaces when preparing food;
- Wrap or cover foods with a sheet of plastic wrap or foil, or put foods in plastic bags or clean covered containers before you place them in the refrigerator. Make certain foods do not leak juices onto other foods;
- Use leftover, precooked and ready-to-eat foods as soon as possible. The longer they are stored in the refrigerator, the more chance *Listeria* has to grow

7. **Where can I find out more information**

For more information: contact the Centre for Enteric Diseases or the Outbreak Response Unit

- Non-health care workers and members of the public should contact their attending clinicians.
- For Laboratory or other enquiries, including clinical-related queries: The Centre for Enteric Diseases
The Centre for Enteric Diseases, Dr Juno Thomas junot@nicd.ac.za
- For medical or clinical-related queries: NICD Hotline +27 82 883 9920
- Enquiries may be emailed to outbreak@nicd.ac.za
- Helpful international resources include <https://www.fda.gov/ForConsumers/ConsumerUpdates/ucm274114.htm>