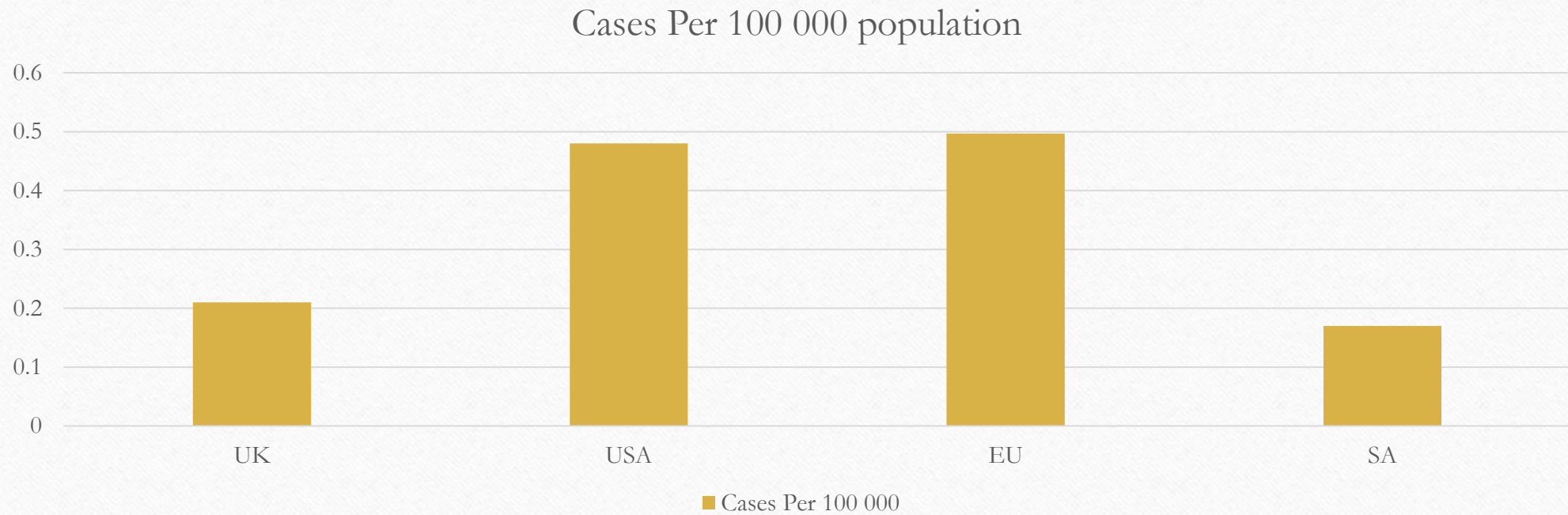


Listeriosis after the Crisis

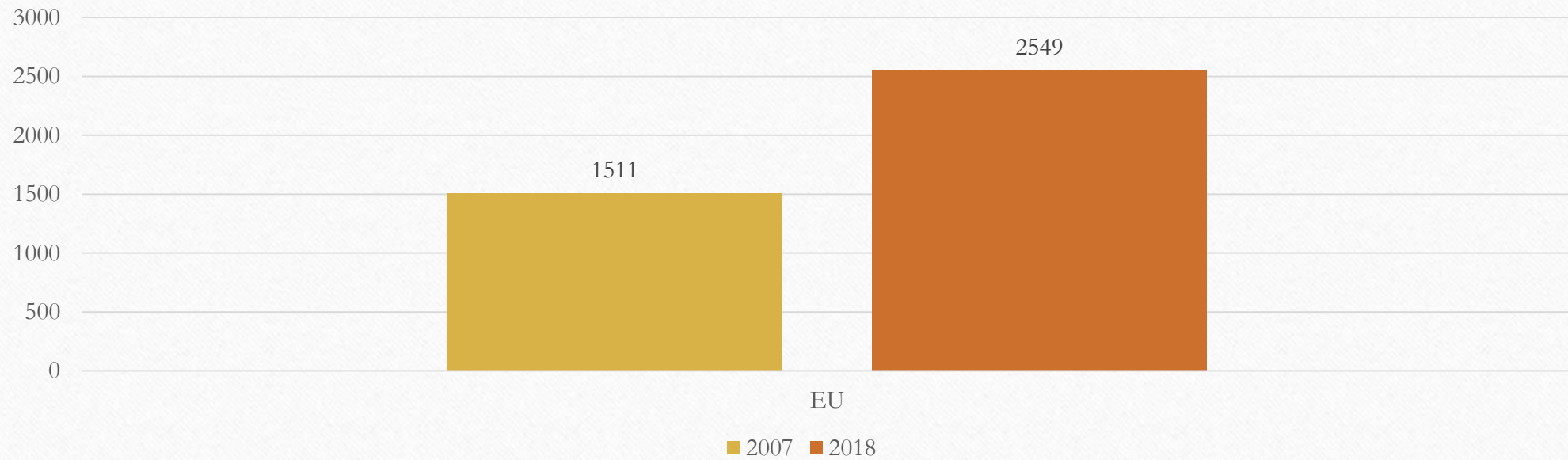
How does SA compare to International Benchmarks

Listeriosis Cases for UK, USA, EU and SA

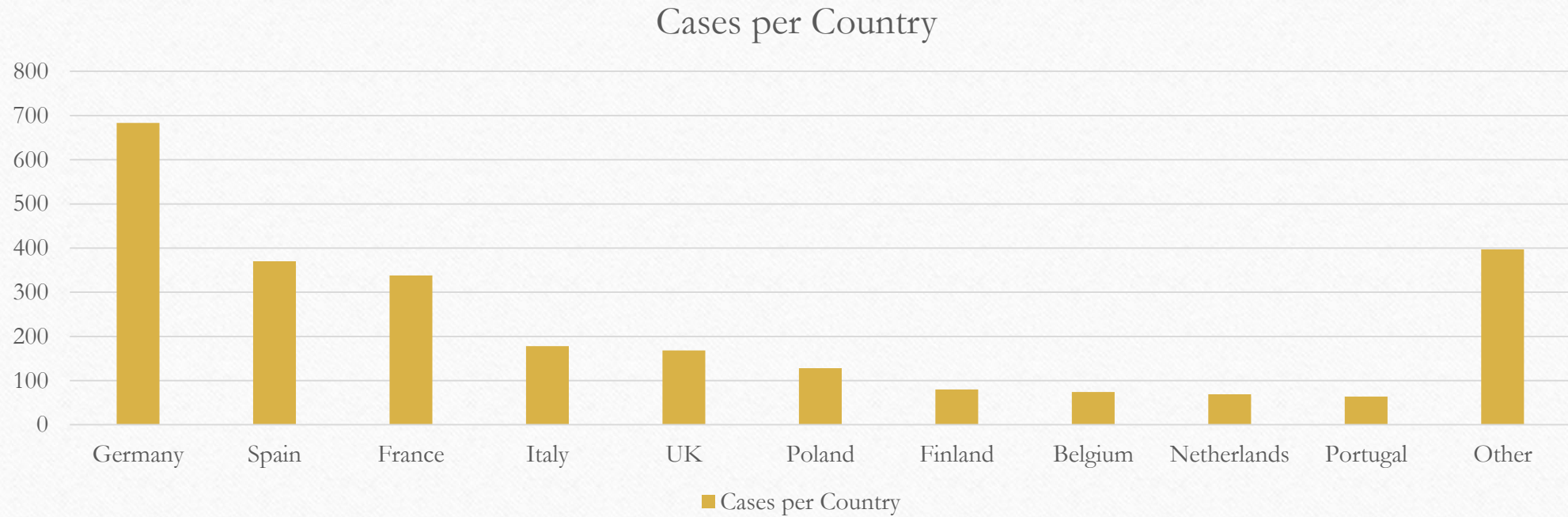


European Union

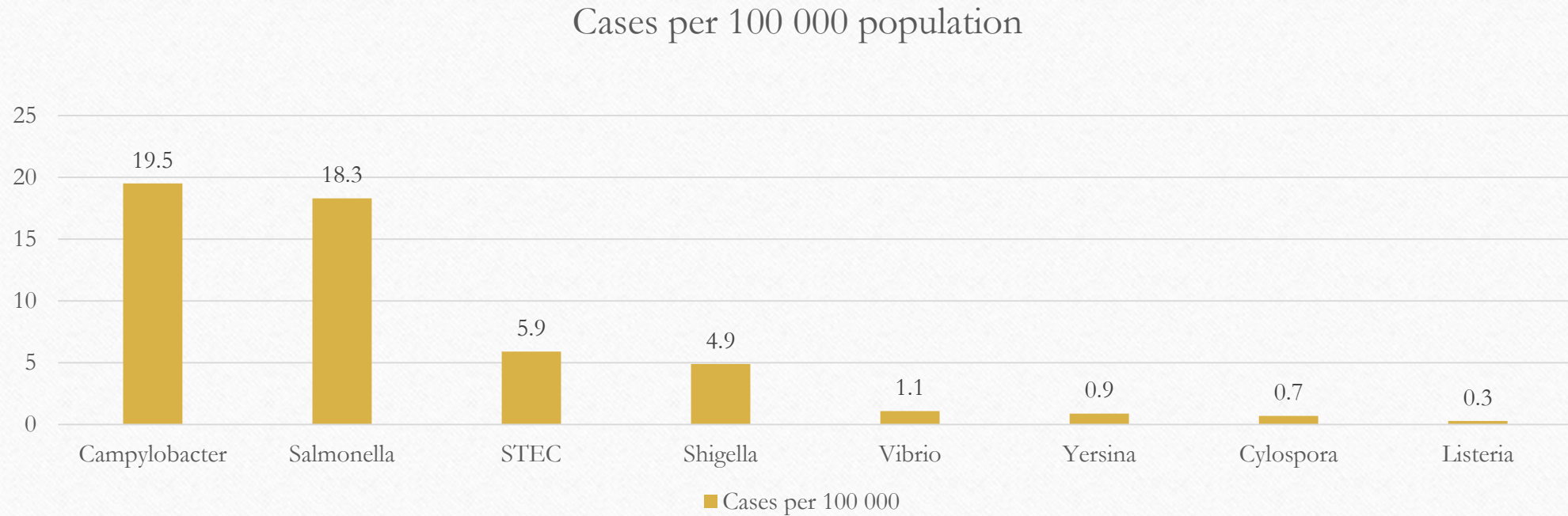
Total Number of Listeriosis cases per annum



Listeriosis cases in EU Countries 2018



Food illness data from the CDC in the USA - 2018



Risk Profiles

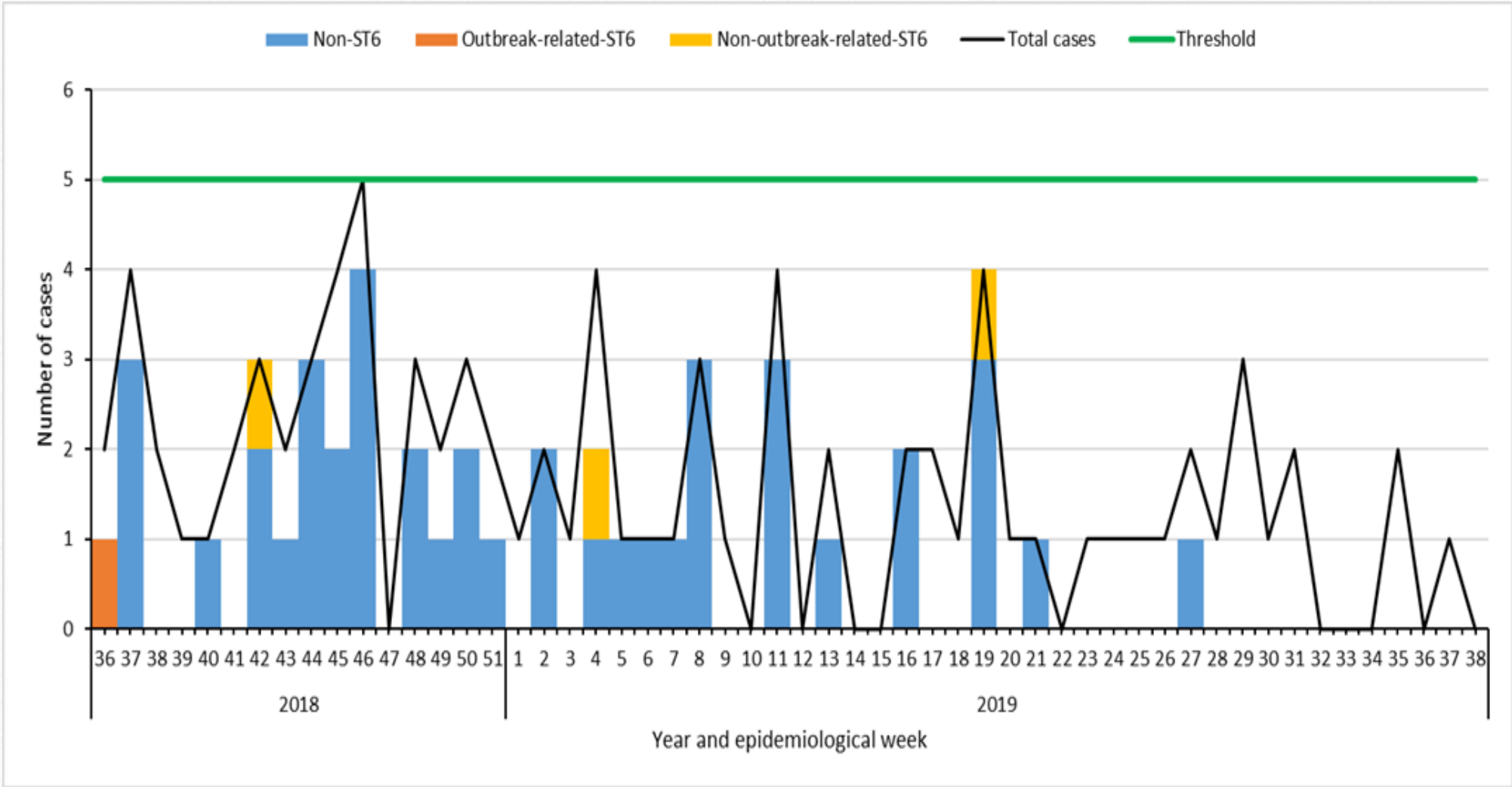
- Most affected are > 65 years
- Pregnant Women
- Persons with weak immunity
- Soft Cheese made using un-pasteurized milk
- Ready to Eat Cold Meats
- Ready to Eat Smoked Fish

NICD report September 2019

- **a Update on listeriosis surveillance, 3 September 2018—18 September 2019, South Africa**
- **Surveillance of listeriosis**
- Following the 2017-2018 outbreak caused by ready-to-eat processed meat products manufactured at a food production facility in Limpopo Province, listeriosis is under surveillance.
- Surveillance activities include:
 - Mandatory reporting of all listeriosis cases through the notifiable medical conditions platform. Since 15 December 2017, listeriosis is a notifiable medical condition, requiring healthcare workers and laboratorians to re-port all cases directly to the NICD.
 - Completion of a standardized case investigation form (CIF) for all cases. Healthcare workers are requested to complete the CIF which includes demographic, clinical and risk factor information, and a detailed food exposure history. The Centre for Enteric Diseases (CED) team at NICD follow up on all CIFs and conduct further interviews if necessary.
 - Referral of clinical *Listeria monocytogenes* isolates for confirmatory testing and typing. All laboratories are requested to refer clinical isolates to CED NICD where they routinely undergo confirmatory phenotypic testing and whole genome sequencing (WGS).

NICD report September 2019

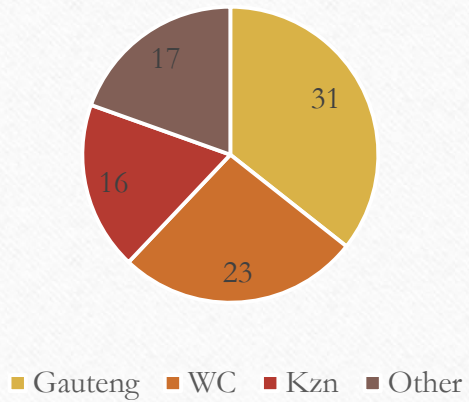
- Analysis of epidemiological and laboratory WGS data. CED regularly analyses epidemiological and WGS data to facilitate early recognition of possible clusters requiring further investigation.
- **Update**
- Since the Minister of Health announced the end of the 2017-2018 outbreak on 3 September 2018, a total of 87 laboratory-confirmed listeriosis cases has been reported. Most cases were from Gauteng Province (36%, 31/87), followed by Western Cape (26%, 23/87) and KwaZulu-Natal (18%, 16/87) provinces. Cases have been diagnosed in both public (74%, 64/87) and private (26%, 23/87) healthcare sectors. Ages range from birth to 80 years (median 33 years) and 57% (48/84) are female. Thirty-six percent of cases are pregnancy-associated (30/84; neonates aged ≤ 28 days, $n=25$ and pregnant women, $n=5$), followed by adults aged 15-49 years (32%, 27/84), 50-64 years (14%, 12/84) and ≥ 65 years (13%, 11/84). Four cases in children aged 1 month to 14 years were reported. Outcome data is currently available for 77% (67/87) of cases, of which 31% (21/67) died.
- To date, 72% (63/87) of isolates were received for WGS, and 46 have been characterized as 14 different sequence types (ST1, ST2, ST4, ST5, ST6, ST7, ST14, ST54, ST88, ST155, ST224, ST820, ST876 and ST1430). Four ST6 isolates were identified; one isolate (date of sample collection September 2018) belongs to the outbreak cluster on core genome multi-locus sequence typing (cgMLST). The three most recent ST6 isolates are not related to the 2017-2018 outbreak on cgMLST (Figure 2). Case investigation forms were received for 76% (66/87) of the cases to date.
- On analysis of available *L. monocytogenes* isolates by WGS and epidemiological data, there is no suggestion of possible clusters/outbreaks anywhere in the country at present. The reported listeriosis cases are sporadic and remain below the threshold of five cases per week.



NICD - Sept 2018-Sept 2019

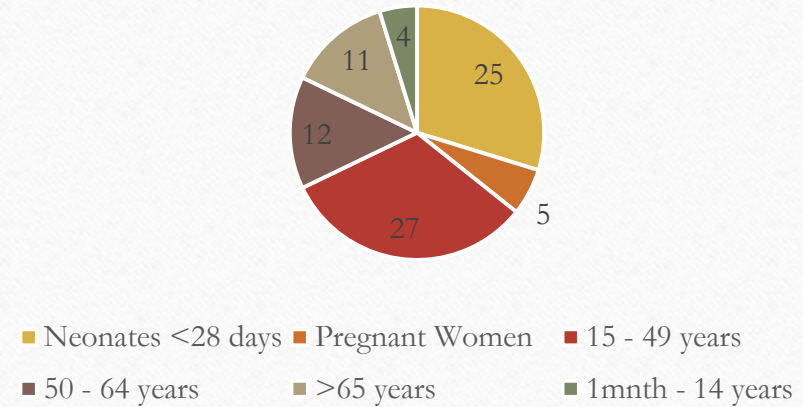
L Mono per Province

Distribution



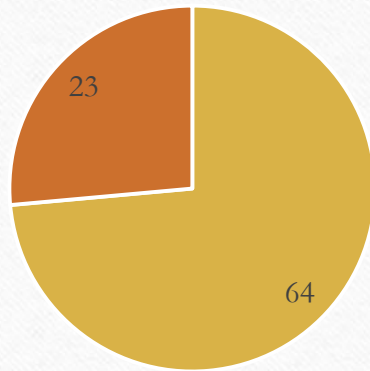
At Risk Groups

Affected Groups



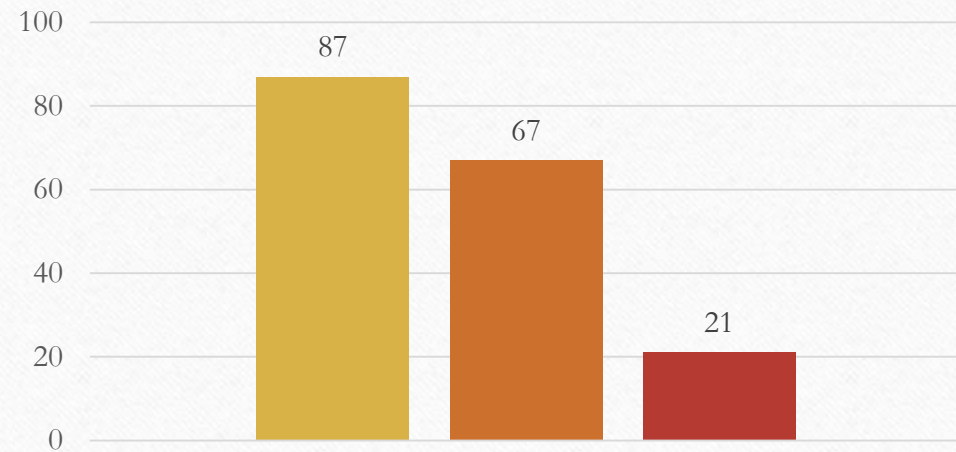
NICD – Sept 2018 – Sept 2019

Public vs Private case reports



■ Public ■ Private

Case data



■ Reported ■ Data Available ■ Died

About this information

- The information in this presentation does not relate exclusively to processed meat products , but is data for all categories of foods as provided by the various Government Agencies of the UK, EU, USA and RSA on their websites
- Information was sourced from the following source documents
- https://www.cdc.gov/mmwr/volumes/68/wr/mm6816a2.htm?s_cid=mm6816a2_w
- <https://www.ecdc.europa.eu/en/listeriosis/surveillance-and-disease-data/atlas>
- <http://www.nicd.ac.za/media/news/>