



foodfocus
THE RIGHT WAY

Listeria- Lessons learned and the way forward

Linda Jackson

www.foodfocus.co.za

About Food Focus



We focus on doing the right things in the right way.

We believe the food industry needs to do the right things, and that it's more than just a tick-box exercise to satisfy an audit, but as a culture and an ethos.

We run our business ethically, and try to inspire others to do the same.



Who do we help



We aim to speak to every link in the food chain, from farm to fork.

- Agri/growers
- Primary Processors
- Small & Large Scale Suppliers
- Manufacturers
- Retailers
- Hospitality
- Support Services
- Consumers



Where we help



We have an integrated approach...

- Food Safety
- Quality
- Occupational Health & Safety
- Environmental Management
- Corporate Social Responsibility
- Risk and Corporate Governance
- Ethics & Sustainability



How we help



- We are an impartial and neutral entity
- We aim to educate and empower
- We aim to support industry initiatives and associations and governmental bodies
- If we don't know the answer we will find the people who do
- We encourage knowledge sharing
- We help industry address challenges
- We help business find the right solutions





Our Advertisers



NSF International



Our involvement in the outbreak



- October 2017 – The Conversation



Spike in Listeria infections in South Africa: why it matters

October 22, 2017 1.11pm SAST

Our involvement in the outbreak



Division for Public Health Surveillance and Response

1 Modderfontein Road, Sandringham, 2193, Johannesburg, South Africa

Email: outbreak@nicd.ac.za | www.nicd.ac.za

07 November 2017

South African Association for Food Science and Technology (SAAFoST)

REQUEST FOR ASSISTANCE – 10-fold INCREASE IN LISTERIA MENINGITIS CASES IN SOUTH AFRICA

Over the last few months the National Institute for Communicable Diseases (NICD) has received reports of a marked increase in the number of cases of *Listeria monocytogenes* meningitis and septicaemia in newborn infants and adults at both private and public hospitals across the country. The incidence rate has risen from 1/1 000 000 general population to 12-15/1 000 000 – a 10-fold increase. Listeriosis carries a high mortality particularly amongst neonates and pregnant women, who are highly susceptible to infection.

And more



DIRECTOR GENERAL
HEALTH
REPUBLIC OF SOUTH AFRICA

PRETORIA
Pretoria Way 4002, PRETORIA, 0001, 27th Floor, Room 2714, Connaught Building, Con Trade Square & Ouders Street, PRETORIA, 0001 Tel: 012 280 8000 Fax: 012 280 8000
CAPE TOWN
P.O. Box 3870, CAPE TOWN, 8000, 88 Flou, Rector 877, 101 Parliament Street, Floor 08/09, CAPE TOWN, 8000 Tel: 021 461 2040 Fax: 021 461 5000

The CEO
Consumer Goods Council of South Africa
Block D Hurlingham
Office Park
Woodlands
Hurlingham Manor
2196

email: gwaregam@cgcsa.co.za

Dear Mr. Magozhe

REQUEST FOR INFORMATION ON INDUSTRY TESTING FOR LISTERIA MONOCYTOGENES

The National Institute for Communicable Disease (NICD) has noted an increase in Listeriosis, possibly indicating a foodborne illness outbreak. The Department of Health has thus been alerted and we are working together to try to establish the potential sources of the Outbreak with a view to the containment thereof. We therefore need to look at the level of testing for Listeria in the industry as we are really aiming to eliminate potential known suspect foodstuffs and duplication of possible testing and rule out potential food sources.

We therefore urge you and your members at this stage, to be open and transparent regarding their testing, as outlined in this request.



Foods at risk for Listeria Contamination

 Eggs	 Fruit	 Unpasteurised Milk	 Root Vegetables
 Cured/smoked seafood	 Chicken/poultry	 Cold meat (ham/polony)	 Raw vegetable
 Ready-to-eat meals	 Ready-to-eat-salads	 Sandwich spreads/Dips	 Mayonnaise
 Hard cheeses	 Soft cheeses (cream cheese)	 Cream/Ice Cream	 Yoghurt/Buttermilk/Amasi
 Processed meat (biltong, sausage)		 Meat spreads (Pate, paste, brawn)	

So we start to talk about it

If you have any queries, you are welcome to contact us at info@foodfocus.co.za



The latest food compliance news
www.foodfocus.co.za

And track the outbreak...

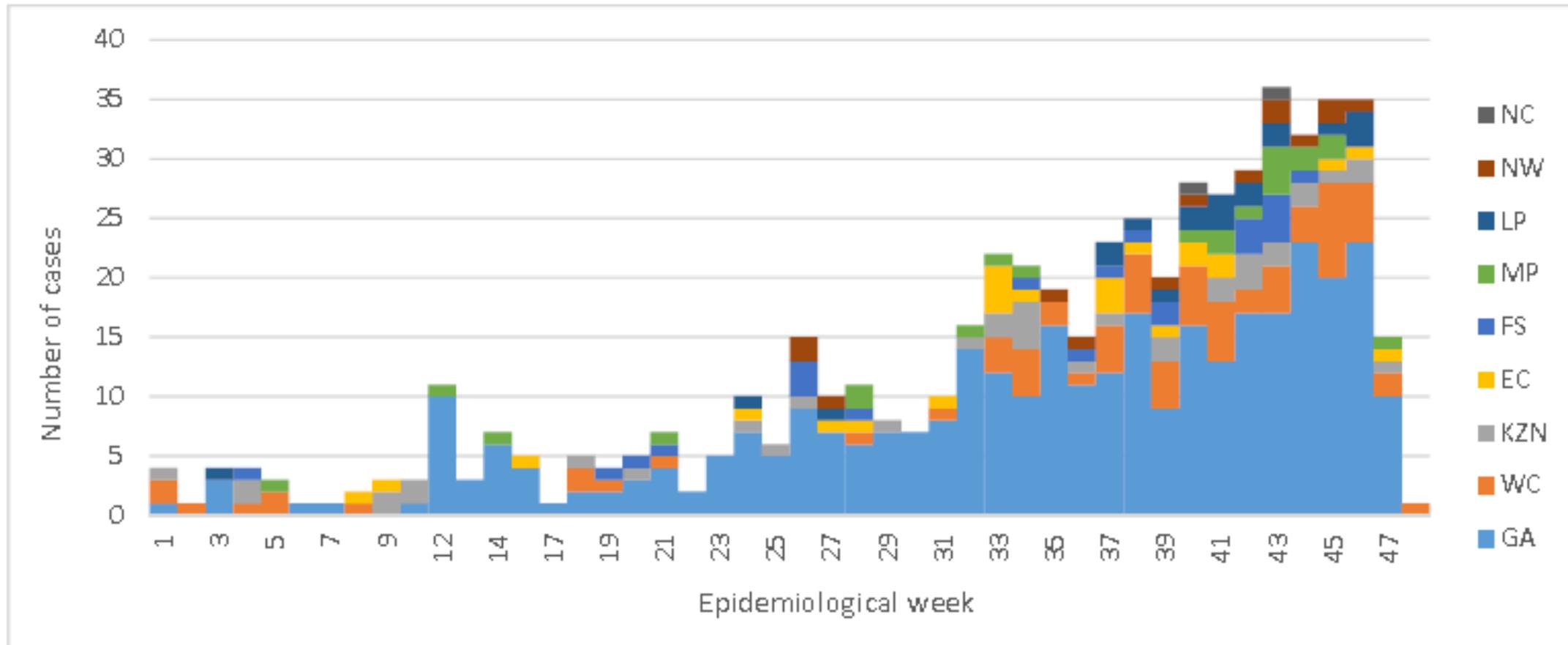
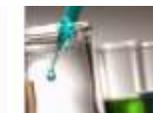


Figure 1: Epidemic curve of laboratory-confirmed listeriosis cases by date of sample collection and province, South Africa, 01 January to 29 November 2017 (n=557)



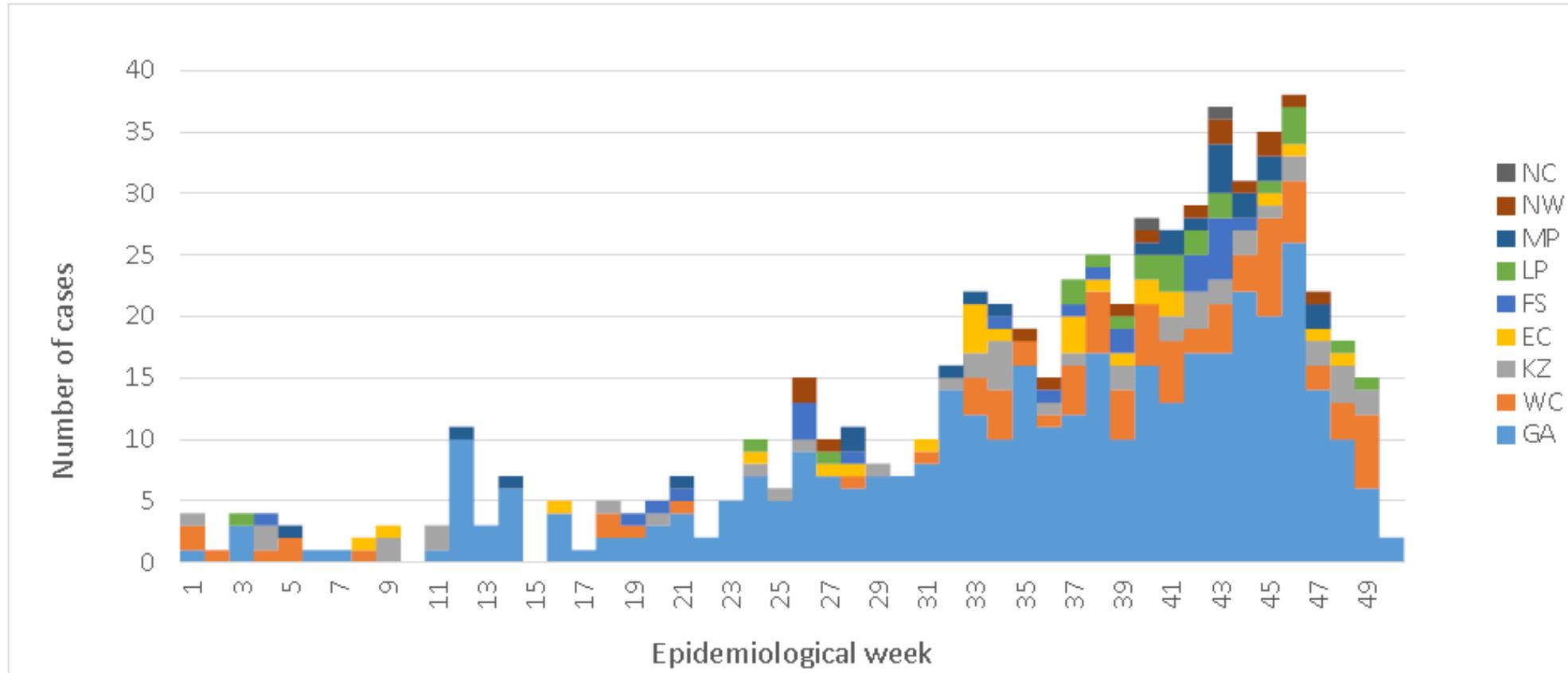
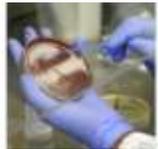


Figure 1: Epidemic curve of laboratory-confirmed listeriosis cases by epidemiological week and date of sample collection and province, South Africa, 01 January to 13 December 2017 (n=602)

5 December 2017



05 December 2017

Media statement by the Minister of Health Dr Aaron Motsoaledi on the outbreak of a food borne disease in South Africa



Government Gazette Staatskoerant

REPUBLIC OF SOUTH AFRICA
REPUBLIEK VAN SUID AFRIKA

Vol. 630 15 Desember 2017 No. 4130

ANNEXURE A

Table 1: Category 1 notifiable medical conditions that require immediate reporting by the most rapid means available upon diagnosis followed by a written or electronic notification to the Department of Health within 24 hours of diagnosis by health care providers, private health laboratories or public health laboratories

	Notifiable medical condition
1.	Acute flaccid paralysis
2.	Acute rheumatic fever
3.	Anthrax
4.	Botulism
5.	Cholera
6.	Diphtheria
7.	Enteric fever (typhoid or paratyphoid fever)
8.	Food-borne disease outbreak*
9.	Haemolytic uraemic syndrome (HUS)
10.	Listeriosis
11.	Malaria
12.	Measles
13.	Meningococcal disease
14.	Pertussis
15.	Plague
16.	Poliomyelitis
17.	Rabies (human)
18.	Respiratory disease caused by a novel respiratory pathogen**
19.	Rift valley fever (human)
20.	Smallpox
21.	Viral haemorrhagic fever diseases***
22.	Yellow fever

* Food-borne disease outbreak is the occurrence of two or more cases of a similar food-borne disease resulting from the ingestion of a common food.





31 December – We have the source....um no sorry we don't

Abattoir closure premature: Sovereign Foods

SOUTH AFRICA Sunday 31 December 2017 - 5:18pm

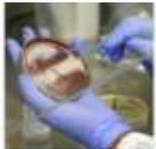


File: The first case of listeria linked to the tainted product was registered by the authorities in September last year. Since then 20 cases have been reported, with 15 people falling ill since

40

However, eNCA quoted a spokesperson for Sovereign Foods as saying it submitted 14 food samples to the department for tests and that the department found eight of these to contain listeria monocytogens. However, it says it also submitted a duplicate set of samples for independent analysis to Deltamune, and that the company found no traces of listeria. “Despite discrepancies in these results, representatives from the Tshwane department of health served a prohibition notice on Sovereign Foods management that insists that the abattoir not operate until they inspected and resampled the environment on December 27, 2017,” the company said in a statement.

“A positive will always be a positive” ...Prof Pieter Gouws



Alerts

Source of listeriosis outbreak not confirmed

December 31, 2017

2360

The listeriosis outbreak in South Africa is ongoing. As of 29 December 2017, a total of 704 laboratory-confirmed listeriosis cases from all provinces across the country have been reported to NICD since 01 January 2017. Most cases have been reported from Gauteng (61%), Western Cape (13%) and KwaZulu-Natal (7%) provinces. Cases have been diagnosed in both public (66%,) and private (34%,) healthcare sectors, and 61 deaths have been reported so far.

Listeria monocytogenes is a bacterium that occurs widely in nature and is found in agricultural, food processing and retail environments. *Listeria* may enter the food processing or retail environment from raw materials (food itself) or the movement of people or equipment in processing environments, and can persist due to ineffective cleaning and sanitation.

And it continues



Listeria Outbreak Statistics SA 2017



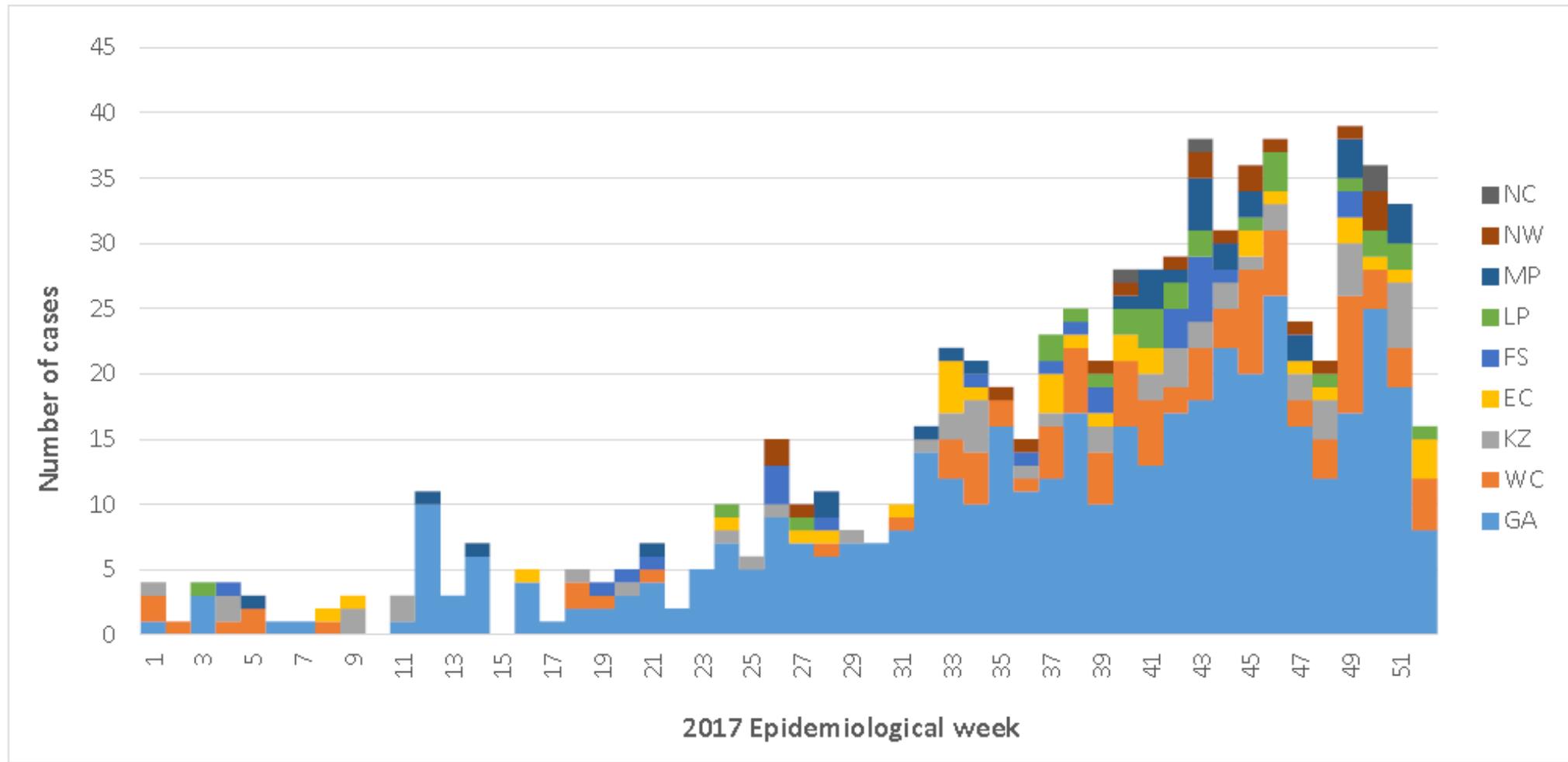
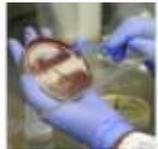


Figure 1: Epidemic curve of laboratory-confirmed listeriosis cases by epidemiological week and date of sample collection and province, South Africa, 01 January 2017 to 03 January 2018 (n=717)

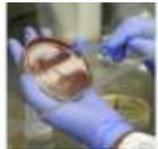
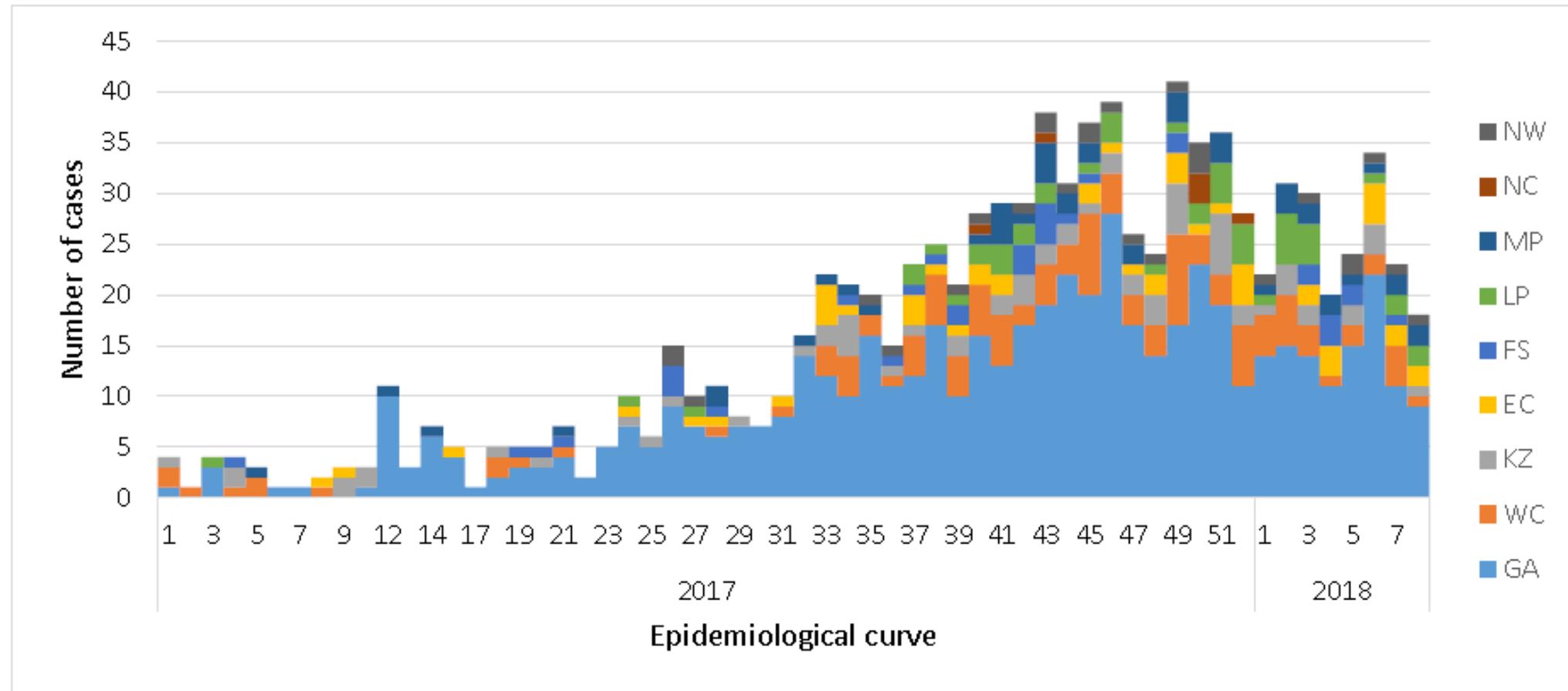


Figure 1: Epidemic curve of laboratory-confirmed listeriosis cases by epidemiological week and date of sample collection and province, South Africa, 01 January 2017 to 27 February 2018



Day Zero



04 March 2017

Media statement by the Minister of Health Dr Aaron Motsoaledi regarding the update on the Listeriosis outbreak in South Africa



Source Identified for the Deadliest Listeria Outbreak in History

Apr 10, 2018 | Jackie Sheridan | Outbreak News



South Africa listeria: Source of 'world's worst outbreak' found

4 March 2018

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B B C



The strain of listeria found in the Polokwane factory that tested positive is particularly virulent

NICD - this is not their first brush with Lm ST6

Thanks Prof Gouws



AMERICAN
SOCIETY FOR
MICROBIOLOGY

genomeA[®]nnouncements



CrossMark
click for updates

Genome Sequences for a Cluster of Human Isolates of *Listeria monocytogenes* Identified in South Africa in 2015

Anthony M. Smith,^{a,b} Preneshni Naicker,^c Colleen Bamford,^c Liliwe Shuping,^d Kerrigan M. McCarthy,^d Arvinda Sooka,^a Shannon L. Smouse,^a Nomsa Tau,^{a,b} Karen H. Keddy^{a,b}

Centre for Enteric Diseases, National Institute for Communicable Diseases, Johannesburg, South Africa^a; Faculty of Health Sciences, University of the Witwatersrand, Johannesburg, South Africa^b; National Health Laboratory Service (Groote Schuur Hospital), Cape Town, South Africa^c; Division of Public Health Surveillance and Response, National Institute for Communicable Diseases, Johannesburg, South Africa^d

Listeria monocytogenes is a Gram-positive bacterium with a ubiquitous presence in the environment. There is growing concern about the increasing prevalence of *L. monocytogenes* associated with food-borne outbreaks. Here we report genome sequences for a cluster of human isolates of *L. monocytogenes* identified in South Africa in 2015.

Source: www.nicd.ac.za

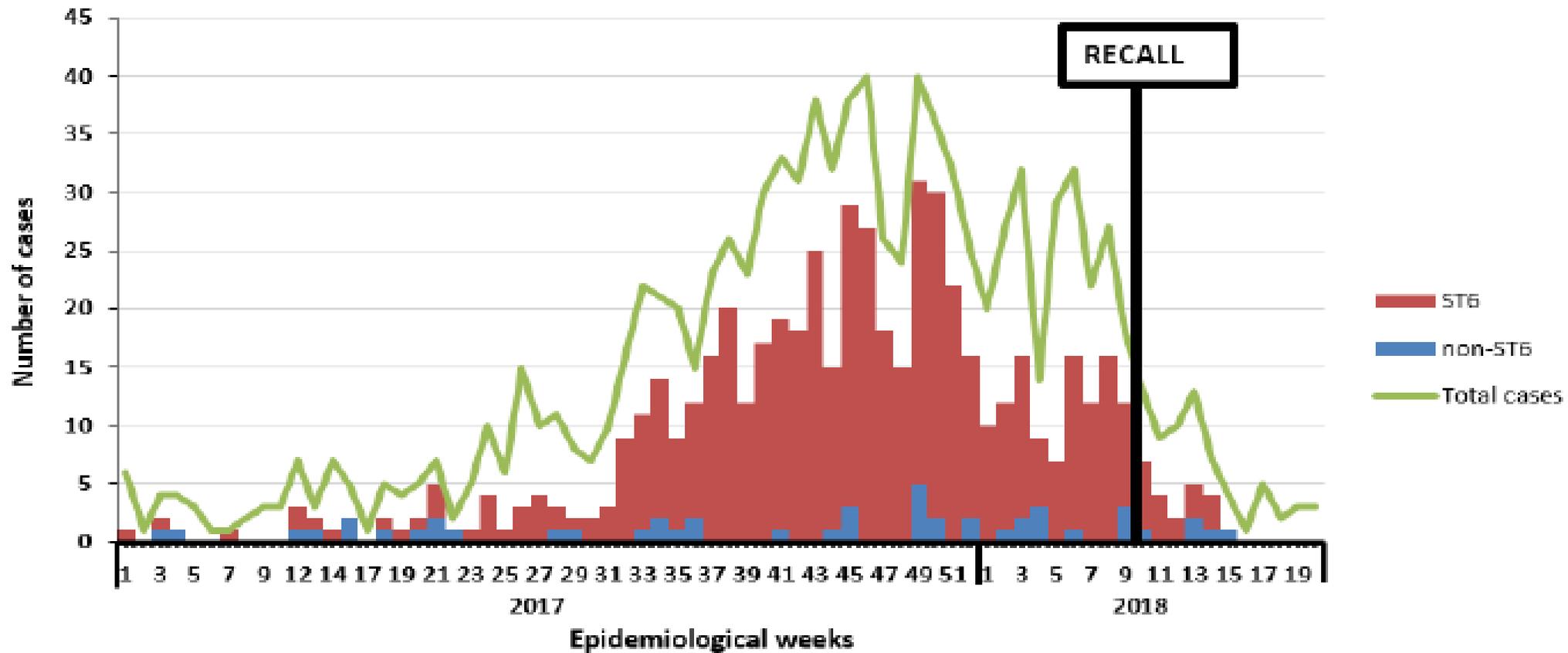


Figure 1: Figure 1: Epidemic curve of laboratory-confirmed listeriosis cases by date of clinical specimen collection (n=1 038) and sequence type (ST) (n=564), South Africa, 01 January 2017 to 22 May 2018



Table 1. Number of laboratory-confirmed listeriosis cases and deaths by province, where outcome data is available, South Africa, 01 January 2017 to 23 May 2018 (n=1 038)

Province	Outcome available (as a % of total cases in RSA)	Number of deaths (% of those with outcome available)	# cases (% of total cases)
Gauteng	383 (63.1)	106 (27.7)	607 (58.4)
Western Cape	129 (99.2)	30 (23.2)	130 (12.5)
Kwa-Zulu Natal	67 (88.1)	21 (31.3)	76 (7.3)
Mpumalanga	47 (97.9)	11 (23.4)	48 (4.6)
Eastern Cape	31 (56.6)	11 (35.4)	53 (5.1)
Limpopo	47 (87.0)	11 (23.4)	54 (5.2)
Free State	30 (85.7)	8 (26.7)	35 (3.4)
North West	25 (86.2)	7 (28.0)	29 (2.8)
Northern Cape	6 (100.0)	3 (50.0)	6 (0.6)
Total	765 (73.7)	208 (27.2)	1 038

So what have we learnt and where do we go from here?



Recalls can be done – on a Sunday afternoon.



Tiger Brands
@TigerBrands



Enterprise Foods confirms that it is undertaking a full national recall on the Enterprise ready-to-eat meat products. [#EnterpriseRecall](#)

4:45 PM - Mar 4, 2018

♡ 66 💬 181 people are talking about this



Tiger Brands
@TigerBrands



As per the Minister of Health's instructions, please remove any Enterprise ready-to-eat meat products from your fridge and place in a plastic bag – away from other foods. [#EnterpriseRecall](#)

4:52 PM - Mar 4, 2018

♡ 156 💬 464 people are talking about this





Shoprite, Pick n Pay scramble to pull products linked to deadly listeriosis

Mar 04 2018 18:11 Adiel Ismail



Cape Town - Supermarket giants Shoprite and Pick n Pay on Sunday indicated they are withdrawing all products linked to the source of the world's largest outbreak of listeria, which claimed 180 lives.

This followed a safety recall by the National Consumer Commission after Tiger Brands subsidiary, an Enterprise Foods factory in Polokwane, was identified as the source of the dangerous food-borne disease.

READ: Enterprise Foods to recall affected products, but conducting own listeriosis tests

Health Minister Aaron Motsoaledi said on Sunday polony was a definite source. However, he warned that products such as Viennas, Russians, Frankfurters, other sausages and cold meats not typically cooked could also be affected due to the risk of cross contamination.

Two more facilities have also been singled out pending more tests to determine the sequence type. These are an Enterprise facility in Germiston on the East Rand, and a Rainbow chicken facility in the Free State.



RELATED ARTICLES

- Economic impact of listeriosis not

Surprise surprise...



Listeriosis: Woolworths calls for the following products to be returned

“Following the recent announcement by the Department of Health on the source of the Listeriosis outbreak, and as an additional precautionary measure, we are recalling a limited number of viennas and cold meats.”

“Customers who have any of the listed products, should return the products to their local store for a full refund”

WAFERTHIN CHARGRILLED HAM 125G

WAFERTHIN ROASTED CHICKEN 125G

WAFERTHIN SMOKED HAM 125G

WAFERTHIN COOKED HAM 125G

WAFERTHIN SMOKED CHICKEN 125G

Is it over yet?



Tiger Brands

@TigerBrands



The product recall process for Enterprise Foods and SNAX ready-to-eat chilled meats has officially ended. If you still have products which formed part of the recall, please contact our consumer helpline on 0860 33 33 10 to ensure their safe destruction.

4:00 PM - Apr 16, 2018



4



See Tiger Brands's other Tweets



The Ministry of Health is interested in food safety – finally, maybe too interested



Listeriosis: Motsoaledi offers to help victims litigate, as MPs argue over blame

2018-03-08 18:43

Paul Herman



news24

Cape Town - Health Minister Aaron Motsoaledi says his department will offer to help victims and their families of the listeriosis outbreak with potential litigation if they decide to take the matter further.

Motsoaledi delivered a statement to the National Assembly on the deadly disease on Thursday.

ALSO READ: Claiming for listeriosis deaths, damages could be complex - lawyer

During debate on his statement, Motsoaledi accused the DA of trying to launch an election campaign on the backs of those who had died from the disease.

This after DA MP Lindy Wilson received applause from sections of the public gallery after labelling the national health system a "death sentence for
[us/stop-believing-these-7-health-myths-20180416](#)



Health Minister Aaron Motsoaledi. (Netwerk24)

BusinessDay

We may have forgotten...



EATING FOOD

PREPARED BY SOMEONE ELSE

IS A MATTER OF TRUST

The trust is broken.



Sunday Times **Times LIVE**

NEWS POLITICS SPORT TSHISALIVE SEBENZALIVE LIFESTYLE BUSINESS



Customers queue to return meat to the Enterprise factory store in Germiston, east of Johannesburg, on March 5 2018.

Image: Alaister Russell/The Sunday Times



MENU



SEARCH



ADVERTISING



Last month

NATIONAL

GIVE US CASH FOR POLONY!



By **Tebogo Mokwena and Joshua Sebola** | Tuesday, March 06, 2018 13:00



“GIVE us back our money now!”

These were the words of angry customers who returned cold meat to the Enterprise factory shop in Germiston, Ekurhuleni yesterday. This came after Health Minister Aaron Motsoaledi on Sunday warned people not to eat cold meat. He said the Listeria bacteria had been traced to an Enterprise Foods facility in Polokwane, Limpopo.

Tiger Brands, which owns Enterprise Foods,

has since announced that it will recall all

Food safety DOES have economic consequences



Listeria outbreak: SA neighbours ban meat exports

2018-03-05 21:04



Johannesburg - Four countries in southern Africa on Monday took steps against South African chilled meat imports made at a factory found to be the origin of the world's worst-ever listeria outbreak.

Mozambique and Namibia announced they were immediately suspending imports of the products. Botswana said it was recalling the items "with immediate effect", while Zambia called on South African retail chains in its country to pull the incriminated goods from local shelves.

Since January 2017, 948 people in South Africa have contracted listeriosis - a disease caused by bacteria from soil, water, vegetation and animal faeces which can contaminate fresh food, notably meat.

At least 180 have died, according to official figures.

Health officials say the source of the outbreak was an Enterprise Food plant, 300km northeast of the



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What To Read Next

Call for calm unheeded



Sunday Times Times LIVE

NEWS POLITICS SPORT TSHISALIVE SEBENZALIVE LIFESTYLE BUSINESS

Listeriosis outbreak: No need to ban SA meats, says WHO

22 March 2018 - 11:12
BY NIVASHNI NAIR

[f](#) [t](#) [@](#) [✉](#) [🖨](#)





BUSINESS

Jobs shed as cooked meat sales dip

Lynley Donnelly 16 Mar 2018 00:00



Customers queue to return Enterprise products in Germiston, outside Johannesburg, after Tiger Brands ordered a recall. (Oupa



Red meat sales plummet amid 'listeria hysteria'

SOUTH AFRICA Wednesday 14 March 2018 - 3:27pm





Food Focus

@FoodFocusSA



Pork industry in crisis thanks to [#listeria](#) fears
<http://www.foodfocus.co.za/home/whats-hot/Latest-News/Pork-industry-in-listeriosis-crisis>

12:19 PM - Apr 9, 2018



1 See Food Focus's other Tweets

06950912/photo/1

Polony recall will affect the poorest of the poor NEWS

Neil Roets

□ 2018-03-07 12:26



The recall of polony and other processed meats is going to have a major effect on deeply indebted consumers.

The recall was implemented by Health Minister Aaron Motsoaledi because it was feared that these processed meats were the source of the devastating listeriosis outbreak that killed 180 people



Kotas or bunny chows are usually filled with cheaper processed meats such as polony in order to cut costs.



We ARE part of a food chain



BL Premium **BusinessDay**

NATIONAL POLITICS COMPANIES ECONOMY BUSINESS WORLD

COMPANIES / LAND & AGRICULTURE

Listeria outbreak set to cost the pork industry at least R1bn

23 APRIL 2018 - 18:22 by NORA SHELLY



Sunday Times **Times LIVE**

NEWS POLITICS SPORT TSHISALIVE SEBENZALIVE LIFESTYLE BUSINESS

People still contracting listeriosis, despite product recall

23 April 2018 - 12:35
BY TIMESLIVE



bqs-01.loggly.com...

Your brand can be impacted.



BUSINESSREPORT COMPANIES ECONOMY ENERGY MARKETS ENTREPRENEURS TECHI

Listeria may bite Tiger Brands for R1bn

COMPANIES / 20 MARCH 2018, 06:50AM / DINEO FAKU



A couple leaves the Tiger Brands factory shop in Germiston. Picture: Siphwe Sibeko/Reuters

JOHANNESBURG - Tiger Brands continued its slippage on the JSE yesterday, losing a further 1.54percent as the beleaguered company shut another factory amid reports

Food safety is an international concern



WHO: South Africa's listeriosis outbreak 'largest ever'

2018-01-13 10:00

Derrick Spies, Correspondent



news24

Johannesburg - The World Health Organisation has said South Africa's *Listeria* outbreak, with nearly 750 confirmed cases, is believed to be the largest-ever outbreak of the bacterial disease listeriosis.

The second largest outbreak of listeriosis was in 2011, when the United States had a total of 147 reported cases. Prior to that, Italy had a large occurrence in 1997.

Listeriosis is a serious, but preventable and treatable disease caused by the bacterium, *Listeria monocytogenes*, which is found in soil, water, vegetation and some animal faeces. Animal products, including meat and dairy; seafood; and fresh produce, such as fruits and vegetables, can all be contaminated



Listeriosis is one of the serious food-borne illnesses you can contract from bacteria.

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Food safety can dominate ALL media channels.



IOL NEWS BUSINESS SPORT ENTERTAINMENT LIFESTYLE TRAVEL MOTO

#Listeriosis gets South Africans talking on social media

POLITICS / 5 MARCH 2018, 7:47PM / NONI MOKATI



ALL media channels. Front pages and street posters, twitter trends and Sunday evening prime time TV – all talking about the same thing: Listeriosis and then polony.

That level of marketing would cost you an absolute fortune!

The consumer is king but an ignorant one.



What you need to know about Listeriosis

What is it?

Listeriosis is a serious, but treatable and preventable disease caused by the bacterium, *Listeria monocytogenes*.



Symptoms

- Diarrhoea
- Fever
- Vomiting
- Weakness
- Muscle aches
- Headache

Who's at risk?

- pregnant women
- neonates
- very young infants
- elderly persons
- anyone with a weakened immune system



Five Safety tips

- Keep hands, utensils and surfaces clean
- Separate raw and cooked food
- Cook food thoroughly
- Keep food at safe temperatures
- Use safe water and raw material



Foods to avoid

- Ready-to-eat cold meat products:
- Polony
 - Viennas and other sausages
 - Cold meats



Sources

- Directly at origin e.g. farm
- Food processing plant
- Retail
- Food preparation at home



government
communications

Department:
Government Communication and Information System
REPUBLIC OF SOUTH AFRICA



You CAN be sued for food safety issues.



Listeriosis outbreak: Tiger Brands opposes applications for class action

SOUTH AFRICA Tuesday 10 April 2018 - 5:09am

Tiger Brands



- In March, ten applicants approached the South Gauteng High Court to sue the companies for death and injury they claim resulted from listeriosis. The court is yet to make a ruling on the applications for the lawsuits.
- Tiger Brands said it is opposing is the fact that two class actions are being brought simultaneously as procedurally this is not possible.



Listeriosis: Motsoaledi offers to help victims litigate, as MPs argue over blame

2018-03-08 18:43

Paul Herman



news24

Cape Town - Health Minister Aaron Motsoaledi says his department will offer to help victims and their families of the listeriosis outbreak with potential litigation if they decide to take the matter further.

Motsoaledi delivered a statement to the National Assembly on the deadly disease on Thursday.

ALSO READ: Claiming for listeriosis deaths, damages could be complex - lawyer

During debate on his statement, Motsoaledi accused the DA of trying to launch an election campaign on the backs of those who had died from the disease.

This after DA MP Lindy Wilson received applause from sections of the public gallery after labelling



Health Minister Aaron Motsoaledi (Netwerk24)

Class action lawsuit goes ahead for listeria victims

29 March 2018 - 09:07

BY KATHARINE CHILD



Food safety can be political



EYEWITNESS NEWS



LATEST LOCAL SPORT LIFESTYLE POLITICS OPINION FEAT

MOTSOLEDI: GOVT CAN'T BE BLAMED FOR LISTERIOSIS OUTBREAK

During a debate in the National Assembly on Thursday Motsoaledi said his department moved as fast as it could to detect the source of the outbreak.



Govt holds meat firms responsible for listeriosis outbreak - Motsoaledi

Apr 19 2018 18:12 Lameez Omarjee



Cape Town - Health Minister Aaron Motsoaledi said on Thursday that the companies which produce processed meat have the resourced labs to test products and should be held responsible for the listeriosis outbreak.

Motsoaledi was answering questions in Parliament about the management of the listeriosis outbreak.

On March 4 the Department of Health held a briefing, where the minister revealed that the source of the outbreak was an Enterprise Foods facility in Polokwane.

- **READ: Listeriosis outbreak traced to Enterprise facility in Polokwane**

"What we found in the Enterprise laboratory in Polokwane is not acceptable," said Motsoaledi.

Responding to a question about government's responsibility in the outbreak, he explained that the department had done its best in workshopping environmental care practitioners or health inspectors from municipalities.

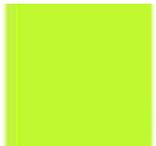


Aaron Motsoaledi

fin24

The culprit is *Listeria monocytogenes* ST6 but...

- 11 other Sequence Types (ST1, ST101, ST2, ST204, ST219, ST224, ST3, ST5, ST54, ST8, and ST876).
- Thirty-eight isolates (9%) have been identified as ST6, and 19 Sequence Types account for the remainder.





RCL FOODS bulletin

Our Results:

From an independent laboratory in France, test results received **CONFIRM** that our Rainbow polony factory in Wolwehoek is **FREE** of **ST6**, the *Listeria* "outbreak strain".

If you have further concerns,
please contact our consumer hotline at

0800 204 675

or visit

www.listeriosisfacts.co.za

RCL Foods' Wolwehoek plant has listeria strain that may still pose risk, Aaron Motsoaledi says

19 MARCH 2018 - 12:47 by TAMAR KAHN

WHAT'S IN A NAME?

Why name, surname and ID number are important when referring to Listeria



The Listeria Family Tree (Genus)

*Listeria monocytogenes**

*Listeria ivanovii**

Listeria seeligeri

Listeria welshimeri

Listeria innocua

Listeria marthii

Listeria aquatica

Listeria booriae

Listeria cornellensis

Listeria fleischmannii

Listeria floridensis

Listeria grandensis

Listeria grayi

Listeria newyorkensis

Listeria riparia

Listeria rocourtaie

Listeria weihenstephanensis

Listeria costaricensis (this one is brand new)

*These two are pathogens! (i.e. they cause disease)

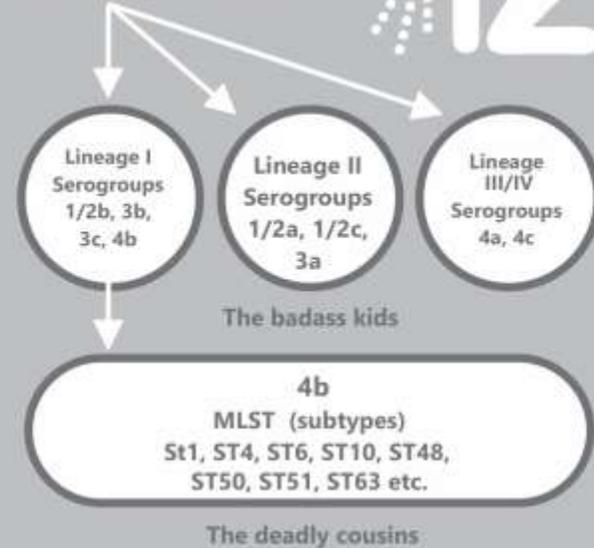
There are currently 18 species of listeria that have been identified and described by scientists.



The Evil Twins Monocytogenes & Ivanovii

Listeria Monocytogenes

Cause illness in humans



LISTERIA FACTS

Compliance for the food industry

Listeria ivanovii

Cause illness
predominantly in ruminants



About Monocytogenes

Numerous molecular subtyping techniques have identified three lineage divisions within the *L. monocytogenes* species. Within these three divisions, *L. monocytogenes* has more than 14 serotypes.

Although serotype 1/2a is the most frequently isolated from food, serotype 4b causes the majority of human epidemics. Within each serotype, more detailed genetic analysis allows scientists to isolate sub types such as ST4, ST6.

All of these have the potential to cause disease and even death.

We have all come to know Listeria on a first name basis during the last few months. But time has come to make sure there is clear understanding on who is who in this family and why this pathogen is so important

- *L. monocytogenes* is an important human foodborne pathogen and the third leading cause of foodborne deaths due to microbial causes in the USA.
- All *L. monocytogenes* can cause the severe form of listeriosis.
- Contaminated food is believed to be the primary source of human exposure to *L. monocytogenes* and has been repeatedly linked to sporadic cases and large outbreaks of listeriosis.
- *L. monocytogenes* has the highest hospitalization rate (92%) & highest case-fatality rate (20%-30%) of any foodborne pathogen. It is responsible for more than 1/4 of food-borne disease-related deaths linked to known pathogens.

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Shared Responsibility for Food Safety

■ Government

■ Industry

■ Consumers



The government...

- A multisectorial incident management team (IMT) has been formed by the National Department of Health (NDoH) to strengthen co-ordination of outbreak response and strengthen health systems to prevent future outbreaks. Funding is being sourced.





Emergency Management Approach

- Emergency response activities that have been conducted by various stakeholders are continuing and intensifying, including surveillance (detection and investigation of cases), risk communication activities, and food safety legislative review and reform. To inform and support these activities, additional activities will be implemented in a phased approach as follows:
- Phase 1: Identification of at-risk food processing plants, development of material and training of staff to support inspections of facilities – **checklists and training material is available**
- Phase 2: Inspection of at-risk food processing plant and strengthening of district environmental health practitioners – **these have started: you should co-operate**
- Phase 3: Reporting and consolidation of health system strengthening activities, and after action review.



Other initiatives

- Capacitate the NHLS labs
- ISO 11290 method
- Training and resources – this is available to everyone so we can all be on the same page
- Policy guidance and legislation

So what is the government doing?

- R638 – Hygiene requirements
 - The Person in charge
 - Qualified
- R607 – HACCP
 - All RTE processed meat and poultry products
- R692 – Micro
 - ? Safe levels?



UK & EUROPE



- Regulation (EC) No 852/2004 Hygiene of Foodstuffs
- Food businesses operators to implement HACCP
- a) Identify hazards
- b) Identify the critical control points (CCPs)
- c) Establish critical limits
- d) Implement monitoring at CCPs
- e) Establish corrective actions
- f) Establish verification procedures
- g) Establish documentation procedures and records.
- Food handlers to be trained commensurate with their work activities
- Persons responsible for HACCP to receive HACCP training.

USA - FSMA



- Mandatory preventive controls for food facilities: Food facilities are required to implement a written preventive controls plan. This involves:
 - (1) evaluating the hazards that could affect food safety,
 - (2) specifying what preventive steps, or controls, will be put in place to significantly minimize or prevent the hazards,
 - (3) specifying how the facility will monitor these controls to ensure they are working,
 - (4) maintaining routine records of the monitoring,
 - (5) specifying what actions the facility will take to correct problems that arise. (Final rule due 18 months following enactment)
- In 21 Code of Federal Regulations (CFR) part 117 (part 117), we have established our regulation entitled “Current Good Manufacturing Practice, Hazard Analysis, and Risk Based Preventive Controls for Human Food”

The way forward

- Enforcement is key?
- More audits?
- Ethics?
- Profit motivated only



So what does Listeriosis mean to YOU?

- “Not our monkey”?
- “Low risk product”





What should Listeriosis mean to YOU?

- Review of HACCP plans and any emerging risks
- Review of recall plans
- Review of strength of food safety teams
- Review status of implementation of all food safety programmes
- Review of corporate risk register in relation to food safety

Courtesy Prof. Ryk Lues – foodsafetyculture.co.za



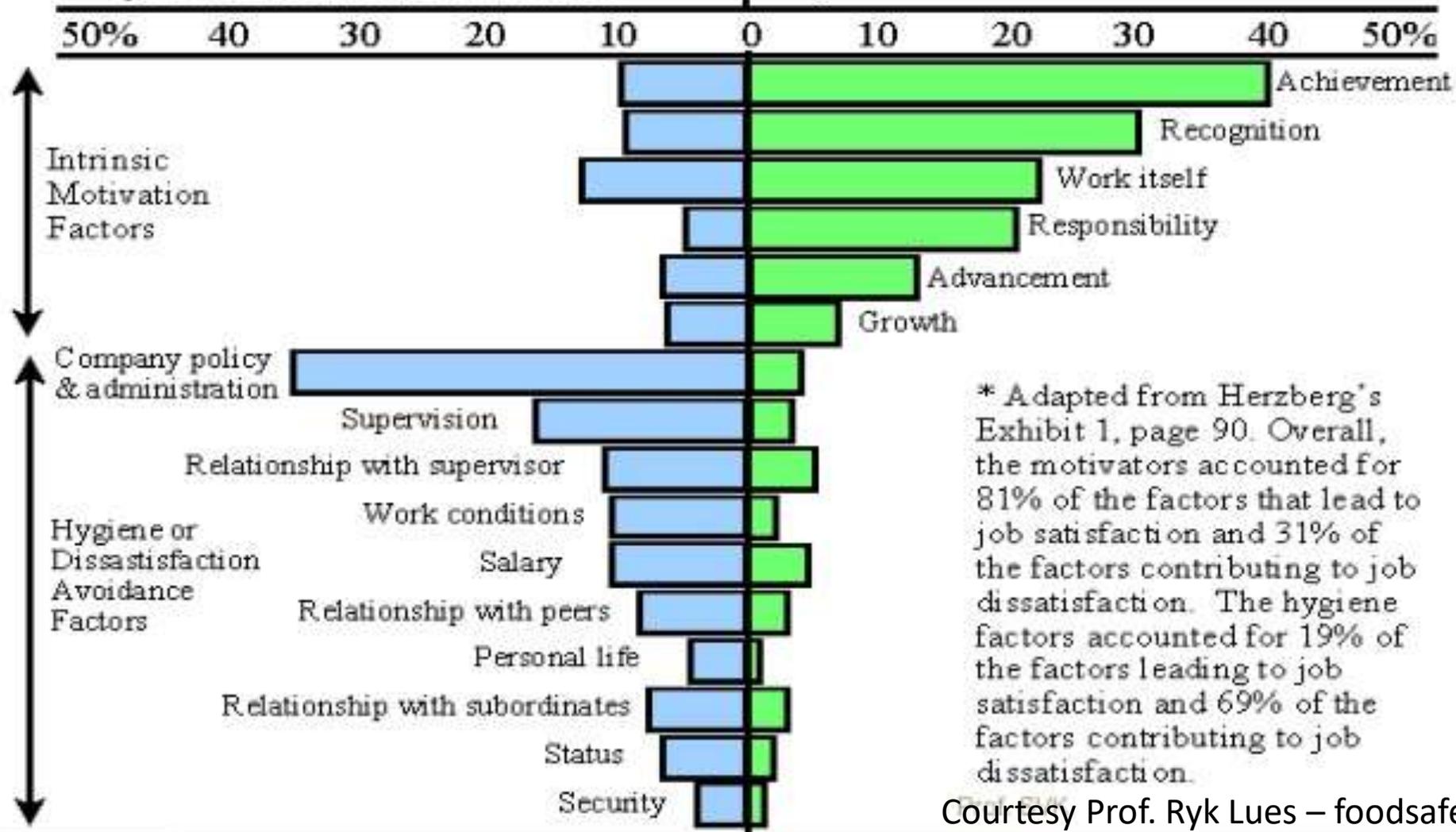
“Not my job...”

Herzberg's Motivator-Hygiene Model

Factors Affecting Job Attributes as Reported in 12 Investigations*

Factors characterizing 1,844 events on the job that led to extreme dissatisfaction

Factors characterizing 1,753 events on the job that led to extreme satisfaction



* Adapted from Herzberg's Exhibit 1, page 90. Overall, the motivators accounted for 81% of the factors that lead to job satisfaction and 31% of the factors contributing to job dissatisfaction. The hygiene factors accounted for 19% of the factors leading to job satisfaction and 69% of the factors contributing to job dissatisfaction.

THE POWER OF CULTURE

Food Safety Culture: “The attitudes, values, norms, beliefs and behaviours that a particular group of people share with respect to food risk and safety”



GFSI definition of food safety culture

- Shared values, norms, and beliefs that affect mindset and behaviours towards food safety across/in/throughout an organisation.
- Shared values, norms and beliefs generally seen as a learned pattern of conditions that are taught to new members when they join a group.
- The way we do things around here... Yiannas

What are we measuring?

- Dr. Gary Ades
- Culture is patterned after what people talk about, but it is shaped by what is measured and rewarded.





- Guchait et al. (2016) in their work considered one aspect of leadership, namely, leader behavioural integrity for food safety, i.e. the extent to which leaders/supervisors consistently enacted or enforced food safety rules, protocols.
- **They concluded that those managers with high leader behavioural integrity influence food safety performance and reduce the risk of food-borne illness. ...**



Your thoughts?

"You cannot legislate good behaviour."

Mervyn King



This is more than just polony...



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