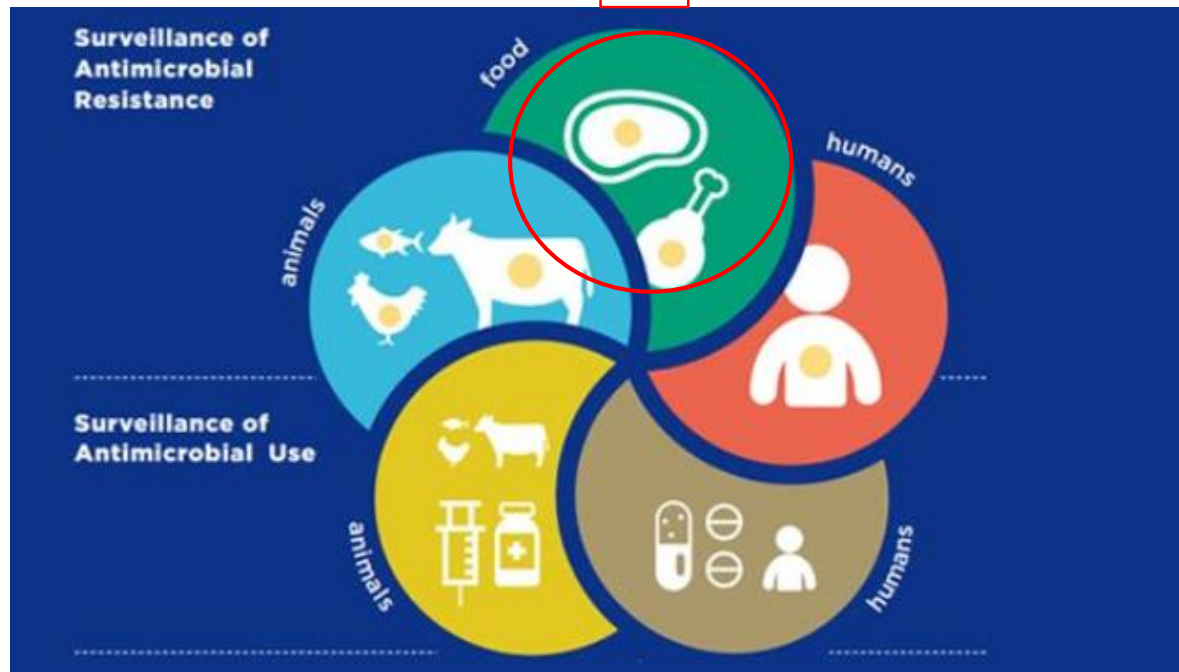




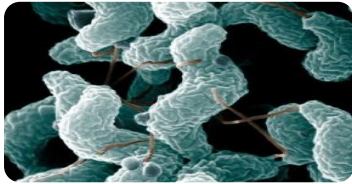
***SURVEILLANCE VAN
ANTIBIOTICARESISTENTIE IN
VOEDINGSWAREN (RESULTATEN 2018)***

AMR Action Plan-One Health Approach

Voedingswaren



Surveillance AMR in zoönotische en commensale bacteriën van voedingswaren



Campylobacter jejuni et coli

Identificatie van de bacteriesoort

C. jejuni (Decision 2013/652/EU)



EN

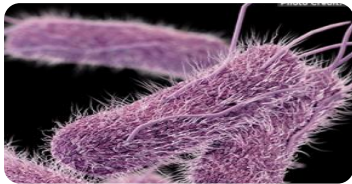
Official Journal of the European Union

DECISIONS



COMMISSION IMPLEMENTING DECISION
of 12 November 2013

on the monitoring and reporting of antimicrobial resistance in zoonotic and commensal bacteria
(notified under document C(2013) 7145)
(Text with EEA relevance)
(2013)652(EU)



Salmonella

Food (toutes les matrices alimentaires, contrôle officiel)

EU-AMR (Decision 2013/652/EU)

- Karkassen van runderen < één jaar (slachthuis)
- Karkassen van vleesvarkens (slachthuis)

Feed



2015, 2017, 2019



E. coli ESBL/AmpC/CP

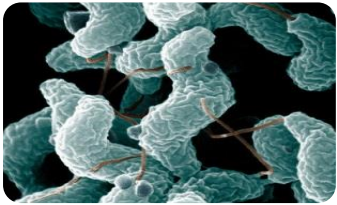
Vers rund- en kalfsvlees (markt)

Vers varkensvlees (markt)



2014, 2016, 2018

Surveillance AMR in zoönotische en commensale bacteriën bij voedselproducerende dieren



Campylobacter jejuni uit caeca van vleeskippen

- Identificatie bacteriesoort
- MIC *C. jejuni* (Decision 2013/652/EU)

L 303/26

EN

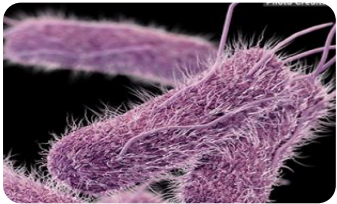
Official Journal of the European Union

14.11.2013

DECISIONS

COMMISSION IMPLEMENTING DECISION
of 12 November 2013

on the monitoring and reporting of antimicrobial resistance in zoonotic and commensal bacteria
(notified under document C(2013) 7145)
(Text with EEA relevance)
(2013)652(EU)



Salmonella pluimvee

- EU-AMR MIC Salmonella (Decision 2013/652/EU)
- Nationaal Controleprogramma + Operateurs

2015, 2017, 2019



Indicator *E.coli* faeces (slachthuis)

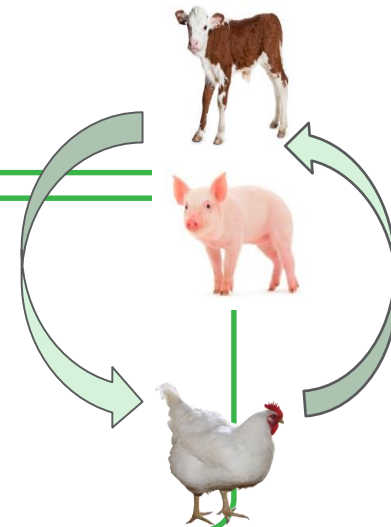
- Pluimvee (vleeskip en kalkoen)
- Vleeskalveren < 1 jaar
- Vleesvarken (Decision 2013/652/EU)

Indicator *E.coli* faeces (veehouderij)

- vleeskalveren < 1 jaar

***E.coli* ESBL/AmpC/CP faeces (slachthuis)**

- Pluimvee
- Vleeskalveren
- Varken
(Decision 2013/652/EU)



2014, 2016, 2018

Antibiotic panel surveillance

WHO Critically Important Antimicrobials for Human Medicine 6th revision Advisory Group on Integrated Surveillance of Antimicrobial Resistance (AGISAR) November 2018



Summary of categorization and prioritization of antimicrobials categorized as Critically Important, Highly Important and Important

	Antimicrobial class	Criterion / Prioritization factor (Yes = ●)				
		C1	C2	P1	P2	P3
CRITICALLY IMPORTANT ANTIMICROBIALS						
<i>HIGHEST PRIORITY</i>						
Highest Priority	Cephalosporins (3 rd , 4 th and 5 th generation)	●	●	●	●	●
	Glycopeptides	●	●	●	●	●
	Macrolides and ketolides	●	●	●	●	●
	Polymyxins	●	●	●	●	●
	Quinolones	●	●	●	●	●
<i>HIGH PRIORITY</i>						
Critically Important	Aminoglycosides	●	●		●	●
	Ansamycins	●	●	●	●	
	Carbapenems and other penems	●	●	●	●	
	Glycylcyclines	●	●	●		
	Lipopeptides	●	●	●		
	Monobactams	●	●	●		
	Oxazolidinones	●	●	●		
	Penicillins (antipseudomonal)	●	●		●	
	Penicillins (aminopenicillins)	●	●		●	●
	Penicillins (aminopenicillins with β-lactamase inhibitors)	●	●		●	●
	Phosphonic acid derivatives	●	●	●	●	
	Drugs used solely to treat tuberculosis / mycobacterial diseases	●	●	●	●	
	HIGHLY IMPORTANT ANTIMICROBIALS					

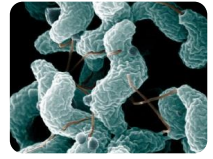
C1 Criterion 1
The antimicrobial class is the sole, or one of limited available therapies, to treat serious bacterial infections in people.

C2 Criterion 2
The antimicrobial class is used to treat infections in people caused by either: (1) bacteria that may be transmitted to humans from nonhuman sources, or (2) bacteria that may acquire resistance genes from nonhuman sources.

P1 Prioritization factor 1
Large number of people in the community or in certain high-risk populations (e.g. patients with serious infections in health care settings), who are affected by diseases for



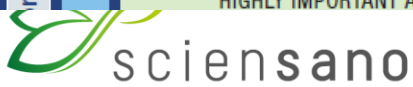
- Antibiotica
- Tetracycline
- Nalidixinezuur
- Ciprofloxacin
- Erythromycine
- Gentamicine
- Streptomycine



- Antibiotica
- Ampicilline
- Cefotaxime
- Ceftazidime



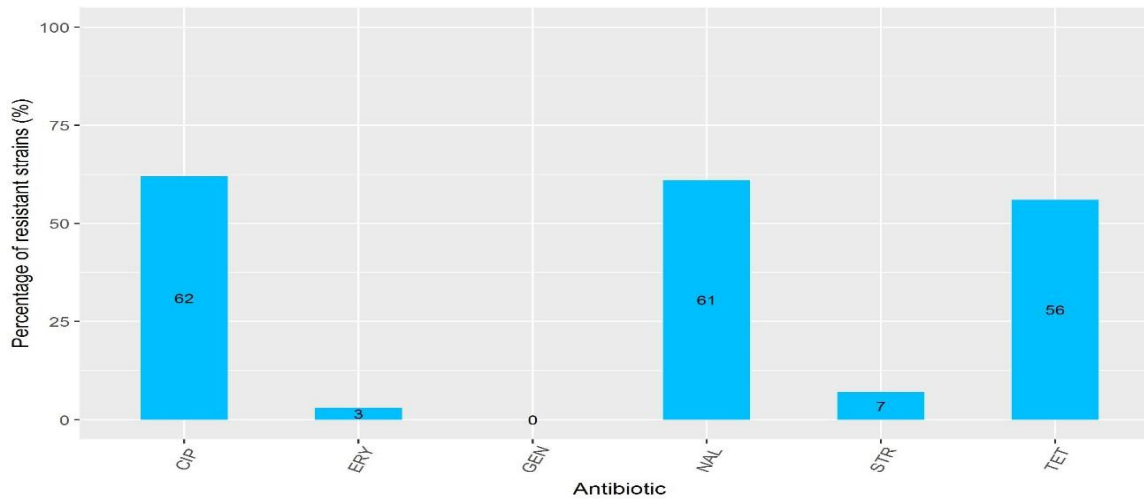
- Meropenem
- Nalidixinezuur
- Ciprofloxacin
- Tetracycline
- Colistine
- Gentamicine
- Trimethoprim
- Sulfamethoxazole
- Chloramfenicol
- Azithromycine
- Tigecycline



Campylobacter *jejuni* van pluimvee en pluimveevlees

Campylobacter jejuni Food 2018

n = 271

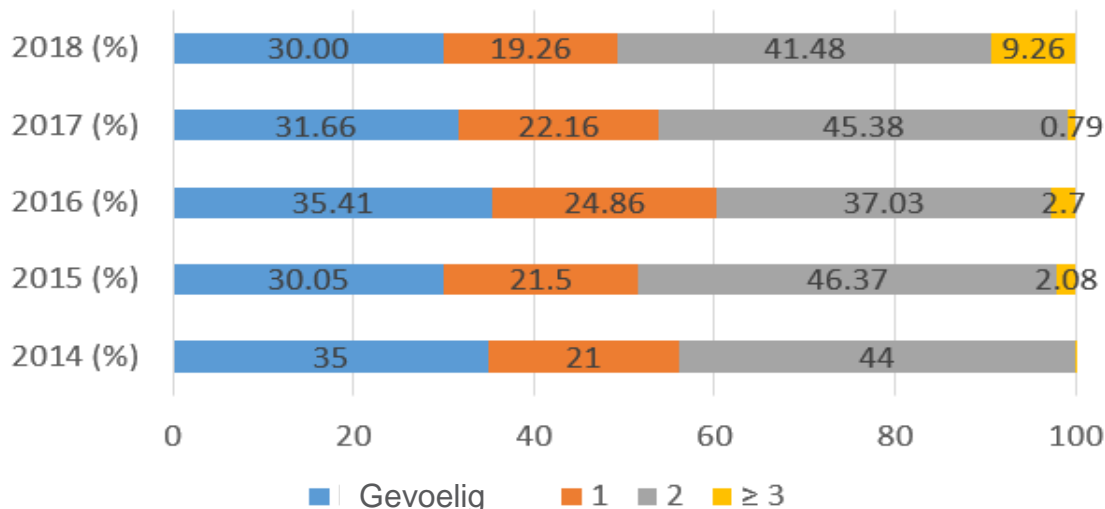


Str ↑ 7% in 2018 vs 1% 2017

CipNaITet Stabiel (60%)

Co-R Cip Ery 1.84%

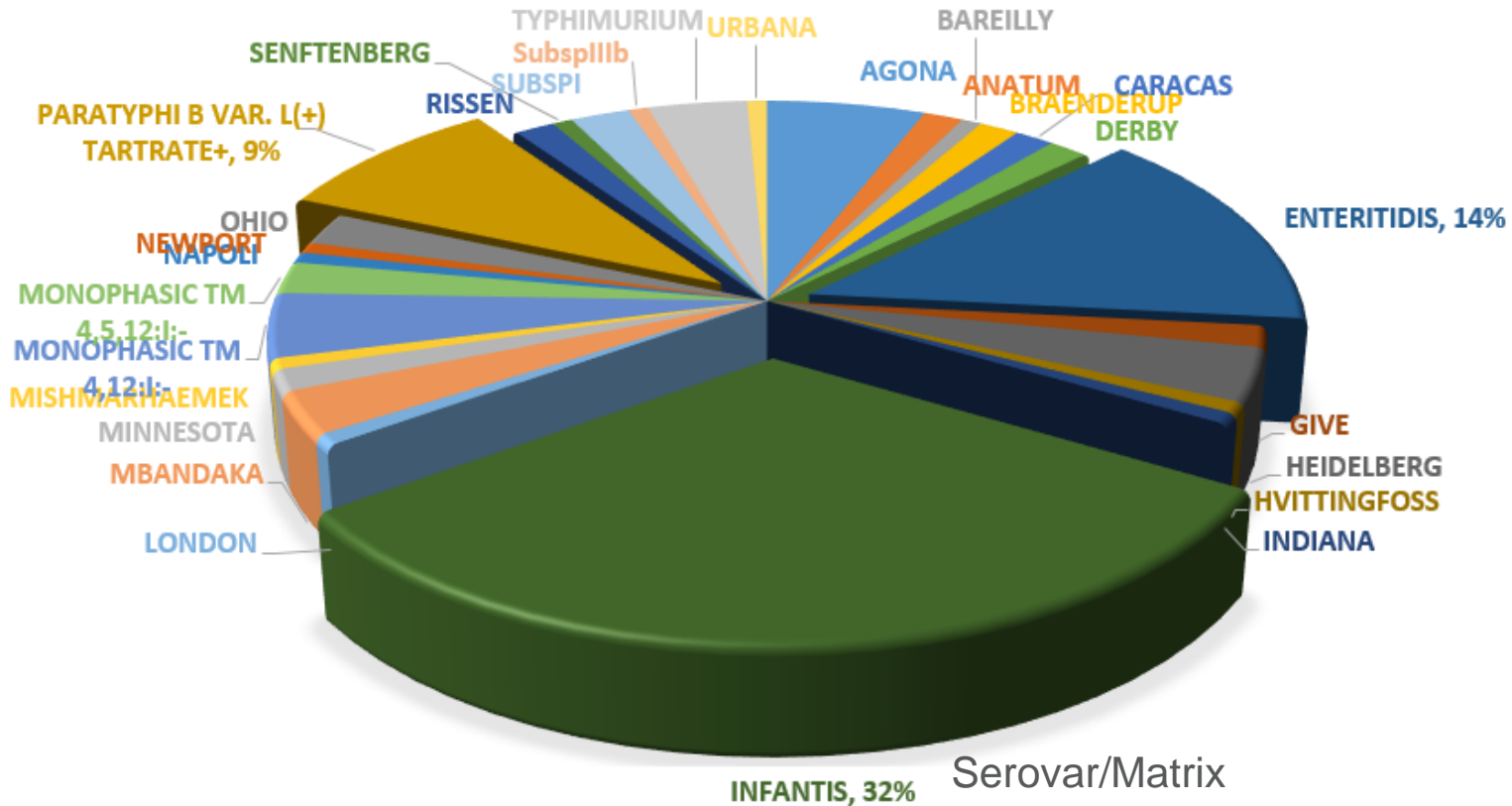
Evolutie AMR



↑ Str R tegen 3 klassen CipNaITetStr

MDR 9.26 % en 2018 vs 0.79 % 2017

Salmonella Food



Serovar/Matrix

- Enteritidis: karkassen van kip
- Infantis: versneden vlees van pluimvee
- Paratyphi B, var L(+) Tartrate +: versneden vlees van pluimvee

Salmonella Food

Profiel

Core-R	Smx, Cip, Tet, Nal, Tmp
ESBL	ESBL 4/130 (3.07%)
Colistine	7/130 (5.38%)
CP	No R (0%)

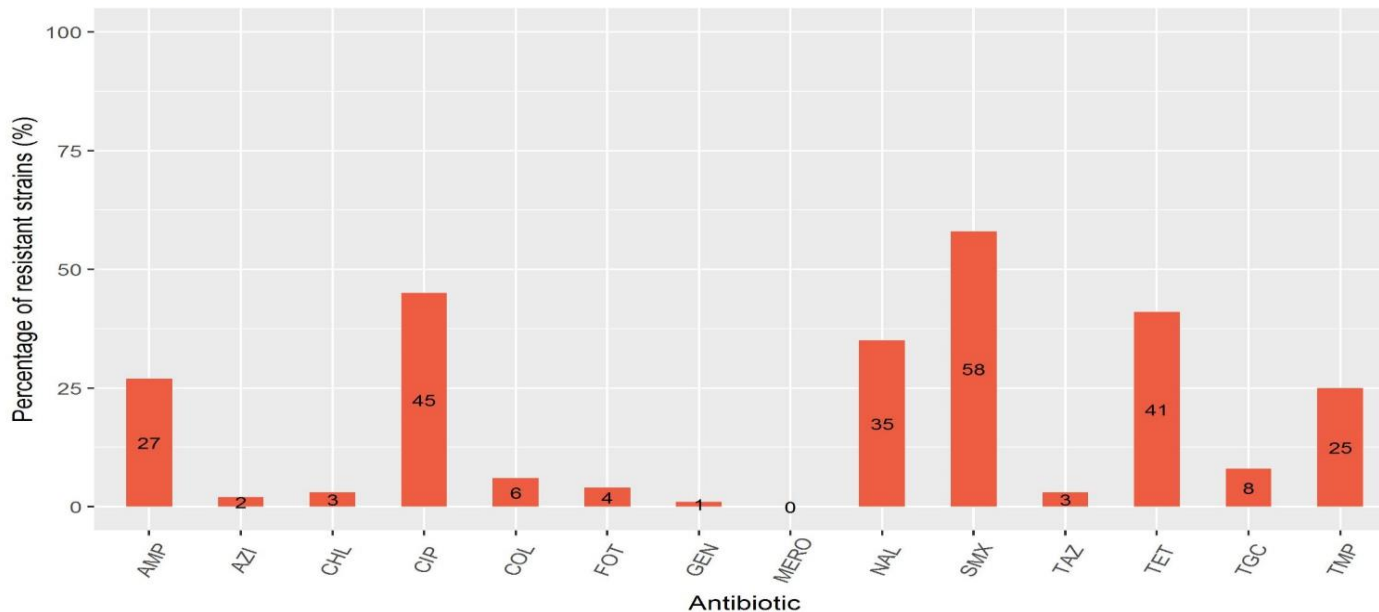
Salmonella spp. die β -lactamases produceren

Serovar	Origin	Matrix	Phenotype
Minnesota (n=1)	Non EU country	Fresh poultry meat	AmpC
Heidelberg (n=2)	Non EU country	Fresh poultry meat	ESBL+AmpC
Subspi (n=1)	Brasil	Fresh poultry meat	ESBL+AmpC

Salmonella spp. resistent tegen colistine

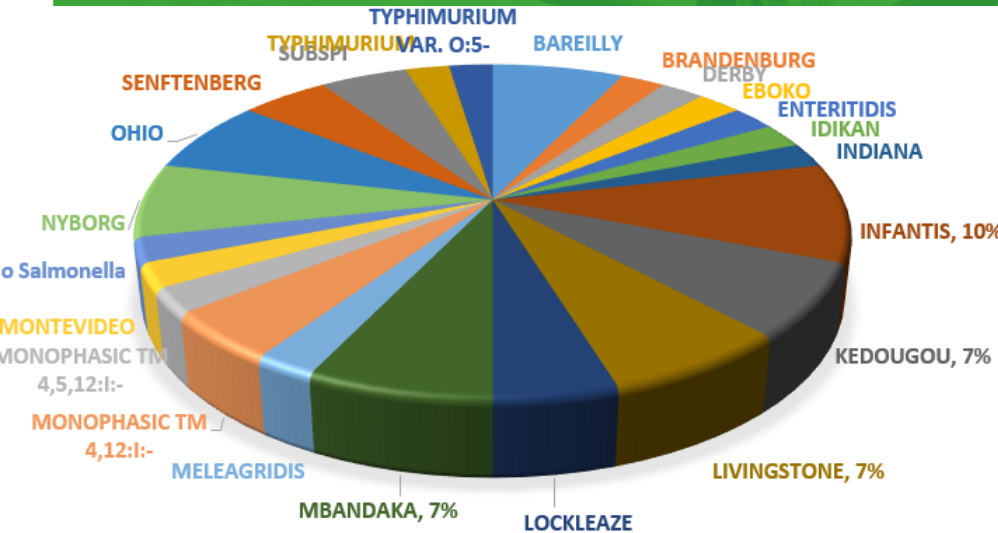
Serovar	Matrix
Enteritidis (n=5)	spent hens
Napoli (n=1)	Spinach
Infantis (n=1)	Poultry fresh meat

Salmonella spp. Food 2018
n = 130



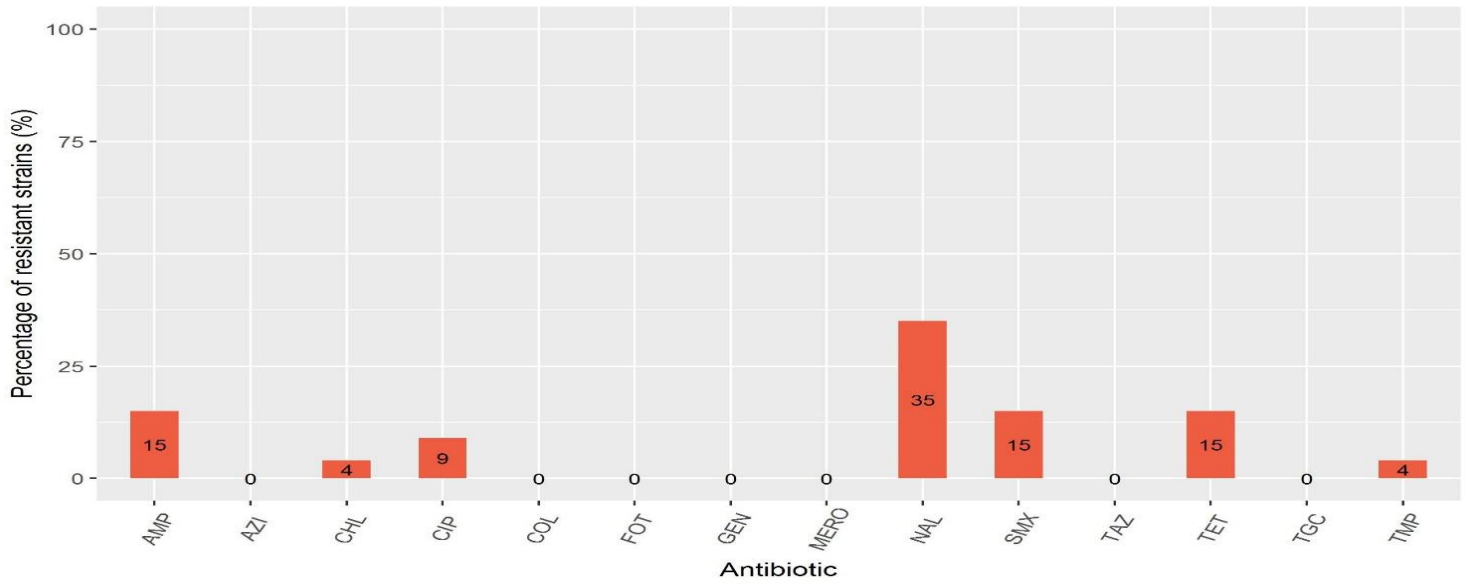
Source: Official control FASFC

Salmonella Feed



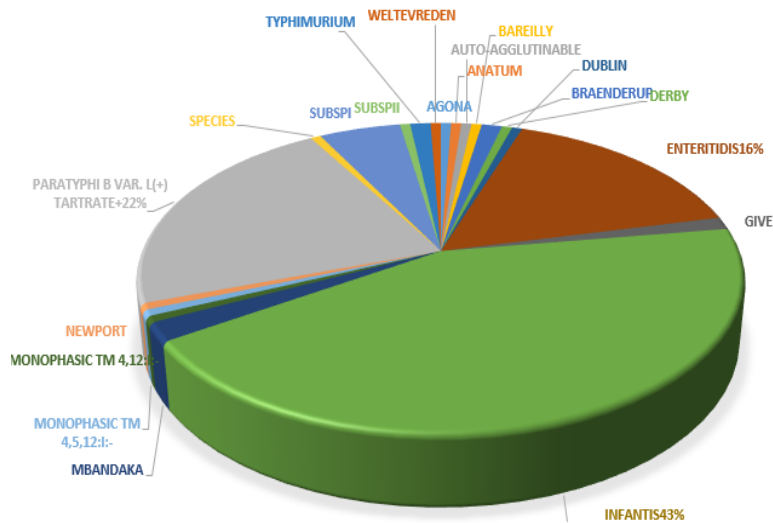
Nal, Amp, Smx, Tet	>R <
ESBL (R 3rd Gen Ceph)	Niet gedetecteerd
Colistine	Niet gedetecteerd
Carbapenems	Niet gedetecteerd

Salmonella spp. Feed 2018
n = 46



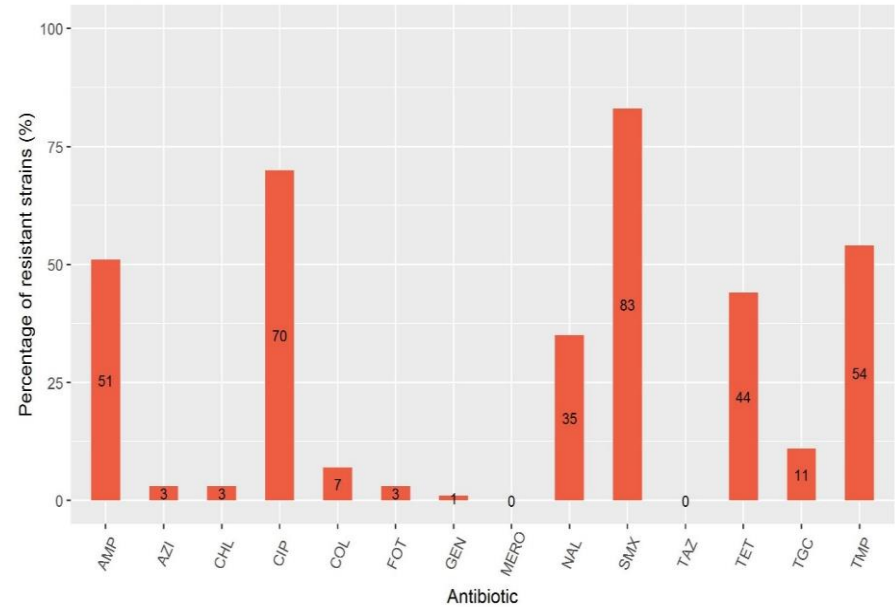
Source: Official control FASFC

Salmonella-karkassen van vleeskippen (Nekvel)



Salmonella spp. PRI 034 2018

n = 115



Source: Autocontrole PRI 034-like + FASFC PRI 034

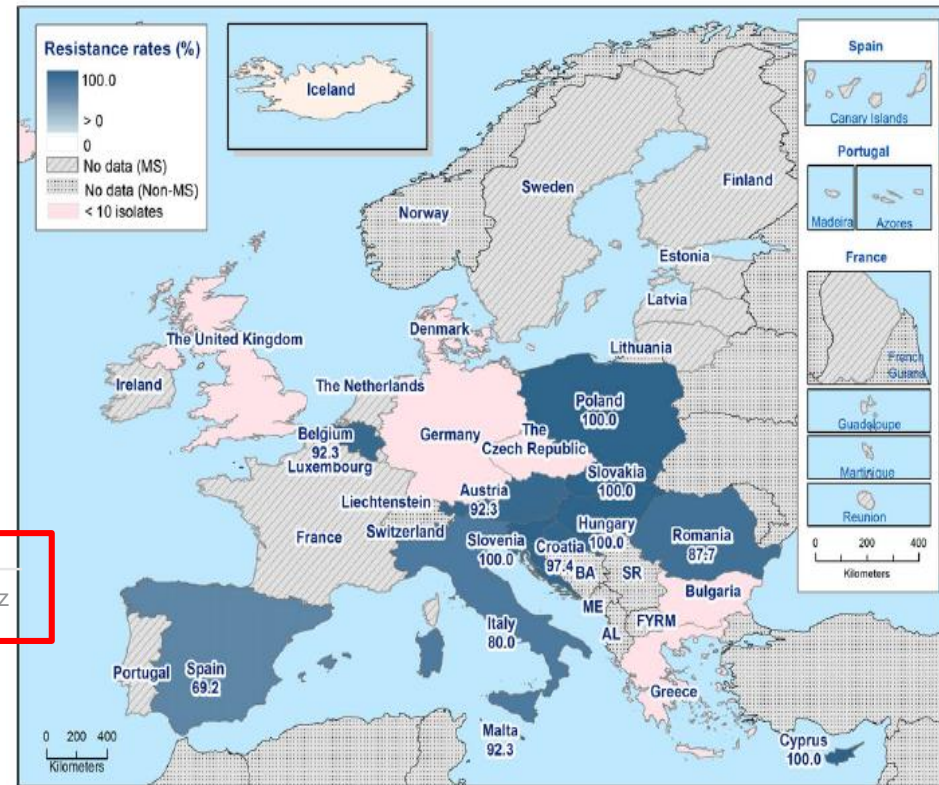
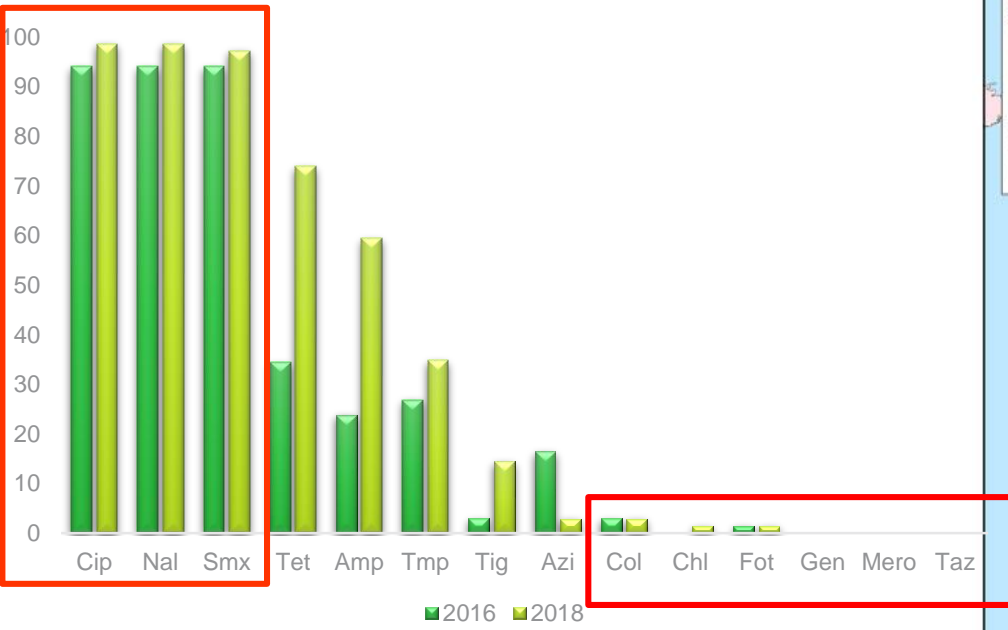
CIA Zwak Azi, col, Fot, Taz, toename Cip, Amp

ESBL 1/155, 0.64%)
Serovar Paratyphi B var. L(+) tartrate (+)

Colistine 12/155 (7.7%), Enteritidis (7), Infantis (2),
Paratyphi B (2), Newport (1)

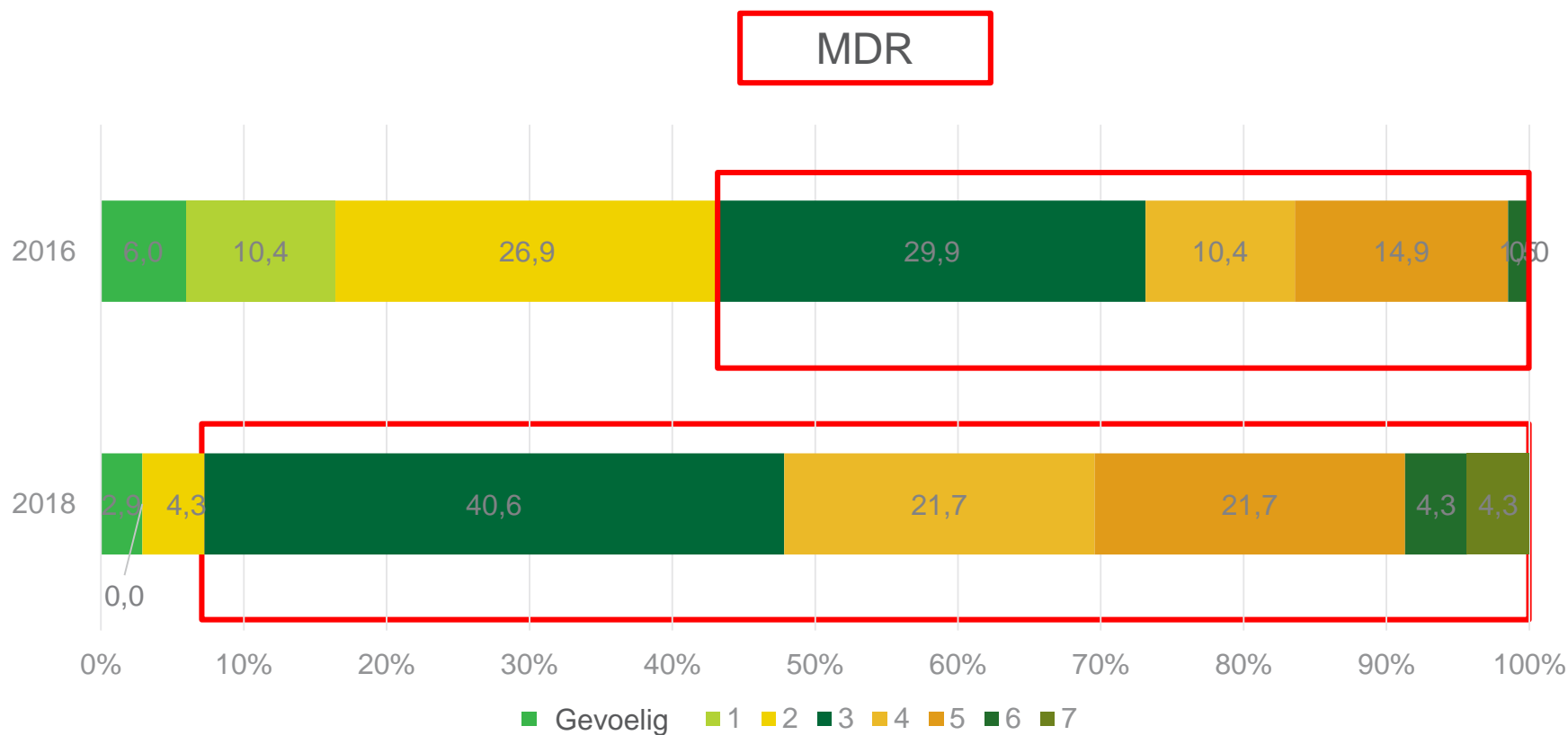
carbapenems Niet gedetecteerd

Salmonella Infantis-karkassen van vleeskippen (Nekvel)



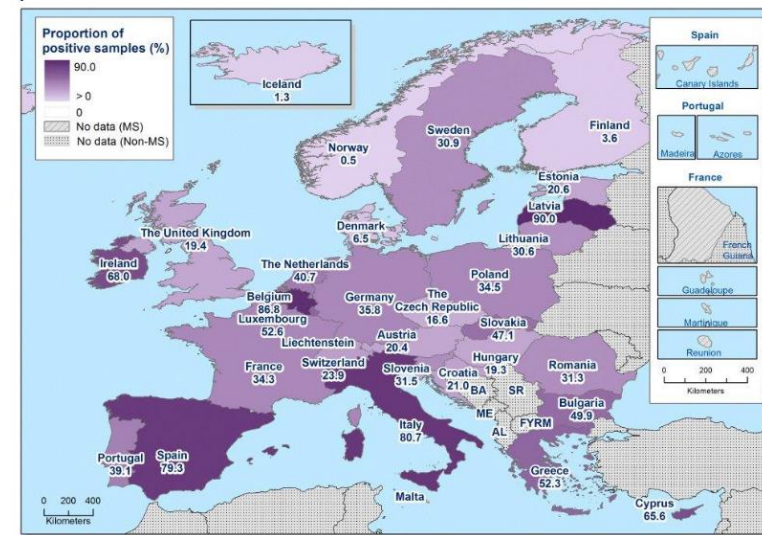
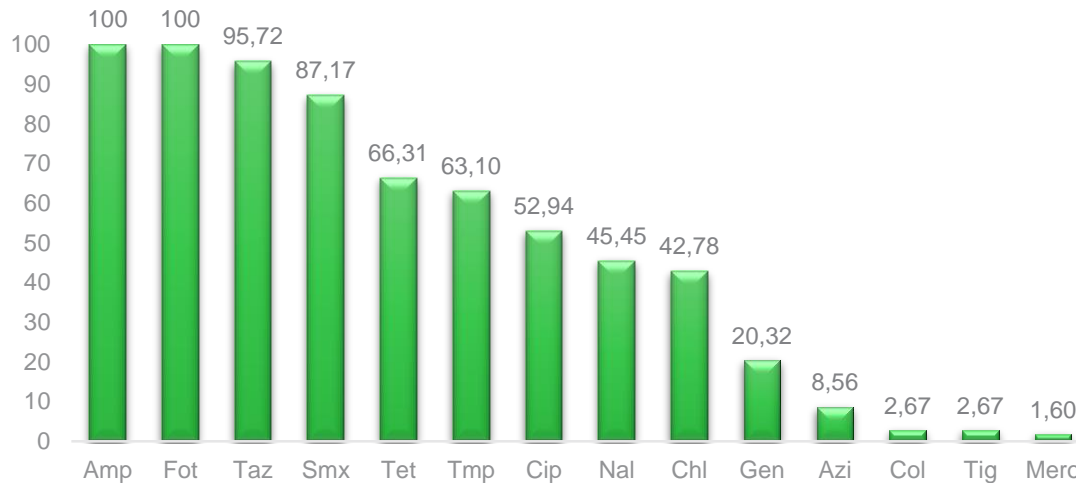
Spatial distribution of ciprofloxacin resistance among *Salmonella Infantis* from broiler flocks, using harmonised ECOFFs, 19 EU/EEA MSs, 2016
 Source: EFSA Journal 2018;16(2):5182

MDR in *S. Infantis* karkassen van vleeskippen (2016-2018)



Surveillance van *E. coli* bacteriën in kippenvlees die β -lactamasen of carbapenems produceren

Vers pluimveevlees

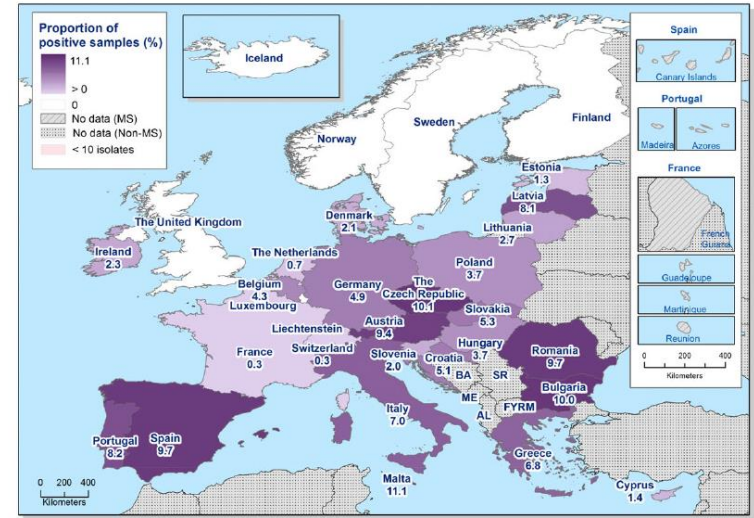
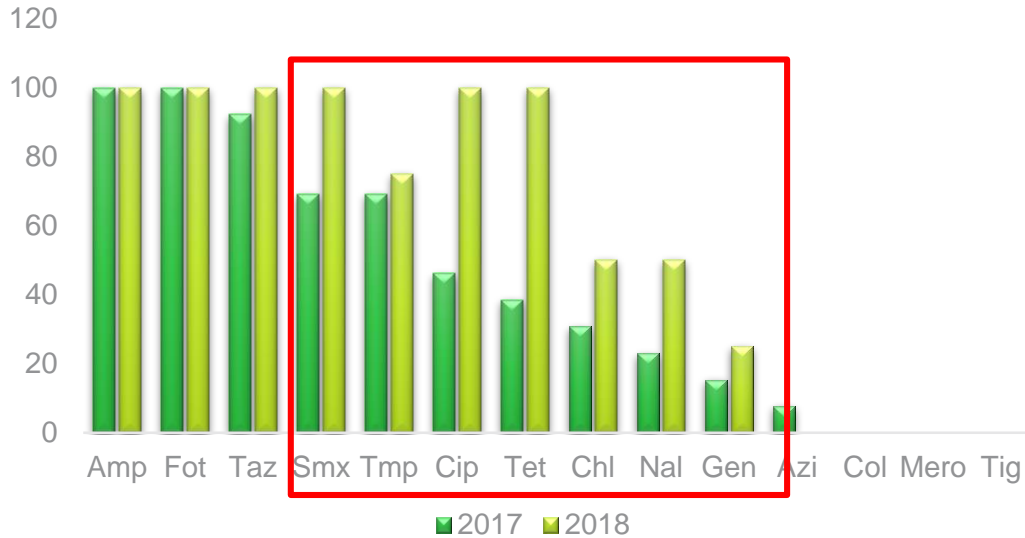


EFSA Journal 2018;16(2):5182

ESBL Food	Aantal geteste stalen	Aantal positieve stalen	% Prevalentie
Vers kippenvlees	300	188	62.67
Vers rundsvlees	301	17	5.65
Vers varkensvlees	299	4	1.34

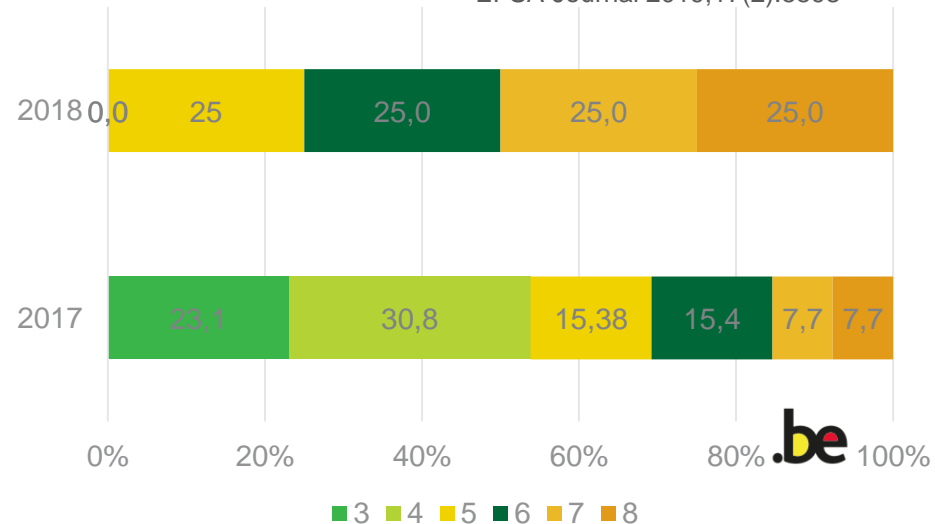


Surveillance van *E. coli* bacteriën in varkensvlees die β -lactamasen of carbapenems produceren

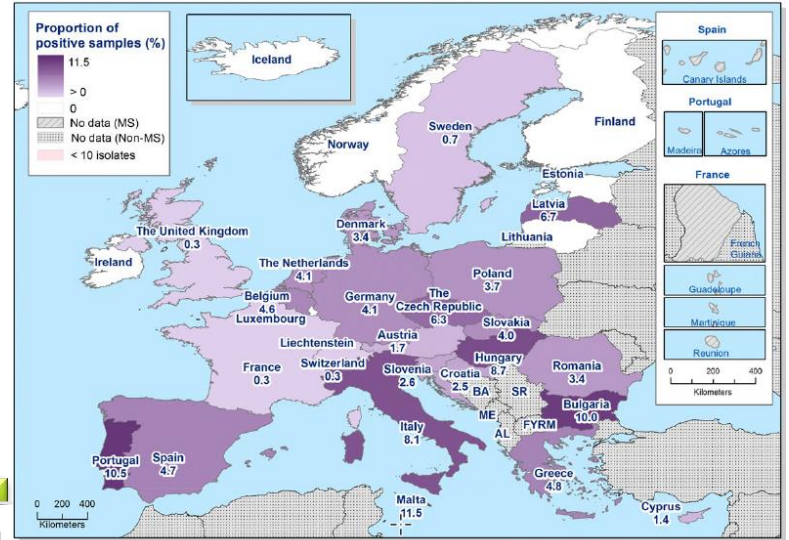
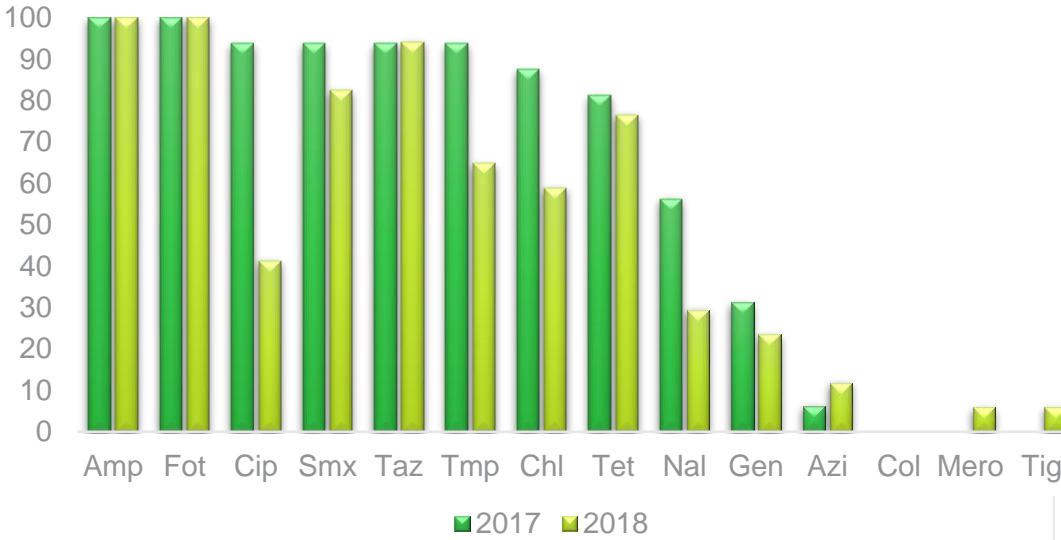


EFSA Journal 2019;17(2):5598

Genotypering is noodzakelijk om de resultaten te verklaren

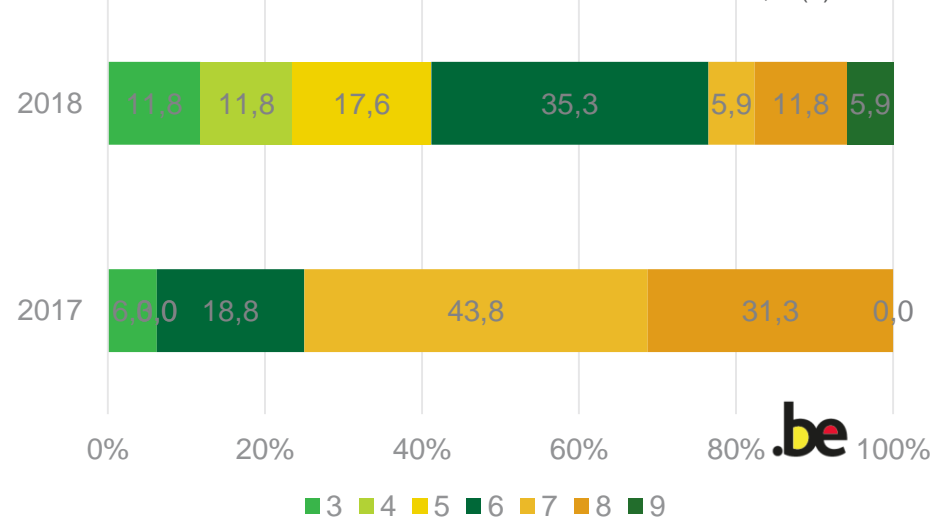


Surveillance van *E. coli* bacteriën in rundsvlees die β -lactamasen of carbapenems produceren



EFSA Journal 2019;17(2):5598

Genotypering is noodzakelijk om de resultaten te verklaren





DANK VOOR UW AANDACHT

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