ZOONOSES MONITORING

Belgium

TRENDS AND SOURCES OF ZOONOSES AND ZOONOTIC AGENTS IN FOODSTUFFS, ANIMALS AND FEEDINGSTUFFS

including information on foodborne outbreaks, antimicrobial resistance in zoonotic and indicator bacteria and some pathogenic microbiological agents

IN 2019

PREFACE

This report is submitted to the European Commission in accordance with Article 9 of Council Directive 2003/99/ EC*. The information has also been forwarded to the European Food Safety Authority (EFSA).

The report contains information on trends and sources of zoonoses and zoonotic agents in Belgium during the year 2019.

The information covers the occurrence of these diseases and agents in animals, foodstuffs and in some cases also in feedingstuffs. In addition the report includes data on antimicrobial resistance in some zoonotic agents and indicator bacteria as well as information on epidemiological investigations of foodborne outbreaks.
Complementary data on susceptible animal populations in the country is also given. The information given covers both zoonoses that are important for the public health in the whole European Union as well as zoonoses, which are relevant on the basis of the national epidemiological situation.
The report describes the monitoring systems in place and the prevention and control strategies applied in the country. For some zoonoses this monitoring is based on legal requirements laid down by the European Union legislation, while for the other zoonoses national approaches are applied.

The report presents the results of the examinations carried out in the reporting year. A national evaluation of the epidemiological situation, with special reference to trends and sources of zoonotic infections, is given. Whenever possible, the relevance of findings in foodstuffs and animals to zoonoses cases in humans is evaluated.
The information covered by this report is used in the annual European Union Summary Reports on zoonoses and antimicrobial resistance that are published each year by EFSA.

The national report contains two parts: tables summarising data reported in the Data Collection Framework and the related text forms. The text forms were sent by email as pdf files and they are incorporated at the end of the report.

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* Directive 2003/ 99/ EC of the European Parliament and of the Council of 12 December 2003 on the monitoring of zoonoses and zoonotic agents, amending Decision 90/ 424/ EEC and repealing Council Directive 92/ 117/ EEC, OJ L 325, 17.11.2003, p. 31

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ANIMAL POPULATION TABLES

Table Susceptible animal population

		Population			
Animal species	**Category of animals**	**holding**	**animal**	**slaughter animal (heads)**	**herd/flock**
Cattle (bovine animals)	Cattle (bovine animals)	24,966	2,487,095	501,473	
	Cattle (bovine animals) - calves (under 1 year) - veal calves	416	191,101	339,178	
Deer	Deer	2,152	9,903		
	Deer - farmed - fallow deer			906	
	Deer - wild - fallow deer			8,941	
	Deer - wild - red deer			11,995	
Ducks	Ducks			35,577	
Gallus gallus (fowl)	Gallus gallus (fowl)	1,852			3,257
	Gallus gallus (fowl) - breeding flocks, unspecified - adult		2,616,024		257
	Gallus gallus (fowl) - broilers		40,696,403	273,992,982	1,811
	Gallus gallus (fowl) - laying hens - adult		10,696,403	25,062,376	493
Geese	Geese			60	
Goats	Goats	10,012	84,238	18,254	
Guinea fowl	Guinea fowl			10,045	
Partridges	Partridges			7,700	
Pheasants	Pheasants			15,811	
Pigeons	Pigeons			16,291	
Pigs	Pigs	7,135		10,749,451	
	Pigs - breeding animals		459,190		
	Pigs - fattening pigs		5,059,401		
Poultry, unspecified	Poultry, unspecified			299,886,878	
Quails	Quails			157	
Rabbits	Rabbits			2,676,110	
Ratites (ostrich, emu, nandu)	Ratites (ostrich, emu, nandu) - farmed			189	
Sheep	Sheep	24,909	205,746	119,985	
Solipeds, domestic	Solipeds, domestic		298,147	5,584	
Turkeys	Turkeys			736,469	
Wild boars	Wild boars - wild			24,020	

DISEASE STATUS TABLES

Table Bovine brucellosis in countries and regions that do not receive Community co-financing for eradication programme

Region	Number of animals serologically tested under investigations of suspect cases	Number of suspended herds under investigations of suspect cases	Number of seropositive animals under investigations of suspect cases	Number of animals positive to BST under investigations of suspect cases	Number of animals positive in microbiological testing under investigations of suspect cases	Number of herds with status officially free	Number of infected herds	Total number of animals	Number of herds tested under surveillance	Number of animals tested under surveillance	Total number of herds	Number of herds tested under surveillance by bulk milk	Number of animals or pools tested under surveillance by bulk milk	Number of infected herds tested under surveillance by bulk milk	Number of notified abortions whatever cause under investigations of suspect cases	Number of isolations of Brucella abortus under investigations of suspect cases	Number of abortions due to Brucella infection under investigations of suspect cases	Number of animals tested by microbiology under investigations of suspect cases
BELGIUM	0	0	0	0	0	24,851	0	2,411,817	505	10,362	24,851	7,365	14,731	0	8,602	0	0	0

Table Ovine or Caprine brucellosis in countries and regions that do not receive Community co-financing for eradication programme

Region	Number of animals serologically tested under investigations of suspect cases	Number of suspended herds under investigations of suspect cases	Number of seropositive animals under investigations of suspect cases	Number of animals positive in microbiological testing under investigations of suspect cases	Number of herds with status officially free	Number of infected herds	Total number of animals	Number of animals tested under surveillance	Total number of herds	Number of animals tested by microbiology under investigations of suspect cases
BELGIUM	0	0	0	0	30,915	0	283,597	7,049	30,915	0

DISEASE STATUS TABLES

Table Bovine tuberculosis in countries and regions that do not receive Community co-financing for eradication programme

Region	Number of herds with status officially free	Number of infected herds	Total number of animals	Number of animals tested with tuberculin routine testing	Number of tuberculin tests carried out before the introduction into the herds	Number of animals with suspicious lesions of tuberculosis examined and submitted to histopathological and bacteriological examinations	Number of animals detected positive in bacteriological examination	Total number of herds
BELGIUM	24,851	0	2,411,817	163,646	286,023	107	0	24,851

PREVALENCE TABLES

Table Campylobacter:CAMPYLOBACTER in food

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Sampling Details	Method	Total units tested	Total units positive	Zoonoses	N of units positive
Not Available	Cheeses made from cows' milk - fresh - made from raw or low heat-treated milk - Farm - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	1	Gram	N_A	Not Available	33	0	Campylobacter	0
	Cheeses made from cows' milk - fresh - made from raw or low heat-treated milk - Processing plant - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	1	Gram	N_A	Not Available	17	0	Campylobacter	0
	Cheeses made from cows' milk - soft and semi-soft - made from raw or low heat-treated milk - Farm - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	1	Gram	N_A	Not Available	44	0	Campylobacter	0
	Cheeses made from cows' milk - soft and semi-soft - made from raw or low heat-treated milk - Processing plant - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	1	Gram	N_A	Not Available	25	0	Campylobacter	0
	Cheeses made from cows' milk - soft and semi-soft - made from raw or low heat-treated milk - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	1	Gram	N_A	Not Available	108	0	Campylobacter	0
	Cheeses made from goats' milk - unspecified - made from raw or low heat-treated milk - Farm - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	1	Gram	N_A	Not Available	25	0	Campylobacter	0
	Cheeses made from goats' milk - unspecified - made from raw or low heat-treated milk - Processing plant - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	1	Gram	N_A	Not Available	23	0	Campylobacter	0
	Cheeses made from goats' milk - unspecified - made from raw or low heat-treated milk - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	1	Gram	N_A	Not Available	40	0	Campylobacter	0
	Cheeses made from sheep's milk - fresh - made from raw or low heat-treated milk - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	1	Gram	N_A	Not Available	84	0	Campylobacter	0
	Cheeses made from sheep's milk - unspecified - made from raw or low heat-treated milk - Farm - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	1	Gram	N_A	Not Available	3	0	Campylobacter	0
	Cheeses made from sheep's milk - unspecified - made from raw or low heat-treated milk - Processing plant - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	1	Gram	N_A	Not Available	3	0	Campylobacter	0
	Fruits - non-pre-cut - frozen - Processing plant - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	1	Gram	N_A	Not Available	15	0	Campylobacter	0
	Fruits - non-pre-cut - frozen - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	1	Gram	N_A	Not Available	30	0	Campylobacter	0
	Fruits - non-pre-cut - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	1	Gram	N_A	Not Available	20	0	Campylobacter	0
	Fruits - non-pre-cut - Wholesale - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	1	Gram	N_A	Not Available	26	0	Campylobacter	0
	Fruits and vegetables - pre-cut - ready-to-eat - Processing plant - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	1	Gram	N_A	Not Available	38	0	Campylobacter	0
	Fruits and vegetables - pre-cut - ready-to-eat - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	1	Gram	N_A	Not Available	65	0	Campylobacter	0
	Juice - fruit juice - pasteurised - Processing plant - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	1	Gram	N_A	Not Available	6	0	Campylobacter	0
	Juice - fruit juice - pasteurised - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	1	Gram	N_A	Not Available	13	0	Campylobacter	0
	Juice - fruit juice - unpasteurised - Processing plant - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	1	Gram	N_A	Not Available	9	0	Campylobacter	0

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Sampling Details	Method	Total units tested	Total units positive	Zoonoses	N of units positive
Not Available	Juice - fruit juice - unpasteurised - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	1	Gram	N_A	Not Available	34	0	Campylobacter	0
	Juice - vegetable juice - pasteurised - Processing plant - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	1	Gram	N_A	Not Available	1	0	Campylobacter	0
	Juice - vegetable juice - pasteurised - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	1	Gram	N_A	Not Available	2	0	Campylobacter	0
	Juice - vegetable juice - unpasteurised - Processing plant - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	1	Gram	N_A	Not Available	6	0	Campylobacter	0
	Juice - vegetable juice - unpasteurised - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	1	Gram	N_A	Not Available	15	2	Campylobacter	2
	Meat from broilers (Gallus gallus) - carcase - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	1	Gram	N_A	Not Available	84	7	Campylobacter	7
	Meat from broilers (Gallus gallus) - carcase - Slaughterhouse - Not Available - food sample - neck skin - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	666	85	Campylobacter	85
	Meat from broilers (Gallus gallus) - fresh - skinned - Processing plant - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	258	9	Campylobacter	9
	Meat from broilers (Gallus gallus) - fresh - skinned - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	2	Gram	N_A	Not Available	46	3	Campylobacter	3
	Meat from broilers (Gallus gallus) - fresh - with skin - Processing plant - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	254	8	Campylobacter	8
	Meat from broilers (Gallus gallus) - fresh - with skin - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	1	Gram	N_A	Not Available	51	0	Campylobacter	0
	Meat from other poultry species - meat preparation - intended to be eaten cooked - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	1	Gram	N_A	Not Available	46	0	Campylobacter	0
	Meat from poultry, unspecified - meat preparation - intended to be eaten cooked - Processing plant - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	1	Gram	N_A	Not Available	45	0	Campylobacter	0
	Meat from poultry, unspecified - meat products - cooked, ready-to-eat - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	1	Gram	N_A	Not Available	46	0	Campylobacter	0
	Meat from poultry, unspecified - meat products - Processing plant - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	1	Gram	N_A	Not Available	45	0	Campylobacter	0
	Seeds, sprouted - ready-to-eat - Processing plant - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	1	Gram	N_A	Not Available	20	0	Campylobacter	0
	Seeds, sprouted - ready-to-eat - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	1	Gram	N_A	Not Available	41	0	Campylobacter	0
	Seeds, sprouted - ready-to-eat - Wholesale - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	1	Gram	N_A	Not Available	27	0	Campylobacter	0
	Spices and herbs - fresh - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	1	Gram	N_A	Not Available	44	0	Campylobacter	0
	Spices and herbs - fresh - Wholesale - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	1	Gram	N_A	Not Available	45	0	Campylobacter	0
	Vegetables - leaves - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	1	Gram	N_A	Not Available	23	0	Campylobacter	0
	Vegetables - leaves - Wholesale - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	1	Gram	N_A	Not Available	23	0	Campylobacter	0
	Vegetables - non-pre-cut - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	1	Gram	N_A	Not Available	15	0	Campylobacter	0

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Sampling Details	Method	Total units tested	Total units positive	Zoonoses	N of units positive
Not Available	Vegetables - non-pre-cut - Wholesale - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	1	Gram	N_A	Not Available	18	0	Campylobacter	0

Table COXIELLA in animal

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sampling Details	Method	Total units tested	Total units positive	N of clinical affected herds	Zoonoses		N of units positive
BELGIUM	Cattle (bovine animals) - Farm - Not Available - animal sample - foetus/stillbirth - Monitoring - passive - Industry sampling - Suspect sampling	holding	N_A	Real-Time PCR (qualitative or quantitative)	1940	203			Coxiella burnetii	203
	Goats - Farm - Not Available - animal sample - Surveillance - Official sampling - Suspect sampling	holding	N_A	Real-Time PCR (qualitative or quantitative)	26	2			Coxiella burnetii	2
	Goats - milk goats - Farm - Not Available - animal sample - milk - Surveillance - Official sampling - Census	holding	N_A	Real-Time PCR (qualitative or quantitative)	160	11	0		Coxiella burnetii	11
	Sheep - Farm - Not Available - animal sample - Surveillance - Official sampling - Suspect sampling	holding	N_A	Real-Time PCR (qualitative or quantitative)	78	8			Coxiella burnetii	8
	Sheep - milk ewes - Farm - Not Available - animal sample - milk - Surveillance - Official sampling - Census	holding	N_A	Real-Time PCR (qualitative or quantitative)	43	1	0		Coxiella burnetii	1

Table Cronobacter:CRONOBACTER in food

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Sampling Details	Method	Total units tested	Total units positive	Zoonoses	N of units positive
Not Available	Foodstuffs intended for special nutritional uses - dried dietary foods for special medical purposes intended for infants below 6 months - Retail - Not Available - Not Available - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	208	0	Cronobacter sakazakii	0
	Infant formula - dried - Retail - Not Available - Not Available - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	291	0	Cronobacter sakazakii	0
	Infant formula - ready-to-eat - Hospital or medical care facility - Not Available - Not Available - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	103	0	Cronobacter sakazakii	0

Table Cysticercus:CYSTICERCUS in animal

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling Details	Method	Sampling unit	Total units tested	Total units positive	Zoonoses	N of units positive
Not Available	Cattle (bovine animals) - Slaughterhouse - Not Available - Not Available - Surveillance - Official sampling - Suspect sampling	N_A	Visual inspection	animal	840654	1075	Cysticercus	1,075

Table Echinococcus:ECHINOCOCCUS in animal

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling Details	Method	Sampling unit	Total units tested	Total units positive	Zoonoses	N of units positive
Not Available	Cattle (bovine animals) - Slaughterhouse - Not Available - Not Available - Surveillance - Official sampling - Suspect sampling	N_A	Visual inspection	animal	840654	0	Echinococcus	0

Area of sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Sampling Details	Method	total units tested	total units positive	Zoonoses	ANTH	VTX	AG	N units positive
Not Available	Cheeses made from cows' milk - fresh - made from raw or low heat-treated milk - Farm - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	51	0	Verocytotoxigenic E. coli (VTEC)	Not Available	Not Available	Not Available	0
	Cheeses made from cows' milk - fresh - made from raw or low heat-treated milk - Processing plant - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	24	0	Verocytotoxigenic E. coli (VTEC)	Not Available	Not Available	Not Available	0
	Cheeses made from cows' milk - soft and semi-soft - made from raw or low heat-treated milk - Farm - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	46	1	VTEC, unspecified	H-antigen unknown	VT1, gene identified, subtype unspecified	eae negative	1
	Cheeses made from cows' milk - soft and semi-soft - made from raw or low heat-treated milk - Processing plant - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	25	0	Verocytotoxigenic E. coli (VTEC)	Not Available	Not Available	Not Available	0
	Cheeses made from cows' milk - soft and semi-soft - made from raw or low heat-treated milk - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	380	1	VTEC, unspecified	H-antigen unknown	VT1, gene identified, subtype unspecified	eae negative	1
	Cheeses made from goats' milk - unspecified - made from raw or low heat-treated milk - Farm - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	25	0	Verocytotoxigenic E. coli (VTEC)	Not Available	Not Available	Not Available	0
	Cheeses made from goats' milk - unspecified - made from raw or low heat-treated milk - Processing plant - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	23	0	Verocytotoxigenic E. coli (VTEC)	Not Available	Not Available	Not Available	0
	Cheeses made from goats' milk - unspecified - made from raw or low heat-treated milk - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	100	1	VTEC O26	H-antigen unknown	VT2, gene identified, subtype unspecified	eae positive	1
	Cheeses made from sheep's milk - fresh - made from raw or low heat-treated milk - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	71	1	VTEC, unspecified	H-antigen unknown	Verotoxin production, toxin type unknown	eae negative	1
	Cheeses made from sheep's milk - unspecified - made from raw or low heat-treated milk - Farm - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	3	0	Verocytotoxigenic E. coli (VTEC)	Not Available	Not Available	Not Available	0
	Cheeses made from sheep's milk - unspecified - made from raw or low heat-treated milk - Processing plant - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	3	0	Verocytotoxigenic E. coli (VTEC)	Not Available	Not Available	Not Available	0
	Dairy products (excluding cheeses) - butter - made from raw or low heat-treated milk - Farm - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	33	1	VTEC, unspecified	H-antigen unknown	VT2, gene identified, subtype unspecified ;VT1, gene identified, subtype unspecified	eae negative	1
	Dairy products (excluding cheeses) - butter - made from raw or low heat-treated milk - Processing plant - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	5	0	Verocytotoxigenic E. coli (VTEC)	Not Available	Not Available	Not Available	0

Area of sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Sampling Details	Method	total units tested	total units positive	Zoonoses	ANTH	VTX	AG	N units positive
Not Available	Fruits and vegetables - pre-cut - ready-to-eat - Processing plant - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	104	0	Verocytotoxigenic E. coli (VTEC)	Not Available	Not Available	Not Available	0
	Fruits and vegetables - pre-cut - ready-to-eat - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	147	0	Verocytotoxigenic E. coli (VTEC)	Not Available	Not Available	Not Available	0
	Meat from bovine animals - carcase - Slaughterhouse - Not Available - food sample - carcase swabs - Surveillance - Official sampling - Objective sampling	single (food/feed)	1600	Square centimetre	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	295	2	VTEC O157	H-antigen unknown	VT2, gene identified, subtype unspecified	eae positive	1
											VT2, gene identified, subtype unspecified ;VT1, gene identified, subtype unspecified	eae positive	1
	Meat from bovine animals - fresh - Processing plant - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	290	6	VTEC O103	H-antigen unknown	VT1, gene identified, subtype unspecified	eae positive	1
									VTEC O26	H-antigen unknown	VT1, gene identified, subtype unspecified	eae positive	1
									VTEC, unspecified	H-antigen unknown	VT2, gene identified, subtype unspecified	eae negative	4
	Meat from bovine animals - meat preparation - intended to be eaten raw - Processing plant - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	93	1	VTEC O26	H-antigen unknown	VT2, gene identified, subtype unspecified	eae positive	1
	Meat from bovine animals - meat preparation - intended to be eaten raw - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	218	4	VTEC, unspecified	H-antigen unknown	VT1, gene identified, subtype unspecified	eae negative	1
												eae positive	1
											VT2, gene identified, subtype unspecified ;VT1, gene identified, subtype unspecified	eae negative	2
	Meat from bovine animals and pig - meat preparation - intended to be eaten raw - Processing plant - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	58	0	Verocytotoxigenic E. coli (VTEC)	Not Available	Not Available	Not Available	0
	Meat from bovine animals and pig - meat preparation - intended to be eaten raw - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	76	1	VTEC, unspecified	H-antigen unknown	VT2, gene identified, subtype unspecified	eae negative	1
	Meat from pig - meat preparation - intended to be eaten raw - Processing plant - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	40	0	Verocytotoxigenic E. coli (VTEC)	Not Available	Not Available	Not Available	0
	Meat from pig - meat preparation - intended to be eaten raw - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	51	0	Verocytotoxigenic E. coli (VTEC)	Not Available	Not Available	Not Available	0
	Meat from sheep - Border Control Posts - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	1	0	Verocytotoxigenic E. coli (VTEC)	Not Available	Not Available	Not Available	0

Area of sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Sampling Details	Method	total units tested	total units positive	Zoonoses	ANTH	VTX	AG	N units positive
Not Available	Meat from sheep - carcase - Slaughterhouse - Not Available - food sample - carcase swabs - Surveillance - Official sampling - Objective sampling	single (food/feed)	400	Square centimetre	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	293	9	VTEC O157	H-antigen unknown	VT2, gene identified, subtype unspecified	eae positive	3
									VTEC, unspecified	H-antigen unknown	VT1, gene identified, subtype unspecified	eae positive	5
											VT2, gene identified, subtype unspecified	eae positive	1
	Milk, cows' - raw milk - Farm - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	227	2	VTEC O26	H-antigen unknown	VT2, gene identified, subtype unspecified	eae positive	1
									VTEC, unspecified	H-antigen unknown	VT2, gene identified, subtype unspecified	eae negative	1
	Seeds, sprouted - ready-to-eat - Farm - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	79	0	Verocytotoxigenic E. coli (VTEC)	Not Available	Not Available	Not Available	0
	Seeds, sprouted - ready-to-eat - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	45	0	Verocytotoxigenic E. coli (VTEC)	Not Available	Not Available	Not Available	0
	Seeds, sprouted - ready-to-eat - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	102	0	Verocytotoxigenic E. coli (VTEC)	Not Available	Not Available	Not Available	0
	Spices and herbs - fresh - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	113	0	Verocytotoxigenic E. coli (VTEC)	Not Available	Not Available	Not Available	0
	Spices and herbs - fresh - Wholesale - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	113	0	Verocytotoxigenic E. coli (VTEC)	Not Available	Not Available	Not Available	0
	Vegetables - leaves - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	57	0	Verocytotoxigenic E. coli (VTEC)	Not Available	Not Available	Not Available	0
	Vegetables - leaves - Wholesale - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	57	0	Verocytotoxigenic E. coli (VTEC)	Not Available	Not Available	Not Available	0
	Vegetables - non-pre-cut - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	37	0	Verocytotoxigenic E. coli (VTEC)	Not Available	Not Available	Not Available	0
	Vegetables - non-pre-cut - Wholesale - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	41	0	Verocytotoxigenic E. coli (VTEC)	Not Available	Not Available	Not Available	0

Table HISTAMINE in food

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Sampling Details	Total units tested	Total units positive	Method	Zoonoses	N of units tested	N of units positive
Not Available	Fish - Fishery products from fish species associated with a high amount of histidine - not enzyme maturated - Border Control Posts - Not Available - Not Available - Surveillance - Official sampling - Objective sampling	batch (food/feed)	1	Gram	N_A	45	0	<= 100	Histamine	0	45
								>100 TO <= 200	Histamine	0	0
								>200	Histamine	0	0
	Fish - Fishery products from fish species associated with a high amount of histidine - not enzyme maturated - Processing plant - Not Available - Not Available - Surveillance - Official sampling - Objective sampling	batch (food/feed)	1	Gram	N_A	126	0	<= 100	Histamine	0	117
								>100 TO <= 200	Histamine	0	0
								>200	Histamine	0	0
		single (food/feed)	1	Gram	N_A	2	0	<= 100	Histamine	0	2
								>100 TO <= 200	Histamine	0	0
								>200	Histamine	0	0
	Fish - Fishery products from fish species associated with a high amount of histidine - not enzyme maturated - Retail - Not Available - Not Available - Surveillance - Official sampling - Objective sampling	single (food/feed)	1	Gram	N_A	15	0	<= 100	Histamine	0	15
								>100 TO <= 200	Histamine	0	0
								>200	Histamine	0	0
	Fish - Fishery products from fish species associated with a high amount of histidine - not enzyme maturated - Wholesale - Not Available - Not Available - Surveillance - Official sampling - Objective sampling	batch (food/feed)	1	Gram	N_A	18	0	<= 100	Histamine	0	2
								>100 TO <= 200	Histamine	0	0
								>200	Histamine	0	0
		single (food/feed)	1	Gram	N_A	1	0	<= 100	Histamine	0	1
								>100 TO <= 200	Histamine	0	0
								>200	Histamine	0	0

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Sampling Details	Total units tested	Total units positive	Method	Zoonoses	N of units tested	N of units positive
Not Available	Bakery products - desserts - containing raw eggs - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	24	0	<= 100	Listeria monocytogenes	24	0
								>100	Listeria monocytogenes	24	0
	Cheeses made from cows' milk - fresh - made from pasteurised milk - Farm - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	45	0	<= 100	Listeria monocytogenes	6	0
								>100	Listeria monocytogenes	6	0
	Cheeses made from cows' milk - fresh - made from pasteurised milk - Farm - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	45	0	detection	Listeria monocytogenes	39	0
	Cheeses made from cows' milk - fresh - made from pasteurised milk - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	66	0	<= 100	Listeria monocytogenes	9	0
								>100	Listeria monocytogenes	9	0
	Cheeses made from cows' milk - fresh - made from pasteurised milk - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	66	0	detection	Listeria monocytogenes	57	0
	Cheeses made from cows' milk - fresh - made from pasteurised milk - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	117	0	<= 100	Listeria monocytogenes	117	0
								>100	Listeria monocytogenes	117	0
	Cheeses made from cows' milk - fresh - made from raw or low heat-treated milk - Farm - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	52	2	<= 100	Listeria monocytogenes	49	0
								>100	Listeria monocytogenes	49	1
	Cheeses made from cows' milk - fresh - made from raw or low heat-treated milk - Farm - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	52	2	detection	Listeria monocytogenes	49	1
	Cheeses made from cows' milk - fresh - made from raw or low heat-treated milk - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	24	0	<= 100	Listeria monocytogenes	2	0
								>100	Listeria monocytogenes	2	0
	Cheeses made from cows' milk - fresh - made from raw or low heat-treated milk - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	24	0	detection	Listeria monocytogenes	22	0
	Cheeses made from cows' milk - soft and semi-soft - made from pasteurised milk - Farm - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	1	0	<= 100	Listeria monocytogenes	1	0
								>100	Listeria monocytogenes	1	0
	Cheeses made from cows' milk - soft and semi-soft - made from pasteurised milk - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	126	1	<= 100	Listeria monocytogenes	45	0
								>100	Listeria monocytogenes	45	0
	Cheeses made from cows' milk - soft and semi-soft - made from pasteurised milk - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	126	1	detection	Listeria monocytogenes	81	1
	Cheeses made from cows' milk - soft and semi-soft - made from pasteurised milk - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	323	0	<= 100	Listeria monocytogenes	323	0
								>100	Listeria monocytogenes	323	0
	Cheeses made from cows' milk - soft and semi-soft - made from raw or low heat-treated milk - Farm - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	46	2	<= 100	Listeria monocytogenes	2	0
								>100	Listeria monocytogenes	2	0
	Cheeses made from cows' milk - soft and semi-soft - made from raw or low heat-treated milk - Farm - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	46	2	detection	Listeria monocytogenes	44	2
	Cheeses made from cows' milk - soft and semi-soft - made from raw or low heat-treated milk - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	25	0	detection	Listeria monocytogenes	25	0
	Cheeses made from cows' milk - soft and semi-soft - made from raw or low heat-treated milk - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	377	1	<= 100	Listeria monocytogenes	377	0
								>100	Listeria monocytogenes	377	1
	Cheeses made from goats' milk - unspecified - made from pasteurised milk - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	33	0	<= 100	Listeria monocytogenes	1	0
								>100	Listeria monocytogenes	1	0
	Cheeses made from goats' milk - unspecified - made from pasteurised milk - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	33	0	detection	Listeria monocytogenes	32	0
	Cheeses made from goats' milk - unspecified - made from pasteurised milk - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	96	0	<= 100	Listeria monocytogenes	96	0
								>100	Listeria monocytogenes	96	0
	Cheeses made from goats' milk - unspecified - made from raw or low heat-treated milk - Farm - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	25	0	<= 100	Listeria monocytogenes	6	0
								>100	Listeria monocytogenes	6	0
	Cheeses made from goats' milk - unspecified - made from raw or low heat-treated milk - Farm - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	25	0	detection	Listeria monocytogenes	19	0

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Sampling Details	Total units tested	Total units positive	Method	Zoonoses	N of units tested	N of units positive
Not Available	Cheeses made from goats' milk - unspecified - made from raw or low heat-treated milk - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	23	0	<= 100	Listeria monocytogenes	2	0
								>100	Listeria monocytogenes	2	0
	Cheeses made from goats' milk - unspecified - made from raw or low heat-treated milk - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	23	0	detection	Listeria monocytogenes	21	0
	Cheeses made from goats' milk - unspecified - made from raw or low heat-treated milk - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	100	1	<= 100	Listeria monocytogenes	100	0
								>100	Listeria monocytogenes	100	1
	Cheeses made from sheep's milk - fresh - made from pasteurised milk - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	93	0	<= 100	Listeria monocytogenes	93	0
								>100	Listeria monocytogenes	93	0
	Cheeses made from sheep's milk - fresh - made from raw or low heat-treated milk - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	71	0	<= 100	Listeria monocytogenes	71	0
								>100	Listeria monocytogenes	71	0
	Cheeses made from sheep's milk - unspecified - made from pasteurised milk - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	3	0	<= 100	Listeria monocytogenes	1	0
								>100	Listeria monocytogenes	1	0
	Cheeses made from sheep's milk - unspecified - made from pasteurised milk - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	3	0	detection	Listeria monocytogenes	2	0
	Cheeses made from sheep's milk - unspecified - made from raw or low heat-treated milk - Farm - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	3	0	detection	Listeria monocytogenes	3	0
	Cheeses made from sheep's milk - unspecified - made from raw or low heat-treated milk - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	3	0	detection	Listeria monocytogenes	3	0
	Dairy products (excluding cheeses) - butter - made from pasteurised milk - Farm - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	10	0	<= 100	Listeria monocytogenes	1	0
								>100	Listeria monocytogenes	1	0
	Dairy products (excluding cheeses) - butter - made from pasteurised milk - Farm - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	10	0	detection	Listeria monocytogenes	9	0
	Dairy products (excluding cheeses) - butter - made from pasteurised milk - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	5	0	detection	Listeria monocytogenes	5	0
	Dairy products (excluding cheeses) - butter - made from pasteurised milk - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	132	0	<= 100	Listeria monocytogenes	132	0
								>100	Listeria monocytogenes	132	0
	Dairy products (excluding cheeses) - butter - made from raw or low heat-treated milk - Farm - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	57	10	<= 100	Listeria monocytogenes	2	0
								>100	Listeria monocytogenes	2	0
	Dairy products (excluding cheeses) - butter - made from raw or low heat-treated milk - Farm - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	57	10	detection	Listeria monocytogenes	55	10
	Dairy products (excluding cheeses) - butter - made from raw or low heat-treated milk - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	20	1	detection	Listeria monocytogenes	20	1
	Dairy products (excluding cheeses) - buttermilk - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	10	0	<= 100	Listeria monocytogenes	10	0
								>100	Listeria monocytogenes	10	0
	Dairy products (excluding cheeses) - buttermilk - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	30	0	<= 100	Listeria monocytogenes	30	0
								>100	Listeria monocytogenes	30	0
	Dairy products (excluding cheeses) - dairy desserts - Farm - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	33	0	<= 100	Listeria monocytogenes	13	0
								>100	Listeria monocytogenes	13	0
	Dairy products (excluding cheeses) - dairy desserts - Farm - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	33	0	detection	Listeria monocytogenes	20	0
	Dairy products (excluding cheeses) - dairy desserts - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	61	0	<= 100	Listeria monocytogenes	20	0
								>100	Listeria monocytogenes	20	0
	Dairy products (excluding cheeses) - dairy desserts - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	61	0	detection	Listeria monocytogenes	41	0
	Dairy products (excluding cheeses) - dairy desserts - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	129	0	<= 100	Listeria monocytogenes	129	0
								>100	Listeria monocytogenes	129	0
	Dairy products (excluding cheeses) - fermented dairy products - fermented milk - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	20	0	<= 100	Listeria monocytogenes	20	0
								>100	Listeria monocytogenes	20	0

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Sampling Details	Total units tested	Total units positive	Method	Zoonoses	N of units tested	N of units positive
Not Available	Dairy products (excluding cheeses) - fermented dairy products - fermented milk - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	40	0	<= 100	Listeria monocytogenes	40	0
								>100	Listeria monocytogenes	40	0
	Dairy products (excluding cheeses) - ice-cream - Farm - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	53	0	<= 100	Listeria monocytogenes	52	0
								>100	Listeria monocytogenes	52	0
	Dairy products (excluding cheeses) - ice-cream - Farm - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	53	0	detection	Listeria monocytogenes	1	0
	Dairy products (excluding cheeses) - ice-cream - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	20	0	<= 100	Listeria monocytogenes	20	0
								>100	Listeria monocytogenes	20	0
	Dairy products (excluding cheeses) - ice-cream - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	99	0	<= 100	Listeria monocytogenes	99	0
								>100	Listeria monocytogenes	99	0
	Dairy products (excluding cheeses) - yoghurt - Farm - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	45	0	<= 100	Listeria monocytogenes	45	0
								>100	Listeria monocytogenes	45	0
	Dairy products (excluding cheeses) - yoghurt - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	33	0	<= 100	Listeria monocytogenes	33	0
								>100	Listeria monocytogenes	33	0
	Dairy products (excluding cheeses) - yoghurt - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	47	0	<= 100	Listeria monocytogenes	47	0
								>100	Listeria monocytogenes	47	0
	Fish - gravad /slightly salted - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	10	1	<= 100	Listeria monocytogenes	3	0
								>100	Listeria monocytogenes	3	0
	Fish - gravad /slightly salted - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	10	1	detection	Listeria monocytogenes	7	1
	Fish - gravad /slightly salted - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	25	0	<= 100	Listeria monocytogenes	25	0
								>100	Listeria monocytogenes	25	0
	Fish - smoked - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	60	1	<= 100	Listeria monocytogenes	33	0
								>100	Listeria monocytogenes	33	0
	Fish - smoked - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	60	1	detection	Listeria monocytogenes	27	1
	Fish - smoked - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	136	0	<= 100	Listeria monocytogenes	136	0
								>100	Listeria monocytogenes	136	0
	Fishery products, unspecified - ready-to-eat - chilled - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	180	2	<= 100	Listeria monocytogenes	129	0
								>100	Listeria monocytogenes	129	0
	Fishery products, unspecified - ready-to-eat - chilled - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	180	2	detection	Listeria monocytogenes	51	2
	Fishery products, unspecified - ready-to-eat - chilled - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	272	0	<= 100	Listeria monocytogenes	272	0
								>100	Listeria monocytogenes	272	0
	Fishery products, unspecified - ready-to-eat - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	20	0	<= 100	Listeria monocytogenes	20	0
								>100	Listeria monocytogenes	20	0
	Follow-on formulae - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	292	0	detection	Listeria monocytogenes	292	0
	Foodstuffs intended for special nutritional uses - dried dietary foods for special medical purposes intended for infants below 6 months - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	208	0	detection	Listeria monocytogenes	208	0
	Fruits - non-pre-cut - Farm - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	41	0	<= 100	Listeria monocytogenes	41	0
								>100	Listeria monocytogenes	41	0
	Fruits - non-pre-cut - frozen - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	87	0	<= 100	Listeria monocytogenes	87	0
								>100	Listeria monocytogenes	87	0
	Fruits - non-pre-cut - frozen - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	50	0	<= 100	Listeria monocytogenes	50	0
								>100	Listeria monocytogenes	50	0
	Fruits - non-pre-cut - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	50	0	<= 100	Listeria monocytogenes	50	0
								>100	Listeria monocytogenes	50	0

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Sampling Details	Total units tested	Total units positive	Method	Zoonoses	N of units tested	N of units positive
Not Available	Fruits and vegetables - pre-cut - ready-to-eat - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	104	0	<= 100	Listeria monocytogenes	63	0
								>100	Listeria monocytogenes	63	0
	Fruits and vegetables - pre-cut - ready-to-eat - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	104	0	detection	Listeria monocytogenes	41	0
	Fruits and vegetables - pre-cut - ready-to-eat - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	147	0	<= 100	Listeria monocytogenes	147	0
								>100	Listeria monocytogenes	147	0
	Infant formula - dried - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	294	0	detection	Listeria monocytogenes	294	0
	Infant formula - ready-to-eat - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	103	0	detection	Listeria monocytogenes	103	0
	Juice - fruit juice - pasteurised - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	6	0	<= 100	Listeria monocytogenes	6	0
								>100	Listeria monocytogenes	6	0
	Juice - fruit juice - pasteurised - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	43	0	<= 100	Listeria monocytogenes	43	0
								>100	Listeria monocytogenes	43	0
	Juice - fruit juice - unpasteurised - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	9	0	<= 100	Listeria monocytogenes	9	0
								>100	Listeria monocytogenes	9	0
	Juice - fruit juice - unpasteurised - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	96	0	<= 100	Listeria monocytogenes	96	0
								>100	Listeria monocytogenes	96	0
	Juice - vegetable juice - pasteurised - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	6	0	<= 100	Listeria monocytogenes	6	0
								>100	Listeria monocytogenes	6	0
	Juice - vegetable juice - pasteurised - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	12	0	<= 100	Listeria monocytogenes	12	0
								>100	Listeria monocytogenes	12	0
	Juice - vegetable juice - unpasteurised - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	1	0	<= 100	Listeria monocytogenes	1	0
								>100	Listeria monocytogenes	1	0
	Juice - vegetable juice - unpasteurised - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	51	0	<= 100	Listeria monocytogenes	51	0
								>100	Listeria monocytogenes	51	0
	Meat from bovine animals - meat preparation - intended to be eaten raw - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	78	0	<= 100	Listeria monocytogenes	55	0
								>100	Listeria monocytogenes	55	0
	Meat from bovine animals - meat preparation - intended to be eaten raw - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	78	0	detection	Listeria monocytogenes	23	0
	Meat from bovine animals - meat preparation - intended to be eaten raw - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	147	0	<= 100	Listeria monocytogenes	147	0
								>100	Listeria monocytogenes	147	0
	Meat from bovine animals and pig - meat preparation - intended to be eaten raw - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	58	2	<= 100	Listeria monocytogenes	31	0
								>100	Listeria monocytogenes	31	0
	Meat from bovine animals and pig - meat preparation - intended to be eaten raw - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	58	2	detection	Listeria monocytogenes	27	2
	Meat from bovine animals and pig - meat preparation - intended to be eaten raw - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	76	0	<= 100	Listeria monocytogenes	76	0
								>100	Listeria monocytogenes	76	0
	Meat from other animal species or not specified - meat products - cooked, ready-to-eat - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	111	0	<= 100	Listeria monocytogenes	37	0
								>100	Listeria monocytogenes	37	0
	Meat from other animal species or not specified - meat products - cooked, ready-to-eat - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	111	0	detection	Listeria monocytogenes	74	0
	Meat from other animal species or not specified - meat products - cooked, ready-to-eat - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	114	0	<= 100	Listeria monocytogenes	114	0
								>100	Listeria monocytogenes	114	0
	Meat from other animal species or not specified - meat products - fermented sausages - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	111	2	<= 100	Listeria monocytogenes	63	0
								>100	Listeria monocytogenes	63	0
	Meat from other animal species or not specified - meat products - fermented sausages - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	111	2	detection	Listeria monocytogenes	48	2

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Sampling Details	Total units tested	Total units positive	Method	Zoonoses	N of units tested	N of units positive
Not Available	Meat from other animal species or not specified - meat products - fermented sausages - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	111	0	<= 100	Listeria monocytogenes	111	0
								>100	Listeria monocytogenes	111	0
	Meat from other animal species or not specified - meat products - pâté - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	113	1	<= 100	Listeria monocytogenes	40	0
								>100	Listeria monocytogenes	40	0
	Meat from other animal species or not specified - meat products - pâté - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	113	1	detection	Listeria monocytogenes	73	1
	Meat from other animal species or not specified - meat products - pâté - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	114	0	<= 100	Listeria monocytogenes	114	0
								>100	Listeria monocytogenes	114	0
	Meat from pig - meat preparation - intended to be eaten raw - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	40	0	<= 100	Listeria monocytogenes	40	0
								>100	Listeria monocytogenes	40	0
	Meat from pig - meat preparation - intended to be eaten raw - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	51	0	<= 100	Listeria monocytogenes	51	0
								>100	Listeria monocytogenes	51	0
	Meat from pig - meat products - cooked ham - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	112	2	<= 100	Listeria monocytogenes	39	0
								>100	Listeria monocytogenes	39	0
	Meat from pig - meat products - cooked ham - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	112	2	detection	Listeria monocytogenes	73	2
	Meat from pig - meat products - cooked ham - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	114	0	<= 100	Listeria monocytogenes	114	0
								>100	Listeria monocytogenes	114	0
	Meat from pig - meat products - cooked, ready-to-eat - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	113	1	<= 100	Listeria monocytogenes	25	0
								>100	Listeria monocytogenes	25	0
	Meat from pig - meat products - cooked, ready-to-eat - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	113	1	detection	Listeria monocytogenes	88	1
	Meat from pig - meat products - cooked, ready-to-eat - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	114	0	<= 100	Listeria monocytogenes	114	0
								>100	Listeria monocytogenes	114	0
	Meat from pig - meat products - raw ham - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	113	0	<= 100	Listeria monocytogenes	63	0
								>100	Listeria monocytogenes	63	0
	Meat from pig - meat products - raw ham - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	113	0	detection	Listeria monocytogenes	50	0
	Meat from pig - meat products - raw ham - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	113	0	<= 100	Listeria monocytogenes	113	0
								>100	Listeria monocytogenes	113	0
	Meat from pig - meat products - unspecified, ready-to-eat - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	112	2	<= 100	Listeria monocytogenes	85	0
								>100	Listeria monocytogenes	85	0
	Meat from pig - meat products - unspecified, ready-to-eat - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	112	2	detection	Listeria monocytogenes	27	2
	Meat from pig - meat products - unspecified, ready-to-eat - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	80	0	<= 100	Listeria monocytogenes	80	0
								>100	Listeria monocytogenes	80	0
	Meat from poultry, unspecified - meat products - cooked, ready-to-eat - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	229	3	<= 100	Listeria monocytogenes	122	0
								>100	Listeria monocytogenes	122	0
	Meat from poultry, unspecified - meat products - cooked, ready-to-eat - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	229	3	detection	Listeria monocytogenes	107	3
	Meat from poultry, unspecified - meat products - cooked, ready-to-eat - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	224	0	<= 100	Listeria monocytogenes	224	0
								>100	Listeria monocytogenes	224	0
	Other food - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	meat substitutes	77	0	<= 100	Listeria monocytogenes	51	0
								>100	Listeria monocytogenes	51	0
	Other food - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	meat substitutes	77	0	detection	Listeria monocytogenes	26	0
	Other food - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	meat substitutes	150	0	<= 100	Listeria monocytogenes	150	0
								>100	Listeria monocytogenes	150	0

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Sampling Details	Total units tested	Total units positive	Method	Zoonoses	N of units tested	N of units positive
Not Available	Other processed food products and prepared dishes - unspecified - ready-to-eat foods - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	76	0	<= 100	Listeria monocytogenes	60	0
								>100	Listeria monocytogenes	60	0
	Other processed food products and prepared dishes - unspecified - ready-to-eat foods - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	76	0	detection	Listeria monocytogenes	16	0
	Other processed food products and prepared dishes - unspecified - ready-to-eat foods - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	insect based products	18	0	<= 100	Listeria monocytogenes	18	0
								>100	Listeria monocytogenes	18	0
					N_A	213	0	<= 100	Listeria monocytogenes	213	0
								>100	Listeria monocytogenes	213	0
	Other products of animal origin - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	insects and insect based products	4	0	<= 100	Listeria monocytogenes	4	0
								>100	Listeria monocytogenes	4	0
	Other products of animal origin - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	insects	26	0	<= 100	Listeria monocytogenes	26	0
								>100	Listeria monocytogenes	26	0
	Seeds, sprouted - ready-to-eat - Farm - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	70	0	<= 100	Listeria monocytogenes	66	0
								>100	Listeria monocytogenes	66	0
	Seeds, sprouted - ready-to-eat - Farm - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	70	0	detection	Listeria monocytogenes	4	0
	Seeds, sprouted - ready-to-eat - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	44	0	<= 100	Listeria monocytogenes	26	0
								>100	Listeria monocytogenes	26	0
	Seeds, sprouted - ready-to-eat - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	44	0	detection	Listeria monocytogenes	18	0
	Seeds, sprouted - ready-to-eat - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	98	0	<= 100	Listeria monocytogenes	98	0
								>100	Listeria monocytogenes	98	0
	Surimi - chilled - Border Control Posts - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	4	0	<= 100	Listeria monocytogenes	4	0
								>100	Listeria monocytogenes	4	0
	Surimi - chilled - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	20	0	<= 100	Listeria monocytogenes	18	0
								>100	Listeria monocytogenes	18	0
	Surimi - chilled - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	20	0	detection	Listeria monocytogenes	2	0
	Surimi - chilled - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	61	0	<= 100	Listeria monocytogenes	61	0
								>100	Listeria monocytogenes	61	0
	Vegetables - leaves - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	56	0	<= 100	Listeria monocytogenes	56	0
								>100	Listeria monocytogenes	56	0
	Vegetables - leaves - Wholesale - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	56	0	<= 100	Listeria monocytogenes	56	0
								>100	Listeria monocytogenes	56	0
	Vegetables - non-pre-cut - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	37	0	<= 100	Listeria monocytogenes	37	0
								>100	Listeria monocytogenes	37	0
	Vegetables - non-pre-cut - Wholesale - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	47	0	<= 100	Listeria monocytogenes	47	0
								>100	Listeria monocytogenes	47	0
	Vegetables - products - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	vegetarian spreads/tapenades	22	0	<= 100	Listeria monocytogenes	22	0
								>100	Listeria monocytogenes	22	0

Table Lyssavirus:LYSSAVIRUS in animal

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling Details	Method	Sampling unit	Total units tested	Total units positive	Zoonoses	N of units positive
BELGIUM	Bats - wild - Natural habitat - Not Available - animal sample - brain - Surveillance - Official sampling - Suspect sampling	N_A	Not Available	animal	30	0	Rabies virus	0
	Cats - Border Control Posts - Not Available - animal sample - brain - Surveillance - Official sampling - Suspect sampling	N_A	Not Available	animal	6	0	Rabies virus	0
	Cats - Veterinary clinics - Not Available - animal sample - brain - Surveillance - Official sampling - Suspect sampling	N_A	Not Available	animal	6	0	Rabies virus	0
	Cattle (bovine animals) - Farm - Not Available - animal sample - brain - Surveillance - Official sampling - Suspect sampling	N_A	Not Available	animal	12	0	Rabies virus	0
	Dogs - Border Control Posts - Not Available - animal sample - brain - Surveillance - Official sampling - Suspect sampling	N_A	Not Available	animal	3	0	Rabies virus	0
	Dogs - Veterinary clinics - Not Available - animal sample - brain - Surveillance - Official sampling - Suspect sampling	N_A	Not Available	animal	3	0	Rabies virus	0
	Foxes - wild - Natural habitat - Not Available - animal sample - brain - Surveillance - Official sampling - Suspect sampling	N_A	Not Available	animal	13	0	Rabies virus	0
	Marten - wild - Natural habitat - Not Available - animal sample - brain - Surveillance - Official sampling - Suspect sampling	N_A	Not Available	animal	1	0	Rabies virus	0
	Solipeds, domestic - Veterinary clinics - Not Available - animal sample - brain - Surveillance - Official sampling - Suspect sampling	N_A	Not Available	animal	1	0	Rabies virus	0

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	N of flocks under control programme	Target verification	Sampling Details	Method	Total units tested	Total units positive	Zoonoses	N of units positive
Not Available	Gallus gallus (fowl) - broilers - before slaughter - Farm - Not Available - environmental sample - boot swabs - Control and eradication programmes - Industry sampling - Census	herd/flock		N	N_A	Not Available	9016	287	Salmonella 4,12:i:-	5
									Salmonella 4,5,12:i:-	8
									Salmonella Agona	7
									Salmonella Anatum	1
									Salmonella Derby	4
									Salmonella enterica, subspecies enterica	3
									Salmonella Enteritidis	1
									Salmonella Idikan	5
									Salmonella Infantis	97
									Salmonella Ituri	1
									Salmonella Java	88
									Salmonella Kedougou	1
									Salmonella Livingstone	9
									Salmonella Llandoff	1
									Salmonella Minnesota	30
									Salmonella Newport	2
									Salmonella Poano	1
									Salmonella Rissen	1
									Salmonella Senftenberg	2
									Salmonella Soerenga	2
									Salmonella spp., unspecified	7
									Salmonella Typhimurium	10
									Salmonella Veneziana	1
	Gallus gallus (fowl) - broilers - before slaughter - Farm - Not Available - environmental sample - boot swabs - Control and eradication programmes - Official and industry sampling - Census	herd/flock	9024	Y	N_A	Not Available	9024	298	Salmonella 4,12:i:-	6
									Salmonella 4,5,12:i:-	8
									Salmonella Agama	1
									Salmonella Agona	7
									Salmonella Anatum	1
									Salmonella Bovismorbificans	1
									Salmonella Derby	4
									Salmonella enterica, subspecies enterica	4
									Salmonella Enteritidis	1
									Salmonella Idikan	5
									Salmonella Infantis	101
									Salmonella Ituri	1
									Salmonella Java	90
									Salmonella Kedougou	1
									Salmonella Livingstone	10
									Salmonella Llandoff	1
									Salmonella Minnesota	30
									Salmonella Newport	2
									Salmonella Poano	1
									Salmonella Rissen	1
									Salmonella Senftenberg	2
									Salmonella Soerenga	2
									Salmonella spp., unspecified	7
									Salmonella Typhimurium	10
									Salmonella Veneziana	1
	Gallus gallus (fowl) - broilers - before slaughter - Farm - Not Available - environmental sample - boot swabs - Control and eradication programmes - Official sampling - Objective sampling	herd/flock		N	N_A	Not Available	87	11	Salmonella 4,12:i:-	1
									Salmonella Agama	1
									Salmonella Bovismorbificans	1
									Salmonella enterica, subspecies enterica	1
									Salmonella Infantis	4
									Salmonella Java	2
									Salmonella Livingstone	1

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	N of flocks under control programme	Target verification	Sampling Details	Method	Total units tested	Total units positive	Zoonoses	N of units positive
Not Available	Gallus gallus (fowl) - broilers - day-old chicks - Farm - Not Available - environmental sample - delivery box liner - Control and eradication programmes - Industry sampling - Census	herd/flock		N	N_A	Not Available	9449	5	Salmonella Infantis	1
									Salmonella Java	1
									Salmonella Minnesota	3
	Gallus gallus (fowl) - broilers - day-old chicks - Hatchery - Not Available - environmental sample - hatcher basket liner - Control and eradication programmes - Industry sampling - Census	herd/flock		N	N_A	Not Available	39	2	Salmonella Infantis	2
BELGIUM	Gallus gallus (fowl) - laying hens - adult - Farm - Belgium - environmental sample - boot swabs - Control and eradication programmes - Industry sampling - Census	herd/flock		N	N_A	Not Available	658	21	Salmonella 4,5,12:i:-	1
									Salmonella Brandenburg	1
									Salmonella enterica, subspecies enterica	2
									Salmonella Enteritidis	4
									Salmonella Infantis	10
									Salmonella Mbandaka	1
									Salmonella Orion	1
									Salmonella Typhimurium	1
	Gallus gallus (fowl) - laying hens - adult - Farm - Belgium - environmental sample - boot swabs and dust - Control and eradication programmes - Official and industry sampling - Census	herd/flock	684	Y	N_A	Not Available	684	33	Salmonella 4,5,12:i:-	1
									Salmonella Agona	1
									Salmonella Brandenburg	1
									Salmonella enterica, subspecies enterica	3
									Salmonella Enteritidis	5
									Salmonella Idikan	3
									Salmonella Infantis	13
									Salmonella Livingstone	1
									Salmonella Mbandaka	1
									Salmonella Orion	1
									Salmonella Rissen	1
									Salmonella Typhimurium	2
	Gallus gallus (fowl) - laying hens - adult - Farm - Belgium - environmental sample - boot swabs and dust - Control and eradication programmes - Official sampling - Census	herd/flock		N	N_A	Not Available	265	14	Salmonella Agona	1
									Salmonella enterica, subspecies enterica	1
									Salmonella Enteritidis	1
									Salmonella Idikan	3
									Salmonella Infantis	5
									Salmonella Livingstone	1
									Salmonella Rissen	1
									Salmonella Typhimurium	1
	Gallus gallus (fowl) - laying hens - day-old chicks - Farm - Belgium - environmental sample - delivery box liner - Control and eradication programmes - Industry sampling - Census	herd/flock		N	N_A	Not Available	134	1	Salmonella spp., unspecified	1
	Gallus gallus (fowl) - laying hens - during rearing period - flocks under control programme - Farm - Belgium - environmental sample - boot swabs - Control and eradication programmes - Industry sampling - Census	herd/flock		N	N_A	Not Available	218	4	Salmonella 4,5,12:i:-	2
									Salmonella Agona	1
									Salmonella enterica, subspecies enterica	1
	Gallus gallus (fowl) - parent breeding flocks for broiler production line - adult - Farm - Not Available - environmental sample - boot swabs - Control and eradication programmes - Official and industry sampling - Census	herd/flock	525	Y	N_A	Not Available	525	9	Salmonella Anatum	1
									Salmonella Bredeney	1
									Salmonella Give	1
									Salmonella Idikan	3
									Salmonella Infantis	1
									Salmonella Ohio	1
									Salmonella Typhimurium	1
	Gallus gallus (fowl) - parent breeding flocks for broiler production line - day-old chicks - Farm - Not Available - environmental sample - delivery box liner - Control and eradication programmes - Industry sampling - Census	herd/flock		N	N_A	Not Available	154	1	Salmonella Lexington	1
	Gallus gallus (fowl) - parent breeding flocks for broiler production line - during rearing period - Farm - Not Available - environmental sample - boot swabs - Control and eradication programmes - Official and industry sampling - Census	herd/flock		N	N_A	Not Available	284	3	Salmonella Agona	1
									Salmonella Idikan	1
									Salmonella Infantis	1
	Turkeys - fattening flocks - before slaughter - Farm - Not Available - environmental sample - boot swabs - Control and eradication programmes - Industry sampling - Census	herd/flock		N	N_A	Not Available	147	7	Salmonella 4,5,12:i:-	5
									Salmonella Indiana	1
									Salmonella Java	1
									Salmonella Typhimurium	1
	Turkeys - fattening flocks - before slaughter - Farm - Not Available - environmental sample - boot swabs - Control and eradication programmes - Official and industry sampling - Census	herd/flock	148	Y	N_A	Not Available	148	7	Salmonella 4,5,12:i:-	5
									Salmonella Indiana	1
									Salmonella Java	1
									Salmonella Typhimurium	1

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	N of flocks under control programme	Target verification	Sampling Details	Method	Total units tested	Total units positive	Zoonoses	N of units positive
BELGIUM	Turkeys - fattening flocks - before slaughter - Farm - Not Available - environmental sample - boot swabs - Control and eradication programmes - Official sampling - Objective sampling	herd/flock		N	N_A	Not Available	4	0	Salmonella	0

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Sampling Details	Method	Total units tested	Total units positive	Zoonoses	N of units positive
Not Available	Bakery products - desserts - containing raw eggs - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	25	0	Salmonella	0
	Cheeses made from cows' milk - fresh - made from raw or low heat-treated milk - Farm - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	34	0	Salmonella	0
	Cheeses made from cows' milk - fresh - made from raw or low heat-treated milk - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	17	0	Salmonella	0
	Cheeses made from cows' milk - soft and semi-soft - made from raw or low heat-treated milk - Farm - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	46	0	Salmonella	0
	Cheeses made from cows' milk - soft and semi-soft - made from raw or low heat-treated milk - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	25	0	Salmonella	0
	Cheeses made from cows' milk - soft and semi-soft - made from raw or low heat-treated milk - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	109	0	Salmonella	0
	Cheeses made from goats' milk - unspecified - made from raw or low heat-treated milk - Farm - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	25	0	Salmonella	0
	Cheeses made from goats' milk - unspecified - made from raw or low heat-treated milk - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	23	0	Salmonella	0
	Cheeses made from goats' milk - unspecified - made from raw or low heat-treated milk - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	40	0	Salmonella	0
	Cheeses made from sheep's milk - fresh - made from raw or low heat-treated milk - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	85	0	Salmonella	0
	Cheeses made from sheep's milk - unspecified - made from raw or low heat-treated milk - Farm - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	3	0	Salmonella	0
	Cheeses made from sheep's milk - unspecified - made from raw or low heat-treated milk - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	3	0	Salmonella	0
	Crustaceans - prawns - cooked - Wholesale - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	118	1	Salmonella Typhimurium	1
	Crustaceans - unspecified - cooked - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	30	0	Salmonella	0
	Crustaceans - unspecified - cooked - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	61	0	Salmonella	0
	Dairy products (excluding cheeses) - butter - made from raw or low heat-treated milk - Farm - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	33	0	Salmonella	0
	Dairy products (excluding cheeses) - butter - made from raw or low heat-treated milk - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	5	0	Salmonella	0
	Dairy products (excluding cheeses) - dairy desserts - Farm - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	21	0	Salmonella	0
	Dairy products (excluding cheeses) - dairy desserts - Processing plant - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	30	0	Salmonella	0
	Dairy products (excluding cheeses) - dairy desserts - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	77	0	Salmonella	0

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Sampling Details	Method	Total units tested	Total units positive	Zoonoses	N of units positive
Not Available	Dairy products (excluding cheeses) - ice-cream - Farm - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	20	0	Salmonella	0
	Dairy products (excluding cheeses) - ice-cream - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	10	0	Salmonella	0
	Dairy products (excluding cheeses) - milk powder and whey powder - Farm - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	1	0	Salmonella	0
	Dairy products (excluding cheeses) - milk powder and whey powder - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	78	0	Salmonella	0
	Egg products - dried - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	7	0	Salmonella	0
	Egg products - dried - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	1	0	Salmonella	0
	Egg products - liquid - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	50	0	Salmonella	0
	Egg products - liquid - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	24	0	Salmonella	0
	Fish - gravad /slightly salted - Processing plant - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	10	0	Salmonella	0
	Fish - gravad /slightly salted - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	10	0	Salmonella	0
	Fish - smoked - Processing plant - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	20	0	Salmonella	0
	Fish - smoked - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	50	0	Salmonella	0
	Fishery products, unspecified - ready-to-eat - chilled - Processing plant - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	66	0	Salmonella	0
	Fishery products, unspecified - ready-to-eat - chilled - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	116	0	Salmonella	0
	Fishery products, unspecified - ready-to-eat - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	20	0	Salmonella	0
	Follow-on formulae - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	90	0	Salmonella	0
	Foodstuffs intended for special nutritional uses - dried dietary foods for special medical purposes intended for infants below 6 months - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	118	0	Salmonella	0
	Fruits - non-pre-cut - Farm - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	26	0	Salmonella	0
	Fruits - non-pre-cut - frozen - Processing plant - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	15	0	Salmonella	0
	Fruits - non-pre-cut - frozen - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	30	0	Salmonella	0
	Fruits - non-pre-cut - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	20	0	Salmonella	0
	Fruits - products - dried - Border Control Posts - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	1	0	Salmonella	0
	Fruits - products - dried - Processing plant - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	11	0	Salmonella	0

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Sampling Details	Method	Total units tested	Total units positive	Zoonoses	N of units positive
Not Available	Fruits - products - dried - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	15	0	Salmonella	0
	Fruits and vegetables - pre-cut - ready-to-eat - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	38	0	Salmonella	0
	Fruits and vegetables - pre-cut - ready-to-eat - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	55	0	Salmonella	0
	Infant formula - dried - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	118	0	Salmonella	0
	Infant formula - ready-to-eat - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	72	0	Salmonella	0
	Juice - fruit juice - pasteurised - Processing plant - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	6	0	Salmonella	0
	Juice - fruit juice - pasteurised - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	13	0	Salmonella	0
	Juice - fruit juice - unpasteurised - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	9	0	Salmonella	0
	Juice - fruit juice - unpasteurised - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	34	0	Salmonella	0
	Juice - vegetable juice - pasteurised - Processing plant - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	6	0	Salmonella	0
	Juice - vegetable juice - pasteurised - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	5	0	Salmonella	0
	Juice - vegetable juice - unpasteurised - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	1	0	Salmonella	0
	Juice - vegetable juice - unpasteurised - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	16	0	Salmonella	0
	Live bivalve molluscs - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	91	0	Salmonella	0
	Meat from bovine animals - carcase - Slaughterhouse - Not Available - food sample - carcase swabs - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	1600	Square centimetre	N_A	Not Available	800	1	Salmonella Paratyphi B	1
	Meat from bovine animals - meat preparation - intended to be eaten raw - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	Not Available	43	0	Salmonella	0
	Meat from bovine animals - meat preparation - intended to be eaten raw - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	46	0	Salmonella	0
	Meat from bovine animals and pig - meat preparation - intended to be eaten cooked - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	Not Available	45	0	Salmonella	0
	Meat from bovine animals and pig - meat preparation - intended to be eaten cooked - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	Not Available	46	0	Salmonella	0
	Meat from bovine animals and pig - meat preparation - intended to be eaten raw - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	Not Available	25	0	Salmonella	0
	Meat from bovine animals and pig - meat preparation - intended to be eaten raw - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	28	0	Salmonella	0
	Meat from broilers (Gallus gallus) - carcase - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	91	6	Salmonella Agona	1
									Salmonella Infantis	1
									Salmonella Kottbus	1
									Salmonella Paratyphi B	3

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Sampling Details	Method	Total units tested	Total units positive	Zoonoses	N of units positive
Not Available	Meat from broilers (Gallus gallus) - fresh - Processing plant - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	544	50	Salmonella enterica	3
									Salmonella Give	1
									Salmonella Infantis	33
									Salmonella Paratyphi B	8
									Salmonella Rissen	1
									Salmonella Typhimurium	4
	Meat from broilers (Gallus gallus) - fresh - skinned - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	46	0	Salmonella	0
	Meat from broilers (Gallus gallus) - fresh - with skin - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	51	1	Salmonella Infantis	1
	Meat from broilers (Gallus gallus) - fresh - with skin - Slaughterhouse - Not Available - food sample - neck skin - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	720	97	Salmonella	3
									Salmonella 4,12:i:-	10
									Salmonella Agona	2
									Salmonella enterica	7
									Salmonella Infantis	52
									Salmonella Mbandaka	1
									Salmonella Minnesota	1
									Salmonella Paratyphi B	21
	Meat from other animal species or not specified - meat products - cooked, ready-to-eat - Processing plant - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	6	0	Salmonella	0
	Meat from other animal species or not specified - meat products - cooked, ready-to-eat - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	10	0	Salmonella	0
	Meat from other animal species or not specified - meat products - fermented sausages - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	22	0	Salmonella	0
	Meat from other animal species or not specified - meat products - fermented sausages - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	23	0	Salmonella	0
	Meat from other animal species or not specified - meat products - pâté - Processing plant - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	6	0	Salmonella	0
	Meat from other animal species or not specified - meat products - pâté - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	11	0	Salmonella	0
	Meat from other animal species or not specified - mechanically separated meat (MSM) - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	Not Available	20	0	Salmonella	0
	Meat from other poultry species - meat preparation - intended to be eaten cooked - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	46	6	Salmonella Infantis	3
									Salmonella Minnesota	1
									Salmonella Paratyphi B	2
	Meat from pig - carcase - Slaughterhouse - Not Available - food sample - carcase swabs - Surveillance - based on Regulation 2073 - HACCP and own check - Objective sampling	single (food/feed)	600	Square centimetre	N_A	Not Available	5055	88	Salmonella	88
	Meat from pig - carcase - Slaughterhouse - Not Available - food sample - carcase swabs - Surveillance - based on Regulation 2073 - Official, based on Regulation 854/2004 - Objective sampling	single (food/feed)	600	Square centimetre	N_A	Not Available	1049	65	Salmonella	3
									Salmonella 4,12:i:-	23
									Salmonella Brandenburg	1
									Salmonella Derby	11
									Salmonella enterica	1
									Salmonella Give	1
									Salmonella Kedougou	1
									Salmonella Livingstone	3
									Salmonella Panama	1
									Salmonella Rissen	4
									Salmonella Typhimurium	16
	Meat from pig - fresh - Processing plant - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	365	4	Salmonella 4,12:i:-	4
	Meat from pig - meat preparation - intended to be eaten cooked - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	Not Available	46	0	Salmonella	0

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Sampling Details	Method	Total units tested	Total units positive	Zoonoses	N of units positive
Not Available	Meat from pig - meat preparation - intended to be eaten raw - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	Not Available	18	0	Salmonella	0
	Meat from pig - meat preparation - intended to be eaten raw - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	18	0	Salmonella	0
	Meat from pig - meat products - cooked ham - Processing plant - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	6	0	Salmonella	0
	Meat from pig - meat products - cooked ham - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	15	0	Salmonella	0
	Meat from pig - meat products - cooked, ready-to-eat - Processing plant - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	6	0	Salmonella	0
	Meat from pig - meat products - cooked, ready-to-eat - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	11	0	Salmonella	0
	Meat from pig - meat products - raw ham - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	23	0	Salmonella	0
	Meat from pig - meat products - raw ham - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	23	0	Salmonella	0
	Meat from pig - meat products - unspecified, ready-to-eat - Processing plant - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	44	0	Salmonella	0
	Meat from pig - meat products - unspecified, ready-to-eat - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	46	0	Salmonella	0
	Meat from pig - offal - Slaughterhouse - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	10	Gram	N_A	Not Available	89	13	Salmonella	1
									Salmonella 4,12:i:-	1
									Salmonella Brandenburg	1
									Salmonella Derby	2
									Salmonella Livingstone	1
									Salmonella Rissen	2
									Salmonella Typhimurium	5
	Meat from poultry, unspecified - meat preparation - intended to be eaten cooked - Border Control Posts - Brazil - food sample - Surveillance - based on Regulation 2073 - Official sampling - Suspect sampling	batch (food/feed)	25	Gram	N_A	Not Available	25	3	Salmonella	3
	Meat from poultry, unspecified - meat preparation - intended to be eaten cooked - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	45	2	Salmonella Infantis	1
									Salmonella Paratyphi B	1
	Meat from poultry, unspecified - meat products - cooked, ready-to-eat - Processing plant - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	51	0	Salmonella	0
	Meat from poultry, unspecified - meat products - cooked, ready-to-eat - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	105	1	Salmonella Infantis	1
	Meat from poultry, unspecified - meat products - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	45	0	Salmonella	0
	Meat from sheep - carcase - Slaughterhouse - Not Available - food sample - carcase swabs - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	400	Square centimetre	N_A	Not Available	250	0	Salmonella	0
	Meat from spent hens (Gallus gallus) - fresh - Slaughterhouse - Not Available - food sample - meat - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	118	9	Salmonella enterica	1
									Salmonella Enteritidis	4
									Salmonella Infantis	3
									Salmonella Livingstone	1
	Molluscan shellfish - cooked - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	44	0	Salmonella	0
	Molluscan shellfish - cooked - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	43	0	Salmonella	0

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Sampling Details	Method	Total units tested	Total units positive	Zoonoses	N of units positive
Not Available	Nuts and nut products - Border Control Posts - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	9	0	Salmonella	0
	Nuts and nut products - Processing plant - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	22	0	Salmonella	0
	Nuts and nut products - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	26	0	Salmonella	0
	Other processed food products and prepared dishes - unspecified - ready-to-eat foods - Processing plant - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	30	0	Salmonella	0
	Other processed food products and prepared dishes - unspecified - ready-to-eat foods - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	insect based products	Not Available	18	0	Salmonella	0
					N_A	Not Available	61	0	Salmonella	0
	Other products of animal origin - Processing plant - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	insects and insect based products	Not Available	4	0	Salmonella	0
	Other products of animal origin - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	insects	Not Available	27	0	Salmonella	0
	Seeds, dried - Border Control Posts - Not Available - food sample - Surveillance - Official sampling - Suspect sampling	batch (food/feed)	25	Gram	N_A	Not Available	180	0	Salmonella	0
	Seeds, sprouted - ready-to-eat - Farm - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	29	0	Salmonella	0
	Seeds, sprouted - ready-to-eat - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	20	0	Salmonella	0
	Seeds, sprouted - ready-to-eat - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	41	0	Salmonella	0
	Spices and herbs - dried - Border Control Posts - Not Available - food sample - Surveillance - Official sampling - Suspect sampling	batch (food/feed)	25	Gram	N_A	Not Available	55	0	Salmonella	0
	Spices and herbs - dried - Processing plant - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	46	1	Salmonella Muenchen	1
	Spices and herbs - dried - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	46	0	Salmonella	0
	Spices and herbs - fresh - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	44	0	Salmonella	0
	Spices and herbs - fresh - Wholesale - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	46	1	Salmonella Kentucky	1
	Surimi - chilled - Border Control Posts - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	4	0	Salmonella	0
	Surimi - chilled - Processing plant - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	20	0	Salmonella	0
	Surimi - chilled - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	61	0	Salmonella	0
	Vegetables - leaves - Farm - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	23	0	Salmonella	0
	Vegetables - leaves - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	23	0	Salmonella	0
	Vegetables - non-pre-cut - Farm - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	18	1	Salmonella	1
	Vegetables - non-pre-cut - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	15	0	Salmonella	0
	Vegetables - products - dried - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Not Available	5	0	Salmonella	0

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Sampling Details	Method	Total units tested	Total units positive	Zoonoses	N of units positive
Not Available	Compound feedingstuffs for cattle - Farm - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	14	0	Salmonella	0
	Compound feedingstuffs for cattle - Feed mill - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	2	1	Salmonella Montevideo	1
							64	0	Salmonella	0
	Compound feedingstuffs for cattle - Retail - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	1	0	Salmonella	0
	Compound feedingstuffs for cattle - Unspecified - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	2	0	Salmonella	0
	Compound feedingstuffs for cattle - Wholesale - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	7	0	Salmonella	0
	Compound feedingstuffs for fish - Farm - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	8	0	Salmonella	0
	Compound feedingstuffs for fish - Feed mill - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	9	0	Salmonella	0
	Compound feedingstuffs for fish - Unspecified - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	1	0	Salmonella	0
	Compound feedingstuffs for fish - Wholesale - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	3	0	Salmonella	0
	Compound feedingstuffs for horses - Farm - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	3	0	Salmonella	0
	Compound feedingstuffs for horses - Feed mill - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	26	0	Salmonella	0
	Compound feedingstuffs for horses - Unspecified - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	1	0	Salmonella	0
	Compound feedingstuffs for horses - Wholesale - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	2	0	Salmonella	0
	Compound feedingstuffs for pigs - Farm - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	32	0	Salmonella	0
	Compound feedingstuffs for pigs - Feed mill - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	53	0	Salmonella	0
	Compound feedingstuffs for pigs - Retail - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	1	0	Salmonella	0
	Compound feedingstuffs for pigs - Unspecified - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	2	0	Salmonella	0
	Compound feedingstuffs for pigs - Wholesale - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	3	0	Salmonella	0
	Compound feedingstuffs for poultry (non specified) - Border Control Posts - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	1	0	Salmonella	0
	Compound feedingstuffs for poultry (non specified) - Farm - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	6	0	Salmonella	0
	Compound feedingstuffs for poultry (non specified) - Feed mill - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	1	0	Salmonella	0
	Compound feedingstuffs for poultry (non specified) - Unspecified - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	2	0	Salmonella	0

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Sampling Details	Method	Total units tested	Total units positive	Zoonoses	N of units positive
Not Available	Compound feedingstuffs for poultry, breeders - Farm - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	17	0	Salmonella	0
	Compound feedingstuffs for poultry, breeders - Feed mill - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	19	0	Salmonella	0
	Compound feedingstuffs for poultry, breeders - Hatchery - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	1	0	Salmonella	0
	Compound feedingstuffs for poultry, breeders - Retail - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	1	0	Salmonella	0
	Compound feedingstuffs for poultry, breeders - Unspecified - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	1	0	Salmonella	0
	Compound feedingstuffs for poultry, breeders - Wholesale - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	1	0	Salmonella	0
	Compound feedingstuffs for poultry, broilers - Farm - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	18	0	Salmonella	0
	Compound feedingstuffs for poultry, broilers - Feed mill - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	18	0	Salmonella	0
	Compound feedingstuffs for poultry, broilers - Hatchery - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	1	0	Salmonella	0
	Compound feedingstuffs for poultry, broilers - Wholesale - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	2	0	Salmonella	0
	Compound feedingstuffs for poultry, laying hens - Farm - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	17	0	Salmonella	0
	Compound feedingstuffs for poultry, laying hens - Feed mill - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	18	0	Salmonella	0
	Compound feedingstuffs for poultry, laying hens - Unspecified - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	1	0	Salmonella	0
	Compound feedingstuffs for poultry, laying hens - Wholesale - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	3	0	Salmonella	0
	Compound feedingstuffs for rabbits - Farm - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	2	0	Salmonella	0
	Compound feedingstuffs for rabbits - Feed mill - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	8	0	Salmonella	0
	Compound feedingstuffs for rabbits - Retail - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	1	0	Salmonella	0
	Compound feedingstuffs for sheep - Farm - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	4	0	Salmonella	0
	Compound feedingstuffs for sheep - Feed mill - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	18	0	Salmonella	0
	Compound feedingstuffs for sheep - Retail - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	1	0	Salmonella	0
	Compound feedingstuffs for sheep - Unspecified - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	1	0	Salmonella	0
	Compound feedingstuffs for sheep - Wholesale - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	1	0	Salmonella	0
	Compound feedingstuffs for turkeys - Farm - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	4	0	Salmonella	0
	Feed material of cereal grain origin - barley derived - Feed mill - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	3	0	Salmonella	0

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Sampling Details	Method	Total units tested	Total units positive	Zoonoses	N of units positive
Not Available	Feed material of cereal grain origin - Border Control Posts - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	5	0	Salmonella	0
	Feed material of cereal grain origin - Feed mill - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	23	0	Salmonella	0
	Feed material of cereal grain origin - maize derived - Border Control Posts - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	1	0	Salmonella	0
	Feed material of cereal grain origin - maize derived - Feed mill - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	13	1	Salmonella Livingstone	1
	Feed material of cereal grain origin - maize derived - Unspecified - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	5	0	Salmonella	0
	Feed material of cereal grain origin - maize derived - Wholesale - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	1	0	Salmonella	0
	Feed material of cereal grain origin - Retail - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	1	0	Salmonella	0
	Feed material of cereal grain origin - rice derived - Border Control Posts - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	2	0	Salmonella	0
	Feed material of cereal grain origin - rice derived - Feed mill - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	2	0	Salmonella	0
	Feed material of cereal grain origin - Unspecified - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	13	0	Salmonella	0
	Feed material of cereal grain origin - wheat derived - Feed mill - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	13	1	Salmonella Idikan	1
	Feed material of cereal grain origin - Wholesale - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	5	0	Salmonella	0
	Feed material of land animal origin - animal fat - Feed mill - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	10	0	Salmonella	0
	Feed material of land animal origin - animal fat - Slaughterhouse - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	1	0	Salmonella	0
	Feed material of land animal origin - animal fat - Unspecified - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	1	0	Salmonella	0
	Feed material of land animal origin - blood products - Feed mill - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	1	0	Salmonella	0
	Feed material of land animal origin - blood products - Slaughterhouse - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	1	0	Salmonella	0
	Feed material of land animal origin - dairy products - Farm - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	11	0	Salmonella	0
	Feed material of land animal origin - dairy products - Feed mill - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	78	0	Salmonella	0
	Feed material of land animal origin - dairy products - Unspecified - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	1	0	Salmonella	0
	Feed material of land animal origin - dairy products - Wholesale - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	1	0	Salmonella	0
	Feed material of land animal origin - egg powder - Border Control Posts - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	2	0	Salmonella	0
	Feed material of land animal origin - egg powder - Feed mill - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	26	1	Salmonella Enteritidis	1

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Sampling Details	Method	Total units tested	Total units positive	Zoonoses	N of units positive
Not Available	Feed material of land animal origin - egg powder - Unspecified - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	15	0	Salmonella	0
	Feed material of land animal origin - egg powder - Wholesale - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	1	0	Salmonella	0
	Feed material of land animal origin - feather meal - Feed mill - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	1	0	Salmonella	0
	Feed material of land animal origin - meat and bone meal - Border Control Posts - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	17	4	Salmonella Agona	1
									Salmonella Brandenburg	2
									Salmonella Derby	3
	Feed material of land animal origin - meat and bone meal - Feed mill - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	24	3	Salmonella enterica, subspecies enterica	1
									Salmonella Montevideo	1
									Salmonella Tennessee	1
							60	2	Salmonella Brandenburg	1
									Salmonella Ohio	1
									Salmonella Senftenberg	1
	Feed material of land animal origin - meat and bone meal - Retail - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	3	0	Salmonella	0
	Feed material of land animal origin - meat and bone meal - Slaughterhouse - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	1	0	Salmonella	0
	Feed material of land animal origin - meat and bone meal - Unspecified - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	3	0	Salmonella	0
	Feed material of land animal origin - meat and bone meal - Wholesale - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	3	0	Salmonella	0
	Feed material of land animal origin - protein meal - Feed mill - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	1	0	Salmonella	0
	Feed material of land animal origin - Retail - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	2	0	Salmonella	0
	Feed material of land animal origin - Slaughterhouse - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	2	0	Salmonella	0
	Feed material of land animal origin - Wholesale - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	2	0	Salmonella	0
	Feed material of marine animal origin - fish meal - Feed mill - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	7	0	Salmonella	0
	Feed material of marine animal origin - fish meal - Wholesale - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	2	0	Salmonella	0
	Feed material of oil seed or fruit origin - Feed mill - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	8	0	Salmonella	0
	Feed material of oil seed or fruit origin - linseed derived - Wholesale - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	1	0	Salmonella	0
	Feed material of oil seed or fruit origin - rape seed derived - Feed mill - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	3	0	Salmonella	0
	Feed material of oil seed or fruit origin - sunflower seed derived - Border Control Posts - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	1	0	Salmonella	0
	Feed material of oil seed or fruit origin - sunflower seed derived - Feed mill - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	11	0	Salmonella	0
	Feed material of oil seed or fruit origin - sunflower seed derived - Unspecified - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	5	0	Salmonella	0

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Sampling Details	Method	Total units tested	Total units positive	Zoonoses	N of units positive
Not Available	Feed material of oil seed or fruit origin - sunflower seed derived - Wholesale - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	1	0	Salmonella	0
	Other feed material - Feed mill - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	1	0	Salmonella	0
	Other feed material - Unspecified - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	3	1	Salmonella Montevideo	1
	Pet food - Border Control Posts - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	6	0	Salmonella	0
	Pet food - dog snacks (pig ears, chewing bones) - Border Control Posts - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	3	0	Salmonella	0
	Pet food - dog snacks (pig ears, chewing bones) - Feed mill - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	5	1	Salmonella Derby	1
									Salmonella Livingstone	1
	Pet food - dog snacks (pig ears, chewing bones) - Retail - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	12	1	Salmonella Brandenburg	1
									Salmonella Idikan	1
	Pet food - dog snacks (pig ears, chewing bones) - Unspecified - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	1	0	Salmonella	0
	Pet food - dog snacks (pig ears, chewing bones) - Wholesale - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	7	0	Salmonella	0
	Pet food - Feed mill - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	38	1	Salmonella Onderstepoort	1
	Pet food - Retail - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	17	0	Salmonella	0
	Pet food - Unspecified - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	1	1	Salmonella Livingstone	1
							7	0	Salmonella	0
	Pet food - Wholesale - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	N_A	Not Available	25	0	Salmonella	0

Table Sarcocystis:SARCOCYSTIS in animal

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling Details	Method	Sampling unit	Total units tested	Total units positive	Zoonoses	N of units positive
Not Available	Cattle (bovine animals) - Slaughterhouse - Not Available - Not Available - Surveillance - Official sampling - Suspect sampling	N_A	Visual inspection	animal	840654	90	Sarcocystis	90

Table Staphylococcus:STAPHYLOCOCCUS AUREUS METICILLIN RESISTANT (MRSA) in animal

Area of sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Sampling Details	Method	Total Units Tested Attribute	Total Units Positive Attribute	Zoonoses	CC	Spa type	ML	Units positive
Not Available	Pigs - breeding animals - unspecified - sows - Farm - Belgium - animal sample - nasal swab - Monitoring - active - Official sampling - Objective sampling	herd/flock		Not Available	N_A	Not Available	179	83	Methicillin resistant Staphylococcus aureus (MRSA)	398	11	57	
											34	18	
											108	2	
											779	1	
											2346	1	
											2582	1	
											2922	1	
											3119	2	
	Pigs - fattening pigs - Farm - Belgium - animal sample - nasal swab - Monitoring - active - Official sampling - Objective sampling	herd/flock		Not Available	N_A	Not Available	180	105	Methicillin resistant Staphylococcus aureus (MRSA)	398	11	67	
											34	11	
											1451	2	
											1457	1	
											2346	1	
											2370	2	
											2383	1	
											3041	1	
											3119	1	
													18

Table Trichinella:TRICHINELLA in animal

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling Details	Method	Sampling unit	Total units tested	Total units positive	Zoonoses	N of units positive
Not Available	Pigs - breeding animals - not raised under controlled housing conditions - sows and boars - Slaughterhouse - Not Available - Not Available - Surveillance - Official sampling - Census	N_A	Magnetic stirrer method for pooled sample digestion	animal	3294615	0	Trichinella	0
	Pigs - fattening pigs - raised under controlled housing conditions - Slaughterhouse - Not Available - Not Available - Surveillance - Official sampling - Census	N_A	Magnetic stirrer method for pooled sample digestion	animal	4117021	0	Trichinella	0
	Solipeds, domestic - horses - Slaughterhouse - Not Available - Not Available - Surveillance - Official sampling - Census	N_A	Magnetic stirrer method for pooled sample digestion	animal	27669	0	Trichinella	0
	Wild boars - wild - Game handling establishment - Not Available - Not Available - Surveillance - Official sampling - Census	N_A	Magnetic stirrer method for pooled sample digestion	animal	27051	0	Trichinella	0

Table Yersinia:YERSINIA in food

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Sampling Details	Method	Total units tested	Total units positive	Zoonoses	N of units positive
Not Available	Meat from pig - carcase - Slaughterhouse - Not Available - food sample - carcase swabs - Surveillance - Official sampling - Objective sampling	single (food/feed)	600	Square centimetre	N_A	Not Available	118	2	Yersinia enterocolitica unspecified	2
	Meat from pig - meat preparation - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	1	Gram	N_A	Not Available	91	0	Yersinia enterocolitica unspecified	0

FOODBORNE OUTBREAKS TABLES

Foodborne Outbreaks: summarized data

when numbers referring to cases, hospitalized people and deaths are reported as unknown, they will be not included in the sum calculation

		Outbreak strenght	Strong			Weak			
Causative agent	Food vehicle	N outbreaks	N human cases	N hospitalized	N deaths	N outbreaks	N human cases	N hospitalized	N deaths
Arcobacter butzleri	Unknown					1	40	0	0
B. cereus enterotoxins	Mixed food					1	4	0	0
Campylobacter	Dairy products (other than cheeses)					1	2	0	0
Clostridium perfringens	Vegetables and juices and other products thereof					1	9	0	0
	Mixed food					1	27	0	0
Histamine	Fish and fish products					1	9	0	0
Listeria monocytogenes - serovar 4b	Bovine meat and products thereof					1	2	1	0
Listeria monocytogenes, unspecified	Cheese					1	2	1	0
Norovirus	Fish and fish products					1	20	0	0
	Mixed food					2	21	0	0
Salmonella	Mixed food					1	2	1	0
Salmonella Enteritidis	Mixed food	1	203	0	0				
	Unknown					1	2	2	0
Salmonella Poona	Milk	1	3	3	0				
Salmonella Virginia	Mixed food					1	6	0	0
Unknown	Milk					1	4	0	0
	Dairy products (other than cheeses)					7	20	0	0
	Cheese					4	11	0	0
	Eggs and egg products					3	6	0	0
	Bovine meat and products thereof					22	51	1	0
	Pig meat and products thereof					9	27	0	0
	Sheep meat and products thereof					1	10	0	0
	Other or mixed red meat and products thereof					13	42	0	0
	Broiler meat (Gallus gallus) and products thereof					14	52	1	0
	Other, mixed or unspecified poultry meat and products thereof					12	26	0	0
	Fish and fish products					20	50	0	0
	Crustaceans, shellfish, molluscs and products thereof					24	95	0	0
	Vegetables and juices and other products thereof					5	27	0	0
	Cereal products including rice and seeds/pulses (nuts, almonds)					4	13	0	0
	Fruit, berries and juices and other products thereof					2	4	0	0
	Drinks, including bottled water					3	6	0	0
	Sweets and chocolate					3	6	0	0
	Bakery products					10	42	2	0

Causative agent	Food vehicle	Outbreak strenght	Strong				Weak			
			N outbreaks	N human cases	N hospitalized	N deaths	N outbreaks	N human cases	N hospitalized	N deaths
Unknown	Other foods						1	2	0	0
	Mixed food						378	1,479	13	0
	Buffet meals						18	129	2	0
VTEC O26	Bovine meat and products thereof						1	3	1	0

Strong Foodborne Outbreaks: detailed data

Causative agent	H	AG	VT	Other Causative Agent	FBO nat. code	Outbreak type	Food vehicle	More food vehicle info	Nature of evidence	Setting	Place of origin of problem	Origin of food vehicle	Contributory factors	Comment	N outbreaks	N human cases	N hosp.	N deaths
Salmonella Enteritidis	unk	Not Available	Not Available	Not Available	1642	General	Mixed food	N_A	Detection of causative agent in food vehicle or its component - Symptoms and onset of illness pathognomonic to causative agent	School or kindergarten	Not Available	Spain	Not Available	N_A	1	203	0	0
Salmonella Poona	unk	Not Available	Not Available	Not Available	1510	General	Milk	N_A	Detection of causative agent in food vehicle or its component - Symptoms and onset of illness pathognomonic to causative agent	Household	Not Available	France	Not Available	N_A	1	3	3	0

Weak Foodborne Outbreaks: detailed data

Causative agent	H	AG	VT	Other Causative Agent	FBO nat. code	Outbreak type	Food vehicle	More food vehicle info	Nature of evidence	Setting	Place of origin of problem	Origin of food vehicle	Contributory factors	Comment	N outbreaks	N human cases	N hosp.	N deaths
Arcobacter butzleri	unk	Not Available	Not Available	Not Available	1607	General	Unknown	N_A	Descriptive environmental evidence	Restaurant or Cafe or Pub or Bar or Hotel or Catering service	Not Available	Not Available	Not Available	N_A	1	40	0	0
B. cereus enterotoxins	unk	Not Available	Not Available	Not Available	1622	Household	Mixed food	N_A	Descriptive environmental evidence	Restaurant or Cafe or Pub or Bar or Hotel or Catering service	Not Available	Not Available	Not Available	N_A	1	4	0	0
Campylobacter	unk	Not Available	Not Available	Not Available	1594	Household	Dairy products (other than cheeses)	N_A	Descriptive environmental evidence	Restaurant or Cafe or Pub or Bar or Hotel or Catering service	Not Available	Not Available	Not Available	N_A	1	2	0	0
Clostridium perfringens	unk	Not Available	Not Available	Not Available	1530	General	Mixed food	N_A	Descriptive environmental evidence	Residential institution (nursing home or prison or boarding school)	Not Available	Not Available	Not Available	N_A	1	27	0	0
					1690	Not Available	Vegetables and juices and other products thereof	N_A	Descriptive environmental evidence	Residential institution (nursing home or prison or boarding school)	Not Available	Not Available	Not Available	N_A	1	9	0	0
Histamine	unk	Not Available	Not Available	Not Available	1633	General	Fish and fish products	N_A	Descriptive environmental evidence	Restaurant or Cafe or Pub or Bar or Hotel or Catering service	Not Available	Not Available	Not Available	N_A	1	9	0	0
Listeria monocytogenes - serovar 4b	unk	Not Available	Not Available	Not Available	1587	Household	Bovine meat and products thereof	N_A	Detection of causative agent in food vehicle or its component - Symptoms and onset of illness pathognomonic to causative agent	Household	Not Available	Not Available	Not Available	N_A	1	2	1	0
Listeria monocytogenes, unspecified	unk	Not Available	Not Available	Not Available	1675	Not Available	Cheese	N_A	Descriptive environmental evidence	Household	Not Available	Not Available	Not Available	N_A	1	2	1	0

Causative agent	H	AG	VT	Other Causative Agent	FBO nat. code	Outbreak type	Food vehicle	More food vehicle info	Nature of evidence	Setting	Place of origin of problem	Origin of food vehicle	Contributory factors	Comment	N outbreaks	N human cases	N hosp.	N deaths
Norovirus	unk	Not Available	Not Available	Not Available	1509	General	Fish and fish products	N_A	Detection of causative agent in food vehicle or its component - Symptoms and onset of illness pathognomonic to causative agent	Restaurant or Cafe or Pub or Bar or Hotel or Catering service	Not Available	Not Available	Not Available	N_A	1	20	0	0
					1563	General	Mixed food	N_A	Unknown	Restaurant or Cafe or Pub or Bar or Hotel or Catering service	Not Available	Not Available	Not Available	N_A	1	17	0	0
					1643	General	Mixed food	N_A	Descriptive environmental evidence	Residential institution (nursing home or prison or boarding school)	Not Available	Not Available	Not Available	N_A	1	4	0	0
Salmonella	unk	Not Available	Not Available	Not Available	1583	General	Mixed food	N_A	Descriptive environmental evidence	Restaurant or Cafe or Pub or Bar or Hotel or Catering service	Not Available	Not Available	Not Available	N_A	1	2	1	0
Salmonella Enteritidis	unk	Not Available	Not Available	Not Available	1591	Household	Unknown	N_A	Descriptive environmental evidence	Household	Not Available	Not Available	Not Available	N_A	1	2	2	0
Salmonella Virginia	unk	Not Available	Not Available	Not Available	1578	General	Mixed food	N_A	Descriptive environmental evidence	Residential institution (nursing home or prison or boarding school)	Not Available	Not Available	Not Available	N_A	1	6	0	0
Unknown	unk	Not Available	Not Available	Not Available	1577	Not Available	Milk	N_A	Unknown	Hospital or medical care facility	Not Available	Not Available	Not Available	N_A	1	4	0	0
					1641	Not Available	Vegetables and juices and other products thereof	N_A	Unknown	School or kindergarten	Not Available	Not Available	Not Available	N_A	1	5	0	0
					1654	Not Available	Sheep meat and products thereof	N_A	Unknown	Take-away or fast-food outlet	Not Available	Not Available	Not Available	N_A	1	10	0	0
					2019/0450	Not Available	Other foods	N_A	Unknown	Household	Not Available	Not Available	Not Available	N_A	1	2	0	0
					N_A	Not Available	Dairy products (other than cheeses)	N_A	Unknown	Not Available	Not Available	Not Available	Not Available	N_A	7	20	0	0
							Cheese	N_A	Unknown	Not Available	Not Available	Not Available	Not Available	N_A	4	11	0	0
							Eggs and egg products	N_A	Unknown	Not Available	Not Available	Not Available	Not Available	N_A	3	6	0	0
							Bovine meat and products thereof	N_A	Unknown	Not Available	Not Available	Not Available	Not Available	N_A	22	51	1	0

Causative agent	H	AG	VT	Other Causative Agent	FBO nat. code	Outbreak type	Food vehicle	More food vehicle info	Nature of evidence	Setting	Place of origin of problem	Origin of food vehicle	Contributory factors	Comment	N outbreaks	N human cases	N hosp.	N deaths
Unknown	unk	Not Available	Not Available	Not Available	N_A	Not Available	Pig meat and products thereof	N_A	Unknown	Not Available	Not Available	Not Available	Not Available	N_A	9	27	0	0
							Other or mixed red meat and products thereof	N_A	Unknown	Not Available	Not Available	Not Available	Not Available	N_A	13	42	0	0
							Broiler meat (Gallus gallus) and products thereof	N_A	Unknown	Not Available	Not Available	Not Available	Not Available	N_A	14	52	1	0
							Other, mixed or unspecified poultry meat and products thereof	N_A	Unknown	Not Available	Not Available	Not Available	Not Available	N_A	12	26	0	0
							Fish and fish products	N_A	Unknown	Not Available	Not Available	Not Available	Not Available	N_A	20	50	0	0
							Crustaceans, shellfish, molluscs and products thereof	N_A	Unknown	Not Available	Not Available	Not Available	Not Available	N_A	24	95	0	0
							Vegetables and juices and other products thereof	N_A	Unknown	Not Available	Not Available	Not Available	Not Available	N_A	4	22	0	0
							Cereal products including rice and seeds/pulses (nuts, almonds)	N_A	Unknown	Not Available	Not Available	Not Available	Not Available	N_A	4	13	0	0
							Fruit, berries and juices and other products thereof	N_A	Unknown	Not Available	Not Available	Not Available	Not Available	N_A	2	4	0	0
							Drinks, including bottled water	N_A	Unknown	Not Available	Not Available	Not Available	Not Available	N_A	3	6	0	0
							Sweets and chocolate	N_A	Unknown	Household	Not Available	Not Available	Not Available	N_A	3	6	0	0
							Bakery products	N_A	Unknown	Not Available	Not Available	Not Available	Not Available	N_A	10	42	2	0
							Mixed food	N_A	Unknown	Not Available	Not Available	Not Available	Not Available	N_A	378	1,479	13	0
							Buffet meals	N_A	Unknown	Not Available	Not Available	Not Available	Not Available	N_A	18	129	2	0
VTEC O26	unk	eae positive	VT2a	Not Available	1537	Household	Bovine meat and products thereof	N_A	Descriptive environmental evidence	Household	Not Available	Not Available	Not Available	N_A	1	3	1	0

ANTIMICROBIAL RESISTANCE TABLES FOR CAMPYLOBACTER

Table Antimicrobial susceptibility testing of Campylobacter jejuni in Meat from broilers (Gallus gallus) - fresh

Sampling Stage: Processing plant | Sampling Type: food sample | Sampling Context: Monitoring

Sampler: Official sampling | Sampling Strategy: Objective sampling | Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Italy

Sampling details:

	AM substance	Ciprofloxacin	Erythromycin	Gentamicin	Nalidixic acid	Streptomycin	Tetracycline
	ECOFF	**0.5**	**4**	**2**	**16**	**4**	**1**
	Lowest limit	**0.12**	**1**	**0.12**	**1**	**0.25**	**0.5**
	Highest limit	**16**	**128**	**16**	**64**	**16**	**64**
	N of tested isolates	**1**	**1**	**1**	**1**	**1**	**1**
MIC	**N of resistant isolates**	**1**	**0**	**0**	**1**	**0**	**1**
<=0.12				1			
0.5						1	
<=1			1				
16		1					
>64					1		1

Table Antimicrobial susceptibility testing of Campylobacter jejuni in Meat from broilers (Gallus gallus) - fresh

Sampling Stage: Processing plant

Sampling Type: food sample

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Netherlands

Sampling details:

	AM substance	Ciprofloxacin	Erythromycin	Gentamicin	Nalidixic acid	Streptomycin	Tetracycline
	ECOFF	**0.5**	**4**	**2**	**16**	**4**	**1**
	Lowest limit	**0.12**	**1**	**0.12**	**1**	**0.25**	**0.5**
	Highest limit	**16**	**128**	**16**	**64**	**16**	**64**
	N of tested isolates	**3**	**3**	**3**	**3**	**3**	**3**
MIC	**N of resistant isolates**	**2**	**0**	**0**	**2**	**0**	**3**
<=0.12				3			
0.25		1					
0.5						3	
<=1			3				
4					1		
8		2					
16							1
>64					2		2

Table Antimicrobial susceptibility testing of Campylobacter jejuni in Meat from broilers (Gallus gallus) - fresh

Sampling Stage: Processing plant

Sampling Type: food sample

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Poland

Sampling details:

	AM substance	Ciprofloxacin	Erythromycin	Gentamicin	Nalidixic acid	Streptomycin	Tetracycline
	ECOFF	**0.5**	**4**	**2**	**16**	**4**	**1**
	Lowest limit	**0.12**	**1**	**0.12**	**1**	**0.25**	**0.5**
	Highest limit	**16**	**128**	**16**	**64**	**16**	**64**
	N of tested isolates	**2**	**2**	**2**	**2**	**2**	**2**
MIC	**N of resistant isolates**	**2**	**0**	**0**	**2**	**1**	**1**
<=0.12				2			
<=0.5							1
0.5						1	
<=1			2				
8		2					
16						1	
>64					2		1

Table Antimicrobial susceptibility testing of Campylobacter jejuni in Meat from broilers (Gallus gallus) - fresh

Sampling Stage: Processing plant

Sampling Type: food sample

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Belgium

Sampling details:

	AM substance	Ciprofloxacin	Erythromycin	Gentamicin	Nalidixic acid	Streptomycin	Tetracycline
	ECOFF	**0.5**	**4**	**2**	**16**	**4**	**1**
	Lowest limit	**0.12**	**1**	**0.12**	**1**	**0.25**	**0.5**
	Highest limit	**16**	**128**	**16**	**64**	**16**	**64**
	N of tested isolates	**47**	**47**	**47**	**47**	**47**	**47**
MIC	**N of resistant isolates**	**39**	**0**	**0**	**38**	**8**	**29**
<=0.12		7		32			
<=0.25						5	
0.25		1		14			
<=0.5							18
0.5				1		26	
<=1			36				
1						7	
2			10		2	1	
4			1		3		
8		9			3	1	
16		21			1	1	1
>16		9				6	
64					4		3
>64					34		25

Table Antimicrobial susceptibility testing of Campylobacter jejuni in Meat from broilers (Gallus gallus) - fresh

Sampling Stage: Processing plant

Sampling Type: food sample

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Unknown

Sampling details:

	AM substance	Ciprofloxacin	Erythromycin	Gentamicin	Nalidixic acid	Streptomycin	Tetracycline
	ECOFF	**0.5**	**4**	**2**	**16**	**4**	**1**
	Lowest limit	**0.12**	**1**	**0.12**	**1**	**0.25**	**0.5**
	Highest limit	**16**	**128**	**16**	**64**	**16**	**64**
	N of tested isolates	**17**	**17**	**17**	**17**	**17**	**17**
MIC	**N of resistant isolates**	**10**	**0**	**0**	**9**	**4**	**10**
<=0.12		5		13			
<=0.25						3	
0.25		2		4			
<=0.5							6
0.5						8	
<=1			15				
1						2	1
2					2		
4		1	2		4		
8		2			2	1	
16		4					
>16		3				3	
64							1
>64					9		9

Table Antimicrobial susceptibility testing of Campylobacter jejuni in Meat from broilers (Gallus gallus) - fresh

Sampling Stage: Processing plant

Sampling Type: food sample

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: France

Sampling details:

	AM substance	Ciprofloxacin	Erythromycin	Gentamicin	Nalidixic acid	Streptomycin	Tetracycline
	ECOFF	**0.5**	**4**	**2**	**16**	**4**	**1**
	Lowest limit	**0.12**	**1**	**0.12**	**1**	**0.25**	**0.5**
	Highest limit	**16**	**128**	**16**	**64**	**16**	**64**
	N of tested isolates	**8**	**8**	**8**	**8**	**8**	**8**
MIC	**N of resistant isolates**	**6**	**0**	**0**	**5**	**0**	**4**
<=0.12		2		3			
<=0.25						2	
0.25				5			
<=0.5							4
0.5						4	
<=1			5				
1						2	
2			3		2		
4					1		
16		3					
>16		3					
64							1
>64					5		3

Table Antimicrobial susceptibility testing of Campylobacter jejuni in Meat from broilers (Gallus gallus) - meat preparation

Sampling Stage: Processing plant

Sampling Type: food sample

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Unknown

Sampling details:

	AM substance	Ciprofloxacin	Erythromycin	Gentamicin	Nalidixic acid	Streptomycin	Tetracycline
	ECOFF	**0.5**	**4**	**2**	**16**	**4**	**1**
	Lowest limit	**0.12**	**1**	**0.12**	**1**	**0.25**	**0.5**
	Highest limit	**16**	**128**	**16**	**64**	**16**	**64**
	N of tested isolates	**1**	**1**	**1**	**1**	**1**	**1**
MIC	**N of resistant isolates**	**1**	**0**	**0**	**1**	**1**	**1**
<=0.12				1			
<=1			1				
>16		1				1	
>64					1		1

Table Antimicrobial susceptibility testing of Campylobacter jejuni in Meat from broilers (Gallus gallus) - meat preparation

Sampling Stage: Retail

Sampling Type: food sample

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Unknown

Sampling details:

	AM substance	Ciprofloxacin	Erythromycin	Gentamicin	Nalidixic acid	Streptomycin	Tetracycline
	ECOFF	**0.5**	**4**	**2**	**16**	**4**	**1**
	Lowest limit	**0.12**	**1**	**0.12**	**1**	**0.25**	**0.5**
	Highest limit	**16**	**128**	**16**	**64**	**16**	**64**
	N of tested isolates	**3**	**3**	**3**	**3**	**3**	**3**
MIC	**N of resistant isolates**	**2**	**0**	**0**	**2**	**0**	**1**
<=0.12		1		2			
0.25				1			
<=0.5							2
0.5						2	
<=1			3				
1						1	
4					1		
16		1					
>16		1					
>64					2		1

Table Antimicrobial susceptibility testing of Campylobacter jejuni in Meat from poultry, unspecified - fresh

Sampling Stage: Retail

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Unknown

Sampling details:

	AM substance	Ciprofloxacin	Erythromycin	Gentamicin	Nalidixic acid	Streptomycin	Tetracycline
	ECOFF	**0.5**	**4**	**2**	**16**	**4**	**1**
	Lowest limit	**0.12**	**1**	**0.12**	**1**	**0.25**	**0.5**
	Highest limit	**16**	**128**	**16**	**64**	**16**	**64**
	N of tested isolates	**8**	**8**	**8**	**8**	**8**	**8**
MIC	**N of resistant isolates**	**4**	**0**	**0**	**4**	**1**	**3**
<=0.12		4		4			
<=0.25						1	
0.25				3			
<=0.5							5
0.5				1		3	
<=1			8				
1		1				2	
2					2	1	
4					2		
8		2					
16		1					
>16						1	
64					1		
>64					3		3

ANTIMICROBIAL RESISTANCE TABLES FOR SALMONELLA

Table Antimicrobial susceptibility testing of Salmonella 1,4,12:i:- in Meat from pig - carcase

Sampling Stage: Slaughterhouse

Sampling Type: food sample - carcase swabs

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method:

Country of Origin: Belgium

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**12**	**12**	**12**	**12**	**12**	**12**	**12**	**12**	**12**	**12**	**12**	**12**	**12**	**12**
MIC	**N of resistant isolates**	**7**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**10**	**10**	**0**	**3**
<=0.015							1								
<=0.03										9					
0.03							10								
0.064										3					
<=0.25				12										8	9
0.25							1								
<=0.5					12				12						
0.5														4	
<=1		4						2							
<=2													2		
2		1						10							
<=4											10				
4			4												
<=8						12									
8			8								1				
32											1	2			
>32															3
>64		7											10		
>1024												10			

Table Antimicrobial susceptibility testing of Salmonella 1,4,12:i:- in Meat from pig - carcase

Sampling Stage: Slaughterhouse

Sampling Type: food sample - carcase swabs

Sampling Context: Monitoring

Sampler: HACCP and own check

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method:

Country of Origin: Belgium

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**10**	**10**	**10**	**10**	**10**	**10**	**10**	**10**	**10**	**10**	**10**	**10**	**10**	**10**
MIC	**N of resistant isolates**	**9**	**0**	**0**	**0**	**1**	**0**	**2**	**0**	**0**	**0**	**10**	**7**	**0**	**3**
<=0.015							3								
<=0.03										10					
0.03							6								
0.064							1								
<=0.25				10										4	7
<=0.5					10				10						
0.5														5	
<=1								3							
1														1	
<=2			1										3		
2		1						5							
<=4											9				
4			5					2							
<=8						8									
8			4								1				
16						1									
32													1		
>32															3
>64		9											6		
>128						1									
>1024												10			

Table Antimicrobial susceptibility testing of Salmonella 1,4,12:i:- in Meat from pig

Sampling Stage: Processing plant

Sampling Type: food sample

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Unknown

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**4**	**4**	**4**	**4**	**4**	**4**	**4**	**4**	**4**	**4**	**4**	**4**	**4**	**4**
MIC	**N of resistant isolates**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**2**	**0**	**0**
<=0.015							1								
<=0.03										4					
0.03							3								
<=0.25				4										2	3
<=0.5					4				4						
0.5														2	1
<=2													2		
2								4							
<=4											3				
4			2												
<=8						4									
8			2								1				
>64		4											2		
>1024												4			

Table Antimicrobial susceptibility testing of Salmonella 1,4,12:i:- in Meat from bovine animals - carcase

Sampling Stage: Slaughterhouse

Sampling Type: food sample - carcase swabs

Sampling Context: Monitoring

Sampler: HACCP and own check

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method:

Country of Origin: Belgium

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
MIC	**N of resistant isolates**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**1**	**0**	**0**
<=0.03										1					
0.03							1								
<=0.25				1										1	1
<=0.5					1				1						
<=4											1				
4			1					1							
<=8						1									
>64		1											1		
>1024												1			

Table Antimicrobial susceptibility testing of Salmonella 1,4,5,12:i:- in Meat from broilers (Gallus gallus) - mechanically separated meat (MSM)

Sampling Stage: Processing plant

Sampling Type: food sample

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Unknown

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	8	16	0.5	2	16	0.064	2	2	0.125	16	256	8	1	2
	Lowest limit	1	2	0.25	0.5	8	0.015	1	0.5	0.03	4	8	2	0.25	0.25
	Highest limit	64	64	4	8	128	8	16	32	16	128	1024	64	8	32
	N of tested isolates	1	1	1	1	1	1	1	1	1	1	1	1	1	1
MIC	N of resistant isolates	1	0	0	0	0	0	0	0	0	0	1	1	0	0
<=0.03										1					
0.03							1								
<=0.25				1											1
<=0.5					1				1						
0.5														1	
2								1							
<=4											1				
<=8						1									
16			1												
>64		1											1		
>1024												1			

Table Antimicrobial susceptibility testing of Salmonella 1,4,5,12:i:- in Meat from pig - carcase

Sampling Stage: Slaughterhouse

Sampling Type: food sample - carcase swabs

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method:

Country of Origin: Belgium

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**9**	**9**	**9**	**9**	**9**	**9**	**9**	**9**	**9**	**9**	**9**	**9**	**9**	**9**
MIC	**N of resistant isolates**	**8**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**8**	**6**	**0**	**2**
<=0.03										9					
0.03							8								
0.064							1								
<=0.25				9										5	7
<=0.5					8				8						
0.5														4	
<=1		1						3							
1									1						
<=2													2		
2					1			6							
<=4											7				
4			3										1		
<=8						8									
8			6								2				
>32															2
64												1			
>64		8											6		
128						1									
>1024												8			

Table Antimicrobial susceptibility testing of Salmonella 1,4,5,12:i:- in Meat from pig - carcase

Sampling Stage: Slaughterhouse

Sampling Type: food sample - carcase swabs

Sampling Context: Monitoring

Sampler: HACCP and own check

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method:

Country of Origin: Belgium

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**
MIC	**N of resistant isolates**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**1**	**0**	**0**
<=0.03										2					
0.03							3								
0.064										1					
<=0.25				3										2	3
<=0.5					3				3						
0.5														1	
<=2													2		
2								3							
<=4											2				
4			2												
<=8						3									
8			1								1				
>64		3											1		
>1024												3			

Table Antimicrobial susceptibility testing of Salmonella 1,4,5,12:i:- in Other food

Sampling Stage: Unspecified

Sampling Type: food sample

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Unknown

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
MIC	**N of resistant isolates**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**0**
<=0.03										1					
0.03							1								
<=0.25				1											1
<=0.5					1				1						
0.5														1	
2								1							
<=8						1									
8			1								1				
>64		1											1		
>1024												1			

Table Antimicrobial susceptibility testing of Salmonella Agona in Other feed material

Sampling Stage: Processing plant

Sampling Type: feed sample

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Germany

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
<=0.015							1								
<=0.03										1					
<=0.25				1										1	1
<=0.5					1				1						
<=1		1													
<=2													1		
2								1							
<=4											1				
4			1												
<=8						1									
64												1			

Table Antimicrobial susceptibility testing of Salmonella Agona in Complementary feedingstuffs

Sampling Stage: Retail

Sampling Type: feed sample

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: New Zealand

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
<=0.015							2								
<=0.03										2					
<=0.25				2										1	2
<=0.5					2				2						
0.5														1	
<=1		2													
<=2													2		
2								2							
<=4											2				
4			1												
<=8						2									
8			1												
32												1			
64												1			

Table Antimicrobial susceptibility testing of Salmonella Brandenburg in Meat from pig - carcase

Sampling Stage: Slaughterhouse

Sampling Type: food sample - carcase swabs

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method:

Country of Origin: Belgium

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
<=0.015							1								
<=0.03										1					
<=0.25				1										1	1
<=0.5					1				1						
<=1		1													
<=2													1		
2								1							
<=4											1				
4			1												
<=8						1									
64												1			

Table Antimicrobial susceptibility testing of Salmonella Brandenburg in Meat from pig - carcase

Sampling Stage: Slaughterhouse

Sampling Type: food sample - carcase swabs

Sampling Context: Monitoring

Sampler: HACCP and own check

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method:

Country of Origin: Belgium

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
<=0.015							1								
<=0.03										1					
<=0.25				1										1	1
<=0.5					1				1						
<=1		1													
<=2													1		
2								1							
<=4											1				
<=8						1									
8			1												
32												1			

Table Antimicrobial susceptibility testing of Salmonella Brandenburg in Other feed material

Sampling Stage: Processing plant

Sampling Type: feed sample

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Unknown

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
<=0.015							1								
<=0.03										1					
<=0.25															1
<=0.5					1				1						
0.5				1										1	
<=2													1		
2		1						1							
<=4											1				
<=8						1									
8			1												
64												1			

Table Antimicrobial susceptibility testing of Salmonella Brandenburg in Complementary feedingstuffs

Sampling Stage: Processing plant

Sampling Type: feed sample

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Unknown

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
<=0.015							1								
<=0.03										1					
<=0.25				1											1
<=0.5					1										
0.5														1	
1									1						
<=2													1		
2		1						1							
<=4											1				
<=8						1									
8			1												
64												1			

Table Antimicrobial susceptibility testing of Salmonella Brandenburg in Complementary feedingstuffs

Sampling Stage: Retail

Sampling Type: feed sample

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: New Zealand

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
<=0.015							1								
<=0.03										2					
0.03							1								
<=0.25				2										1	2
<=0.5					2				2						
0.5														1	
<=1		1													
<=2													2		
2		1						2							
<=4											2				
<=8						2									
8			2												
32												1			
64												1			

Table Antimicrobial susceptibility testing of Salmonella Derby in Meat from pig - carcase

Sampling Stage: Slaughterhouse

Sampling Type: food sample - carcase swabs

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method:

Country of Origin: Belgium

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**8**	**8**	**8**	**8**	**8**	**8**	**8**	**8**	**8**	**8**	**8**	**8**	**8**	**8**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**0**
<=0.015							5								
<=0.03										8					
0.03							3								
<=0.25				8										5	5
<=0.5					8				8						
0.5														3	3
<=1		7						2							
<=2													7		
2		1						6							
<=4											8				
4			6												
<=8						8									
8			2												
32												1			
64												6			
>64													1		
>1024												1			

Table Antimicrobial susceptibility testing of Salmonella Derby in Meat from pig - carcase

Sampling Stage: Slaughterhouse

Sampling Type: food sample - carcase swabs

Sampling Context: Monitoring

Sampler: HACCP and own check

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method:

Country of Origin: Belgium

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**13**	**13**	**13**	**13**	**13**	**13**	**13**	**13**	**13**	**13**	**13**	**13**	**13**	**13**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
<=0.015							10								
<=0.03										13					
0.03							3								
<=0.25				13										8	7
<=0.5					13				13						
0.5														5	6
<=1		11													
<=2													13		
2		2						12							
<=4											13				
4			7					1							
<=8						12									
8			6												
16						1						1			
32												3			
64												7			
128												2			

Table Antimicrobial susceptibility testing of Salmonella Derby in Other feed material

Sampling Stage: Processing plant

Sampling Type: feed sample

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Unknown

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**2**	**0**	**0**
<=0.015							1								
<=0.03										2					
0.03							1								
<=0.25				2											1
<=0.5					2				1						
0.5														2	1
<=1		2						1							
2								1	1						
<=4											2				
8			1												
16			1			2									
64												1	1		
>64													1		
>1024												1			

Table Antimicrobial susceptibility testing of Salmonella Derby in Complementary feedingstuffs

Sampling Stage: Retail

Sampling Type: feed sample

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: New Zealand

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
<=0.015							2								
<=0.03										2					
<=0.25				2										2	2
<=0.5					2				2						
<=1		2						1							
<=2													2		
2								1							
<=4											2				
4			2												
<=8						2									
32												2			

Table Antimicrobial susceptibility testing of Salmonella enterica, subspecies enterica in Meat from pig - carcase

Sampling Stage: Slaughterhouse

Sampling Type: food sample - carcase swabs

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method:

Country of Origin: Belgium

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**
MIC	**N of resistant isolates**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**
<=0.015							1								
<=0.03										2					
0.03							1								
<=0.25				2										2	1
<=0.5					2				2						
<=1		1						1							
<=2													1		
2								1							
<=4											2				
4			1												
<=8						1									
8			1												
16													1		
32												1			
>32															1
64												1			
>64		1													
128						1									

Table Antimicrobial susceptibility testing of Salmonella enterica, subspecies enterica in Other feed material

Sampling Stage: Processing plant

Sampling Type: feed sample

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Germany

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
<=0.015							1								
<=0.03										1					
<=0.25				1										1	
<=0.5					1				1						
0.5															1
<=1		1													
<=2													1		
2								1							
<=4											1				
4			1												
<=8						1									
32												1			

Table Antimicrobial susceptibility testing of Salmonella enterica, subspecies enterica in Meat from broilers (Gallus gallus) - meat preparation

Sampling Stage: Processing plant

Sampling Type: food sample

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Netherlands

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
MIC	**N of resistant isolates**	**1**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**1**
<=0.03										1					
<=0.25				1											
<=0.5					1				1						
0.5							1							1	
4								1					1		
<=8						1									
8			1												
32												1			
>32															1
>64		1													
>128											1				

Table Antimicrobial susceptibility testing of Salmonella enterica, subspecies enterica in Meat from broilers (Gallus gallus) - meat preparation

Sampling Stage: Processing plant

Sampling Type: food sample

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Belgium

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**
MIC	**N of resistant isolates**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**1**	**0**	**1**
<=0.015							2								
<=0.03										2					
<=0.25				2											1
<=0.5					2				2						
0.5														2	
<=2													1		
2								2							
<=4											2				
<=8						2									
8			2												
>32															1
>64		2											1		
>1024												2			

Table Antimicrobial susceptibility testing of Salmonella enterica, subspecies enterica in Other food

Sampling Stage: Unspecified

Sampling Type: food sample

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Spain

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
<=0.03										1					
0.03							1								
<=0.25				1										1	1
<=0.5					1				1						
<=1		1													
<=2													1		
2								1							
<=4											1				
<=8						1									
8			1												
64												1			

Table Antimicrobial susceptibility testing of Salmonella enterica, subspecies enterica in Meat from broilers (Gallus gallus) - carcase - spent hens

Sampling Stage: Slaughterhouse

Sampling Type: food sample - carcase swabs

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Belgium

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
0.03							1								
0.064										1					
<=0.25				1											
<=0.5					1										
0.5														1	1
<=2													1		
2		1						1	1						
<=4											1				
8			1												
16						1									
256												1			

Table Antimicrobial susceptibility testing of Salmonella Enteritidis in Meat from broilers (Gallus gallus) - mechanically separated meat (MSM)

Sampling Stage: Processing plant

Sampling Type: food sample

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Unknown

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**1**	**1**	**0**	**1**
<=0.03										1					
<=0.25				1										1	
0.25							1								
<=0.5					1				1						
<=1		1						1							
4			1												
<=8						1									
>32															1
>64													1		
>128											1				
>1024												1			

Table Antimicrobial susceptibility testing of Salmonella Enteritidis in Complementary feedingstuffs

Sampling Stage: Processing plant

Sampling Type: feed sample

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Unknown

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
<=0.03										1					
0.03							1								
<=0.25				1										1	1
<=0.5					1				1						
<=2													1		
2		1													
<=4											1				
4			1					1							
32						1						1			

Table Antimicrobial susceptibility testing of Salmonella Enteritidis in Meat from broilers (Gallus gallus) - carcase - spent hens

Sampling Stage: Slaughterhouse

Sampling Type: food sample - carcase swabs

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Netherlands

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
0.03							1								
0.064										1					
<=0.25				1											
<=0.5					1				1						
0.5														1	
1															1
2		1													
<=4											1				
4													1		
<=8						1									
8			1					1							
64												1			

Table Antimicrobial susceptibility testing of Salmonella Enteritidis in Meat from broilers (Gallus gallus) - carcase - spent hens

Sampling Stage: Slaughterhouse

Sampling Type: food sample - carcase swabs

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Belgium

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**0**	**1**	**2**	**0**	**0**	**1**	**0**	**0**	**0**	**0**
<=0.03										2					
0.03							1								
<=0.25				2										1	2
<=0.5					2				2						
0.5							1							1	
<=1	1														
<=2													2		
2	1														
<=4											1				
4			1					2							
<=8						2									
8			1												
64												2			
>128											1				

Table Antimicrobial susceptibility testing of Salmonella Enteritidis in Meat from broilers (Gallus gallus) - carcase - spent hens

Sampling Stage: Slaughterhouse

Sampling Type: food sample - carcase swabs

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Germany

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
<=0.015							1								
<=0.03										1					
<=0.25				1										1	1
<=0.5					1				1						
<=2													1		
2		1													
<=4											1				
4			1					1							
<=8						1									
64												1			

Table Antimicrobial susceptibility testing of Salmonella Give in Meat from pig - carcase

Sampling Stage: Slaughterhouse

Sampling Type: food sample - carcase swabs

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method:

Country of Origin: Belgium

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
<=0.03										1					
0.03							1								
<=0.25				1										1	
<=0.5					1				1						
0.5															1
<=1		1													
<=2													1		
2								1							
<=4											1				
4			1												
<=8						1									
128												1			

Table Antimicrobial susceptibility testing of Salmonella Give in Meat from broilers (Gallus gallus) - meat preparation

Sampling Stage: Processing plant

Sampling Type: food sample

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Hungary

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
MIC	**N of resistant isolates**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**0**
<=0.03										1					
0.064							1								
<=0.25				1										1	
<=0.5					1				1						
<=2													1		
2								1							1
<=8						1									
8			1												
16		1													
32											1				
>1024												1			

Table Antimicrobial susceptibility testing of Salmonella Goldcoast in Meat from pig - carcase

Sampling Stage: Slaughterhouse

Sampling Type: food sample - carcase swabs

Sampling Context: Monitoring

Sampler: HACCP and own check

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method:

Country of Origin: Belgium

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
<=0.03										1					
0.03							1								
<=0.25				1											1
<=0.5					1				1						
0.5														1	
<=2													1		
2								1							
4		1													
<=8						1									
8											1				
16			1												
64												1			

Table Antimicrobial susceptibility testing of Salmonella Idikan in Other feed material

Sampling Stage: Processing plant

Sampling Type: feed sample

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Belgium

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
<=0.03										1					
0.03							1								
<=0.25				1										1	1
<=0.5					1				1						
<=1		1													
<=2													1		
2								1							
<=4											1				
4			1												
<=8						1									
64												1			

Table Antimicrobial susceptibility testing of Salmonella Idikan in Other feed material

Sampling Stage: Processing plant

Sampling Type: feed sample

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Unknown

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
<=0.015							2								
<=0.03										2					
<=0.25				2											2
<=0.5					2				2						
0.5														2	
<=1		2						2							
<=2													2		
<=4											2				
4			2												
<=8						2									
64												2			

Table Antimicrobial susceptibility testing of Salmonella Indiana in Other food

Sampling Stage: Unspecified

Sampling Type: food sample

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Unknown

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**
<=0.03										1					
<=0.25				1											1
0.25							1								
<=0.5					1				1						
0.5														1	
<=1		1													
<=2													1		
2								1							
<=8						1									
8			1												
16												1			
>128											1				

Table Antimicrobial susceptibility testing of Salmonella Infantis in Meat from broilers (Gallus gallus) - mechanically separated meat (MSM)

Sampling Stage: Processing plant

Sampling Type: food sample

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Unknown

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**
MIC	**N of resistant isolates**	**1**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**2**	**2**	**2**	**0**	**2**
<=0.03										2					
<=0.25				2											
0.25							2								
<=0.5					2				2						
0.5														1	
1														1	
2		1						2							
4			1												
<=8						2									
16			1												
>32															2
>64		1											2		
128											1				
>128											1				
>1024												2			

Table Antimicrobial susceptibility testing of Salmonella Infantis in Meat from pig - carcase

Sampling Stage: Slaughterhouse

Sampling Type: food sample - carcase swabs

Sampling Context: Monitoring

Sampler: HACCP and own check

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method:

Country of Origin: Belgium

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
<=0.03										1					
0.03							1								
<=0.25				1										1	
<=0.5					1				1						
0.5															1
<=1		1													
<=2													1		
2								1							
<=4											1				
<=8						1									
8			1												
64												1			

Table Antimicrobial susceptibility testing of Salmonella Infantis in Other feed material

Sampling Stage: Processing plant

Sampling Type: feed sample

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Germany

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
<=0.03										2					
0.03							2								
<=0.25				2										1	1
<=0.5					2				2						
0.5														1	1
<=1		2													
<=2													2		
2								2							
<=4											2				
4			2												
<=8						2									
32												1			
64												1			

Table Antimicrobial susceptibility testing of Salmonella Infantis in Meat from broilers (Gallus gallus) - meat preparation

Sampling Stage: Processing plant

Sampling Type: food sample

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Netherlands

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**1**	**1**	**0**	**1**
<=0.03										1					
<=0.25				1											
0.25							1								
<=0.5					1				1						
1														1	
2		1						1							
<=8						1									
8			1												
>32															1
>64													1		
>128											1				
>1024												1			

Table Antimicrobial susceptibility testing of Salmonella Infantis in Meat from broilers (Gallus gallus) - meat preparation

Sampling Stage: Processing plant

Sampling Type: food sample

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Poland

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**1**	**1**	**0**	**0**
<=0.03										1					
<=0.25				1											1
<=0.5									1						
1					1		1							1	
2		1						1							
8			1												
16						1									
>64													1		
>128											1				
>1024												1			

Table Antimicrobial susceptibility testing of Salmonella Infantis in Meat from broilers (Gallus gallus) - meat preparation

Sampling Stage: Processing plant

Sampling Type: food sample

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Belgium

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**14**	**14**	**14**	**14**	**14**	**14**	**14**	**14**	**14**	**14**	**14**	**14**	**14**	**14**
MIC	**N of resistant isolates**	**6**	**0**	**0**	**0**	**0**	**14**	**0**	**0**	**0**	**14**	**10**	**9**	**0**	**8**
<=0.03										13					
0.064										1					
<=0.25				14											5
0.25							10								
<=0.5					14				14						
0.5							4							11	1
<=1		3						1							
1														3	
<=2													5		
2		4						13							
4		1	4												
<=8						12									
8			9												
16			1			2									
32		2										4			
>32															8
64		2											1		
>64		2											8		
128											7				
>128											7				
>1024												10			

Table Antimicrobial susceptibility testing of Salmonella Infantis in Meat from broilers (Gallus gallus) - meat preparation

Sampling Stage: Processing plant

Sampling Type: food sample

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Unknown

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**
MIC	**N of resistant isolates**	**2**	**0**	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**5**	**5**	**4**	**0**	**1**
<=0.03										6					
0.03							1								
<=0.25				6											3
0.25							1								
<=0.5					6				6						
0.5							3							5	2
<=1	1														
1							1							1	
<=2													2		
2	3							6							
<=4											1				
4		2													
<=8						5									
8		3													
16		1				1									
>32															1
64												1			
>64	2												4		
>128											5				
>1024												5			

Table Antimicrobial susceptibility testing of Salmonella Infantis in Meat from broilers (Gallus gallus) - meat preparation

Sampling Stage: Processing plant

Sampling Type: food sample

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: France

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
MIC	**N of resistant isolates**	**1**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**0**
<=0.03										1					
<=0.25				1											
<=0.5					1				1						
0.5							1							1	1
<=2													1		
2								1							
4			1												
<=8						1									
>64		1													
>128											1				
>1024												1			

Table Antimicrobial susceptibility testing of Salmonella Infantis in Meat from broilers (Gallus gallus) - meat preparation

Sampling Stage: Retail

Sampling Type: food sample

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Unknown

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
MIC	**N of resistant isolates**	**1**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**1**	**1**	**0**	**0**
<=0.03										1					
<=0.25				1											1
0.25							1								
<=0.5					1				1						
0.5														1	
2								1							
4			1												
<=8						1									
>64		1											1		
>128											1				
>1024												1			

Table Antimicrobial susceptibility testing of Salmonella Infantis in Meat from poultry, unspecified - meat preparation - intended to be eaten cooked

Sampling Stage: Processing plant

Sampling Type: food sample

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Unknown

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**1**	**1**	**0**	**0**
<=0.03										1					
<=0.25				1											
<=0.5					1				1						
0.5							1								1
1														1	
2		1						1							
<=8						1									
8			1												
>64													1		
>128											1				
>1024												1			

Table Antimicrobial susceptibility testing of Salmonella Infantis in Meat from poultry, unspecified - meat preparation

Sampling Stage: Retail

Sampling Type: food sample

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Unknown

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**
MIC	**N of resistant isolates**	**1**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**2**	**2**	**1**	**0**	**0**
<=0.03										2					
<=0.25				2											2
<=0.5					2				2						
0.5							1							1	
<=1								1							
1							1							1	
<=2													1		
2								1							
4		1													
<=8						1									
8			2												
16						1									
>64		1											1		
>128											2				
>1024												2			

Table Antimicrobial susceptibility testing of Salmonella Infantis in Meat from bovine animals and pig - meat preparation

Sampling Stage: Retail

Sampling Type: food sample

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Unknown

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**
MIC	**N of resistant isolates**	**1**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**3**	**3**	**3**	**0**	**1**
<=0.03										3					
0.12							1								
<=0.25				3											2
0.25							2								
<=0.5					3				3						
0.5														2	
<=1		1						1							
1														1	
2		1						2							
4			2												
<=8						3									
8			1												
>32															1
>64		1											3		
128											1				
>128											2				
>1024												3			

Table Antimicrobial susceptibility testing of Salmonella Infantis in Meat from broilers (Gallus gallus) - carcase - spent hens

Sampling Stage: Slaughterhouse

Sampling Type: food sample - carcase swabs

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: France

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	8	16	0.5	2	16	0.064	2	2	0.125	16	256	8	1	2
	Lowest limit	1	2	0.25	0.5	8	0.015	1	0.5	0.03	4	8	2	0.25	0.25
	Highest limit	64	64	4	8	128	8	16	32	16	128	1024	64	8	32
	N of tested isolates	1	1	1	1	1	1	1	1	1	1	1	1	1	1
MIC	N of resistant isolates	1	0	0	0	0	1	0	0	0	1	1	1	0	1
<=0.03										1					
<=0.25				1											
0.25							1								
<=0.5					1				1						
<=1								1							
1														1	
<=8						1									
8			1												
>32															1
>64	1												1		
128											1				
>1024												1			

Table Antimicrobial susceptibility testing of Salmonella Isangi in Other feed material

Sampling Stage: Processing plant

Sampling Type: feed sample

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Germany

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
<=0.015							1								
<=0.03										1					
<=0.25				1										1	
<=0.5					1				1						
0.5															1
<=1		1													
<=2													1		
2								1							
<=4											1				
<=8						1									
8			1												
64												1			

Table Antimicrobial susceptibility testing of Salmonella Kedougou in Meat from pig - carcase

Sampling Stage: Slaughterhouse

Sampling Type: food sample - carcase swabs

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method:

Country of Origin: Belgium

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
MIC	**N of resistant isolates**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**
<=0.03										1					
0.03							1								
<=0.25				1											
<=0.5					1				1						
0.5														1	1
<=1								1							
<=2													1		
<=4											1				
4			1												
<=8						1									
>64		1													
>1024												1			

Table Antimicrobial susceptibility testing of Salmonella Kedougou in Other feed material

Sampling Stage: Processing plant

Sampling Type: feed sample

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Netherlands

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
<=0.03										1					
0.03							1								
<=0.25				1											1
<=0.5					1				1						
0.5														1	
<=1		1													
<=2													1		
2								1							
<=4											1				
4			1												
16						1									
64												1			

Table Antimicrobial susceptibility testing of Salmonella Kedougou in Complementary feedingstuffs

Sampling Stage: Processing plant

Sampling Type: feed sample

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Unknown

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
<=0.03										1					
0.03							1								
<=0.25				1										1	
<=0.5					1				1						
0.5															1
<=2													1		
2		1						1							
<=4											1				
4			1												
<=8						1									
64												1			

Table Antimicrobial susceptibility testing of Salmonella Kentucky in Spices and herbs

Sampling Stage: Farm

Sampling Type: food sample

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Morocco

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
<=0.03										1					
0.03							1								
<=0.25				1										1	
<=0.5					1				1						
0.5															1
<=1		1													
<=2													1		
2								1							
<=4											1				
<=8						1									
8			1												
128												1			

Table Antimicrobial susceptibility testing of Salmonella Litchfield in Meat from pig - carcase

Sampling Stage: Slaughterhouse

Sampling Type: food sample - carcase swabs

Sampling Context: Monitoring

Sampler: HACCP and own check

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method:

Country of Origin: Belgium

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
MIC	**N of resistant isolates**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**
<=0.015							1								
<=0.03										1					
<=0.25				1										1	
<=0.5					1				1						
<=2													1		
2								1							
<=4											1				
4			1												
<=8						1									
>32															1
>64		1													
>1024												1			

Table Antimicrobial susceptibility testing of Salmonella Livingstone in Meat from pig - carcase

Sampling Stage: Slaughterhouse

Sampling Type: food sample - carcase swabs

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method:

Country of Origin: Belgium

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**
MIC	**N of resistant isolates**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**1**
<=0.03										3					
0.03							3								
<=0.25				3										1	
<=0.5					3				3						
0.5														2	1
<=1		2						2							
1															1
<=2													2		
2								1							
<=4											3				
<=8						2									
8			3												
32												1			
>32															1
64												1			
>64		1											1		
>128						1									
>1024												1			

Table Antimicrobial susceptibility testing of Salmonella Livingstone in Meat from pig - carcase

Sampling Stage: Slaughterhouse

Sampling Type: food sample - carcase swabs

Sampling Context: Monitoring

Sampler: HACCP and own check

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method:

Country of Origin: Belgium

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	8	16	0.5	2	16	0.064	2	2	0.125	16	256	8	1	2
	Lowest limit	1	2	0.25	0.5	8	0.015	1	0.5	0.03	4	8	2	0.25	0.25
	Highest limit	64	64	4	8	128	8	16	32	16	128	1024	64	8	32
	N of tested isolates	1	1	1	1	1	1	1	1	1	1	1	1	1	1
MIC	N of resistant isolates	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<=0.015							1								
<=0.03										1					
<=0.25				1										1	
<=0.5					1				1						
0.5															1
<=1		1													
<=2													1		
2								1							
<=4											1				
<=8						1									
8			1												
64												1			

Table Antimicrobial susceptibility testing of Salmonella Livingstone in Other feed material

Sampling Stage: Processing plant

Sampling Type: feed sample

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Belgium

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
<=0.03										1					
0.03							1								
<=0.25				1											
<=0.5					1				1						
0.5														1	1
<=1		1													
<=2													1		
2								1							
<=4											1				
<=8						1									
8			1												
64												1			

Table Antimicrobial susceptibility testing of Salmonella Livingstone in Other feed material

Sampling Stage: Processing plant

Sampling Type: feed sample

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Unknown

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
<=0.03										1					
0.03							1								
<=0.25				1											
<=0.5					1				1						
0.5														1	1
<=1		1													
<=2													1		
2								1							
<=4											1				
<=8						1									
8			1												
64												1			

Table Antimicrobial susceptibility testing of Salmonella Livingstone in Other feed material

Sampling Stage: Processing plant

Sampling Type: feed sample

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Germany

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
<=0.03										1					
0.03							1								
<=0.25				1											
<=0.5					1				1						
0.5														1	1
<=1		1													
<=2													1		
2								1							
<=4											1				
<=8						1									
8			1												
32												1			

Table Antimicrobial susceptibility testing of Salmonella Livingstone in Complementary feedingstuffs

Sampling Stage: Processing plant

Sampling Type: feed sample

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Unknown

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
<=0.03										1					
0.03							1								
<=0.25				1										1	
<=0.5					1										
0.5															1
<=1		1													
1									1						
<=2													1		
2								1							
<=4											1				
<=8						1									
8			1												
32												1			

Table Antimicrobial susceptibility testing of Salmonella Livingstone in Meat from broilers (Gallus gallus) - carcase - spent hens

Sampling Stage: Slaughterhouse

Sampling Type: food sample - carcase swabs

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: France

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	8	16	0.5	2	16	0.064	2	2	0.125	16	256	8	1	2
	Lowest limit	1	2	0.25	0.5	8	0.015	1	0.5	0.03	4	8	2	0.25	0.25
	Highest limit	64	64	4	8	128	8	16	32	16	128	1024	64	8	32
	N of tested isolates	1	1	1	1	1	1	1	1	1	1	1	1	1	1
MIC	N of resistant isolates	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<=0.03										1					
0.03							1								
<=0.25				1										1	
<=0.5					1				1						
0.5															1
<=1		1													
<=2													1		
2								1							
<=4											1				
<=8						1									
8			1												
64												1			

Table Antimicrobial susceptibility testing of Salmonella Mbandaka in Other feed material

Sampling Stage: Processing plant

Sampling Type: feed sample

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Germany

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
<=0.015							1								
<=0.03										1					
<=0.25				1											
<=0.5					1				1						
0.5														1	
<=1		1													
<=2													1		
2								1							1
<=4											1				
<=8						1									
8			1												
256												1			

Table Antimicrobial susceptibility testing of Salmonella Minnesota in Meat from bovine animals and pig - meat preparation

Sampling Stage: Retail

Sampling Type: food sample

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Unknown

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
MIC	**N of resistant isolates**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**
<=0.03										1					
0.03							1								
<=0.25				1										1	
<=0.5					1				1						
<=1								1							
<=2													1		
<=4											1				
4			1												
<=8						1									
>32															1
64												1			
>64		1													

Table Antimicrobial susceptibility testing of Salmonella Montevideo in Meat from pig - carcase

Sampling Stage: Slaughterhouse

Sampling Type: food sample - carcase swabs

Sampling Context: Monitoring

Sampler: HACCP and own check

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method:

Country of Origin: Belgium

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
<=0.015							1								
<=0.03										1					
<=0.5					1										
0.5				1										1	1
<=1		1													
1									1						
<=2													1		
2								1							
<=4											1				
<=8						1									
8			1												
64												1			

Table Antimicrobial susceptibility testing of Salmonella Montevideo in Other feed material

Sampling Stage: Processing plant

Sampling Type: feed sample

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Netherlands

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
<=0.015							1								
0.064										1					
<=0.25				1											1
<=0.5					1										
0.5														1	
<=1		1													
1									1						
<=2													1		
2								1							
<=4											1				
4			1												
<=8						1									
32												1			

Table Antimicrobial susceptibility testing of Salmonella Montevideo in Other feed material

Sampling Stage: Farm

Sampling Type: feed sample

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Unknown

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
<=0.015							2								
<=0.03										2					
<=0.25				2										2	2
<=0.5					2				2						
<=1		2						2							
<=2													2		
<=4											2				
4			2												
<=8						2									
32												1			
64												1			

Table Antimicrobial susceptibility testing of Salmonella Montevideo in Other food

Sampling Stage: Unspecified

Sampling Type: food sample

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: France

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
<=0.015							1								
<=0.03										1					
<=0.25				1										1	1
<=0.5					1				1						
<=1		1													
<=2													1		
2								1							
<=4											1				
4			1												
<=8						1									
16												1			

Table Antimicrobial susceptibility testing of Salmonella Muenchen in Other processed food products and prepared dishes - vegetable based dishes

Sampling Stage: Processing plant

Sampling Type: food sample

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Unknown

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
<=0.03										1					
0.03							1								
<=0.25				1										1	1
<=0.5					1				1						
<=1		1													
<=2													1		
2								1							
<=4											1				
4			1												
<=8						1									
32												1			

Table Antimicrobial susceptibility testing of Salmonella Ohio in Complementary feedingstuffs

Sampling Stage: Processing plant

Sampling Type: feed sample

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Denmark

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
<=0.03										1					
0.064							1								
<=0.25				1										1	
<=0.5					1				1						
0.5															1
<=1		1													
<=2													1		
2								1							
<=4											1				
<=8						1									
8			1												
64												1			

Table Antimicrobial susceptibility testing of Salmonella Onderstepoort in Other feed material

Sampling Stage: Processing plant

Sampling Type: feed sample

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Netherlands

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
<=0.03										1					
0.03							1								
<=0.25				1										1	
<=0.5					1										
0.5															1
1									1						
<=2													1		
2		1													
<=4											1				
4								1							
<=8						1									
8			1												
64												1			

Table Antimicrobial susceptibility testing of Salmonella Panama in Meat from pig - carcase

Sampling Stage: Slaughterhouse

Sampling Type: food sample - carcase swabs

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method:

Country of Origin: Belgium

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
<=0.015							1								
<=0.03										1					
<=0.25				1											
<=0.5					1				1						
0.5														1	1
<=1		1													
<=2													1		
<=4											1				
4								1							
<=8						1									
8			1												
128												1			

Table Antimicrobial susceptibility testing of Salmonella Paratyphi B in Meat from broilers (Gallus gallus) - mechanically separated meat (MSM)

Sampling Stage: Processing plant

Sampling Type: food sample

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Unknown

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**
<=0.015							1								
<=0.03										1					
<=0.25				1										1	
<=0.5					1				1						
<=1		1													
<=2													1		
2								1							
<=4											1				
4			1												
<=8						1									
>32															1
>1024												1			

Table Antimicrobial susceptibility testing of Salmonella Paratyphi B in Meat from broilers (Gallus gallus) - meat preparation

Sampling Stage: Processing plant

Sampling Type: food sample

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Netherlands

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
MIC	**N of resistant isolates**	**1**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**1**
<=0.03										1					
<=0.25				1											
<=0.5									1						
0.5														1	
<=1								1							
1					1		1								
<=2													1		
16			1			1									
>32															1
>64		1													
>128											1				
>1024												1			

Table Antimicrobial susceptibility testing of Salmonella Paratyphi B in Meat from broilers (Gallus gallus) - meat preparation

Sampling Stage: Processing plant

Sampling Type: food sample

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Belgium

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**
MIC	**N of resistant isolates**	**2**	**0**	**0**	**0**	**0**	**2**	**1**	**0**	**0**	**2**	**3**	**1**	**0**	**4**
<=0.015							2								
<=0.03										4					
0.03							1								
0.064										1					
<=0.25				4										2	1
<=0.5					3				5						
0.5				1			1							1	
<=1	2														
1					2		1							2	
<=2													3		
2								4							
<=4											3				
4	1	3						1					1		
<=8						4									
8		1													
16		1				1									
32												2			
>32															4
>64	2												1		
>128											2				
>1024												3			

Table Antimicrobial susceptibility testing of Salmonella Paratyphi B in Meat from poultry, unspecified - meat preparation - intended to be eaten cooked

Sampling Stage: Processing plant

Sampling Type: food sample

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Unknown

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**
<=0.03										1					
0.03							1								
<=0.25				1											
<=0.5					1				1						
0.5														1	
<=1		1													
<=2													1		
2								1							
<=4											1				
4			1												
<=8						1									
>32															1
>1024												1			

Table Antimicrobial susceptibility testing of Salmonella Paratyphi B in Meat from bovine animals and pig - meat preparation

Sampling Stage: Retail

Sampling Type: food sample

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Unknown

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**
MIC	**N of resistant isolates**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**3**
<=0.03										3					
0.03							3								
<=0.25				3										2	
<=0.5					3				3						
0.5														1	
<=1		1													
<=2													3		
2		1						3							
<=4											3				
4			2												
<=8						3									
8			1												
>32															3
>64		1													
>1024												3			

Table Antimicrobial susceptibility testing of Salmonella Paratyphi B in Meat from bovine animals - carcase

Sampling Stage: Slaughterhouse

Sampling Type: food sample - carcase swabs

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method:

Country of Origin: Belgium

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**1**
<=0.03										1					
0.03							1								
<=0.25				1										1	
<=0.5					1				1						
<=1		1													
<=2													1		
<=4											1				
4								1							
<=8						1									
8			1												
>32															1
>1024												1			

Table Antimicrobial susceptibility testing of Salmonella Rissen in Meat from pig - carcase

Sampling Stage: Slaughterhouse

Sampling Type: food sample - carcase swabs

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method:

Country of Origin: Belgium

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**
MIC	**N of resistant isolates**	**3**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**3**	**3**	**0**	**3**
<=0.015							2								
<=0.03										3					
0.03							1								
<=0.25				3											
<=0.5					3				3						
0.5														2	
1														1	
2								3							
<=4											2				
8			2												
16			1								1				
>32															3
64													2		
>64		3											1		
128						3									
>1024												3			

Table Antimicrobial susceptibility testing of Salmonella Rissen in Meat from pig - carcase

Sampling Stage: Slaughterhouse

Sampling Type: food sample - carcase swabs

Sampling Context: Monitoring

Sampler: HACCP and own check

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method:

Country of Origin: Belgium

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**
<=0.015							1								
<=0.03										1					
<=0.25				1										1	
<=0.5					1				1						
<=1		1													
<=2													1		
2								1							
<=4											1				
4			1												
>32															1
128						1									
>1024												1			

Table Antimicrobial susceptibility testing of Salmonella Rissen in Meat from broilers (Gallus gallus) - meat preparation

Sampling Stage: Processing plant

Sampling Type: food sample

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Belgium

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
MIC	**N of resistant isolates**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**1**
<=0.015							1								
<=0.03										1					
<=0.25				1											
<=0.5					1				1						
0.5														1	
2								1							
<=4											1				
16			1												
>32															1
64													1		
>64		1													
128						1									
>1024												1			

Table Antimicrobial susceptibility testing of Salmonella Senftenberg in Complementary feedingstuffs

Sampling Stage: Processing plant

Sampling Type: feed sample

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Unknown

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
<=0.015							1								
<=0.03										2					
0.03							1								
<=0.25				2										1	1
<=0.5					2				2						
0.5														1	1
<=1		2													
<=2													2		
2								2							
<=4											2				
4			2												
<=8						2									
64												2			

Table Antimicrobial susceptibility testing of Salmonella spp., unspecified in Meat from pig - carcase

Sampling Stage: Slaughterhouse

Sampling Type: food sample - carcase swabs

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method:

Country of Origin: Belgium

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**
MIC	**N of resistant isolates**	**3**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**3**	**2**	**0**	**3**
<=0.015							1								
<=0.03										3					
0.064							2								
<=0.25				1										1	
<=0.5					2				3						
0.5				2										1	
<=1								2							
1					1									1	
2								1							
<=4											2				
4			1										1		
<=8						1									
8											1				
16			1			1									
>32															3
>64		3	1										2		
>128						1									
>1024												3			

Table Antimicrobial susceptibility testing of Salmonella spp., unspecified in Meat from pig - carcase

Sampling Stage: Slaughterhouse

Sampling Type: food sample - carcase swabs

Sampling Context: Monitoring

Sampler: HACCP and own check

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method:

Country of Origin: Belgium

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**
MIC	**N of resistant isolates**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**0**
<=0.015							1								
<=0.03										2					
0.03							1								
<=0.25				2											1
<=0.5					1				2						
0.5														2	1
<=1								1							
1					1										
<=2													1		
2		1						1							
<=4											2				
<=8						2									
8			2												
32												1			
>64		1											1		
>1024												1			

Table Antimicrobial susceptibility testing of Salmonella spp., unspecified in Other feed material

Sampling Stage: Processing plant

Sampling Type: feed sample

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Belgium

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
<=0.015							1								
<=0.03										1					
<=0.25				1										1	1
<=0.5					1				1						
<=1		1													
<=2													1		
2								1							
<=4											1				
<=8						1									
8			1												
64												1			

Table Antimicrobial susceptibility testing of Salmonella spp., unspecified in Meat from bovine animals and pig - meat preparation

Sampling Stage: Retail

Sampling Type: food sample

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Unknown

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
MIC	**N of resistant isolates**	**1**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**0**
<=0.03										1					
<=0.25				1											1
<=0.5					1				1						
0.5							1							1	
<=2													1		
2								1							
<=8						1									
8			1												
>64		1													
>128											1				
>1024												1			

Table Antimicrobial susceptibility testing of Salmonella Tennessee in Other food

Sampling Stage: Unspecified

Sampling Type: food sample

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: United Kingdom

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
<=0.03										1					
0.03							1								
<=0.25				1											1
<=0.5					1				1						
0.5														1	
<=2													1		
2		1						1							
<=4											1				
8			1												
16						1									
64												1			

Table Antimicrobial susceptibility testing of Salmonella Typhimurium in Meat from pig - carcase

Sampling Stage: Slaughterhouse

Sampling Type: food sample - carcase swabs

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method:

Country of Origin: Belgium

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	8	16	0.5	2	16	0.064	2	2	0.125	16	256	8	1	2
	Lowest limit	1	2	0.25	0.5	8	0.015	1	0.5	0.03	4	8	2	0.25	0.25
	Highest limit	64	64	4	8	128	8	16	32	16	128	1024	64	8	32
	N of tested isolates	14	14	14	14	14	14	14	14	14	14	14	14	14	14
MIC	N of resistant isolates	12	0	0	0	2	2	0	0	0	1	6	8	0	8
<=0.015							1								
<=0.03										14					
0.03							11								
<=0.25				14										6	3
0.25							1								
<=0.5					14				13						
0.5							1							8	3
<=1	1							6							
1									1						
<=2													6		
2	1							8							
<=4											11				
4		8													
<=8						12									
8		6									2				
32	1											7	1		
>32															8
64												1			
>64	11												7		
128						1					1				
>128						1									
>1024												6			

Table Antimicrobial susceptibility testing of Salmonella Typhimurium in Meat from pig - carcase

Sampling Stage: Slaughterhouse

Sampling Type: food sample - carcase swabs

Sampling Context: Monitoring

Sampler: HACCP and own check

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method:

Country of Origin: Belgium

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**10**	**10**	**10**	**10**	**10**	**10**	**10**	**10**	**10**	**10**	**10**	**10**	**10**	**10**
MIC	**N of resistant isolates**	**8**	**0**	**0**	**0**	**2**	**0**	**1**	**0**	**0**	**0**	**6**	**4**	**0**	**3**
<=0.015							2								
<=0.03										10					
0.03							7								
0.064							1								
<=0.25				9										5	6
<=0.5					7				10						
0.5				1										4	
<=1		2						1							
1					3									1	1
<=2													5		
2								8							
<=4											7				
4			5					1							
<=8						7									
8			4								3		1		
16			1			1									
32												4	1		
>32															3
>64		8											3		
>128						2									
>1024												6			

Table Antimicrobial susceptibility testing of Salmonella Typhimurium in Other feed material

Sampling Stage: Processing plant

Sampling Type: feed sample

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Netherlands

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
MIC	**N of resistant isolates**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
<=0.015							1								
<=0.03										1					
<=0.25				1											1
<=0.5					1				1						
0.5														1	
<=2													1		
2								1							
<=4											1				
4			1												
<=8						1									
32												1			
>64		1													

Table Antimicrobial susceptibility testing of Salmonella Typhimurium in Other feed material

Sampling Stage: Processing plant

Sampling Type: feed sample

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Unknown

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
0.064							1			1					
<=0.25				1											1
<=0.5					1				1						
0.5														1	
2		1						1							
4													1		
<=8						1						1			
8			1								1				

Table Antimicrobial susceptibility testing of Salmonella Typhimurium in Meat from broilers (Gallus gallus) - meat preparation

Sampling Stage: Processing plant

Sampling Type: food sample

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Hungary

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**
MIC	**N of resistant isolates**	**1**	**0**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**1**	**1**	**0**	**1**
<=0.03										2					
0.03							2								
<=0.25				2										2	1
<=0.5					2				1						
1									1						
<=2													1		
2		1						1							
<=4											1				
4			1					1							
<=8						1									
8			1								1				
>32															1
>64		1											1		
128												1			
>128						1									
>1024												1			

Table Antimicrobial susceptibility testing of Salmonella Typhimurium in Other food

Sampling Stage: Retail

Sampling Type: food sample

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Unknown

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
MIC	**N of resistant isolates**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
<=0.015							1								
<=0.03										1					
<=0.25				1											1
<=0.5					1				1						
0.5														1	
<=2													1		
2								1							
<=4											1				
4			1												
<=8						1									
32												1			
>64		1													

Table Antimicrobial susceptibility testing of Salmonella Yoruba in Other feed material

Sampling Stage: Processing plant

Sampling Type: feed sample

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Germany

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
<=0.03										1					
0.03							1								
<=0.25				1										1	
<=0.5					1				1						
0.5															1
<=1		1													
<=2													1		
2								1							
<=4											1				
4			1												
<=8						1									
64												1			

ANTIMICROBIAL RESISTANCE TABLES FOR INDICATOR ESCHERICHIA COLI

Table Antimicrobial susceptibility testing of Escherichia coli, non-pathogenic, unspecified in Meat from broilers (Gallus gallus) - fresh

Sampling Stage: Retail

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER ESBL MON pnl2

Analytical Method:

Country of Origin: Unknown

Sampling Details:

	AM substance	Cefepime	Cefotaxim	Cefotaxime + Clavulanic acid	Cefoxitin	Ceftazidim	Ceftazidime + Clavulanic acid	Ertapenem	Imipenem	Meropenem	Temocillin
	Cefotaxime synergy test	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**
	Ceftazidime synergy test	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**
	ECOFF	**0.125**	**0.25**	**0.25**	**8**	**0.5**	**0.5**	**0.06**	**0.5**	**0.125**	**32**
	Lowest limit	**0.064**	**0.25**	**0.064**	**0.5**	**0.25**	**0.12**	**0.015**	**0.12**	**0.03**	**0.5**
	Highest limit	**32**	**64**	**64**	**64**	**128**	**128**	**2**	**16**	**16**	**64**
	N of tested isolates	**148**	**148**	**148**	**148**	**148**	**148**	**148**	**148**	**148**	**148**
MIC	**N of resistant isolates**	**132**	**148**	**12**	**14**	**145**	**12**	**0**	**2**	**0**	**0**
<=0.015								135			
<=0.03										146	
0.03								11			
<=0.064		2		133							
0.064								2		2	
<=0.12							123		89		
0.12		14		3							
0.25		42					13		54		
0.5		34	1	1		3			3		
1		11	10	2	1	12			2		
2		14	40	1	13	23	2				11

	AM substance	Cefepime	Cefotaxim	Cefotaxime + Clavulanic acid	Cefoxitin	Ceftazidim	Ceftazidime + Clavulanic acid	Ertapenem	Imipenem	Meropenem	Temocillin
	Cefotaxime synergy test	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**
	Ceftazidime synergy test	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**
	ECOFF	**0.125**	**0.25**	**0.25**	**8**	**0.5**	**0.5**	**0.06**	**0.5**	**0.125**	**32**
	Lowest limit	**0.064**	**0.25**	**0.064**	**0.5**	**0.25**	**0.12**	**0.015**	**0.12**	**0.03**	**0.5**
	Highest limit	**32**	**64**	**64**	**64**	**128**	**128**	**2**	**16**	**16**	**64**
	N of tested isolates	**148**	**148**	**148**	**148**	**148**	**148**	**148**	**148**	**148**	**148**
MIC	**N of resistant isolates**	**132**	**148**	**12**	**14**	**145**	**12**	**0**	**2**	**0**	**0**
4		24	34	5	78	19	8				78
8		6	19	3	42	34	2				54
16		1	14		3	38					5
32			14		6	14					
64			8		5	3					
>64			8								
>128						2					

Table Antimicrobial susceptibility testing of Escherichia coli, non-pathogenic, unspecified in Meat from broilers (Gallus gallus) - fresh

Sampling Stage: Retail

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER ESBL MON

Analytical Method:

Country of Origin: Unknown

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.25**	**0.5**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**64**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**148**	**148**	**148**	**148**	**148**	**148**	**148**	**148**	**148**	**148**	**148**	**148**	**148**	**148**
MIC	**N of resistant isolates**	**148**	**10**	**148**	**144**	**75**	**75**	**1**	**9**	**0**	**60**	**121**	**101**	**0**	**104**
<=0.015							60								
<=0.03										147					
0.03							12								
0.064							1			1					
0.12							2								
<=0.25														125	20
0.25							36								
<=0.5					4				94						
0.5				2			14							20	19
<=1								142							
1				14	19		7		41					3	5
<=2			8										47		
2				45	16			5	4						
<=4											75				
4			70	27	26		1								
>4				60											
<=8						70						11			
8			54		30		8		1		10				
>8					53		7								
16			6			3			1		3	5	1		
>16								1							

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.25**	**0.5**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**64**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**148**	**148**	**148**	**148**	**148**	**148**	**148**	**148**	**148**	**148**	**148**	**148**	**148**	**148**
MIC	**N of resistant isolates**	**148**	**10**	**148**	**144**	**75**	**75**	**1**	**9**	**0**	**60**	**121**	**101**	**0**	**104**
32			8			26			3		2	10	8		
>32									4						104
64		4	1			26					4	1	32		
>64		144	1										60		
128						11					14				
>128						12					40				
1024												2			
>1024												119			

Table Antimicrobial susceptibility testing of Escherichia coli, non-pathogenic, unspecified in Meat from bovine animals - fresh

Sampling Stage: Retail

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: ESBL MON pnl2

Analytical Method:

Country of Origin: Belgium

Sampling Details:

	AM substance	Cefepime	Cefotaxim	Cefotaxime + Clavulanic acid	Cefoxitin	Ceftazidim	Ceftazidime + Clavulanic acid	Ertapenem	Imipenem	Meropenem	Temocillin
	Cefotaxime synergy test	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**
	Ceftazidime synergy test	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**
	ECOFF	**0.125**	**0.25**	**0.25**	**8**	**0.5**	**0.5**	**0.06**	**0.5**	**0.125**	**32**
	Lowest limit	**0.064**	**0.25**	**0.064**	**0.5**	**0.25**	**0.12**	**0.015**	**0.12**	**0.03**	**0.5**
	Highest limit	**32**	**64**	**64**	**64**	**128**	**128**	**2**	**16**	**16**	**64**
	N of tested isolates	**9**	**9**	**9**	**9**	**9**	**9**	**9**	**9**	**9**	**9**
MIC	**N of resistant isolates**	**8**	**9**	**1**	**1**	**9**	**1**	**0**	**0**	**0**	**0**
<=0.015								7			
<=0.03										9	
0.03								2			
<=0.064				8							
<=0.12							8		7		
0.12		1									
0.25									2		
0.5		1									
1			1	1		3					
2		2				1	1				1
4		4	1		4	3					4
8		1			4	1					4
16			2		1	1					
32			2								

	AM substance	Cefepime	Cefotaxim	Cefotaxime + Clavulanic acid	Cefoxitin	Ceftazidim	Ceftazidime + Clavulanic acid	Ertapenem	Imipenem	Meropenem	Temocillin
	Cefotaxime synergy test	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**
	Ceftazidime synergy test	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**
	ECOFF	**0.125**	**0.25**	**0.25**	**8**	**0.5**	**0.5**	**0.06**	**0.5**	**0.125**	**32**
	Lowest limit	**0.064**	**0.25**	**0.064**	**0.5**	**0.25**	**0.12**	**0.015**	**0.12**	**0.03**	**0.5**
	Highest limit	**32**	**64**	**64**	**64**	**128**	**128**	**2**	**16**	**16**	**64**
	N of tested isolates	**9**	**9**	**9**	**9**	**9**	**9**	**9**	**9**	**9**	**9**
MIC	**N of resistant isolates**	**8**	**9**	**1**	**1**	**9**	**1**	**0**	**0**	**0**	**0**
64			3								

Table Antimicrobial susceptibility testing of Escherichia coli, non-pathogenic, unspecified in Meat from bovine animals - fresh

Sampling Stage: Retail

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: ESBL MON

Analytical Method:

Country of Origin: Belgium

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.25**	**0.5**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**64**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**9**	**9**	**9**	**9**	**9**	**9**	**9**	**9**	**9**	**9**	**9**	**9**	**9**	**9**
MIC	**N of resistant isolates**	**9**	**1**	**9**	**9**	**3**	**1**	**0**	**1**	**0**	**0**	**5**	**5**	**0**	**4**
<=0.015							5								
<=0.03										9					
0.03							3								
<=0.25														7	
<=0.5									7						
0.5							1							1	3
<=1								8							
1				1	3				1					1	2
<=2			1										2		
2					1			1							
<=4											8				
4			2	1	3				1				1		
>4				7											
<=8						5						1			
8			5		1								1		
>8					1										
16						1					1				
32			1									3			
>32															4
64													1		
>64		9											4		

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.25**	**0.5**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**64**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**9**	**9**	**9**	**9**	**9**	**9**	**9**	**9**	**9**	**9**	**9**	**9**	**9**	**9**
MIC	**N of resistant isolates**	**9**	**1**	**9**	**9**	**3**	**1**	**0**	**1**	**0**	**0**	**5**	**5**	**0**	**4**
128						1									
>128						2									
>1024												5			

Table Antimicrobial susceptibility testing of Escherichia coli, non-pathogenic, unspecified in Meat from bovine animals - fresh

Sampling Stage: Retail

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: ESBL MON pnl2

Analytical Method:

Country of Origin: France

Sampling Details:

	AM substance	Cefepime	Cefotaxim	Cefotaxime + Clavulanic acid	Cefoxitin	Ceftazidim	Ceftazidime + Clavulanic acid	Ertapenem	Imipenem	Meropenem	Temocillin
	Cefotaxime synergy test	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**
	Ceftazidime synergy test	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**
	ECOFF	**0.125**	**0.25**	**0.25**	**8**	**0.5**	**0.5**	**0.06**	**0.5**	**0.125**	**32**
	Lowest limit	**0.064**	**0.25**	**0.064**	**0.5**	**0.25**	**0.12**	**0.015**	**0.12**	**0.03**	**0.5**
	Highest limit	**32**	**64**	**64**	**64**	**128**	**128**	**2**	**16**	**16**	**64**
	N of tested isolates	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
MIC	**N of resistant isolates**	**1**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**
<=0.015								1			
<=0.03										1	
<=0.064				1							
<=0.12							1				
0.25									1		
2						1					1
4		1			1						
16			1								

Table Antimicrobial susceptibility testing of Escherichia coli, non-pathogenic, unspecified in Meat from bovine animals - fresh

Sampling Stage: Retail

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: ESBL MON

Analytical Method:

Country of Origin: France

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.25**	**0.5**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**64**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
MIC	**N of resistant isolates**	**1**	**0**	**1**	**1**	**1**	**1**	**0**	**1**	**0**	**0**	**1**	**1**	**0**	**1**
<=0.03										1					
<=0.25														1	
0.25							1								
<=1								1							
2					1										
>4				1											
8			1								1				
16									1						
>32															1
>64		1											1		
>128						1									
>1024												1			

Table Antimicrobial susceptibility testing of Escherichia coli, non-pathogenic, unspecified in Vegetables - leaves

Sampling Stage: Retail

Sampling Type: food sample

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER ESBL MON pnl2

Analytical Method:

Country of Origin: Belgium

Sampling Details:

AM substance	Cefepime	Cefotaxim	Cefotaxime + Clavulanic acid	Cefoxitin	Ceftazidim	Ceftazidime + Clavulanic acid	Ertapenem	Imipenem	Meropenem	Temocillin
Cefotaxime synergy test	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**
Ceftazidime synergy test	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**
ECOFF	**0.125**	**0.25**	**0.25**	**8**	**0.5**	**0.5**	**0.06**	**0.5**	**0.125**	**32**
Lowest limit	**0.064**	**0.25**	**0.064**	**0.5**	**0.25**	**0.12**	**0.015**	**0.12**	**0.03**	**0.5**
Highest limit	**32**	**64**	**64**	**64**	**128**	**128**	**2**	**16**	**16**	**64**
N of tested isolates	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**
MIC **N of resistant isolates**	**2**	**2**	**1**	**1**	**1**	**1**	**0**	**0**	**0**	**0**
<=0.015							1			
<=0.03									2	
<=0.064			1							
0.064							1			
<=0.12						1		2		
0.25	1									
0.5					1					
4	1									2
8		1	1	1	1	1				
>64		1		1						

Table Antimicrobial susceptibility testing of Escherichia coli, non-pathogenic, unspecified in Vegetables - leaves

Sampling Stage: Retail

Sampling Type: food sample

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER ESBL MON

Analytical Method:

Country of Origin: Belgium

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.25**	**0.5**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**64**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**
MIC	**N of resistant isolates**	**2**	**0**	**2**	**1**	**0**	**1**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**0**
<=0.015							1								
<=0.03										2					
<=0.25														1	1
<=0.5					1				2						
0.5														1	1
<=1								2							
<=2													2		
<=4											1				
4			2												
>4				2											
<=8						2									
>8					1		1								
16												1			
>64		2													
>128											1				
>1024												1			

Table Antimicrobial susceptibility testing of Escherichia coli, non-pathogenic, unspecified in Vegetables - leaves

Sampling Stage: Retail

Sampling Type: food sample

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER ESBL MON pnl2

Analytical Method:

Country of Origin: France

Sampling Details:

	AM substance	Cefepime	Cefotaxim	Cefotaxime + Clavulanic acid	Cefoxitin	Ceftazidim	Ceftazidime + Clavulanic acid	Ertapenem	Imipenem	Meropenem	Temocillin
	Cefotaxime synergy test	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**
	Ceftazidime synergy test	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**
	ECOFF	**0.125**	**0.25**	**0.25**	**8**	**0.5**	**0.5**	**0.06**	**0.5**	**0.125**	**32**
	Lowest limit	**0.064**	**0.25**	**0.064**	**0.5**	**0.25**	**0.12**	**0.015**	**0.12**	**0.03**	**0.5**
	Highest limit	**32**	**64**	**64**	**64**	**128**	**128**	**2**	**16**	**16**	**64**
	N of tested isolates	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**
MIC	**N of resistant isolates**	**2**	**2**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**
<=0.015								2			
<=0.03										2	
<=0.064				2							
<=0.12							2		1		
0.25									1		
1						2					
4		1			2						
8		1									2
64			2								

Table Antimicrobial susceptibility testing of Escherichia coli, non-pathogenic, unspecified in Vegetables - leaves

Sampling Stage: Retail

Sampling Type: food sample

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER ESBL MON

Analytical Method:

Country of Origin: France

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.25**	**0.5**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**64**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**
MIC	**N of resistant isolates**	**2**	**0**	**2**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
<=0.015							1								
<=0.03										2					
0.03							1								
<=0.25														2	
<=0.5									2						
0.5															1
<=1								2							
1					1										
<=2													1		
2					1										1
<=4											2				
4			1										1		
>4				2											
<=8						2									
8			1												
16												1			
32												1			
>64		2													

Table Antimicrobial susceptibility testing of Escherichia coli, non-pathogenic, unspecified in Milk, cows' - raw milk

Sampling Stage: Farm

Sampling Type: food sample - milk

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER ESBL MON pnl2

Analytical Method:

Country of Origin: Belgium

Sampling Details:

	AM substance	Cefepime	Cefotaxim	Cefotaxime + Clavulanic acid	Cefoxitin	Ceftazidim	Ceftazidime + Clavulanic acid	Ertapenem	Imipenem	Meropenem	Temocillin
	Cefotaxime synergy test	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**
	Ceftazidime synergy test	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**
	ECOFF	**0.125**	**0.25**	**0.25**	**8**	**0.5**	**0.5**	**0.06**	**0.5**	**0.125**	**32**
	Lowest limit	**0.064**	**0.25**	**0.064**	**0.5**	**0.25**	**0.12**	**0.015**	**0.12**	**0.03**	**0.5**
	Highest limit	**32**	**64**	**64**	**64**	**128**	**128**	**2**	**16**	**16**	**64**
	N of tested isolates	**20**	**20**	**20**	**20**	**20**	**20**	**20**	**20**	**20**	**20**
MIC	**N of resistant isolates**	**16**	**20**	**5**	**6**	**20**	**5**	**1**	**0**	**0**	**0**
<=0.015								18			
<=0.03										20	
0.03								1			
<=0.064		3		14							
<=0.12							12		14		
0.12		1		1				1			
0.25							3		5		
0.5									1		
1		1	1	5		3					1
2		4	3		1	5	3				3
4		9	2		10	6	2				9
8		1	1		3	5					7
16		1	2		3						
32			4		2	1					

	AM substance	Cefepime	Cefotaxim	Cefotaxime + Clavulanic acid	Cefoxitin	Ceftazidim	Ceftazidime + Clavulanic acid	Ertapenem	Imipenem	Meropenem	Temocillin
	Cefotaxime synergy test	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**
	Ceftazidime synergy test	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**
	ECOFF	**0.125**	**0.25**	**0.25**	**8**	**0.5**	**0.5**	**0.06**	**0.5**	**0.125**	**32**
	Lowest limit	**0.064**	**0.25**	**0.064**	**0.5**	**0.25**	**0.12**	**0.015**	**0.12**	**0.03**	**0.5**
	Highest limit	**32**	**64**	**64**	**64**	**128**	**128**	**2**	**16**	**16**	**64**
	N of tested isolates	**20**	**20**	**20**	**20**	**20**	**20**	**20**	**20**	**20**	**20**
MIC	**N of resistant isolates**	**16**	**20**	**5**	**6**	**20**	**5**	**1**	**0**	**0**	**0**
64			3		1						
>64			4								

Table Antimicrobial susceptibility testing of Escherichia coli, non-pathogenic, unspecified in Milk, cows' - raw milk

Sampling Stage: Farm

Sampling Type: food sample - milk

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER ESBL MON

Analytical Method:

Country of Origin: Belgium

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.25**	**0.5**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**64**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**20**	**20**	**20**	**20**	**20**	**20**	**20**	**20**	**20**	**20**	**20**	**20**	**20**	**20**
MIC	**N of resistant isolates**	**20**	**1**	**20**	**20**	**6**	**5**	**0**	**1**	**0**	**2**	**9**	**12**	**0**	**8**
<=0.015							14								
<=0.03										19					
0.03							1								
0.064										1					
0.12							1								
<=0.25														16	4
0.25							1								
<=0.5									14						
0.5							1							4	7
<=1								19							
1				1	5		1		5						1
<=2			2										8		
2				3	3			1							
<=4											16				
4			10	2	7										
>4				14											
<=8						12						4			
8			5		4		1		1		2				
>8					1										
16			2			2						5			
32			1									2	2		

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.25**	**0.5**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**64**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**20**	**20**	**20**	**20**	**20**	**20**	**20**	**20**	**20**	**20**	**20**	**20**	**20**	**20**
MIC	**N of resistant isolates**	**20**	**1**	**20**	**20**	**6**	**5**	**0**	**1**	**0**	**2**	**9**	**12**	**0**	**8**
>32															8
64		1											3		
>64		19											7		
128						1									
>128						5					2				
>1024												9			

Table Antimicrobial susceptibility testing of Escherichia coli, non-pathogenic, unspecified in Cattle (bovine animals) - calves (under 1 year)

Sampling Stage: Slaughterhouse

Sampling Type: animal sample - caecum

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: AMR MON pnl2

Analytical Method:

Country of Origin: Belgium

Sampling Details:

AM substance	Cefepime		Cefotaxim		Cefotaxime + Clavulanic acid		Cefoxitin	Ceftazidim	Ceftazidime + Clavulanic acid		Ertapenem	Imipenem	Meropenem	Temocillin
Cefotaxime synergy test	**Not Available**		**Not Available**		**Not Available**		**Not Available**	**Not Available**	**Not Available**		**Not Available**	**Not Available**	**Not Available**	**Not Available**
Ceftazidime synergy test	**Not Available**		**Not Available**		**Not Available**		**Not Available**	**Not Available**	**Not Available**		**Not Available**	**Not Available**	**Not Available**	**Not Available**
ECOFF	**0.125**		**0.25**		**0.25**		**8**	**0.5**	**0.5**		**0.06**	**0.5**	**0.125**	**32**
Lowest limit	**0.064**	**0.06**	**0.25**	**0.064**	**0.06**	**0.5**	**0.25**	**0.12**	**0.125**	**0.015**	**0.12**	**0.03**	**0.5**	
Highest limit	**32**	**32**	**64**	**64**	**64**	**64**	**128**	**128**	**128**	**2**	**16**	**16**	**64**	
N of tested isolates	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	
MIC **N of resistant isolates**	**5**	**5**	**4**	**1**	**1**	**1**	**4**	**1**	**1**	**0**	**0**	**0**	**0**	
<=0.015										6				
<=0.03													6	
<=0.064	1			4										
<=0.12									4			3		
0.12					1									
<=0.25			2					1						
0.25		5								1		3		
<=0.5														1
0.5					1			1						
1			3											
2			1				1	2		1				1
4							3	1						3
8							1	1						
16							1							1

Table Antimicrobial susceptibility testing of Escherichia coli, non-pathogenic, unspecified in Cattle (bovine animals) - calves (under 1 year)

Sampling Stage: Slaughterhouse

Sampling Type: animal sample - caecum

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method:

Country of Origin: Belgium

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.25**	**0.5**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**64**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**172**	**172**	**172**	**172**	**172**	**172**	**172**	**172**	**172**	**172**	**172**	**172**	**172**	**172**
MIC	**N of resistant isolates**	**115**	**7**	**4**	**4**	**54**	**42**	**4**	**9**	**0**	**21**	**105**	**126**	**0**	**86**
<=0.015							104								
<=0.03										170					
0.03							20								
0.064							6			2					
0.12							4								
<=0.25				168										141	25
0.25							22								
<=0.5					168				106						
0.5							5							30	49
<=1		1						158							
1				2			4		50					1	11
<=2			6										40		
2		23		2	2		1	10	7						1
<=4											132				
4		32	92		1				1				6		
<=8						112						19			
8		1	61		1		3	2			16				
>8							3								
16		1	6			6		2	3		3	23			
32		2	3			9						20	5		
>32									5						86

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.25**	**0.5**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**64**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**172**	**172**	**172**	**172**	**172**	**172**	**172**	**172**	**172**	**172**	**172**	**172**	**172**	**172**
MIC	**N of resistant isolates**	**115**	**7**	**4**	**4**	**54**	**42**	**4**	**9**	**0**	**21**	**105**	**126**	**0**	**86**
64		2	2			7					5	5	31		
>64		110	2										90		
128						13					3				
>128						25					13				
>1024												105			

Table Antimicrobial susceptibility testing of Escherichia coli, non-pathogenic, unspecified in Cattle (bovine animals) - calves (under 1 year)

Sampling Stage: Slaughterhouse

Sampling Type: animal sample - caecum

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: ESBL MON pnl2

Analytical Method:

Country of Origin: Belgium

Sampling Details:

	AM substance	Cefepime	Cefotaxim	Cefotaxime + Clavulanic acid	Cefoxitin	Ceftazidim	Ceftazidime + Clavulanic acid	Ertapenem	Imipenem	Meropenem	Temocillin
	Cefotaxime synergy test	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**
	Ceftazidime synergy test	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**
	ECOFF	**0.125**	**0.25**	**0.25**	**8**	**0.5**	**0.5**	**0.06**	**0.5**	**0.125**	**32**
	Lowest limit	**0.064**	**0.25**	**0.064**	**0.5**	**0.25**	**0.12**	**0.015**	**0.12**	**0.03**	**0.5**
	Highest limit	**32**	**64**	**64**	**64**	**128**	**128**	**2**	**16**	**16**	**64**
	N of tested isolates	**170**	**170**	**170**	**170**	**170**	**170**	**170**	**170**	**170**	**170**
MIC	**N of resistant isolates**	**159**	**170**	**14**	**18**	**161**	**10**	**2**	**0**	**0**	**0**
<=0.015								127			
<=0.03										164	
0.03								30			
<=0.064		4		147							
0.064								11		5	
<=0.12							126		107		
0.12		7		7				2		1	
<=0.25						2					
0.25		6		2			29		61		
0.5		6		6		7	5		2		
1		9	9	2	1	20	2				
2		25	5	5	24	43	2				15
4		54	6		98	30	1				93
8		40	4		29	46	4				53

	AM substance	Cefepime	Cefotaxim	Cefotaxime + Clavulanic acid	Cefoxitin	Ceftazidim	Ceftazidime + Clavulanic acid	Ertapenem	Imipenem	Meropenem	Temocillin
	Cefotaxime synergy test	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**
	Ceftazidime synergy test	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**
	ECOFF	**0.125**	**0.25**	**0.25**	**8**	**0.5**	**0.5**	**0.06**	**0.5**	**0.125**	**32**
	Lowest limit	**0.064**	**0.25**	**0.064**	**0.5**	**0.25**	**0.12**	**0.015**	**0.12**	**0.03**	**0.5**
	Highest limit	**32**	**64**	**64**	**64**	**128**	**128**	**2**	**16**	**16**	**64**
	N of tested isolates	**170**	**170**	**170**	**170**	**170**	**170**	**170**	**170**	**170**	**170**
MIC	**N of resistant isolates**	**159**	**170**	**14**	**18**	**161**	**10**	**2**	**0**	**0**	**0**
16		18	30	1	9	15					7
32		1	21		4	5	1				2
64			33		4	2					
>64			62		1						

Table Antimicrobial susceptibility testing of Escherichia coli, non-pathogenic, unspecified in Cattle (bovine animals) - calves (under 1 year)

Sampling Stage: Slaughterhouse

Sampling Type: animal sample - caecum

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: ESBL MON

Analytical Method:

Country of Origin: Belgium

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.25**	**0.5**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**64**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**170**	**170**	**170**	**170**	**170**	**170**	**170**	**170**	**170**	**170**	**170**	**170**	**170**	**170**
MIC	**N of resistant isolates**	**170**	**22**	**170**	**160**	**95**	**78**	**4**	**36**	**0**	**30**	**124**	**145**	**0**	**110**
<=0.015							76								
<=0.03										169					
0.03							12								
0.064							4			1					
0.12							6								
<=0.25														149	20
0.25							38								
<=0.5					10				88						
0.5				2			12							18	36
<=1								159							
1				5	24				42					3	4
<=2			10										22		
2				8	33		2	7	4						
<=4											111				
4			56	2	33		1	1	5				3		
>4				153											
<=8						74						14			
8			68		43		4	3	4		21				
>8					27		15								
16			14			1			8		8	20			
32			11			8			9		1	9	3		

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.25**	**0.5**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**64**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**170**	**170**	**170**	**170**	**170**	**170**	**170**	**170**	**170**	**170**	**170**	**170**	**170**	**170**
MIC	**N of resistant isolates**	**170**	**22**	**170**	**160**	**95**	**78**	**4**	**36**	**0**	**30**	**124**	**145**	**0**	**110**
>32									10						110
64			5			8					2	3	33		
>64		170	6										109		
128						29					5				
>128						50					22				
256												1			
>1024												123			

Table Antimicrobial susceptibility testing of Escherichia coli, non-pathogenic, unspecified in Cattle (bovine animals) - meat production animals - calves (under 1 year)

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON pnl2

Analytical Method:

Country of Origin: Belgium

Sampling Details:

AM substance	Cefepime	Cefotaxim	Cefotaxime + Clavulanic acid		Cefoxitin	Ceftazidim	Ceftazidime + Clavulanic acid		Ertapenem	Imipenem	Meropenem	Temocillin
Cefotaxime synergy test	Not Available	Not Available	Not Available		Not Available	Not Available	Not Available		Not Available	Not Available	Not Available	Not Available
Ceftazidime synergy test	Not Available	Not Available	Not Available		Not Available	Not Available	Not Available		Not Available	Not Available	Not Available	Not Available
ECOFF	0.125	0.25	0.25		8	0.5	0.5		0.06	0.5	0.125	32
Lowest limit	0.06	0.25	0.064	0.06	0.5	0.25	0.12	0.125	0.015	0.12	0.03	0.5
Highest limit	32	64	64	64	64	128	128	128	2	16	16	64
N of tested isolates	7	7	7	7	7	7	7	7	7	7	7	7
N of resistant isolates	6	7	1	1	2	3	1	1	0	0	0	0
MIC												
<=0.015									6			
<=0.03											7	
0.03									1			
<=0.064			6									
<=0.12							6			7		
0.12	1											
<=0.25						3						
0.5		2				1						
1	2	1										
2	2			1	1	1						2
4	2	1			1	1		1				3
8		1			3	1						2
16					1							
32		1										

	AM substance	Cefepime	Cefotaxim	Cefotaxime + Clavulanic acid		Cefoxitin	Ceftazidim	Ceftazidime + Clavulanic acid		Ertapenem	Imipenem	Meropenem	Temocillin
	Cefotaxime synergy test	Not Available	Not Available	Not Available		Not Available	Not Available	Not Available		Not Available	Not Available	Not Available	Not Available
	Ceftazidime synergy test	Not Available	Not Available	Not Available		Not Available	Not Available	Not Available		Not Available	Not Available	Not Available	Not Available
	ECOFF	0.125	0.25	0.25		8	0.5	0.5		0.06	0.5	0.125	32
	Lowest limit	0.06	0.25	0.064	0.06	0.5	0.25	0.12	0.125	0.015	0.12	0.03	0.5
	Highest limit	32	64	64	64	64	128	128	128	2	16	16	64
	N of tested isolates	7	7	7	7	7	7	7	7	7	7	7	7
MIC	N of resistant isolates	6	7	1	1	2	3	1	1	0	0	0	0
64						1							
>64			1										

Table Antimicrobial susceptibility testing of Escherichia coli, non-pathogenic, unspecified in Cattle (bovine animals) - meat production animals - calves (under 1 year)

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Belgium

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.25**	**0.5**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**64**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**164**	**164**	**164**	**164**	**164**	**164**	**164**	**164**	**164**	**164**	**164**	**164**	**164**	**164**
MIC	**N of resistant isolates**	**35**	**0**	**7**	**3**	**26**	**11**	**0**	**8**	**0**	**8**	**36**	**30**	**0**	**26**
<=0.015							132								
<=0.03										160					
0.03							16								
0.064							5			3					
0.12							2			1					
<=0.25				157										144	55
0.25							1								
<=0.5					161				116						
0.5				1			6							18	69
<=1	3							145							
1				2	1				36					2	12
<=2		12											129		
2	51			1				19	4						2
<=4											147				
4	74	104			1		1		1				4		
>4				3											
<=8						135						47			
8	1	46			1		1		2		6		1		
16	3	2				3			1		3	45	1		
32	1					2			3			30	2		
>32									1						26

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.25**	**0.5**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**64**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**164**	**164**	**164**	**164**	**164**	**164**	**164**	**164**	**164**	**164**	**164**	**164**	**164**	**164**
MIC	**N of resistant isolates**	**35**	**0**	**7**	**3**	**26**	**11**	**0**	**8**	**0**	**8**	**36**	**30**	**0**	**26**
64		2				1					1	6	8		
>64		29											19		
128						9					2				
>128						14					5				
1024												1			
>1024												35			

Table Antimicrobial susceptibility testing of Escherichia coli, non-pathogenic, unspecified in Pigs - fattening pigs

Sampling Stage: Slaughterhouse

Sampling Type: animal sample - caecum

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: AMR MON pnl2

Analytical Method:

Country of Origin: Belgium

Sampling Details:

	AM substance	Cefepime		Cefotaxim	Cefotaxime + Clavulanic acid	Cefoxitin	Ceftazidim	Ceftazidime + Clavulanic acid		Ertapenem	Imipenem	Meropenem	Temocillin
	Cefotaxime synergy test	Not Available		Not Available	Not Available	Not Available	Not Available	Not Available		Not Available	Not Available	Not Available	Not Available
	Ceftazidime synergy test	Not Available		Not Available	Not Available	Not Available	Not Available	Not Available		Not Available	Not Available	Not Available	Not Available
	ECOFF	0.125		0.25	0.25	8	0.5	0.5		0.06	0.5	0.125	32
	Lowest limit	0.064	0.06	0.25	0.064	0.5	0.25	0.12	0.125	0.015	0.12	0.03	0.5
	Highest limit	32	32	64	64	64	128	128	128	2	16	16	64
	N of tested isolates	3	3	3	3	3	3	3	3	3	3	3	3
MIC	N of resistant isolates	1	1	1	0	0	1	0	0	0	0	0	0
<=0.015										2			
<=0.03												3	
0.03										1			
<=0.064		2			3								
<=0.12								2			1		
<=0.25				2			2						
0.25									1		2		
1							1						
2						1							1
4			1			1							2
8						1							
32				1									

Table Antimicrobial susceptibility testing of Escherichia coli, non-pathogenic, unspecified in Pigs - fattening pigs

Sampling Stage: Slaughterhouse

Sampling Type: animal sample - caecum

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method:

Country of Origin: Belgium

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.25**	**0.5**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**64**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**175**	**175**	**175**	**175**	**175**	**175**	**175**	**175**	**175**	**175**	**175**	**175**	**175**	**175**
MIC	**N of resistant isolates**	**68**	**3**	**1**	**1**	**34**	**16**	**0**	**1**	**0**	**4**	**69**	**63**	**0**	**62**
<=0.015							142								
<=0.03										172					
0.03							16								
0.064							1			2					
0.12							4			1					
<=0.25				174										156	47
0.25							9								
<=0.5					174				119						
0.5							3							16	53
<=1		2						158							
1									48					3	13
<=2			21										103		
2		50						17	7						
<=4											162				
4		51	111		1								6		
>4				1											
<=8						134						42			
8		4	40								7		3		
16		1				7			1		2	39			
32						15						21	3		
>32															62

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.25**	**0.5**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**64**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**175**	**175**	**175**	**175**	**175**	**175**	**175**	**175**	**175**	**175**	**175**	**175**	**175**	**175**
MIC	**N of resistant isolates**	**68**	**3**	**1**	**1**	**34**	**16**	**0**	**1**	**0**	**4**	**69**	**63**	**0**	**62**
64		1	1			10						4	17		
>64		66	2										43		
128						3					1				
>128						6					3				
1024												1			
>1024												68			

Table Antimicrobial susceptibility testing of Escherichia coli, non-pathogenic, unspecified in Pigs - fattening pigs

Sampling Stage: Slaughterhouse

Sampling Type: animal sample - caecum

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: ESBL MON pnl2

Analytical Method:

Country of Origin: Belgium

Sampling Details:

	AM substance	Cefepime	Cefotaxim	Cefotaxime + Clavulanic acid	Cefoxitin	Ceftazidim	Ceftazidime + Clavulanic acid	Ertapenem	Imipenem	Meropenem	Temocillin
	Cefotaxime synergy test	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**
	Ceftazidime synergy test	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**
	ECOFF	**0.125**	**0.25**	**0.25**	**8**	**0.5**	**0.5**	**0.06**	**0.5**	**0.125**	**32**
	Lowest limit	**0.064**	**0.25**	**0.064**	**0.5**	**0.25**	**0.12**	**0.015**	**0.12**	**0.03**	**0.5**
	Highest limit	**32**	**64**	**64**	**64**	**128**	**128**	**2**	**16**	**16**	**64**
	N of tested isolates	**144**	**144**	**144**	**144**	**144**	**144**	**144**	**144**	**144**	**144**
MIC	**N of resistant isolates**	**113**	**144**	**30**	**26**	**125**	**29**	**0**	**0**	**0**	**0**
<=0.015								136			
<=0.03										142	
0.03								5			
<=0.064		14		111							
0.064								3		1	
<=0.12							96		100		
0.12		17		1						1	
<=0.25						2					
0.25		9		2			15		39		
0.5		7	2	8		17	4		5		
1		5	18	20	1	30	6				
2		28	19	1	19	35	14				12
4		42	7		72	28	8				86
8		16	9	1	26	24	1				44

	AM substance	Cefepime	Cefotaxim	Cefotaxime + Clavulanic acid	Cefoxitin	Ceftazidim	Ceftazidime + Clavulanic acid	Ertapenem	Imipenem	Meropenem	Temocillin
	Cefotaxime synergy test	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**
	Ceftazidime synergy test	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**
	ECOFF	**0.125**	**0.25**	**0.25**	**8**	**0.5**	**0.5**	**0.06**	**0.5**	**0.125**	**32**
	Lowest limit	**0.064**	**0.25**	**0.064**	**0.5**	**0.25**	**0.12**	**0.015**	**0.12**	**0.03**	**0.5**
	Highest limit	**32**	**64**	**64**	**64**	**128**	**128**	**2**	**16**	**16**	**64**
	N of tested isolates	**144**	**144**	**144**	**144**	**144**	**144**	**144**	**144**	**144**	**144**
MIC	**N of resistant isolates**	**113**	**144**	**30**	**26**	**125**	**29**	**0**	**0**	**0**	**0**
16		5	32		12	7					2
32		1	17		9						
64			26		5	1					
>64			14								

Table Antimicrobial susceptibility testing of Escherichia coli, non-pathogenic, unspecified in Pigs - fattening pigs

Sampling Stage: Slaughterhouse

Sampling Type: animal sample - caecum

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: ESBL MON

Analytical Method:

Country of Origin: Belgium

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.25**	**0.5**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**64**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**144**	**144**	**144**	**144**	**144**	**144**	**144**	**144**	**144**	**144**	**144**	**144**	**144**	**144**
MIC	**N of resistant isolates**	**144**	**23**	**144**	**125**	**38**	**27**	**0**	**13**	**0**	**12**	**89**	**76**	**0**	**75**
<=0.015							98								
<=0.03										143					
0.03							17								
0.064							2			1					
0.12							3								
<=0.25														126	34
0.25							12								
<=0.5					19				98						
0.5				1			8							17	29
<=1								139							
1				21	25				30					1	6
<=2			12										65		
2				16	41			5	3						
<=4											122				
4			65	9	25				5				1		1
>4				97											
<=8						99						19			
8			42		26		2		2		7		2		
>8					8		2								
16			2			7			3		3	21	2		
32			3			11			3		1	11	3		

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.25**	**0.5**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**64**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**144**	**144**	**144**	**144**	**144**	**144**	**144**	**144**	**144**	**144**	**144**	**144**	**144**	**144**
MIC	**N of resistant isolates**	**144**	**23**	**144**	**125**	**38**	**27**	**0**	**13**	**0**	**12**	**89**	**76**	**0**	**75**
>32															74
64		2	11			9					3	4	24		
>64		142	9										47		
128						8					2				
>128						10					6				
>1024												89			

Table Antimicrobial susceptibility testing of Escherichia coli, non-pathogenic, unspecified in Gallus gallus (fowl) - broilers

Sampling Stage: Slaughterhouse

Sampling Type: animal sample - caecum

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: AMR MON pnl2

Analytical Method:

Country of Origin: Belgium

Sampling Details:

	AM substance	Cefepime		Cefotaxim	Cefotaxime + Clavulanic acid	Cefoxitin	Ceftazidim	Ceftazidime + Clavulanic acid		Ertapenem	Imipenem	Meropenem	Temocillin
	Cefotaxime synergy test	Not Available		Not Available	Not Available	Not Available	Not Available	Not Available		Not Available	Not Available	Not Available	Not Available
	Ceftazidime synergy test	Not Available		Not Available	Not Available	Not Available	Not Available	Not Available		Not Available	Not Available	Not Available	Not Available
	ECOFF	0.125		0.25	0.25	8	0.5	0.5		0.06	0.5	0.125	32
	Lowest limit	0.064	0.06	0.25	0.064	0.5	0.25	0.12	0.125	0.015	0.12	0.03	0.5
	Highest limit	32	32	64	64	64	128	128	128	2	16	16	64
	N of tested isolates	17	17	17	17	17	17	17	17	17	17	17	17
MIC	N of resistant isolates	12	12	14	0	0	14	0	0	0	0	0	0
<=0.015										15			
<=0.03												17	
0.03										2			
<=0.064		4			16								
<=0.12								16			14		
0.12			1		1								
<=0.25				3			3						
0.25			5						1		3		
0.5			3										
1			1	5									
2			1	1		5							2
4			2	5		6	6						8
8						6	3						7
16				2			4						

	AM substance	Cefepime		Cefotaxim	Cefotaxime + Clavulanic acid	Cefoxitin	Ceftazidim	Ceftazidime + Clavulanic acid		Ertapenem	Imipenem	Meropenem	Temocillin
	Cefotaxime synergy test	Not Available		Not Available	Not Available	Not Available	Not Available	Not Available		Not Available	Not Available	Not Available	Not Available
	Ceftazidime synergy test	Not Available		Not Available	Not Available	Not Available	Not Available	Not Available		Not Available	Not Available	Not Available	Not Available
	ECOFF	0.125		0.25	0.25	8	0.5	0.5		0.06	0.5	0.125	32
	Lowest limit	0.064	0.06	0.25	0.064	0.5	0.25	0.12	0.125	0.015	0.12	0.03	0.5
	Highest limit	32	32	64	64	64	128	128	128	2	16	16	64
	N of tested isolates	17	17	17	17	17	17	17	17	17	17	17	17
MIC	N of resistant isolates	12	12	14	0	0	14	0	0	0	0	0	0
32				1									
64							1						

Table Antimicrobial susceptibility testing of Escherichia coli, non-pathogenic, unspecified in Gallus gallus (fowl) - broilers

Sampling Stage: Slaughterhouse

Sampling Type: animal sample - caecum

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method:

Country of Origin: Belgium

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.25**	**0.5**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**64**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**169**	**169**	**169**	**169**	**169**	**169**	**169**	**169**	**169**	**169**	**169**	**169**	**169**	**169**
MIC	**N of resistant isolates**	**133**	**6**	**14**	**14**	**51**	**94**	**1**	**10**	**0**	**81**	**114**	**92**	**0**	**93**
<=0.015							65								
<=0.03										169					
0.03							8								
0.064							2								
0.12							11								
<=0.25				155										129	33
0.25							36								
<=0.5					155				113						
0.5				1			26							37	33
<=1	1							159							
1							4		43					3	9
<=2		16											75		
2	22		4	1			2	9	3						1
<=4											78				
4	13	65	1	4			2						1		
>4			8												
<=8						110						19			
8		69		4			7		1		6		1		1
>8				5			6								
16	1	13				8			5		4	14	1		
>16								1							

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.25**	**0.5**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**64**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**169**	**169**	**169**	**169**	**169**	**169**	**169**	**169**	**169**	**169**	**169**	**169**	**169**	**169**
MIC	**N of resistant isolates**	**133**	**6**	**14**	**14**	**51**	**94**	**1**	**10**	**0**	**81**	**114**	**92**	**0**	**93**
32			2			9			1		1	20	3		
>32									3						92
64		2	1			21					14	2	33		
>64		130	3										55		
128						9					22	3			
>128						12					44				
1024												1			
>1024												110			

Table Antimicrobial susceptibility testing of Escherichia coli, non-pathogenic, unspecified in Gallus gallus (fowl) - broilers

Sampling Stage: Slaughterhouse

Sampling Type: animal sample - caecum

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: ESBL MON pnl2

Analytical Method:

Country of Origin: Belgium

Sampling Details:

	AM substance	Cefepime	Cefotaxim	Cefotaxime + Clavulanic acid	Cefoxitin	Ceftazidim	Ceftazidime + Clavulanic acid	Ertapenem	Imipenem	Meropenem	Temocillin
	Cefotaxime synergy test	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**
	Ceftazidime synergy test	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**
	ECOFF	**0.125**	**0.25**	**0.25**	**8**	**0.5**	**0.5**	**0.06**	**0.5**	**0.125**	**32**
	Lowest limit	**0.064**	**0.25**	**0.064**	**0.5**	**0.25**	**0.12**	**0.015**	**0.12**	**0.03**	**0.5**
	Highest limit	**32**	**64**	**64**	**64**	**128**	**128**	**2**	**16**	**16**	**64**
	N of tested isolates	**176**	**176**	**176**	**176**	**176**	**176**	**176**	**176**	**176**	**176**
MIC	**N of resistant isolates**	**148**	**176**	**18**	**20**	**172**	**17**	**1**	**1**	**0**	**1**
<=0.015								141			
<=0.03										174	
0.03								30			
<=0.064		11		153							
0.064								4		2	
<=0.12							145		132		
0.12		17		5							
<=0.25						1					
0.25		26					13		37		
0.5		21	6	2		3	1	1	6		
1		19	12	5	1	25			1		1
2		26	20	3	12	23	3				15
4		33	28	6	98	24	9				101
8		18	34	1	45	38	4				48

	AM substance	Cefepime	Cefotaxim	Cefotaxime + Clavulanic acid	Cefoxitin	Ceftazidim	Ceftazidime + Clavulanic acid	Ertapenem	Imipenem	Meropenem	Temocillin
	Cefotaxime synergy test	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**
	Ceftazidime synergy test	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**
	ECOFF	**0.125**	**0.25**	**0.25**	**8**	**0.5**	**0.5**	**0.06**	**0.5**	**0.125**	**32**
	Lowest limit	**0.064**	**0.25**	**0.064**	**0.5**	**0.25**	**0.12**	**0.015**	**0.12**	**0.03**	**0.5**
	Highest limit	**32**	**64**	**64**	**64**	**128**	**128**	**2**	**16**	**16**	**64**
	N of tested isolates	**176**	**176**	**176**	**176**	**176**	**176**	**176**	**176**	**176**	**176**
MIC	**N of resistant isolates**	**148**	**176**	**18**	**20**	**172**	**17**	**1**	**1**	**0**	**1**
16		4	25	1	6	20	1				10
32		1	18		8	19					
64			17		4	15					
>64			16		2						1
128						5					
>128						3					

Table Antimicrobial susceptibility testing of Escherichia coli, non-pathogenic, unspecified in Gallus gallus (fowl) - broilers

Sampling Stage: Slaughterhouse

Sampling Type: animal sample - caecum

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: ESBL MON

Analytical Method:

Country of Origin: Belgium

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.25**	**0.5**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**64**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**176**	**176**	**176**	**176**	**176**	**176**	**176**	**176**	**176**	**176**	**176**	**176**	**176**	**176**
MIC	**N of resistant isolates**	**176**	**18**	**176**	**172**	**84**	**115**	**3**	**17**	**0**	**92**	**152**	**111**	**1**	**137**
<=0.015							48								
<=0.03										174					
0.03							9								
0.064							4			2					
0.12							3								
<=0.25														133	19
0.25							45								
<=0.5					4				107						
0.5				3			32							38	14
<=1								166							
1				15	26		10		49					4	4
<=2			21										62		
2				29	22		3	7	3					1	2
<=4											58				
4			80	23	25		1	2	1				3		
>4				106											
<=8						83						10			
8			51		34		10				16				
>8					65		11								
16			6			9			5		10	8	3		
>16								1							

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.25**	**0.5**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**64**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**176**	**176**	**176**	**176**	**176**	**176**	**176**	**176**	**176**	**176**	**176**	**176**	**176**	**176**
MIC	**N of resistant isolates**	**176**	**18**	**176**	**172**	**84**	**115**	**3**	**17**	**0**	**92**	**152**	**111**	**1**	**137**
32			11			9			6		2	5	8		
>32									5						137
64		2	3			26					8	1	38		
>64		174	4										62		
128						30					20				
>128						19					62				
>1024												152			

Table Antimicrobial susceptibility testing of Escherichia coli, non-pathogenic, unspecified in Gallus gallus (fowl) - broilers

Sampling Stage: Slaughterhouse

Sampling Type: animal sample - caecum

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Belgium

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.25**	**0.5**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**64**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
MIC	**N of resistant isolates**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**
<=0.015							1								
<=0.03										1					
<=0.25				1										1	
<=0.5					1				1						
<=2													1		
2								1							
<=4											1				
4			1												
<=8						1									
>32															1
>64		1													
>1024												1			

Table Antimicrobial susceptibility testing of Escherichia coli, non-pathogenic, unspecified in Gallus gallus (fowl) - breeding flocks, unspecified

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON pnl2

Analytical Method:

Country of Origin: Belgium

Sampling Details:

	AM substance	Cefepime	Cefotaxim	Cefotaxime + Clavulanic acid	Cefoxitin	Ceftazidim	Ceftazidime + Clavulanic acid	Ertapenem	Imipenem	Meropenem	Temocillin
	Cefotaxime synergy test	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**
	Ceftazidime synergy test	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**
	ECOFF	**0.125**	**0.25**	**0.25**	**8**	**0.5**	**0.5**	**0.06**	**0.5**	**0.125**	**32**
	Lowest limit	**0.06**	**0.25**	**0.064**	**0.5**	**0.25**	**0.12**	**0.015**	**0.12**	**0.03**	**0.5**
	Highest limit	**32**	**64**	**64**	**64**	**128**	**128**	**2**	**16**	**16**	**64**
	N of tested isolates	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
MIC	**N of resistant isolates**	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**
<=0.015								1			
<=0.03										1	
<=0.064				1							
<=0.12							1		1		
0.12		1									
1			1								
2						1					1
4					1						

Table Antimicrobial susceptibility testing of Escherichia coli, non-pathogenic, unspecified in Gallus gallus (fowl) - breeding flocks, unspecified

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Belgium

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.25**	**0.5**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**64**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**189**	**189**	**189**	**189**	**189**	**189**	**189**	**189**	**189**	**189**	**189**	**189**	**189**	**189**
MIC	**N of resistant isolates**	**53**	**1**	**1**	**1**	**7**	**30**	**0**	**4**	**0**	**21**	**39**	**37**	**0**	**30**
<=0.015							136								
<=0.03										186					
0.03							21								
0.064							2			3					
0.12							5								
<=0.25				188										170	64
0.25							18								
<=0.5					188				137						
0.5							3							18	85
<=1	8							175							
1							1		43					1	8
<=2		26											142		
2	56			1				14	5						2
<=4											156				
4	68	112							1				9		
>4			1												
<=8					180							69			
8	4	47					1				8		1		
>8							2								
16	2	3			2				3		4	44			
32		1			1						1	31	2		1

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.25**	**0.5**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**64**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**189**	**189**	**189**	**189**	**189**	**189**	**189**	**189**	**189**	**189**	**189**	**189**	**189**	**189**
MIC	**N of resistant isolates**	**53**	**1**	**1**	**1**	**7**	**30**	**0**	**4**	**0**	**21**	**39**	**37**	**0**	**30**
>32															29
64		2				1					2	6	14		
>64		49											21		
128						3					11	2			
>128						2					7				
>1024												37			

Table Antimicrobial susceptibility testing of Escherichia coli, non-pathogenic, unspecified in Gallus gallus (fowl) - laying hens

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Belgium

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.25**	**0.5**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**64**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**76**	**76**	**76**	**76**	**76**	**76**	**76**	**76**	**76**	**76**	**76**	**76**	**76**	**76**
MIC	**N of resistant isolates**	**10**	**0**	**0**	**0**	**1**	**7**	**1**	**0**	**0**	**5**	**7**	**20**	**0**	**9**
<=0.015							55								
<=0.03										75					
0.03							14								
0.064										1					
0.12							1								
<=0.25				76										52	22
0.25							5								
<=0.5					76				50						
0.5							1							23	34
<=1	2							71							
1									23					1	10
<=2		5											56		
2	20							4	3						1
<=4											68				
4	43	49						1							
<=8						71						12			
8	1	22									3				
16						4						29	2		
32												25			
>32															9
64						1					1	3	8		

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.25**	**0.5**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**64**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**76**	**76**	**76**	**76**	**76**	**76**	**76**	**76**	**76**	**76**	**76**	**76**	**76**	**76**
MIC	**N of resistant isolates**	**10**	**0**	**0**	**0**	**1**	**7**	**1**	**0**	**0**	**5**	**7**	**20**	**0**	**9**
>64		10											10		
128											3				
>128											1				
>1024												7			

Table Antimicrobial susceptibility testing of Escherichia coli, non-pathogenic, unspecified in Meat from pig - fresh

Sampling Stage: Retail

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: ESBL MON pnl2

Analytical Method:

Country of Origin: Belgium

Sampling Details:

	AM substance	Cefepime	Cefotaxim	Cefotaxime + Clavulanic acid	Cefoxitin	Ceftazidim	Ceftazidime + Clavulanic acid	Ertapenem	Imipenem	Meropenem	Temocillin
	Cefotaxime synergy test	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**
	Ceftazidime synergy test	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**
	ECOFF	**0.125**	**0.25**	**0.25**	**8**	**0.5**	**0.5**	**0.06**	**0.5**	**0.125**	**32**
	Lowest limit	**0.064**	**0.25**	**0.064**	**0.5**	**0.25**	**0.12**	**0.015**	**0.12**	**0.03**	**0.5**
	Highest limit	**32**	**64**	**64**	**64**	**128**	**128**	**2**	**16**	**16**	**64**
	N of tested isolates	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**
MIC	**N of resistant isolates**	**4**	**6**	**2**	**2**	**6**	**2**	**0**	**0**	**0**	**0**
<=0.015								4			
<=0.03										6	
0.03								1			
<=0.064				3							
0.064								1			
<=0.12							3		4		
0.12		2		1							
0.25							1		2		
1		1		1		1					
2		1		1	1	2	2				
4		1	2		2	2					3
8		1	1		1	1					2
16			1		1						1
32					1						

	AM substance	Cefepime	Cefotaxim	Cefotaxime + Clavulanic acid	Cefoxitin	Ceftazidim	Ceftazidime + Clavulanic acid	Ertapenem	Imipenem	Meropenem	Temocillin
	Cefotaxime synergy test	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**
	Ceftazidime synergy test	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**
	ECOFF	**0.125**	**0.25**	**0.25**	**8**	**0.5**	**0.5**	**0.06**	**0.5**	**0.125**	**32**
	Lowest limit	**0.064**	**0.25**	**0.064**	**0.5**	**0.25**	**0.12**	**0.015**	**0.12**	**0.03**	**0.5**
	Highest limit	**32**	**64**	**64**	**64**	**128**	**128**	**2**	**16**	**16**	**64**
	N of tested isolates	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**
MIC	**N of resistant isolates**	**4**	**6**	**2**	**2**	**6**	**2**	**0**	**0**	**0**	**0**
64			2								

Table Antimicrobial susceptibility testing of Escherichia coli, non-pathogenic, unspecified in Meat from pig - fresh

Sampling Stage: Retail

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: ESBL MON

Analytical Method:

Country of Origin: Belgium

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.25**	**0.5**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**64**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**
MIC	**N of resistant isolates**	**6**	**0**	**6**	**6**	**4**	**4**	**0**	**0**	**0**	**4**	**4**	**3**	**0**	**5**
<=0.015							2								
<=0.03										6					
<=0.25														3	
0.25							2								
<=0.5									3						
0.5							1							3	1
<=1								6							
1									3						
<=2			1										2		
2					3										
<=4											2				
4			1	2	2								1		
>4				4											
<=8						2						1			
8			4		1		1								
32		1				1									
>32															5
64											1	1	2		
>64		5											1		
128						1					1				
>128						2					2				

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.25**	**0.5**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**64**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**
MIC	**N of resistant isolates**	**6**	**0**	**6**	**6**	**4**	**4**	**0**	**0**	**0**	**4**	**4**	**3**	**0**	**5**
>1024												4			

Table Antimicrobial susceptibility testing of Escherichia coli, non-pathogenic, unspecified in Meat from pig - fresh

Sampling Stage: Retail

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: ESBL MON pnl2

Analytical Method:

Country of Origin: France

Sampling Details:

	AM substance	Cefepime	Cefotaxim	Cefotaxime + Clavulanic acid	Cefoxitin	Ceftazidim	Ceftazidime + Clavulanic acid	Ertapenem	Imipenem	Meropenem	Temocillin
	Cefotaxime synergy test	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**
	Ceftazidime synergy test	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**	**Not Available**
	ECOFF	**0.125**	**0.25**	**0.25**	**8**	**0.5**	**0.5**	**0.06**	**0.5**	**0.125**	**32**
	Lowest limit	**0.064**	**0.25**	**0.064**	**0.5**	**0.25**	**0.12**	**0.015**	**0.12**	**0.03**	**0.5**
	Highest limit	**32**	**64**	**64**	**64**	**128**	**128**	**2**	**16**	**16**	**64**
	N of tested isolates	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
MIC	**N of resistant isolates**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
<=0.015								1			
<=0.03										1	
<=0.064				1							
<=0.12							1		1		
0.5		1				1					
2					1						
4			1								1

Table Antimicrobial susceptibility testing of Escherichia coli, non-pathogenic, unspecified in Meat from pig - fresh

Sampling Stage: Retail

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: ESBL MON

Analytical Method:

Country of Origin: France

Sampling Details:

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.25**	**0.5**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**64**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
MIC	**N of resistant isolates**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**
<=0.015							1								
<=0.03										1					
<=0.25														1	1
<=0.5					1				1						
<=1								1							
<=4											1				
4			1												
>4				1											
<=8						1						1			
>64		1											1		

OTHER ANTIMICROBIAL RESISTANCE TABLES

Table Antimicrobial susceptibility testing of Enterococcus, non-pathogenic - E. faecalis in Cattle (bovine animals) - calves (under 1 year)

Sampling Stage: Slaughterhouse | Sampling Type: animal sample - caecum | Sampling Context: Monitoring

Sampler: Official sampling | Sampling Strategy: Objective sampling | Programme Code: AMR MON

Analytical Method:

Country Of Origin:Belgium

Sampling Details:

MIC	AM substance	Ampicillin	Chloramphenicol	Ciprofloxacin	Daptomycin	Erythromycin	Gentamicin	Linezolid	Quinupristin/Dalfopristin	Teicoplanin	Tetracycline	Tigecycline	Vancomycin
	ECOFF	**4**	**32**	**4**	**4**	**4**	**32**	**4**	**0.5**	**2**	**4**	**0.25**	**4**
	Lowest limit	**0.5**	**4**	**0.12**	**0.25**	**1**	**8**	**0.5**	**0.5**	**0.5**	**1**	**0.03**	**1**
	Highest limit	**64**	**128**	**16**	**32**	**128**	**1024**	**64**	**64**	**64**	**128**	**4**	**128**
<=0.03												1	
0.064												41	
0.12												52	
<=0.25					2								
0.25				4								21	
<=0.5	18							4		113			
0.5			44	18									
<=1						9					10		81
1	82		59	61				45		2			
2	14		5	30	9			58	5				32
<=4		7											
4			1	4				4	34				2
<=8							85						
8	1	35						4	26				
16		1					17		45		1		
>16			2										
32									2				
64		54							3		10		
128		18				1					37		
>128						96					57		
1024							1						
>1024							12						

Table Antimicrobial susceptibility testing of Enterococcus, non-pathogenic - E. faecalis in Pigs - fattening pigs

Sampling Stage: Slaughterhouse | Sampling Type: animal sample - caecum | Sampling Context: Monitoring

Sampler: Official sampling | Sampling Strategy: Objective sampling | Programme Code: AMR MON

Analytical Method:

Country Of Origin:Belgium

Sampling Details:

	AM substance	Ampicillin	Chloramphenicol	Ciprofloxacin	Daptomycin	Erythromycin	Gentamicin	Linezolid	Quinupristin/Dalfopristin	Teicoplanin	Tetracycline	Tigecycline	Vancomycin
	ECOFF	**4**	**32**	**4**	**4**	**4**	**32**	**4**	**0.5**	**2**	**4**	**0.25**	**4**
	Lowest limit	**0.5**	**4**	**0.12**	**0.25**	**1**	**8**	**0.5**	**0.5**	**0.5**	**1**	**0.03**	**1**
MIC	**Highest limit**	**64**	**128**	**16**	**32**	**128**	**1024**	**64**	**64**	**64**	**128**	**4**	**128**
<=0.03												2	
0.064												10	
0.12												37	
<=0.25					1								
0.25				2								7	
<=0.5		4								56			
0.5				8									
<=1						26					22		41
1		44		38	20			6					
2		8		7	30	7		46					13
<=4			2										
4					3			2					1
<=8							20						
8			38		2	2		2	18				1
16			2				29		35				
>16				1									
32			2				1		3		1		
64			2								8		
128			10				1				16		
>128						21					9		
1024							4						
>1024							1						

Table Antimicrobial susceptibility testing of Enterococcus, non-pathogenic - E. faecalis in Gallus gallus (fowl) - broilers

Sampling Stage: Slaughterhouse

Sampling Type: animal sample - caecum

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method:

Country Of Origin:Belgium

Sampling Details:

	AM substance	Ampicillin	Chloramphenicol	Ciprofloxacin	Daptomycin	Erythromycin	Gentamicin	Linezolid	Quinupristin/Dalfopristin	Teicoplanin	Tetracycline	Tigecycline	Vancomycin
	ECOFF	**4**	**32**	**4**	**4**	**4**	**32**	**4**	**0.5**	**2**	**4**	**0.25**	**4**
	Lowest limit	**0.5**	**4**	**0.12**	**0.25**	**1**	**8**	**0.5**	**0.5**	**0.5**	**1**	**0.03**	**1**
MIC	**Highest limit**	**64**	**128**	**16**	**32**	**128**	**1024**	**64**	**64**	**64**	**128**	**4**	**128**
<=0.03												6	
0.064												50	
0.12												101	
0.25				12								16	
<=0.5		12						2		173			
0.5				44	2								
<=1						19					31		97
1		129		105	54			76					
2		31		8	104	8		93	1				64
<=4			3										
4				1	13	1		2					12
<=8							92						
8			156						46				
16			11			3	75		119				
>16				3									
32		1				8	1		5		63		
64									2		29		
128			3			2	1				46		
>128						132					4		
256							2						
>1024							2						

Table Antimicrobial susceptibility testing of Enterococcus, non-pathogenic - E. faecalis in Gallus gallus (fowl) - breeding flocks, unspecified

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country Of Origin:Belgium

Sampling Details:

	AM substance	Ampicillin	Chloramphenicol	Ciprofloxacin	Daptomycin	Erythromycin	Gentamicin	Linezolid	Quinupristin/Dalfopristin	Teicoplanin	Tetracycline	Tigecycline	Vancomycin
	ECOFF	**4**	**32**	**4**	**4**	**4**	**32**	**4**	**0.5**	**2**	**4**	**0.25**	**4**
	Lowest limit	**0.5**	**4**	**0.12**	**0.25**	**1**	**8**	**0.5**	**0.5**	**0.5**	**1**	**0.03**	**1**
MIC	**Highest limit**	**64**	**128**	**16**	**32**	**128**	**1024**	**64**	**64**	**64**	**128**	**4**	**128**
<=0.03												2	
0.064												17	
0.12												23	
<=0.25					1								
0.25				1								3	
<=0.5		1						1		45			
0.5				6	1								
<=1						23					11		35
1		33		35	7			7	1				
2		10		3	33	11		37					9
<=4			4										
4					3				3				1
<=8							18						
8		1	39			1			17				
16			1			2	25		24				
32						2	2				10		
64											12		
128			1								11		
>128						6					1		

Table Antimicrobial susceptibility testing of Enterococcus, non-pathogenic - E. faecalis in Turkeys - fattening flocks

Sampling Stage: Slaughterhouse

Sampling Type: animal sample - caecum

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method:

Country Of Origin:Belgium

Sampling Details:

	AM substance	Ampicillin	Chloramphenicol	Ciprofloxacin	Daptomycin	Erythromycin	Gentamicin	Linezolid	Quinupristin/Dalfopristin	Teicoplanin	Tetracycline	Tigecycline	Vancomycin
	ECOFF	**4**	**32**	**4**	**4**	**4**	**32**	**4**	**0.5**	**2**	**4**	**0.25**	**4**
	Lowest limit	**0.5**	**4**	**0.12**	**0.25**	**1**	**8**	**0.5**	**0.5**	**0.5**	**1**	**0.03**	**1**
MIC	**Highest limit**	**64**	**128**	**16**	**32**	**128**	**1024**	**64**	**64**	**64**	**128**	**4**	**128**
0.064												32	
<=0.12				1									
0.12												28	
<=0.25					1								
0.25				9								7	
<=0.5		7						2		66			
0.5				22									
<=1						6					3		50
1		51		31	39			34		1			
2		9		4	26	11		31					17
<=4			6										
4					1								
<=8							42						
8			55			3			18				
16						5	18		44				
32			4						5		8		
64						1					13		
128			2								36		
>128						41					7		
512							1						
>1024							6						

Table Antimicrobial susceptibility testing of Enterococcus, non-pathogenic - E. faecalis in Gallus gallus (fowl) - laying hens

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country Of Origin:Belgium

Sampling Details:

	AM substance	Ampicillin	Chloramphenicol	Ciprofloxacin	Daptomycin	Erythromycin	Gentamicin	Linezolid	Quinupristin/Dalfopristin	Teicoplanin	Tetracycline	Tigecycline	Vancomycin
	ECOFF	**4**	**32**	**4**	**4**	**4**	**32**	**4**	**0.5**	**2**	**4**	**0.25**	**4**
	Lowest limit	**0.5**	**4**	**0.12**	**0.25**	**1**	**8**	**0.5**	**0.5**	**0.5**	**1**	**0.03**	**1**
MIC	**Highest limit**	**64**	**128**	**16**	**32**	**128**	**1024**	**64**	**64**	**64**	**128**	**4**	**128**
<=0.03												3	
0.064												16	
<=0.12				1									
0.12												54	
0.25				1								7	
<=0.5		12						2		80			
0.5				21	2								
<=1						40					40		61
1		45		53	19			9					
2		23		4	49	19		69	1				18
<=4			9										
4					10	2			2				1
<=8							57						
8			68			1			43				
16			2			4	23		34		1		
32						2					4		
64			1			1					10		
128						1					25		
>128						10							

Table Antimicrobial susceptibility testing of Enterococcus, non-pathogenic - E. faecium in Cattle (bovine animals) - calves (under 1 year)

Sampling Stage: Slaughterhouse

Sampling Type: animal sample - caecum

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method:

Country Of Origin:Belgium

Sampling Details:

MIC	AM substance	Ampicillin	Chloramphenicol	Ciprofloxacin	Daptomycin	Erythromycin	Gentamicin	Linezolid	Quinupristin/Dalfopristin	Teicoplanin	Tetracycline	Tigecycline	Vancomycin
	ECOFF	**4**	**32**	**4**	**4**	**4**	**32**	**4**	**1**	**2**	**4**	**0.25**	**4**
	Lowest limit	**0.5**	**4**	**0.12**	**0.25**	**1**	**8**	**0.5**	**0.5**	**0.5**	**1**	**0.03**	**1**
	Highest limit	**64**	**128**	**16**	**32**	**128**	**1024**	**64**	**64**	**64**	**128**	**4**	**128**
<=0.03												39	
0.064												51	
<=0.12				1									
0.12												68	
0.25												16	
<=0.5		37							8	169			
0.5				28	16								
<=1						19					100		157
1		43		79	45			22	18	5			
2		57		15	22	23		131	7		2		14
<=4			71										
4		23		49	70	74		18	124				3
<=8							159						
8		11	91	2	21	10		3	17				
16			6				8						
32		1	2				3						
64		2	4								1		
128											18		
>128						48					53		
256							1						
1024							1						
>1024							2						

Table Antimicrobial susceptibility testing of Enterococcus, non-pathogenic - E. faecium in Pigs - fattening pigs

Sampling Stage: Slaughterhouse | Sampling Type: animal sample - caecum | Sampling Context: Monitoring

Sampler: Official sampling | Sampling Strategy: Objective sampling | Programme Code: AMR MON

Analytical Method:

Country Of Origin:Belgium

Sampling Details:

MIC	AM substance	Ampicillin	Chloramphenicol	Ciprofloxacin	Daptomycin	Erythromycin	Gentamicin	Linezolid	Quinupristin/Dalfopristin	Teicoplanin	Tetracycline	Tigecycline	Vancomycin
	ECOFF	**4**	**32**	**4**	**4**	**4**	**32**	**4**	**1**	**2**	**4**	**0.25**	**4**
	Lowest limit	**0.5**	**4**	**0.12**	**0.25**	**1**	**8**	**0.5**	**0.5**	**0.5**	**1**	**0.03**	**1**
	Highest limit	**64**	**128**	**16**	**32**	**128**	**1024**	**64**	**64**	**64**	**128**	**4**	**128**
<=0.03												27	
0.064												84	
<=0.12				1									
0.12												64	
<=0.25					2								
0.25				5								3	
<=0.5	13								15	176			
0.5				42	17								
<=1						27					86		168
1	41			81	26			2	10	2			
2	54			20	36	75		133	10		1		9
<=4		17											
4	61			25	81	55		41	136				1
<=8							170						
8	9	150		4	16	4		2	7				
16		7					8				1		
32		2				1					3		
64		1				1					66		
128		1				1					16		
>128						14					5		

Table Antimicrobial susceptibility testing of Enterococcus, non-pathogenic - E. faecium in Gallus gallus (fowl) - broilers

Sampling Stage: Slaughterhouse

Sampling Type: animal sample - caecum

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method:

Country Of Origin:Belgium

Sampling Details:

MIC	AM substance	Ampicillin	Chloramphenicol	Ciprofloxacin	Daptomycin	Erythromycin	Gentamicin	Linezolid	Quinupristin/Dalfopristin	Teicoplanin	Tetracycline	Tigecycline	Vancomycin
	ECOFF	**4**	**32**	**4**	**4**	**4**	**32**	**4**	**1**	**2**	**4**	**0.25**	**4**
	Lowest limit	**0.5**	**4**	**0.12**	**0.25**	**1**	**8**	**0.5**	**0.5**	**0.5**	**1**	**0.03**	**1**
	Highest limit	**64**	**128**	**16**	**32**	**128**	**1024**	**64**	**64**	**64**	**128**	**4**	**128**
<=0.03												18	
0.064												64	
0.12												82	
<=0.25					2								
0.25												5	
<=0.5		25							13	166			
0.5				1	1								
<=1						20					47		161
1		43		21	6			15	16	3			
2		34		40	23	15		127	12				6
<=4			9										
4		18		99	97	3		27	70		1		2
<=8							143						
8		12	94	8	38	4			56				
16			42		2	2	15		1				
32		4	18			2	7		1		3		
64		9	5			1					22		
>64		24											
128			1								51		
>128						122					45		
>1024							4						

Table Antimicrobial susceptibility testing of Enterococcus, non-pathogenic - E. faecium in Gallus gallus (fowl) - breeding flocks, unspecified

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country Of Origin:Belgium

Sampling Details:

	AM substance	Ampicillin	Chloramphenicol	Ciprofloxacin	Daptomycin	Erythromycin	Gentamicin	Linezolid	Quinupristin/Dalfopristin	Teicoplanin	Tetracycline	Tigecycline	Vancomycin
	ECOFF	**4**	**32**	**4**	**4**	**4**	**32**	**4**	**1**	**2**	**4**	**0.25**	**4**
	Lowest limit	**0.5**	**4**	**0.12**	**0.25**	**1**	**8**	**0.5**	**0.5**	**0.5**	**1**	**0.03**	**1**
MIC	**Highest limit**	**64**	**128**	**16**	**32**	**128**	**1024**	**64**	**64**	**64**	**128**	**4**	**128**
<=0.03												33	
0.064												41	
0.12												43	
<=0.25					4								
0.25				5								2	
<=0.5		28						1	14	117			
0.5				15	7								
<=1						94					64		113
1		21		38	17			38	15	2			
2		28		13	31	8		73	12		1		2
<=4			65										
4		23		42	50	3		6	76				4
<=8							107						
8		16	51	6	9			1	2				
16		1			1	2	10				1		
32		1	2			3	1						
64			1								19		
>64		1											
128											23		
>128						9					11		
>1024							1						

Table Antimicrobial susceptibility testing of Enterococcus, non-pathogenic - E. faecium in Turkeys - fattening flocks

Sampling Stage: Slaughterhouse

Sampling Type: animal sample - caecum

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method:

Country Of Origin:Belgium

Sampling Details:

	AM substance	Ampicillin	Chloramphenicol	Ciprofloxacin	Daptomycin	Erythromycin	Gentamicin	Linezolid	Quinupristin/Dalfopristin	Teicoplanin	Tetracycline	Tigecycline	Vancomycin
	ECOFF	**4**	**32**	**4**	**4**	**4**	**32**	**4**	**1**	**2**	**4**	**0.25**	**4**
	Lowest limit	**0.5**	**4**	**0.12**	**0.25**	**1**	**8**	**0.5**	**0.5**	**0.5**	**1**	**0.03**	**1**
MIC	**Highest limit**	**64**	**128**	**16**	**32**	**128**	**1024**	**64**	**64**	**64**	**128**	**4**	**128**
<=0.03												8	
0.064												15	
0.12												9	
0.25												5	
<=0.5		5							7	36			
<=1						10					12		31
1		11		4	4			1	7	1			
2		6		13	4	5		33	7				5
<=4			2										
4		9		18	22	3		3	13				1
<=8							33						
8		1	13	2	7	2			3				
16			10			2	4						
32			12								1		
64		3									2		
>64		2											
128											3		
>128						15					19		

Table Antimicrobial susceptibility testing of Enterococcus, non-pathogenic - E. faecium in Gallus gallus (fowl) - laying hens

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country Of Origin:Belgium

Sampling Details:

	AM substance	Ampicillin	Chloramphenicol	Ciprofloxacin	Daptomycin	Erythromycin	Gentamicin	Linezolid	Quinupristin/Dalfopristin	Teicoplanin	Tetracycline	Tigecycline	Vancomycin
	ECOFF	**4**	**32**	**4**	**4**	**4**	**32**	**4**	**1**	**2**	**4**	**0.25**	**4**
	Lowest limit	**0.5**	**4**	**0.12**	**0.25**	**1**	**8**	**0.5**	**0.5**	**0.5**	**1**	**0.03**	**1**
MIC	**Highest limit**	**64**	**128**	**16**	**32**	**128**	**1024**	**64**	**64**	**64**	**128**	**4**	**128**
<=0.03												38	
0.064												60	
0.12												39	
<=0.25					8								
0.25				2									
<=0.5	50							3	45	137			
0.5				10	11								
<=1						98					120		130
1	30			35	12			39	19				
2	37			28	30	17		83	27				6
<=4		65											
4	18			52	58	5		12	44				1
<=8							122						
8	2	68	10	18	3				1				
16		2				2	13		1				
32		2					2				1		
64											9		
128											5		
>128						12					2		

Table Antimicrobial susceptibility testing of Methicillin resistant Staphylococcus aureus (MRSA) in Pigs - breeding animals - unspecified - sows

Sampling Stage: Farm

Sampling Type: animal sample - nasal swab

Sampling Context: Monitoring - active

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country Of Origin:Belgium

Sampling Details:

			AM Substance	Cefoxitin	Chloramphenicol	Ciprofloxacin	Clindamycin	Erythromycin	Fusidic acid	Gentamicin	Kanamycin	Linezolid	Mupirocin	Penicillin	Quinupristin/Dalfopristin	Rifampicin	Streptomycin	Sulfamethoxazole	Tetracycline	Tiamulin	Trimethoprim	Vancomycin
			Performed CC MRSA characterisation	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
			Performed MLST MRSA characterisation	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
			ECOFF	4	16	1	0.25	1	0.5	2	8	4	1	0.12	1	0.032	16	128	1	2	2	2
			Lowest limit	0.5	4	0.25	0.12	0.25	0.5	1	4	1	0.5	0.12	0.5	0.016	4	64	0.5	0.5	2	1
Spa T.	M.Seq.	C.C.	MIC	16	64	8	4	8	4	16	64	8	256	2	4	0.5	32	512	16	4	32	16
11		398	<=0.016													57						
			<=0.12				32															
			<=0.25			15		18														
			0.25				1															
			<=0.5						56				56		35					48		
			0.5			8		16														
			<=1							43		1										57
			1			5									18					5		
			<=2																		6	
			2			2				1		55	1	1	2							
			>2											56								
			<=4		1						42						30					
			4			1			1	1		1			1						2	
			>4				24								1					4		
			8	19	42	14					2						23					
			>8			12		23														
			16	28	14					4							3					
			>16	10						8									57			
			32								1											
			>32														1				49	
			<=64															52				

Spa T.	M.Seq.	C.C.	AM Substance	Cefoxitin	Chloramphenicol	Ciprofloxacin	Clindamycin	Erythromycin	Fusidic acid	Gentamicin	Kanamycin	Linezolid	Mupirocin	Penicillin	Quinupristin/Dalfopristin	Rifampicin	Streptomycin	Sulfamethoxazole	Tetracycline	Tiamulin	Trimethoprim	Vancomycin
			Performed CC MRSA characterisation	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
			Performed MLST MRSA characterisation	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
			ECOFF	4	16	1	0.25	1	0.5	2	8	4	1	0.12	1	0.032	16	128	1	2	2	2
			Lowest limit	0.5	4	0.25	0.12	0.25	0.5	1	4	1	0.5	0.12	0.5	0.016	4	64	0.5	0.5	2	1
			MIC	16	64	8	4	8	4	16	64	8	256	2	4	0.5	32	512	16	4	32	16
11	398		64								1											
			>64								11											
			128															5				
34	398		<=0.016													18						
			<=0.25			13		7														
			0.25				1															
			<=0.5						18				18		1					1		
			0.5			4		8														
			<=1							18		1										17
			1			1																
			2									16			10							1
			>2											18								
			<=4								18						9					
			4				1					1			5							
			>4				16								2					17		
			8	2	18												4					
			>8					3														
			16	16													1					
			>16																18			
			>32														4				18	
			<=64															17				
			>512															1				
108	398		<=0.016													2						
			<=0.25			1																
			<=0.5						2				2							2		
			0.5			1																
			<=1							2		2										2
			1												2							
			<=2																		2	
			>2											2								
			<=4								2						2					
			>4				2															
			8	1	2																	
			>8					2														

		AM Substance	Cefoxitin	Chloramphenicol	Ciprofloxacin	Clindamycin	Erythromycin	Fusidic acid	Gentamicin	Kanamycin	Linezolid	Mupirocin	Penicillin	Quinupristin/Dalfopristin	Rifampicin	Streptomycin	Sulfamethoxazole	Tetracycline	Tiamulin	Trimethoprim	Vancomycin
		Performed CC MRSA characterisation	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
		Performed MLST MRSA characterisation	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
		ECOFF	4	16	1	0.25	1	0.5	2	8	4	1	0.12	1	0.032	16	128	1	2	2	2
		Lowest limit	0.5	4	0.25	0.12	0.25	0.5	1	4	1	0.5	0.12	0.5	0.016	4	64	0.5	0.5	2	1
Spa T.	M.Seq.	C.C.	MIC	16	64	8	4	8	4	16	64	8	256	2	4	0.5	32	512	16	4	32	16
108		398	16	1																		
			>16																2			
			<=64														2					
779		398	<=0.016												1							
			<=0.12				1															
			<=0.5						1				1		1					1		
			<=1																			1
			2					1		1			1									
			>2											1								
			8		1	1																
			16	1							1											
			>16															1				
			32													1						
			>32																	1		
			<=64														1					
2346		398	<=0.016												1							
			<=0.12				1															
			<=0.25					1														
			<=0.5						1				1		1					1		
			<=1							1												1
			2								1											
			>2											1								
			<=4							1						1						
			8		1																	
			>8			1																
			16	1																		
			>16															1				
			>32																	1		
			<=64														1					
2582		398	<=0.016												1							
			<=0.5						1				1									

Spa T.	M.Seq.	C.C.	AM Substance	Cefoxitin	Chloramphenicol	Ciprofloxacin	Clindamycin	Erythromycin	Fusidic acid	Gentamicin	Kanamycin	Linezolid	Mupirocin	Penicillin	Quinupristin/Dalfopristin	Rifampicin	Streptomycin	Sulfamethoxazole	Tetracycline	Tiamulin	Trimethoprim	Vancomycin
			Performed CC MRSA characterisation	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
			Performed MLST MRSA characterisation	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
			ECOFF	4	16	1	0.25	1	0.5	2	8	4	1	0.12	1	0.032	16	128	1	2	2	2
			Lowest limit	0.5	4	0.25	0.12	0.25	0.5	1	4	1	0.5	0.12	0.5	0.016	4	64	0.5	0.5	2	1
			MIC	16	64	8	4	8	4	16	64	8	256	2	4	0.5	32	512	16	4	32	16
2582		398	0.5			1		1														
			<=1							1												1
			2									1			1							
			>2											1								
			>4				1													1		
			8		1						1						1					
			16	1																		
			>16																1			
			>32																		1	
			<=64															1				
2922		398	<=0.016													1						
			<=0.25			1																
			<=0.5						1				1									
			<=1							1		1										1
			2												1							
			>2											1								
			<=4								1						1					
			>4				1													1		
			8	1	1																	
			>8					1														
			>16																1			
			>32																		1	
			128															1				
3119		398	<=0.016													2						
			<=0.12				1															
			<=0.25			1																
			<=0.5						2				2		2					2		
			0.5			1		1														
			<=1							1												2
			<=2																		1	
			2									2										
			>2											2								
			<=4								1						1					
			>4				1															

Spa T.	M.Seq.	C.C.	AM Substance	Cefoxitin	Chloramphenicol	Ciprofloxacin	Clindamycin	Erythromycin	Fusidic acid	Gentamicin	Kanamycin	Linezolid	Mupirocin	Penicillin	Quinupristin/Dalfopristin	Rifampicin	Streptomycin	Sulfamethoxazole	Tetracycline	Tiamulin	Trimethoprim	Vancomycin
			Performed CC MRSA characterisation	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
			Performed MLST MRSA characterisation	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
			ECOFF	4	16	1	0.25	1	0.5	2	8	4	1	0.12	1	0.032	16	128	1	2	2	2
			Lowest limit	0.5	4	0.25	0.12	0.25	0.5	1	4	1	0.5	0.12	0.5	0.016	4	64	0.5	0.5	2	1
			MIC	16	64	8	4	8	4	16	64	8	256	2	4	0.5	32	512	16	4	32	16
3119		398	8	1	2																	
			>8					1														
			16	1													1					
			>16							1									2			
			>32																		1	
			<=64															1				
			>64								1											
			256															1				

Table Antimicrobial susceptibility testing of Methicillin resistant Staphylococcus aureus (MRSA) in Pigs - fattening pigs

Sampling Stage: Farm

Sampling Type: animal sample - nasal swab

Sampling Context: Monitoring - active

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country Of Origin:Belgium

Sampling Details:

			AM Substance	Cefoxitin	Chloramphenicol	Ciprofloxacin	Clindamycin	Erythromycin	Fusidic acid	Gentamicin	Kanamycin	Linezolid	Mupirocin	Penicillin	Quinupristin/Dalfopristin	Rifampicin	Streptomycin	Sulfamethoxazole	Tetracycline	Tiamulin	Trimethoprim	Vancomycin
			Performed CC MRSA characterisation	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
			Performed MLST MRSA characterisation	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
			ECOFF	4	16	1	0.25	1	0.5	2	8	4	1	0.12	1	0.032	16	128	1	2	2	2
			Lowest limit	0.5	4	0.25	0.12	0.25	0.5	1	4	1	0.5	0.12	0.5	0.016	4	64	0.5	0.5	2	1
Spa T.	M.Seq.	C.C.	MIC	16	64	8	4	8	4	16	64	8	256	2	4	0.5	32	512	16	4	32	16
11		398	<=0.016													67						
			<=0.12				31															
			<=0.25			26		18														
			0.25				1															
			<=0.5						66				67		40					53		
			0.5			7		17														
			<=1							42		5										67
			1			4			1						19					5		
			<=2																		3	
			2			3				2		59			2							
			>2											67								
			<=4		2						43						35					
			4			1	1			5		3			1							
			>4				34								5					9		
			8	24	48	10				5	9						28					
			>8			16		32														
			16	36	13					1	2						2					
			>16	7						12									67			
			32														1					
			>32														1				64	
			<=64															59				

Spa T.	M.Seq.	C.C.	AM Substance	Cefoxitin	Chloramphenicol	Ciprofloxacin	Clindamycin	Erythromycin	Fusidic acid	Gentamicin	Kanamycin	Linezolid	Mupirocin	Penicillin	Quinupristin/Dalfopristin	Rifampicin	Streptomycin	Sulfamethoxazole	Tetracycline	Tiamulin	Trimethoprim	Vancomycin
			Performed CC MRSA characterisation	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
			Performed MLST MRSA characterisation	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
			ECOFF	4	16	1	0.25	1	0.5	2	8	4	1	0.12	1	0.032	16	128	1	2	2	2
			Lowest limit	0.5	4	0.25	0.12	0.25	0.5	1	4	1	0.5	0.12	0.5	0.016	4	64	0.5	0.5	2	1
			MIC	16	64	8	4	8	4	16	64	8	256	2	4	0.5	32	512	16	4	32	16
11		398	64		4						2											
			>64								11											
			128															4				
			256															3				
			>512															1				
34		398	<=0.016													11						
			<=0.25			10		3														
			<=0.5						10				11									
			0.5			1		5														
			<=1							11		1										11
			1						1													
			2									10			6							
			>2											11								
			<=4		1						11						6					
			4				1								2					1		
			>4				10								3					10		
			8	2	8												4					
			>8					3														
			16	8	2																	
			>16	1															11			
			>32														1				11	
			<=64															10				
			>512															1				
1451		398	<=0.016													2						
			<=0.12				2															
			<=0.25			2		1														
			<=0.5						2				2		2					2		
			0.5					1														
			<=1							2		1										2
			<=2																		2	
			2									1										
			>2											2								

		AM Substance	Cefoxitin	Chloramphenicol	Ciprofloxacin	Clindamycin	Erythromycin	Fusidic acid	Gentamicin	Kanamycin	Linezolid	Mupirocin	Penicillin	Quinupristin/Dalfopristin	Rifampicin	Streptomycin	Sulfamethoxazole	Tetracycline	Tiamulin	Trimethoprim	Vancomycin
		Performed CC MRSA characterisation	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
		Performed MLST MRSA characterisation	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
		ECOFF	4	16	1	0.25	1	0.5	2	8	4	1	0.12	1	0.032	16	128	1	2	2	2
		Lowest limit	0.5	4	0.25	0.12	0.25	0.5	1	4	1	0.5	0.12	0.5	0.016	4	64	0.5	0.5	2	1
Spa T.	M.Seq.	C.C.	MIC																		
1451	398		<=4							2											
			8		1											2					
			16	1																	
			>16	1														2			
			<=64														2				
			64		1																
1457	398		<=0.016												1						
			<=0.5					1				1							1		
			0.5			1															
			<=1						1												1
			1											1							
			2								1										
			>2										1								
			<=4							1						1					
			>4			1															
			8	1	1																
			>8				1														
			>16															1			
			>32																	1	
			128														1				
2346	398		<=0.016												1						
			<=0.12			1															
			<=0.5					1				1		1					1		
			0.5				1														
			<=1						1												1
			2								1										
			>2										1								
			<=4							1											
			8	1	1	1										1					
			>16															1			
			>32																	1	
			<=64														1				
2370	398		<=0.016												2						

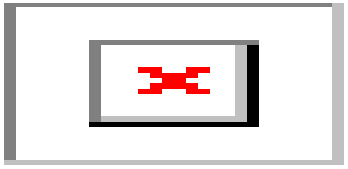
		AM Substance	Cefoxitin	Chloramphenicol	Ciprofloxacin	Clindamycin	Erythromycin	Fusidic acid	Gentamicin	Kanamycin	Linezolid	Mupirocin	Penicillin	Quinupristin/Dalfopristin	Rifampicin	Streptomycin	Sulfamethoxazole	Tetracycline	Tiamulin	Trimethoprim	Vancomycin
		Performed CC MRSA characterisation	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
		Performed MLST MRSA characterisation	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
		ECOFF	4	16	1	0.25	1	0.5	2	8	4	1	0.12	1	0.032	16	128	1	2	2	2
		Lowest limit	0.5	4	0.25	0.12	0.25	0.5	1	4	1	0.5	0.12	0.5	0.016	4	64	0.5	0.5	2	1
Spa T.	M.Seq. C.C.	MIC	16	64	8	4	8	4	16	64	8	256	2	4	0.5	32	512	16	4	32	16
2370	398	<=0.25			2																
		<=0.5						2				2		1					2		
		<=1							2		2										2
		1												1							
		>2											2								
		<=4								1						2					
		>4				2															
		8	2	1						1											
		>8					2														
		>16																2			
		32		1																	
		>32																		2	
		<=64															2				
2383	398	<=0.016													1						
		<=0.12				1															
		<=0.25					1														
		<=0.5						1				1		1					1		
		<=1							1												1
		2									1										
		>2											1								
		<=4								1						1					
		8	1	1	1																
		>16																1			
		>32																		1	
		<=64															1				
3041	398	<=0.016													1						
		<=0.25			1																
		<=0.5						1				1									
		0.5					1														
		<=1							1												1
		<=2																		1	
		2									1			1							

Spa T.	M.Seq.	C.C.	AM Substance	Cefoxitin	Chloramphenicol	Ciprofloxacin	Clindamycin	Erythromycin	Fusidic acid	Gentamicin	Kanamycin	Linezolid	Mupirocin	Penicillin	Quinupristin/Dalfopristin	Rifampicin	Streptomycin	Sulfamethoxazole	Tetracycline	Tiamulin	Trimethoprim	Vancomycin
			Performed CC MRSA characterisation	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
			Performed MLST MRSA characterisation	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
			ECOFF	4	16	1	0.25	1	0.5	2	8	4	1	0.12	1	0.032	16	128	1	2	2	2
			Lowest limit	0.5	4	0.25	0.12	0.25	0.5	1	4	1	0.5	0.12	0.5	0.016	4	64	0.5	0.5	2	1
			MIC	16	64	8	4	8	4	16	64	8	256	2	4	0.5	32	512	16	4	32	16
3041		398	>2											1								
			<=4								1						1					
			>4				1													1		
			8	1	1																	
			>16																1			
			<=64															1				
3119		398	<=0.016													1						
			<=0.5						1				1									
			0.5			1																
			<=1							1												1
			2									1										
			>2											1								
			<=4								1						1					
			>4				1								1					1		
			8		1																	
			>8					1														
			16	1																		
			>16																1			
			>32																		1	
			<=64															1				

Specific monitoring of ESBL-/AmpC-/carbapenemase-producing bacteria and specific monitoring of carbapenemase-producing bacteria, in the absence of isolate detected

Programme Code	Matrix Detailed	Zoonotic Agent Detailed	Sampling Strategy	Sampling Stage	Sampling Details	Sampling Context	Sampler	Sample Type	Sampling Unit Type	Sample Origin	Comment	Total Units Tested	Total Units Positive
CARBAMON	Cattle (bovine animals) - calves (under 1 year)	Escherichia coli, non-pathogenic, unspecified	Objective sampling	Slaughterhouse	N_A	Monitoring	Official sampling	animal sample - caecum	slaughter animal batch	Belgium	N_A	300	0
	Gallus gallus (fowl) - broilers	Escherichia coli, non-pathogenic, unspecified	Objective sampling	Slaughterhouse	N_A	Monitoring	Official sampling	animal sample - caecum	slaughter animal batch	Belgium	N_A	348	0
	Meat from bovine animals - fresh	Escherichia coli, non-pathogenic, unspecified	Objective sampling	Retail	N_A	Monitoring	Official sampling	food sample - meat	batch (food/feed)	Belgium	N_A	300	0
	Meat from pig - fresh	Escherichia coli, non-pathogenic, unspecified	Objective sampling	Retail	N_A	Monitoring	Official sampling	food sample - meat	batch (food/feed)	Belgium	N_A	300	0
	Pigs - fattening pigs	Escherichia coli, non-pathogenic, unspecified	Objective sampling	Slaughterhouse	N_A	Monitoring	Official sampling	animal sample - caecum	slaughter animal batch	Belgium	N_A	297	0

Specific monitoring of ESBL-/AmpC-/carbapenemase-producing bacteria and specific monitoring of carbapenemase-producing bacteria, in the absence of isolate detected



Latest Transmission set

Table Name	Last submitted dataset transmission date
Antimicrobial Resistance	11-Dec-2020
Esbl	17-Jul-2020
Animal Population	24-Jul-2020
Disease Status	22-Jul-2020
Food Borne Outbreaks	17-Jul-2020
Prevalence	24-Jul-2020

Belgium, Text Forms 2019

Table of contents

Inhoud

1. Institutions and Laboratories involved in zoonoses monitoring and reporting

The Federal Agency for the Safety of the Food Chain (FASFC) is responsible for the monitoring and reporting of zoonoses in food, feed and animals, except for wildlife. The regional authorities are responsible for the monitoring in wildlife.

The FASFC has 5 in-house laboratories of which 2 perform most of the microbiological analyses in the framework of the zoonoses monitoring. Part of the analyses is performed by the national reference laboratory (NRL) Sciensano, part by the laboratories of the animal health associations (DGZ and ARSIA) and part by other external laboratories approved by the FASFC.

Sciensano is the national reference laboratory for animal diseases, zoonoses and antimicrobial resistance with the exception of parasites for which the Institute of Tropical Medicine (ITM) is the national reference laboratory. Sciensano is as well appointed as NRL for foodborne outbreaks by the FASFC.

Both the national reference laboratories and the FASFC are responsible for the reporting to EFSA. The FASFC coordinates this reporting activity.

2. Animal population

1. Sources of information and the date(s) (months, years) the information relates to

The SANITEL and BELTRACE database of the Federal Agency for the Safety of the Food Chain (FASFC) is the central database for identification and registration of facilities and animals The reported figures concern the number of active holdings on 16/12/2019. For bovines, the number of animals is the number of animals present on 16/12/2019, for poultry and pigs, it concerns the maximum capacity of animals. For sheep and goats, it concerns the animals present on 15 December 2019. The number of slaughtered animals equals the total of animals slaughtered during the year 2019. As of the beginning of 2019, poultry farms are not only registered at the level of the holding but also at the level of the epidemiological unit. Both figures are reported. The number of flocks equals the maximal number of flocks that can be present at a certain point in time.

2. Definitions used for different types of animals, herds, flocks and holdings as well as the production types covered

A holding is any establishment, construction or, in the case of an outdoor farm, any place in which animals are held, kept or handled. The location of the holding is based on the address and the coordinates of the geographical entity. A geographical entity is a unit of one building or a complex of buildings including grounds and territories where an animal species is or could be held. A herd/flock is an animal or a group of animals kept on a holding as an epidemiological unit. If more than one herd is kept on a holding, each of these herds shall form a distinct unit.

3. National changes of the numbers of susceptible population and trends

Over the last years, there's a continuous decrease in the total number of holdings for all animal species. In 2019 an increase in the number of holdings is seen for all species except for bovines and pigs. Compared to 2018, small increases were seen in the total number of bovines, goats, layers and broilers and decreases in the number of pigs, Cervidae, breeders and horses in 2019. About 46.6% of the registered horses are excluded from the food chain. There is no explanation for the high increase in the number of holdings with Cervidae.

4. Geographical distribution and size distribution of the herds, flocks and holdings

Belgium can be geographically divided into two regions, the Flemish region situated in the north and the Walloon region situated in the south of the country. There's a very dense animal population of bovines, swine and poultry in the Flemish region. The Walloon region is important for its cattle breeding holdings of the Belgian Blue White breed. About 28 percent of poultry farms and 23 percent of pig farms are situated in the Walloon region.

Disease status

3. General evaluation: *Brucella* in animals

1. History of the disease and/or infection in the country

The domestic pig population is free of brucellosis. The last ***Brucella*** isolation in domestic pigs in Belgium was in 1969. Belgium is officially free from bovine brucellosis since 25 June 2003 (Commission Decision 2003/467/EC) and of ***B. melitensis*** since 29 March 2001 (Commission Decision 2001/292/EC.

4. Description of Monitoring/Surveillance/Control programmes system: *Brucella* in pigs – animal sample

1. Monitoring/Surveillance/Control programmes system

Serological screening for ***Brucella*** is done for breeding pigs destined for non-commercial assemblies, at artificial insemination centres and in animals intended for trade. The methods used are Rose Bengal test (RBT), Slow Agglutination test (SAT) according to Wright, Complement Fixation test (CFT) and ELISA. Bacteriological examination for ***Brucella*** and ***Yersinia*** is done in case of positive serology. Regularly, false positive serological reactions are reported. These are due to a ***Yersinia enterocolitica*** O9 infection and are confirmed by ***Yersinia enterocolitica 09*** isolation in the absence of ***Brucella spp***. isolation.

2. Notification system in place to the national competent authority

Brucellosis is a notifiable disease according to the Animal Health Law of 24 March 1987, Chapter III and the Royal Degree of 3 February 2014 (list of notifiable diseases).

3. Results of investigations and national evaluation of the situation, the trends and sources of infection

The domestic pig population in Belgium is free of brucellosis. The last ***Brucella*** isolation in domestic pigs in Belgium was in 1969. ***B. suis*** **biovar 2** may be isolated from wild boars (Sus scrofa). The infection seems to be endemic in wild boar in Belgium. ***B. suis*** **biovar 2**, circulating among wild boars, shows only limited pathogenicity for humans, if pathogenic at all.

5. Description of Monitoring/Surveillance/Control programmes system: *Brucella* in bovines – animal sample

1. Monitoring/Surveillance/Control programmes system

Since Belgium is officially free of bovine brucellosis, the eradication program has been changed in a surveillance program. An animal is legally suspected of brucellosis in case of a positive ELISA. If, according to the epidemiology and the results of the blood test, an animal or herd is found to be at risk, a bacteriological investigation always takes place. Hence, a brucellosis animal is defined as an animal in which ***Brucella abortus*** has been isolated, and a cattle holding is considered as an outbreak herd if one of the animals is positive for brucellosis by bacteriological examination. In 2009, a study was realized to evaluate the current national surveillance program of bovine brucellosis. The study clearly indicated that the best approach is to test bovines imported from officially free or nonofficially free Member States of ***Brucella spp***., to test animals at purchase in consequence of national trade as well as to analyse aborting animals in order to early detect infection. Due to the results of the study, the mandatory analysis for brucellosis at purchase of new animals changed into a voluntary approach. A new surveillance program has been applied from the end of 2009 on. In 2019, surveillance was focused on following risk categories:

- each bovine animal older than 24 months, import of non-officially free MSs or Third Countries at the moment of trade and follow-up testing during 3 consecutive years during the 'winterscreening' (targeted selection);
- at random selection of 500 bovine herds of all herds that did not declare any abortion during the past year and did send some lightweight carcasses of new-borns to the rendering plant. On these herds a maximum of 20 female animals, over 24 months old, are randomly selected for serological analysis of brucellosis;
- abortion protocol: all abortions should be notified and analysed for brucellosis;
- a general screening of dairy herds by an ELISA of bulkmilk was realised in spring and autumn 2019. There were no cases of bovine brucellosis in 2019.

Blood samples are taken by the farm veterinarian, bulk milk samples by the driver at the moment of the collection of the milk by the milk factory. Micro agglutination test and ELISA are performed on blood or bulk milk. Other tests performed are the complement fixation test, the Rose Bengale Test, PCR, Stamp/Ziehl Neelsen coloration and culture. An animal is defined as infected if ***Brucella spp***. has been isolated by culture and identified as brucellosis. A herd is defined as infected if one of its animals is positive by bacteriological examination for Brucellosis.

2. Measures in place

Vaccination is prohibited since 1992. In case of a positive result in the micro-agglutination test the same blood, sample is tested with an ELISA. If this indirect ELISA is positive, the result has to be confirmed by a blocking (homemade) ELISA at the NRL. If this confirmatory test is positive, the animal is considered as infected and is compulsory slaughtered (test and slaughter strategy) for additional analysis to detect a possible Brucella infection by culture.

3. Notification system in place to the national competent authority

Brucellosis is a notifiable disease according to the Animal Health Law of 24 March 1987 Chapter III and the Royal Degree of 3 February 2014 (list of notifiable diseases).

4. Results of investigations and national evaluation of the situation, the trends and sources of infection

An intensified bovine brucellosis control program started in Belgium in 1988. In case of active brucellosis, i.e. excretion of ***Brucella***, the plan consisted in the culling of all animals of the infected herd (total depopulation). Culled bovines were compensated based on the replacement value of the animals. In March 2000, the last case of bovine brucellosis was identified before obtaining the officially brucellosis free status in 2003. In case of positive serological reactors, the FASFC instructs follow-up testing or 'test and slaughter' for additional analyses. These analyses could not confirm brucellosis. To reduce the number of FPSR (False positive serological reactors) to be slaughtered, the micro-agglutination test has been used as for routine testing whereas the indirect ELISA is accepted as a complementary test by serial or parallel testing. The blocking ELISA of the NRL is considered as the confirmation test. This approach avoids the unnecessary mandatory slaughter of false positive reacting animals.
End 2010 a brucellosis breakdown herd was detected after analysing an abortion. The infected herd was totally depopulated. In March 2012, again a breakdown of brucellosis was detected after analysis of an abortion. No epidemiological link could be found with the breakdown of 2010. Tracing-back and an epidemiological inquiry lead to the detection of 4 other secondary breakdowns linked to the primary case. All these 5 brucellosis breakdown herds were infected with an identical ***Brucella abortus*** **biovar 3**. Another infected herd of brucellosis was detected by analysis of bulk milk and an infection with ***Brucella suis*** **biovar 2** was confirmed. Finally there was a stamping-out of all the animals of the infected herds. In 2013 a breakdown herd was detected as contact herd of the primary breakdown herd of 2012. The breakdown herd of 2013 was already examined twice by serology in 2012 with negative results. A third follow-up screening by serology indicated some positive results. This positive serology could be confirmed by culture after test and slaughter of the reactors. Finally 6 bovines were infected. There was a stamping-out of all the animals of this infected herd. In 2014, bovine brucellosis was not detected by a serological follow-up surveillance of contact herds of the brucellosis incident. In 2015, no cases of brucella infection were detected by a last serological follow-up surveillance of contact herds during the winter campaign of the 2012 - 2013 brucellosis incident. Scientific advice 05-2016 of the Scientific Committee of the FASFC on the re-emergence of bovine brucellosis in Belgium was published in May 2016. At the end of 2016, on a holding of cattle, one bovine was found infected with ***B. suis*** **biovar 2** by microbiological examination after mandatory test-slaughter due to serological positive reaction. This holding was finally totally depopulated. Probably contact with wild boar could have been the origin of infection with this pathogen. ***B. suis*** **biovar 2** may be isolated from wild boars (Sus scrofa). The infection seems to be endemic in wild boar in Belgium. ***B. suis*** **biovar 2**, circulating among wild boar, shows only limited pathogenicity for humans, if pathogenic at all. There were no cases of bovine brucellosis in 2019.

6. Description of Monitoring/Surveillance/Control programmes system: *Brucella melitensis* in goats and sheep – animal sample

1. Monitoring/Surveillance/Control programmes system

Serum samples taken in the framework of a national monitoring programme for Visna-Maedi/CAE and at export are examined for ***Brucella melitensis*** specific antibodies by means of an iELISA at the NRL. All ELISA positive samples are consecutively tested by the Rose Bengal Test (RBT) and Complement Fixation Test (CFT) as confirmatory tests. Animals that are positive in the two confirmatory tests or that could not be analysed and/or interpreted in RBT and/or CFT were sampled a second time. A sheep or goat is defined as infected with brucellosis if positive in all three tests: the ELISA, the Rose Bengal test and the Complement Fixation test and ***Brucella melitensis*** is isolated by culture.

2. Measures in place

If the confirmatory test is positive, the animal is considered as infected and is compulsory slaughtered (test and slaughter strategy) for additional analysis to detect a possible ***Brucella*** infection by culture.

3. Notification system in place to the national competent authority

Brucellosis is a notifiable disease according to the Animal Health Law of 24 March 1987 Chapter III and the Royal Degree of 3 February 2014 (list of notifiable diseases).

4. Results of investigations and national evaluation of the situation, the trends and sources of infection

At the National Reference Laboratory, 7.049 caprine/ovine serum samples were tested in 2019. The results confirmed those of previous years, i.e. the absence of any epidemiological or bacteriological evidence of caprine/ovine brucellosis in Belgium.

7. General evaluation: *Mycobacterium*

1. History of the disease and/or infection in the country

Belgium (all regions) is officially free of bovine tuberculosis since 25 June 2003 (Commission Decision 2003/467/EG). Each year, a couple of infected bovine herds are discovered with a minimum of 0 in 2010 and a maximum of 24 in 2000. Neither infected herds nor infected wild and farmed deer were found in 2019.

2. Evaluation of status, trends and relevance as a source for humans

Bovine tuberculosis in humans caused by ***M. bovis*** is clinically indistinguishable from human tuberculosis caused by ***M. tuberculosis***. In the past, the most important way of transmission of ***M. bovis*** to humans was the consumption of raw milk or raw milk products from infected cattle. Industrial heating during production methods or pasteurization of raw milk stopped this way of transmission to humans. Nowadays tuberculosis in humans caused by ***M. bovis*** is rare. In regions were ***M. bovis*** infections in cattle are largely eliminated, only few residual cases occur among elderly persons as a result of the reactivation of dormant ***M. bovis*** within old lesions. Also among migrants from high-prevalence countries or regions, infections with ***M. bovis*** are diagnosed. Agricultural workers may acquire infection by ***M. bovis*** by inhaling cough aerosols from infected cattle and may subsequently develop typical pulmonary or genito-urinary tuberculosis. Cervical lymphadenopathy, intestinal lesions, chronic skin tuberculosis (lupus vulgaris) and other non-pulmonary forms are also particularly common as clinical symptoms. Seen the very low prevalence of bovine tuberculosis in bovines and farmed and wild deer, bovine tuberculosis in animals is not relevant as a source for infection of humans in Belgium. No recent cases in humans were linked to tuberculosis in animals except of farmers and their employees and family of infected farms.

3. Any recent specific action in the Member State or suggested for the European Union

The surveillance program of tuberculosis is based on Directive 64/432/EEC, which is implemented and adapted in National legislation since 1963 and last modified by the Royal Decree of 17 October 2002. The control implies skin testing of animals at the occasion of trade and intensive testing of infected and contact farms in consequence of a confirmation of a bovine TB suspicious case (tracing-on and tracing-back of all contact animals and contact herds). Systematic ante- and post-mortem examination are performed at all slaughterhouses. The Federal Agency for the Safety of the Food chain is informed about any suspicious or positive result of the skin test of bovines and may decide to re-examine (additional tests e.g. comparative tuberculin test, interferon-gamma test) the animals or to kill them for additional analysis (test and slaughter strategy). In case a "TB suspicious" lesion is detected, a tissue sample is sent to the National Reference Laboratory for analysis. Consequently, if a ***M. bovis*** suspicion is confirmed by a positive culture or PCR, all animals in the herd of origin are skin tested and an epidemiological investigation is realized. The total herd is considered as the 'epidemiological unit'. Isolation of ***M. bovis*** and biochemical testing is exclusively performed in the National Reference Laboratory where also IFN-gamma, PCR and molecular typing by means of RFLP, spoligotyping or more recently MIRU-VNTR are done to support the epidemiological investigations and to eventually prove the link between different cases.
In case a holding is infected and if by epidemiological investigation and tracing-back, animals were found to have been traded to another country, the Chief Veterinary Officer of the country of destination is informed about the outbreak in the country of origin. This alert can help to rapidly detect an infection in the concerned holding of destination abroad. Monitoring of the type of strains circulating in each country could contribute to the understanding of the temporal-spatial spread of some specific strains

between different countries and could possibly bear some epidemiological links between different outbreaks. More attention should be given to intracommunity trade in animals sensitive to bovine tuberculosis (e.g. camelids), especially if those animals have stayed for a time in an endemic region of tuberculosis. Attention should also be given to early detection of a possible incurrence of infected wildlife as deer, wild boar and badgers from neighbouring countries.

8. Description of Monitoring/Surveillance/Control programmes system: *Mycobacterium tuberculosis* complex (MTC) in wild and farmed deer – animal sample

1. Monitoring/Surveillance/Control programmes system

Monitoring of ***Mycobacterium tuberculosis*** complex in wild and farmed deer is done by a systematic post-mortem examination at the slaughterhouses/game handling establishment. Suspicious lesions of lungs, lymph nodes, etc are further examined by different methods: Ziehl-Neelsen coloration - Culture for isolation - PCR on lesions / organs - PCR on culture. An animal is positive if ***Mycobacterium bovis*** is isolated by culture or confirmed by laboratory analysis.
At the Faculty of Veterinary Medicine of the University of Liège, examination at autopsy of hunted or killed by accident "wild" deer are also performed. In case of suspected TB lesions, tissue samples are sent to the National Reference Laboratory for additional analysis to confirm the suspicion.

2. Measures in place

There are no measures in place in case MTC should be confirmed in wild deer.

3. Notification system in place to the national competent authority

MTC is a notifiable animal disease according to Chapter III of the Animal Health Law of 24 March 1987 and the Royal decree of 3 February 2014. All farmers, vets and laboratories have to notify the disease to the Federal Agency for the Safety of the Food Chain.

4. Results of investigations and national evaluation of the situation, the trends and sources of infection

No ***Mycobacterium bovis*** was detected in "wild/hunted" or "farmed" deer in the last 5 years.

9. Description of Monitoring/Surveillance/Control programmes system: *Mycobacterium tuberculosis* complex (MTC) in farmed bovines – animal sample

1. Monitoring/Surveillance/Control programmes system

The control of tuberculosis is based on Council Directive 64/432/EEC, which is implemented and adapted in National legislation since 1963 and was last modified by the Royal Decree of 17 October 2002. The surveillance program implies skin testing of all animals at purchase by the contracted farm veterinarian, skin testing of all animals of a holding and of all 'contact' animals and herds (tracing-on and tracing-back) in case of a suspected/infected bovine(s) on a holding and a systematic ante- and post-mortem examination of all slaughtered bovines. All dairy cows older than 24 months that belong to a herd that directly sells raw milk or raw dairy products are tested every year.
Each bovine animal older than 12 months, imported from non-officially free Member States or 3rd Countries is tested at the moment of trade and there is a follow-up testing during 3 consecutive years in the framework of the winterscreening.
Either a single (bovine tuberculin) or comparative (bovine/avian tuberculin) intradermal skin test is performed.
In case a "TB suspicious" lesions is detected, a tissue sample (lymph nodes, lung, liver, kidney and spleen) is transmitted to the National Reference Laboratory for further analysis (Sciensano). Suspicious lesions are examined by culture (isolation and identification - Ziehl-Neelsen coloration) and by PCR. Interferon-gamma tests are used on blood. Molecular typing by means of RFLP, spoligotyping and more recently MIRU-VNTR are also used at the NRL.
A 'bovine' is defined as infected with bovine tuberculosis if the animal is positive by skin testing or if ***Mycobacterium bovis*** is isolated by culture or confirmed by laboratory analysis (PCR). A 'holding' is defined as infected if ***Mycobacterium bovis*** was isolated by culture from an animal of the holding.

2. Measures in place

If ***M. bovis*** is suspected, the herd is considered as the epidemiological unit and all animals in the herd of origin are skin tested. A complete epidemiological investigation is performed. After tracing-back and tracing-on of all animals, the 'contact' holdings are examined by skin testing. If any suspicious or positive result of the skin test is detected, the FASFC may decide to re-examine the reactor animals (additional tests e.g. comparative skin testing with avian and bovine tuberculin and/or Interferon-gamma testing) or to a direct mandatory slaughter of the reactors (test slaughter) for additional analysis. In case a suspicious lesion is detected at post-mortem examination, a sample is sent to the National reference laboratory for analysis. If in consequence ***M. bovis*** is isolated, all skin tested positive animals during successive testing are mandatory slaughtered. If a lot of bovines are reacting positive to skin testing, the FASFC can decide that all animals of the holding must be mandatory slaughtered (total stamping-out).
A follow-up testing of infected and/or eradicated herds is performed during 5 years after partial or total stamping-out, in the first year, the third year and the fifth year.
In most breakdowns, a sanitation plan is established taking into account the epidemiological situation. In case of partial stamping-out, only 2 sanitation plans may be realised. After stamping-out, new restocked animals are tested three times during a 5 years period by annual skin testing to prove the TB free status of the holding.

3. Notification system in place to the national competent authority

MTC is a notifiable animal disease according to Chapter III of the Animal Health Law of 24 March 1987 and the Royal decree of 3 February 2014. All farmers, vets and laboratories have to notify the disease to the Federal Agency for the Safety of the Food Chain.

4. Results of investigations and national evaluation of the situation, the trends and sources of infection

Each year, a couple of infected bovine herds are discovered with a minimum of 0 in 2010 and a maximum of 24 in 2000. In 2019, outbreaks of bovine tuberculosis were not detected. There was a follow-up of the last 2 outbreaks of 2018. The first one where stamping out was implemented, was released after the FASFC had checked the cleaning and disinfection of the premises. The second one was released after a second negative tuberculin test.

Specific zoonoses

10. General evaluation: Lyssavirus (rabies) in animals – all animals – animal sample

1. History of the disease and/or infection in the country

The oral vaccination campaign of foxes with vaccine baits started in 1989 and was finalised by the end of 2003. Since the last indigenously acquired case of rabies occurred in Belgium in a bovine coming from Bastogne (province of Luxembourg) in July 1999, Belgium obtained the official status of rabies-free country in July 2001 according to the WHO recommendations (1992) and the World Organisation of Animal Health (OIE) guidelines (1997). In October 2007, Belgium lost temporarily its official status of rabies free country due to a positive case of rabies in a dog, illegally imported from Morocco. A second similar case was detected early 2008. Emergency vaccination and antiserum was given to nearly 100 people who had been in contact with one of the dogs. Belgium regained its official free status of rabies on 28 October 2008. Regional vaccination in the South of Belgium of dogs and cats is no longer compulsory since 1 March 2016. A first case of European bat ***Lyssavirus*** (EBL-1) was detected in 2016, a second case in 2017.

2. Evaluation of status, trends and relevance as a source for humans

Belgium is free of classical rabies since October 2008. However, exceptional imported cases (pets) and the emergence of the European bat Lyssa virus (EBL-1) are two potential sources for human rabies infections in Belgium.

3. Any recent specific action in the Member State or suggested for the European Union

It is highly recommended to report on the rabies virus type detected to be able to differentiate between the classical rabies type (genotype 1) and the European bat Lyssa virus types (unspecified or genotype 5 [EBL 1] or genotype 6 [EBL 2]). Bat rabies is of public health concern. The public should be made aware of the danger of human exposure to bats, especially in case of abnormal behavior of bats. Rabies is transmitted to humans and other animals through saliva, usually by a bite. Any person exposed to bats should be previously vaccinated against rabies. Nobody should handle diseased or dead bats without protection such as gloves. Any person finding a bat behaving abnormally, in an unusual place, or under unusual circumstances, should not attempt to handle or to move the animal but should contact the official authority. Education and recommendations should be given to travelers in order to reduce their risk of infection. Although dogs represent a more serious threat in many countries, the risk of rabies infection by bat bites also exists. Pre-exposure vaccination should be offered to persons at risk, such as laboratory workers, veterinarians, animal handlers and international travelers. Current available vaccines are safe and effective against both the classical rabies virus and the bat ***Lyssaviruses***.

11. Description of Monitoring/Surveillance/Control programmes system: Lyssavirus (rabies) in animals – all animals – animal sample

1. Monitoring/Surveillance/Control programmes system

Suspicion of rabies in domestic animals with nervous symptoms has to be notified to the Federal Agency for the Safety of the Food Chain and the animals have to be tested for classical Rabies. Wildlife showing nervous symptoms or wildlife found dead should also be notified and sent for analysis to Sciensano, the national reference laboratory for rabies. Collection of bats found dead is recommended for rabies surveillance. All living animals suspected of rabies due to clinical nervous system symptoms are euthanized and their head/carcass (small animals) or brain (larger animals) are transported as soon as possible in a tightly sealed package to the national reference laboratory where testing is performed. An animal is considered infected in case of a positive direct immunofluorescence test (Antigen detection) confirmed by cell cultivation of the virus or detection by RT-PCR or by mice inoculation test. The high percentage of examinations of cattle is a consequence of the surveillance system for TSE in cattle: all suspected BSE cases are first examined for rabies. Rabies must be considered in the differential diagnosis of BSE, although the clinical course of rabies is usually quicker than the evolution of clinical nervous symptoms in case of BSE.

2. Measures in place

When rabies is confirmed and based on the results of an epidemiological investigation, a zone of increased vigilance is delineated. Within the zone, animals identified as having had contact with the confirmed case will either be placed under surveillance or euthanized. Extra measures can be taken regarding vaccination (within 24 to 48 hours of contact) and isolation. Exposed persons will be treated (vaccination and antiserum treatment).

3. Notification system in place to the national competent authority

Notification of all laboratory confirmed cases to the competent Authority is mandatory by royal decree of 18 September 2016, the Animal Health Law of 24 March 1987 Chapter III and the royal decree of 3 February 2014 (list of all notifiable animal diseases).

4. Results of investigations and national evaluation of the situation, the trends and sources of infection

In total 75 animals were tested in 2019 of which all were negative for rabies. This is the same result as seen in 2018.

12. General evaluation: *Trichinella*

1. History of the disease and/or infection in the country

Since 1940, the Competent Authority has been organizing analyses for ***Trichinella*** in pigs at the slaughterhouses. The analysis is generalized since 1991. ***Trichinella*** has not been detected in carcasses of pigs and horses produced for human consumption in Belgium. One autochthonous human outbreak, involving 4 people belonging to the same family, occurred in 1979. This outbreak was most likely caused by a home raised wild boar. The status "negligible risk for ***Trichinella*** in fattening pigs kept under industrial housing conditions" was granted by the European Commission to Belgium end December 2010. In 2018, ***Trichinella*** **britovi** was detected in a wild boar. No cases of ***Trichinella*** were detected in 2019.

2. Evaluation of status, trends and relevance as a source for humans

Trichinellosis is virtually absent in Belgian domestic livestock. Since systematic controls of pigs and horses are done at slaughter (Regulation (EU) N° 2015/1375), no positive cases were found. The last autochthonous outbreak in humans in Belgium occurred in 1979 following the consumption of meat from a home raised wild boar. At the end of 2014, Belgium experienced an outbreak of trichinellosis, affecting 16 people. This outbreak was most likely caused by the consumption of infected wild boar meat of Spanish origin. Increased monitoring in Belgium, during the last decade, has shown that ***Trichinella*** spp. still circulate amongst wildlife, although both the prevalence and the intensity of infections are low. EU legislation also requires that wild boars hunted in the EU for commercial purpose are examined for ***Trichinella***. Yearly, about 12.000 to 13.000 sport-hunted wild boars are tested. The routine examination of wild boars intended for the market has proven to be a good measure to protect the consumer against sylvatic trichinellosis. In addition, monitoring of infection through examination of sentinel animals, such as the fox, is recommended to assess the prevalence of trichinellosis and to follow trends in time. Serological examination might be an alternative for muscle digestion in screening programs but can't be used in safeguarding consumer's health in meat inspection. An extra measure to protect the consumer is to eat meat of wild boar "well done", or to freeze the meat at -20C for 4 weeks. An important measure to avoid spreading of the infection among wildlife is not to leave offal of animal carcasses in the field after hunting.

4. Additional information

The derogation from accreditation for laboratories carrying out *Trichinella* official control is made permanent from December 2019 on in accordance with Article 40(1)(a) of Regulation (EU) 2017/625, but guidelines on minimum recommendations for (derogated) official laboratories have been agreed on.

13. Description of Monitoring/Surveillance/Control programmes system: *Trichinella* in horses – animal sample

1. Monitoring/Surveillance/Control programmes system

There is a permanent surveillance of all slaughtered horses at the slaughterhouse as part of the implementation of Commission Implementing Regulation (EU) No 2015/1375.
Samples of horses are taken of the diaphragm or m. masseter (or tongue). At least 5 g of muscle is examined, pooled up to 20 animals (max. up to a pool of 100-115 g).
An animal is considered positive in case of detection and identification of ***Trichinella*** larvae in a muscle sample by the reference method of detection (magnetic stirrer method for pooled samples, artificial digestion method for individual samples). Confirmation of positive results by the digestion method can be done by molecular methods in the National Reference Laboratory on trichinellosis.

2. Measures in place

Carcasses found positive are declared unfit for human consumption.

3. Notification system in place to the national competent authority

Notification to the FASFC is compulsory for any positive test result.

4. Results of investigations and national evaluation of the situation, the trends and sources of infection

As seen in previous years, ***Trichinella*** was not detected in horses in 2019.

14. Description of Monitoring/Surveillance/Control programmes system: *Trichinella* in pigs and wild boar – animal sample

1. Monitoring/Surveillance/Control programmes system

There is a permanent surveillance of all slaughtered fattening and breeding pigs at the slaughterhouse and of wild boar and other wildlife at the game processing plant as part of the implementation of Commission Implementing Regulation (EU) No 2015/1375. Since 1 June 2014, holdings may be officially recognised as applying controlled housing conditions. Sampling of fattening pigs from these holdings is not mandatory in Belgium. However, due to logistic reasons (export), almost all animals are tested. Fattening pigs are sampled by 1 gram of diaphragm muscle, pooled with up to 100 animals in 1 pool. Sows and boars are sampled by 2 grams of diaphragm muscle, pooled with up to 50 animals in 1 pool.
Samples of wild boars are taken of the foreleg, the tongue or diaphragm. For these animals, at least 5 g of muscle is examined, pooled up to 20 animals (max. up to a pool of 100-115 g).
An animal is considered positive in case of detection and identification of ***Trichinella*** larvae in a muscle sample by the reference method of detection (magnetic stirrer method for pooled samples, artificial digestion method for individual samples). Confirmation of positive results by the digestion method can be done by molecular methods in the National Reference Laboratory on Trichinellosis.
Serology may be used for epidemiological studies in live pigs and for monitoring of wildlife.

2. Measures in place
Carcasses found positive are declared unfit for human consumption.
3. Notification system in place to the national competent authority
Notification to the FASFC is compulsory for any positive test result.
4. Results of investigations and national evaluation of the situation, the trends and sources of infection
Trichinella spiralis was detected in 2015 and in 2016 in a wild boar. ***T. britovi*** was detected in 2016 and 2018, also in wild boar. Although only a limited number of ***Trichinella*** cases have been detected in wild boar since 1992, there is serological evidence of the presence of anti-Trichinella antibodies in wildlife. Trichinella was not detected in pigs or wild boar in 2019.

15. General evaluation: *Echinococcus*

1. History of the disease and/or infection in the country

At the slaughterhouses, a small number of carcasses showing lesions of ***Echinococcus*** (cysts) are from time to time detected and notified to the FASFC. In case of positive findings, depending on the extent of the lesions, carcasses are partially or totally rejected and declared unfit for human consumption. In 2016 only one case was detected in a bovine carcass. No cases were detected in 2019.

2. Evaluation of status, trends and relevance as a source for humans

Echinococcosis is caused either by ***Echinococcus granulosus*** or ***Echinococcus multilocularis.*** ***Echinococcus granulosus*** produces unilocular human hydatidosis. The adult stage is a small tapeworm (6 mm) that lives in the small intestine of domestic and wild canids. Sheep and cattle serve as intermediate hosts for the infection. Humans acquire infection by ingestion of typical taeniid eggs, which are excreted in the faeces of infected dogs: the oncospheres liberated from the eggs migrate via the bloodstream to the liver, lungs and other tissues to develop in hydatid cysts. Indigenous unilocular hydatidosis in man has been reported in Belgium. ***Echinococcus multilocularis*** causes alveolar (multilocular) echinococcosis in humans. Foxes and dogs are the definitive hosts of this parasite and small rodents the intermediate hosts. Ingestion of the eggs by humans can result in the development of invasive cysts in the liver. In Belgium, the percentage of infected foxes varies with the region, with a decreasing rate from the South-East to the North-West: e.g 33% in the Ardennes, 13% in the Condroz region and 1-2% in Flanders. The endemic region is situated under the river Meuse, on the heights of the Ardennes in the Walloon Region.
Post mortem visual examination is performed at the slaughterhouses in the domestic intermediate hosts: cattle, sheep, horses and pigs. Whole carcasses or parts are rejected in case ***Echinococcus*** cysts are found. As in 2017 and 2018, no cysts were detected in 2019.

3. Any recent specific action in the Member State or suggested for the European Union

Consumption of berries found in nature is discouraged by warning messages, displayed to visitors of Parks and Woodlands.

16. General evaluation: Cysticercosis

1. History of the disease and/or infection in the country

In the last ten years, the number of bovine carcasses found positive with ***Taenia* saginata** varied between 2.374 and 994. In 2019, 1,075 contaminated carcasses were found of which 1,057 were only lightly infected. The Belgian pig population is free of ***Cysticercus* cellulosae**. ***Taenia* solium** (and ***Cysticercus* cellulosae**) is not autochthonous in Belgium.
Post-mortem, macroscopic examination of carcasses of adult cattle as well as calves is routinely done in all slaughterhouses. Serological examination is possible and confirmation of the lesions by molecular tests can be done. Lightly contaminated carcasses are treated by freezing at -18C for 10 days before declared fit for human consumption. Heavily contaminated carcasses are unfit for human consumption and are destroyed.

2. Evaluation of status, trends and relevance as a source for humans

Cysticercus* bovis** in muscular tissue of cattle is the larval stage of the tapeworm ***Taenia saginata, a parasitic cestode of the human gut (taeniasis). Cattle can become infected by ingestion of vegetation contaminated with ***T. saginata*** eggs shed in human feces. Risk factors are access to rivers and flooding of pastures or wetland. Humans are contaminated by the ingestion of raw or undercooked beef containing the larval form (cysticerci). Usually pathogenicity for humans is low. The tapeworm eggs contaminate the environment directly or through surface waters. Human carriers should be treated promptly. Strict rules for the hygienic disposal or sanitation of human feces with a method that inactivates ***T. saginata*** eggs should be developed. The spreading of human excrement on land should not be allowed.

3. Any recent specific action in the Member State or suggested for the European Union

The introduction of serological analyses for the detection of cysticerci antigens in the serum of animals (cattle) should be developed. This would allow the detection of more cases compared to the visual inspection of carcasses at slaughterhouse.

17. General evaluation: *Sarcocystis*

1. History of the disease and/or infection in the country

At the slaughterhouses, a small number of carcasses showing myositis eosinophilica (green colouring spots of the carcass) are detected and notified to the FASFC. In case of positive findings, carcasses are totally rejected and declared unfit for human consumption. The number of reported cases of sarcosporidiosis in cattle in the last 5 years varied between 94 in 2014 and 99 in 2017. Only 80 cases were reported in 2018. However, in 2019 the number increased again to 90.

2. Evaluation of status, trends and relevance as a source for humans

Sarcocystis bovihominis (bovine as intermediate host) and ***Sarcocystis suihominis*** (porcine intermediate host) occur sporadically. Domestic carnivores are hosts of the adult stage. Humans can be a definitive host for sarcosporidiosis by ingestion of infected meat or excreted oocysts and develop symptoms like diarrhoea, headache, eosinophilia, abortion, congenital disorder. For human sarcosporidiosis there is no immunity development. A majority of grazing animals are inapparent carriers of tissue cysts.

18. General evaluation: *Coxiella burnetii*

1. History of the disease and/or infection in the country

Coxiella burnetii is endemic on Belgian cattle farms, sero-prevalence is high and little change is seen over time. More attention is paid to ***Coxiella*** in small ruminants, especially on farms with dairy goats, since the occurrence of massive cases of human coxiellosis in the Netherlands. Bulk milk is monitored on farms with dairy goats and dairy ewes. Since the beginning of the monitoring in 2011and due to the mandatory vaccination of goats on infected farms, the yearly number of infected farms has remained low.

2. Evaluation of status, trends and relevance as a source for humans

Coxiella burnetii circulates on cattle farms with little to no (visible) effect on animal and public health. So far, the link between a human case and a positive herd of goats or sheep has not been established in Belgium for the exception of farmers and veterinarians. However, the number of foeti testing positive after abortion is gradually increasing. Due to a tendency of keeping a larger number of animals in a herd, the risk of human coxiellosis is also increasing. The number of confirmed human cases varied **over the past 5 years with a maximum of 16 in 2016 and a minimum of 7 in 2017.** The total number of confirmed, probable and possible cases remained stable in the past 5 years and fluctuated between 18 and 22 cases. **In 201**9**,** 10 **confirmed,** 5 **probable and** 7 **possible cases were seen.** There was no information available on the country of origin of the infections.

3. Any recent specific action in the Member State or suggested for the European Union

One of the challenges of reducing the spread of Coxiella between farms is the current possibility of moving infected animals from one farm to another within and between member states without any legal restrictions. Laying down national rules only restricts national trade but not intracommunity trade.

19. Description of Monitoring/Surveillance/Control programmes system: *Coxiella burnetii* in cattle – animal sample

1. Monitoring/Surveillance/Control programmes system

There is no mandatory monitoring system in place for ***Coxiella burnetii*** on cattle farms. In case of abortion, ***Coxiella burnetii*** is part of the differential diagnosis and further examination is recommended but not mandatory. Different samples can be taken: vaginal swabs, foeti, bulk milk, blood, organs and placenta. Either the RT-PCR or ELISA are used as analytical method. The herd is only considered positive when the sample of at least one animal is positive on RT-PCR.

2. Measures in place

There are no mandatory measures in place. However, the farmer is informed of the positive result and recommendations on the prevention of the spread of ***Coxiella burnetii*** to other animals and visitors/workers on the farm are given. The location of positive farms is reported to the regional public health departments and to the general practitioners within a radius of 5 km.

3. Notification system in place to the national competent authority

All results are reported by the authorised laboratories on demand of the FASFC. It is mandatory for laboratories, veterinarians and farmers to notify positive results to the FASFC.

4. Results of investigations and national evaluation of the situation, the trends and sources of infection

The gradual increase in the percentage of RT-PCR positive samples in case of abortion in bovines seen in the past few years came to a halt in 2018. In 2019, of the 3,148 samples from foeti of 1,920 herds, 7,4% of the samples and 10,4% of the herds were PCR positive. This is a slight increase compared to 2018 where 5,6% of the samples were positive.

20. Description of Monitoring/Surveillance/Control programmes system: *Coxiella burnetii* in sheep and goats – animal sample

1. Monitoring/Surveillance/Control programmes system

The monitoring of dairy goats and dairy ewes (census sampling) consists of bulk milk samples taken 5 times a year and analysed by PCR and ELISA for the presence of ***Coxiella* burnetii** or antibodies against ***Coxiella burnetii***. Samples are taken either by the FASFC or by the Milk Control Centre. 10 ml of bulk milk is taken at the level of the farm, frozen and sent to the national reference laboratory for further analyses.
For the passive monitoring of ***Coxiella*** on all farms with goats and sheep in case of abortion, a blood sample of the animal that aborted and a sample of the foetus or placenta or a vaginal swab are taken by the veterinarian of the holding and sent to the laboratory of an animal health association for further investigation. These samples are also analysed by RT-PCR, the blood sample of the mother animal by ELISA. Analyses in the framework of clinical investigation take place on demand of the farm veterinarian when ***Coxiella*** is suspected.
The herd is considered positive when the RT-PCR result of a sample of at least one animal is positive.

2. Measures in place

Vaccination is mandatory on farms with dairy goats in case of positive RT-PCR. Voluntary vaccination of goats and sheep is admitted. When a herd is positive for ***Coxiella burnetii*** there is a mandatory heat treatment of the milk, a restriction of the contacts with the farm and the animals, a mandatory quarantine of the animals that aborted with a restriction to leave the farm only for slaughter over a period of 30 days and a mandatory cleaning and disinfection after depopulation of the houses where infected animals were present. When animals from infected herds are sold, the buyer must be informed about the presence of ***Coxiella burnetii*** on the farm. Furthermore, the location of positive farms is reported to the regional public health departments and to the general practitioners within a radius of 5 km.

3. Notification system in place to the national competent authority

It is mandatory for all laboratories, veterinarians and farmers to report all positive results to the FASFC. Farmers must notify their veterinarian in case of abortion. All results are reported by the recognized laboratories on demand of the FASFC.

4. Results of investigations and national evaluation of the situation, the trends and sources of infection

In 2019, 160 farms with dairy goats and 43 farms with dairy ewes were monitored for the presence of ***Coxiella burnetii*** in bulk milk of which respectively 11 and 1 had at least one positive PCR.
In sheep, 78 herds were examined by PCR after abortion. Coxiella was detected on 8 herds. Twenty-six herds with goats were examined, *Coxiella burnetii* was detected in 2 herds. In addition, 2 alpaca's from 2 different farms were tested of which one was positive on PCR.
The prevalence of ***Coxiella*** in bulk milk remained stable compared to previous years. The number of abortions due to Coxiella showed a slight decrease in 2019 compared to 2018.

21. General evaluation: MRSA

1. History of the disease and/or infection in the country

A first prevalence study on MRSA carried out in 2007 on 50 pig farms revealed a prevalence of 68% (Crombé et al (2012)). Results from the yearly on-farm monitoring of MRSA show a high prevalence in pigs (65.6% in 2013, 61.5% in 2016 and 52.4% in 2019), a lower prevalence in bovines (veal calves, young bovines and dairy cows respectively 47.1%, 10.2% and 9.9% in 2012 and 78.9%, 15.4% and 10.4% in 2015 and 54.5%, 8.7% and 14% in 2018) and almost negligible in layers and broilers (2.4% in 2011 and 2014, 1.58% in 2017). However, typical HA-MRSA spa-types and isolates resistant to last resort antibiotics have been found sporadically over the past years. The source was not traced.

2. Evaluation of status, trends and relevance as a source for humans

The prevalence on farms is gradually decreasing in pigs and layer and broilers. The situation in the different categories of bovines remains stable since 2012. According to a study by Argudin et al (2018) 124 out of 1585 human ***S***. aureus isolates harvested in 2014 – 2016 belonged to the CC398. 47% of the CC398 isolates were related to the human clade, 53% to the animal clade. Most isolates belonging to the human clade were recovered from hospitals in Brussels and the Walloon region and were mainly MSSA, whereas most isolates belonging to the animal clade were recovered from hospitals in Flanders, the region with the highest density of pig and bovine farms, and were all tetracycline resistant MRSA.

3. Additional information

Crombé et al (2012): Crombé F, Willems G, Dispas, Hallin M, Denis O, Suetens C, Gordts, Struelens M, Butaye P (2012) Prevalence and Antimicrobial Susceptibility of Methicillin-Resistant Staphylococcus aureus Among Pigs in Belgium: Microbial Drug Resistance 18(2): 125-131.
Argudin et al (2018): Argudin MA, Deplano A, Vandendriessche S, Dodément M, Nonhoff C, Denis O, Roisin S (2018) CC398 Staphylococcus aureus subpopulations in Belgian patients. **Eur J Clin Microbiol Infect Dis 36(8):1527-1529.**

Description of Monitoring/Surveillance/Control programmes system: MRSA – animal sample - Pigs

1. Monitoring/Surveillance/Control programmes system

The monitoring of MRSA in bovines, pigs and poultry has been repeated every three years starting in 2011 with poultry, in 2012 with bovines and in 2013 with pigs. In 2019, samples were taken of fattening pigs and sows. They are programmed to be taken by official veterinarians, evenly divided over the year over the different local control units based respectively on the number of such farms in each control unit. 10 nasal swabs from 10 different pigs are taken on each holding and pooled to one sample. Samples of fattening pigs and of sows may not be taken on a same holding. Each swab is transported in its own transportation tube. The swabs are pooled at the level of the laboratory to one sample per farm. The swabs are stored between 5°C and 25°C. A holding is positive when MRSA is detected and confirmed by PCR.
Pooled samples are incubated in Mueller-Hinton (MH) broth (Becton Dickinson) supplemented with NaCl (6.5%) at 37C for 18-24h. One ml of this broth is added to Tryptic Soy Broth (TSB) supplemented with cefoxitin (3.5 mg/l) and aztreonam (75 mg/l) and incubated at 37C for 18-24h. Ten microliter of this enrichment is plated on Brilliance MRSA 2 (Oxoid) and incubated 18-24h at 37C. Presence of MRSA is suspected based on colony morphology. Per sample, one to five suspected colonies are

selected from the Brilliance MRSA 2 plate. Presence of MRSA is confirmed using a triplex real-time PCR method. DNA is extracted as described in SOP/BAC/ANA/18. The PCR allows detecting the ***Staphylococcal aureus*** specific gene, *nuc*, the presence of the *mec*A gene responsible for methicillin resistance and the variant *mec*C gene. MRSA isolates are spa-typed by sequencing the repetitive region of the spa-gene encoding for the staphylococcal protein A. This method depicts the rapid evolution, since through recombination, the repeats may change fast. The protein A (spa) gene is amplified according to the Ridom StaphType standard protocol (www.ridom.de/staphtype) and the amplification is checked on a 2% agarose gel. Sequencing is performed with ABI3130xl using standard protocols and sequences are compared with the international Ridom database. CC398 PCR is performed on MRSA-isolates following a protocol described by Stegger et al. 2011. This method allows the rapid detection of the ***S. aureus*** clonal complex CC398 including the sequence type ST398.

2. Measures in place

There are no measures linked to positive MRSA findings. However, farmers are informed of the presence of MRSA on the holding and on possible measures to protect themselves, their personnel and their family. General hygiene and biosecurity measures are promoted.

3. Notification system in place to the national competent authority

There is no notification system in place for MRSA in animals.

4. Results of investigations and national evaluation of the situation, the trends and sources of infection

The results of the 2019 monitoring revealed a lower percentage of MRSA positive samples of sows (46,4%) and fattening pigs (58,3%) compared to 2016 (59,5% and 63,3% respectively) Of the 188 positive MRSA samples observed in 2019 in Belgium, 170 were further analysed. All of the 170 belonged to CC398. These CC398 isolates belonged to the following spa-types: **124 to** t011, **29 to** t034, **3 to** t3119, 2 each to t108, t1451, t2346, t2370 and 1 each to **t779,** t1457, t23**83, t2582, t2922** and **t3041.** All these spa-types are known to be associated to CC398/LA-MRSA according to the literature and all the isolates were resistant to tetracycline which is typical of LA_MRSA. . No isolates resistant to the last resort antibiotics vancomycin and linezolid were found. One isolate was resistant **to mupirocin**. Mupirocin is classified as a highly important antimicrobial according to WHO and is not currently authorized in veterinary medicine in Europe. It is used as first line antimicrobial for decolonisation of MSSA and MRSA in humans and is also used as an antibiotic of last resort versus MRSA infections of open wounds. This isolate from sow was resistant to 10 different antimicrobials: CLI ERY FOX FUS MUP PEN SYN TET TIA TMP.

22. General evaluation: *Salmonella*

1. History of the disease and/or infection in the country

Humans

Food prepared with contaminated raw eggs, egg products or insufficiently heated poultry meat or pork is the major source of the human *Salmonella* infections. Human salmonellosis is usually characterized by the acute onset of fever, abdominal pain, nausea, and sometimes vomiting. Symptoms are often mild and most infections are self-limiting, lasting a few days.

In 2019 there was one relatively large outbreak of ***Salmonella*** Enteritidis in a hotel school where 60 cases were laboratory confirmed (>200 people infected). In general, incidence is highest in young children. Incidence is also higher in the Flemish region compared to the Brussels Capital and Walloon region, mainly related to *S.* Typhimurium. No age or gender differences were observed between the 3 regions.

In Belgium, the human *Salmonella* surveillance system is a voluntary laboratory-based network headed by the National Reference Centre for *Salmonella* (NRC) based at Sciensano. Participating laboratories send around 3,000 *Salmonella* isolates to the NRC per year. The NRC performs serotyping analysis and MLVA (multiloci variable-tandem-repeat analysis) and monitor antibiotic susceptibility/resistance. Whole-genome sequencing (WGS) can be performed in outbreak situations. A mandatory notification exists for the clinical suspicion of typhoid fever and/or the laboratory confirmation of *S.* Typhi and *S*. Paratyphi, which is coordinated by the regional health authorities in the three regions. Annually, around 20 human cases of *S*. Typhi are reported

In 2019 the NRC ***Salmonella*** received 2,619 isolates from patients for serotyping. 1,233 isolates were serotyped ***Salmonella*** **Typhimurium**.

Serotype	N° of isolates
Salmonella **spp.**	2,619
Salmonella **Typhimurium**	557
Salmonella **Typhimurium monophasic**	676
Salmonella **Enteritidis**	550
Salmonella **Infantis**	60
Salmonella **Derby**	45
Salmonella **Chester**	36
Salmonella **Kentucky**	26

Animals

Salmonellosis is subject to mandatory notification by analytical laboratories for all animal species and is endemic in Belgium.

Various animals (especially poultry, pigs, cattle, and reptiles) can be reservoirs for *Salmonella*, and humans generally become infected by eating poorly cooked, contaminated food, or by direct contact with animals. In Belgium as in other European countries, salmonellosis is one of the most frequent reported foodborne infections.

Salmonella in pigs is the most important source of human salmonellosis in Belgium. Certain quality labels demand a monitoring of the ***Salmonella*** status of slaughter pigs. Optional monitoring of breeding farms is ongoing, and effective control tools such as vaccination continue to be sought. Optimizing general biosafety, both external and internal, is also a priority. Compliance with hygiene measures in slaughterhouses is very important to reduce ***Salmonella*** contamination of pig carcasses. Controls are carried out in slaughterhouses and if the results are unsatisfactory, measures are taken to reduce these contaminations.

Since 2007, an on-farm national ***Salmonella*** control programme is implemented for the different categories of poultry: breeders, layers, broilers and turkeys. The programme includes preventive measures, which are part of the conditions of approval of poultry farms, monitoring and measures in case of positive flocks. ***S.*** **Enteritidis** and ***S.*** **Typhimurium** are targeted in layers, broilers and turkeys as well as in breeders in which ***S.*** **Infantis**, ***S.*** **Virchow**, ***S.*** **Hadar** and ***S.*** **Paratyphi varians Java** are also targeted-serotypes. The vaccination against ***S.*** **Enteritidis** is also mandatory in breeders and layers. Since the implementation of the control programme, the prevalence of ***S.*** **Enteritidis** strongly decreased not only in all poultry categories but also in humans.
In rearing breeding flocks, since 2012, the prevalence of targeted serotypes has been very low and has reached 0% between 2015 and 2018. In 2019, the prevalence of targeted serotypes in rearing breeding flocks was 0.35% due to one flock positive for ***S.*** **Infantis**. Between 2011 and 2016, the prevalence of targeted serotypes in adult breeding flocks has been around 0.35% except for 2014 where the prevalence was 1%. In 2017 the prevalence of targeted serotypes increased to 1.8% and slightly decreased to 1.42% in 2018. In 2019, the prevalence of targeted serotypes decreased to 0.38%. The ***Salmonella*** **spp**. flock prevalence in 2019 was 1.71% in adult breeders.
In rearing laying flocks, the prevalence of targeted serotypes has been very low since 2012 and has reached 0% between 2016 and 2018. In 2019, the prevalence of targeted serotypes in rearing layers was 0.92% due to 2 flocks positive for *S.* Typhimurium. In adult laying flocks, the prevalence of targeted serotypes was around 2% from 2011 to 2014. In 2015, the prevalence was 1.2% and strongly decreased in 2016 to 0.3%. In 2017 and 2018, the prevalence of targeted serotypes was around 1% in adult layers. In 2019, the prevalence of targeted serotypes was 1.17% with 5 ***S.*** **Enteritidis** and 3 ***S.*** **Typhimurium** positive flocks. The ***Salmonella*** **spp** flock prevalence in 2019 for adult layers was 4.68% out of which 13 flocks were positive for ***S.*** **Infantis**.
As in previous years, the prevalence in broilers of the targeted serotypes ***S.*** **Enteritidis** and ***S.*** **Typhimurium**, was low (0.28%) in 2019. However, also as in previous years, different other serotypes circulated with a prevalence of 3.28% for all serotypes and a prevalence of 1.12% for ***S.*** **Infantis**.
In 2019, in meat turkeys, the prevalence of targeted serotypes was 3.36% (5 flocks positive for ***S.*** **Typhimurium**), which is well above the EU threshold as was already the case in 2018. The ***Salmonella*** **spp** flock prevalence and reached 5.04% in 2019.

2. Evaluation of status, trends and relevance as a source for humans

Various animals (especially poultry, pigs, cattle, and reptiles) can be reservoirs for ***Salmonella***, and humans generally become infected by eating poorly cooked, contaminated food, or by direct contact with animals. In Belgium as in other European countries salmonellosis is one of the most frequent reported foodborne infection.

In humans, there is a decreasing trend in the number of ***Salmonella*** **spp**. reported by the NRC over the past decade, affecting both ***S.*** **Enteritidis** and ***S.*** **Typhimurium**. After the increase in the number of cases reported in 2018 due to a large outbreak of *S*. Typhimurium with 546 cases identified, the number of cases normalized in 2019.

In poultry, the number of ***S.* Typhimurium** strains isolated in 2019 was low. On the other hand, the number of ***S.* Infantis** isolated strains is increasing in recent years and ***S.* Infantis** is the most commonly isolated serotype in broilers, breeders and layers. In humans, ***S.* Infantis** is the third serotype isolated in case of Salmonellosis.

3. Any recent specific action in the Member State or suggested for the European Union

For poultry, a new national legislation on the identification and the registration of poultry has been in force since July 2018. Every flock of poultry intended to enter in the food chain must be identified and registered. Until now, only flocks with more than 199 birds must be registered and must implement the national salmonella control plan. This new legislation will facilitate the reporting of Salmonella data to the Commission and will allow to report accurate data on the number of breeding flocks of more than 250 birds, the number of laying hen holdings with more than 1000 birds and the number of broiler holdings with more than 5000 birds as required by the European Commission.

23. Description of Monitoring/Surveillance/Control programmes system: *Salmonella* - poultry

1. Monitoring/Surveillance/Control programmes system

In poultry, a national ***Salmonella*** control programme is implemented in Belgium. This program is co-financed by the European Commission for breeders and layers and can be consulted via following link: https://ec.europa.eu/food/funding/animal-health/national-veterinary-programmes_en.
According to the Royal Decree of 27/04/2007 concerning the control of ***Salmonella*** in poultry, all farms with breeding poultry of the species *Gallus gallus*, laying hens, broilers and meat turkeys with a capacity of 200 or more birds, have to implement the provisions of the national *Salmonella* control programme.
In **breeders**, industry sampling is performed by the FBO in every flock of poultry as day-old-chicks, at 4 weeks, at 24 weeks and then every two weeks until the end of the production. Official sampling is delegated to the animal health associations and performed in every flock 2 weeks before the transfer to the laying unit (±16 weeks) and at 22 weeks, 46 weeks and 56 weeks. Roosters joining a flock in production are also sampled at time of delivery. In day-old-chicks, the sampling is performed at time of delivery to the holding. 20 pieces (min: 5 cm by 5cm, max: 10 cm by 10 cm) of cover sheets soiled with faeces are sampled from transport boxes and the sample must be representative of the whole flock. The sampling in pullet and adult breeders is performed according to the Commission Regulation (EU) No 200/2010. The boot swabs method is used in floor rearing systems. Five pairs of boot swabs are collected per flock and must concern all parts of the poultry house. The five pairs of boot swabs are gathered in two containers: 2 pairs in one and 3 pairs in the other one. In cage breeding flocks, sampling consists in 2 composite samples of faeces per flock. Each sample must contain naturally mixed faeces taken from 60 different places forming a total of 150 g of faeces.
In **layers**, industry sampling is performed by the FBO in every flock as day-old-chicks, 16 weeks (2 weeks before the transfer to the laying unit), 24 weeks and then every 15 weeks until the end of production and during the last 3 weeks of the last production period. An official sampling is performed in every holding of layers once a year and according to the Commission Regulation (EU) No 517/2011.
The sampling method for industry sampling is the same as for breeders described above. The official sampling is realised according to the boot swabs method or faeces samples. These samples can be replaced by a sample of 100 g of dust taken from different parts of the poultry house.
In **broilers and meat turkeys**, each flock must be sampled by the FBO as day-old-chicks and within the 3 weeks before slaughtering (6 weeks for organic farming or broilers over 81 days and turkeys

over 100 days). An official sampling is performed in 10% of the holdings. In day-old-chicks sampling can be performed at the holding during the delivery (cover sheets) or at the hatchery. The sampling performed at the hatchery consists in hatchery basket liners or fluff or broken eggshells. If a flock counts more than 50 000 chickens, at least 2 samples must be taken. The industry and official samplings in adult broilers and turkeys is performed using the boot swabs method.
The samples are sent to an approved laboratory by the responsible within 48 hours following the sampling. All necessary information must accompany the samples. Samples are kept cool before the transfer.
Samples are analysed in accredited and by the FASFC approved laboratories using analytical methods which are on an by the FASFC approved list: http://www.favv-afsca.fgov.be/laboratories/approvedlaboratories/.
Serotyping is performed on all *Salmonella* spp. positive results at the national reference laboratory.

2. Measures in place

According to the Royal Decree of 27/04/2007 concerning the control of ***Salmonella*** in poultry, it is required to vaccinate **breeding and laying** hens against ***Salmonella* Enteritidis** unless the flocks are destined for intracommunity trade or export. The vaccination of elite breeders is prohibited. It is also highly recommended to vaccinate breeding and laying flocks against ***Salmonella* Typhimurium**. The vaccination schedule consists in two or three vaccine doses depending on the type of vaccine used. Attenuated vaccines are administrated in the drinking water at day 1, at 6-8 weeks and about 2 weeks before the transfer to the production unit (16 weeks). Inactivated vaccines are injected at 6-8 weeks and at 16 weeks. It is also forbidden to treat all poultry against zoonotic *Salmonella* with antimicrobials.
The national ***Salmonella*** control programme implemented in Belgium is approved and co-financed by the EC for breeders and layers: https://ec.europa.eu/food/funding/animal-health/national-veterinary-programmes_en.
When a bacteriological test of faeces or dust from a flock of **breeding poultry** is positive for a targeted *Salmonella* serotype (*S*. Enteritidis, *S*. Typhimurium, *S*. Infantis, *S*. Hadar, *S*. Virchow, *S*. Paratyphi B varians Java), measures are taken in this flock to avoid the contamination of other flocks in the holding and the dispersion of the disease to the following links in the food chain. Contacts within the holding are limited and only limited persons may have access to the holding (responsible, veterinary, competent authority...). Animals from the positive flock are slaughtered in the month following the positive test and hatching eggs are destroyed or commercialized only if they are treated in such a manner as to ensure the elimination of ***Salmonella***. A sanitary vacuum is installed after depopulation and cleaning and disinfection of the poultry house. After these operations, a hygienogram and a swab testing are performed to control the presence of ***Salmonella***.
The measures taken when a bacteriological test is positive for ***S*. Enteritidis** or ***S*. Typhimurium** in a flock of **layers** include the slaughtering of day-old-chicks within the month following the detection. Contacts within the holding are limited and only limited persons may have access to the holding (responsible, veterinary, competent authority...). The positive flock is slaughtered at the end of the laying production according to logistical slaughter procedures. Table eggs from this positive flock are commercialized only if they are treated in such a manner as to ensure the elimination of ***Salmonella***. A sanitary vacuum is installed after depopulation and cleaning and disinfection of the poultry house. After these operations, a hygienogram and a swab testing are performed to control the presence of ***Salmonella***.
In **breeders and layers**, confirmatory testing is possible when a targeted serotype is found. The confirmatory analysis is performed by the competent authority or an approved animal health association and consists of sampling of faeces or dust for bacteriological testing. An additional sampling is performed to check if antimicrobials have been used. This sampling consists in 100 g of muscular tissue from 5 healthy chickens. Transitory measures are taken until the result of confirmatory analysis is known. They include the limitation of contact inside the holding, restriction on

hatching eggs and commercialization of table eggs. In adult layers, the positive flock cannot move except for a logistical slaughtering. If the result of confirmatory analysis and the test to check the presence of antimicrobials are negative, the transitory measures are lifted. If one of these two tests are positive, definitive measures as described in the paragraphs above are applied.
When a bacteriological test from a flock of **broilers or meat turkeys** is positive for zoonotic ***Salmonella***, the flock is slaughtered at the end of the production according to logistical procedures. Before the set-up of a new flock, the house must be cleaned and disinfected and a sanitary vacuum is installed after depopulation. A hygienogram and a swab testing are also performed before repopulation. Moreover, if two flocks lodged in the same poultry house are successively positive for the same zoonotic serotype, the house must be cleaned and disinfected by an external company before the sanitary vacuum is installed. If three flocks lodged in the same poultry house are successively positive for the same zoonotic serotype, an additional measure must be taken: the veterinarian of the holding must provide guidance which includes the optimisation of biosafety and an epidemiological investigation to identify the source of contamination.

3. Notification system in place to the national competent authority

The notification of the presence of ***Salmonella*** in samples taken at primary production is mandatory and must be notified to the FASFC by the responsible of the laboratory.

4. Results of investigations and national evaluation of the situation, the trends and sources of infection

In poultry, the national ***Salmonella*** control programme implemented since 2007, allowed to significantly reduce the prevalence of targeted serotypes in the different categories. However, certain serotypes are increasing in the last year.
Since 2012, in **rearing breeding flocks**, the prevalence on targeted serotypes was very low and reached 0% in 2015, 2016,2017 and 2018. In 2019, one flock was positive for ***S.* Infantis** increasing the prevalence to 0.35%. Two flocks were positive for non-targeted ***Salmonella*** spp. in 2019. Between 2012 and 2016, the prevalence on targeted serotypes in **adult breeding flocks** has been around 0.35% except for 2014 where the prevalence was 1%. In 2017 and 2018 the prevalence was 1.8% and 1.42% respectively. In 2019 the prevalence of targeted serotypes was 0.38%. One flock was positive for ***S*. Infantis** and one for ***S*. Typhimurium**.
In **rearing layer flocks**, two flocks were found positive for ***S*. Typhimurium** and 2 flocks for non-targeted ***Salmonella*** serotypes in 2019. The prevalence of the targeted serotypes ***S*. Enteritidis** or ***S*. Typhimurium** positive flocks in the last years was low in rearing layer flocks. In **adult layer flocks**, the prevalence has been just below 2% in previous years where in 2014, the prevalence was just above the target due to one holding that had two rounds of **S. Enteritidis** positive flocks. In 2015, the same holding still housed 3 positive flocks from 2014 but the prevalence decreased to 1,3%. In 2016, 2 ***S*. Enteritidis** positive flocks were detected. The holding that had multiple positive flocks in 2014 and 2015, was ***Salmonella*** spp. free in 2016. In 2017, 7 ***S*. Enteritidis** positive flocks were detected increasing the prevalence to 1%. In 2018, the prevalence was 1.08% with 7 S. Enteritidis positive flocks and 1 S. Typhimurium positive flock detected. In 2019, the prevalence slightly increased to 1.17% with 5 flocks positive for ***S.* Enteritidis** and 3 flocks positive for ***S.* Typhimurium**.
As in previous years, the prevalence of ***S*. Enteritidis and *S*. Typhimurium** in **broilers** was also low (0,28%) in 2019. However, also as in previous years, different other serotypes circulated with a prevalence of 3.28% for all serotypes. In broilers within 3 weeks before slaughtering, the prevalence of ***S.* Enteritidis** (0.011%) and ***S.* Typhimurium** (0.27%) in 2019 was approximately the same as in 2018. In 2019, among the non-targeted ***Salmonella*** serotypes, where the prevalence of ***S*. Infantis** remained the same as in 2018, the prevalence of ***S*. Rissen** drastically decreased and the prevalence of ***S*. Paratyphi B varians Java** and ***S*. Minnesota** increased in 2019.

In meat turkeys, the prevalence of both targeted (3.36%) and non-targeted (5.04%) serotypes remained high in 2019 with 5 flocks positive for **S. Typhimurium** and 2 flocks positive for on-targeted serotypes.

At primary production (poultry flocks) the prevalence of ***S*. Enteritidis** and ***S*. Typhimurium** is very low. However in food, these serotypes are the second and third most detected ones. ***S*. Infantis** is the most common serotype in broilers and food.

24. Description of Monitoring/Surveillance/Control programmes system: *Salmonella* – Food (including slaughterhouses)

1. Monitoring/Surveillance/Control programmes system

For food a vigilance program is implemented in order to detect non-conformities in food or a food category that exceed a pre-determined threshold (the prevalence level to be controlled) with a high degree of confidence. The number of analysis is determined with a statistical approach. The samples are taken randomly. More information can be found in the MANCP: http://www.afsca.be/about/mancp/ This analytical surveillance program covers the entire food chain: primary production, processing, distribution and import. The results are evaluated against legal microbiological criteria. If not existing for a given parameter/matrix combination, the results are evaluated against action limits established by the FASFC. http://www.afsca.be/thematischepublicaties/inventaris-acties.asp

The surveillance program contains samples of:

- dairy products: raw milk, raw milk cheeses (fresh, soft and semi-soft)), raw milk butter, deserts with milk, ice cream, milk powder
- pasteurized egg products, deserts with raw eggs
- meat products (fermented and cooked sausages, raw and cooked ham, paté, head meat, mayonnaise based spreads with meat products)
- meat preparations intended to be eaten raw/cooked
- poultry: whole birds, meat cuts (with and without skin), poultry meat preparations intended to be eaten cooked, poultry meat products.
- fishery products: smoked salmon, mayonnaise based spreads with fishery products, fish intended to be eaten raw, surimi, crustaceans, live bivalve molluscs intended to be eaten raw
- unpasteurized fruit and vegetable juices
- red berries and small fruits
- sprouted seeds
- pre-cut and pre-packaged vegetables, fruits and sprouted seeds
- leafy and fruit vegetables
- insects and foodstuffs with insects
- ready-to-eat meals
- infant and follow-up infant formulae (including for dietary use)
- nuts
- dried fruits and vegetables
- spices
- dried herbs

Besides the surveillance program as described above, samples are taken at the import level of certain products for the control on *Salmonella* spp. in the framework of EU-legislation (Regulation (EC) n° 669/2009) (increased levels of official import controls).

Since 2006, FBO's are required to sample and test pig carcasses for ***Salmonella***. Since 1 July 2015, these results, ie the total number of samples and the number of positive samples, must be reported to the FASFC.

For the verification of the correct implementation by food business operators of the process hygiene criteria for Salmonella on pig carcases (point 2.1.4, Annex I Regulation 2073/2005), a surveillance based on official sampling is done using the same method and sampling area as food business operators. Each year 49 random samples are taken in each slaughterhouse slaughtering more than 10.000 pigs a year and 35 random samples in slaughterhouses slaughtering between 1.000 and 9.999 pigs a year.

Analytical method
Food samples are analysed in accredited and by the FASFC approved laboratories using analytical methods which are on a by the FASFC approved list: http://www.favv-afsca.fgov.be/laboratories/approvedlaboratories/.
Serotyping is performed on all *Salmonella* spp. positive results.

2. Measures in place

Positive results in food trigger measures as stipulated in regulation (EU) 2073/2005, i.e. withdrawal from the market / recall from the consumer. If it concerns foodstuffs for which no legal food safety criteria exist, measures are taken as described in the FASFC procedures:
http://www.afsca.be/thematischepublicaties/inventaris-acties.asp., i.e. withdrawal from the market / recall from the consumer in case of ready-to-eat foods. If it concerns not-ready-to-eat foods the concerned food business operator should improve hygiene practices.
If the process hygiene criterion for ***Salmonella*** on carcases is not complied with, an action plan from the food business operator concerned is required. Its outcome is strictly supervised.

3. Notification system in place to the national competent authority

The principle of mandatory notification as foreseen in the general food law (Regulation (CE) n° 178/2002) has been regulated in national legislation: http://www.favv-afsca.fgov.be/meldingsplicht/

In Belgium, the human ***Salmonella*** surveillance system is a voluntary laboratory-based network headed by the National Reference Centre for ***Salmonella*** (NRC) based at Sciensano. Participating laboratories send around 3,000 ***Salmonella*** isolates to the NRC per year. The NRC performs serotyping analysis and MLVA (multiloci variable-tandem-repeat analysis) and checks for antibiotic resistance.
The NRC collaborates with the directorate epidemiology and public health of Sciensano. The objective of the national surveillance programme is to document the occurrence and trends of serotypes, to detect local, regional, national or even international outbreaks, to find and to eliminate the source and to suggest preventive actions to regional health authorities and the FASFC. This national ***Salmonella*** surveillance is also intended to interact rapidly at the international level via electronic communication (with the Food and Water Diseases international surveillance network, ECDC) and to help detecting outbreaks and targeting preventive strategies.
A mandatory notification exists for the clinical suspicion of typhoid fever and/or the laboratory confirmation of *S.* Typhi and *S*. Paratyphi, which is coordinated by the regional health authorities in the three regions.

4. Results of investigations and national evaluation of the situation, the trends and sources of infection

At primary production (poultry flocks) the prevalence of **S. Enteritidis** and **S. Typhimurium** is very low. On pig carcasses in slaughterhouses the most dominant serotype is *S.* Typhimurium. In poultry in slaughterhouses the most dominant serotype is *S.* Infantis. This serotype is also dominant in poultry products (meat cuts, meat preparations and meat products) at retail level in the food chain.

25. Description of Monitoring/Surveillance/Control programmes system: *Salmonella* - Feed

1. Monitoring/Surveillance/Control programmes system

In June 2008 the Panel on Biological Hazards of EFSA identified ***Salmonella* spp**. as the major hazard for microbial contamination of animal feed. For other microbiological hazards, feed was regarded a far less important source of contamination. This opinion confirmed the strategy of the FASFC, since 2006, to focus its efforts on microbiological contamination in feed on ***Salmonella*.** Special attention is given to the sampling procedure using n=5 and taking into account the heterogenic nature of a possible ***Salmonella*** contamination of feed.

The EU legal framework at present foresees a legal limit of Salmonella (absence in 25g) for feed materials of animal origin and petfood containing animal by-products. For feed materials of non-animal origin and compound feeds the FASFC established an identical action limit in 2010 (absence in 25g).

Using a statistically substantiated risk evaluation, the FASFC re-evaluates and performs an official control program every year. Compound feed and feed materials are sampled and analysed for absence of ***Salmonella*** in 25g.

Feed samples are analysed in accredited and by the FASFC approved laboratories using analytical methods which are on an by the FASFC approved list: http://www.favv-afsca.fgov.be/laboratories/approvedlaboratories/.
Serotyping is performed on all *Salmonella* spp. positive results.

2. Measures in place

Every detection of ***Salmonella*** is treated as a non-conformity, but the actions taken depend on the serotype detected and the type of feed. Since 2010 a strategy was implemented determining critical serotypes per type of feed and fine-tuned actions depending on the type of feed and the place in the feed chain where the contamination is detected. The current strategy can be found (in Dutch and French) at http://www.favv-afsca.fgov.be/productionvegetale/circulaires/#A20110224

3. Notification system in place to the national competent authority

The principle of mandatory notification as foreseen in the general food law (Regulation (CE) n° 178/2002) has been regulated in national legislation: **http://www.favv-afsca.fgov.be/professionnels/notificationobligatoire/**

The notification to the competent authority includes the notification by the operator or the responsible of the laboratory of the presence of Salmonella in feed samples taken.

4. Results of investigations and national evaluation of the situation, the trends and sources of infection

In 2019, 496 units of compound feedingstuffs (all types of animals including pets) were tested, of which 2 were positive for ***Salmonella***: 1 raw pet food and 1 compound feed for calves. In addition, 426 feed materials were tested, and 16 were positive for *Salmonella* (14 of animal origin and 2 of plant origin). In total 12 different serotypes where identified. The most common serotypes were *S.* ***Brandenburg*** (4 detections) and ***S. Derby*** (4 detections) followed by ***S. Livingstone*** (3 detections), *S. Montevideo* (3 detections) and ***S. Idikan*** *(2 detections).* All other serotypes where single detections.

26. General evaluation: *Campylobacter, Listeria,* STEC*, histamine, Cronobacter, Yersinia*

1. History of the disease and/or infection in the country

In Belgium, the human surveillance systems for ***Campylobacter***, ***Listeria***, **STEC** and ***Yersinia*** are based on data from the National Reference Centres (NRC) (Campylobacter, Listeria, STEC, Yersinia) and/or data from a sentinel laboratory-based network reported to Sciensano (Campylobacter, Listeria, STEC, Yersinia). Surveillance of **histamine** cases and ***Cronobacter*** is based on the voluntary notification of clusters (≥2 cases) of foodborne illness.

Listeriosis

In 2019 the NRC registered 67 cases of listeriosis (74 in 2018). The NRL received 158 ***Listeria monocytogenes*** isolates from food sources for serotyping.

For the human cases, the serotypes are distributed as follows:

Serotype	N° of isolates
1/2a	28
4b	34
1/2b	4
IVb	1
Sum:	**67**

Campylobacteriosis

In 2019 the NRC registered 7,051 cases of campylobacteriosis, which is a decrease in comparison with the numbers reported in 2018.

STEC

In 2019, the NRC reported 113 cases of STEC.

2. Evaluation of status, trends and relevance as a source for humans

Campylobacter

Campylobacteriosis is one of the most frequently occurring foodborne illness in Belgium. Poultry is the main suspected source for human infection in Europe. In Belgium around 10.000 cases are yearly reported by the sentinel laboratory network. Incidence is highest in children and during the summer period.

Yersinia

In Belgium as in most European countries, enteric yersiniosis is caused primarily by ***Y. enterocolitica***, and much less frequently by ***Y. pseudotuberculosis***. The consumption of raw or undercooked pork is a well-established mode of ***Y. enterocolitica*** contamination. Incidence is highest in children under 10 years of age. Around 700-800 cases are yearly reported by the NRC and analysis at the NRC reveals that 2/3 of them are non-pathogenic strains (biotype 1A). There is no recent increase in the number of pathogenic strains reported by the NRC.

Listeria

Listeriosis is a less frequent, but more severe foodborne pathogen. Severe illness mainly occurs in the elderly and those with compromised immune systems and infection of pregnant woman may provoke congenital disease of the unborn child.
These organisms are among the most important causes of death from food-borne infections in industrialized countries. In Belgium incidence is highest among adults aged 60 or older (70-80% of the reported cases), and people with weakened immune systems. Since 2017 whole-genome sequencing (WGS) is performed as a routine typing tool by the NRC.

STEC
Annually, around 100 cases of STEC are confirmed by the NRC. Most cases concern young children. There is a peak during summer and autumn. Annually, around 20 cases of the haemolytic uremic syndrome are reported by the NRC.

3. Any recent specific action in the Member State or suggested for the European Union

For STEC, a harmonized approach within the EU is desirable for the measures to be taken in case of STEC detection in the food chain for those matrices for which no legal criteria exist in Regulation (EU) n° 2073/2005.

27. Description of Monitoring/Surveillance/Control programmes system: *Campylobacter*

1. Monitoring/Surveillance/Control programmes system

For food a vigilance (surveillance) program is implemented in order to detect non-conformities in food or a food category that exceed a pre-determined threshold (the prevalence level to be controlled) with a high degree of confidence. The number of analysis is determined with a statistical approach. The samples are taken randomly. More information can be found in the MANCP: http://www.afsca.be/about/mancp/
This analytical surveillance program covers the entire food chain: primary production, transformation, distribution and import. The results are evaluated against legal microbiological criteria. If not existing for a given parameter/matrix combination, the results are evaluated against action limits established by the FASFC. http://www.afsca.be/thematischepublicaties/inventaris-acties.asp

As broiler meat is considered to be the most important single source of human campylobacteriosis, the surveillance program includes mainly broiler meat: whole birds, meat cuts (with and without skin), poultry meat preparations intended to be eaten cooked, poultry meat products.
Raw milk cheeses (fresh, soft, semi-soft of milk from cows, ewes and goats) and meat of bovine (carcasses) are as well included in the surveillance program.

Food samples are analyzed in accredited and by the FASFC approved laboratories using analytical methods which are on a by the FASFC approved list: http://www.favv-afsca.fgov.be/laboratories/approvedlaboratories/

2. Measures in place

In case of non-compliant results in foodstuffs, posing a risk for public health, the products are withdrawn from the market or even a recall from the consumers is organized. Corrective measures are imposed on the concerned food business operator(s). Measures are taken as described in the FASFC procedures: http://www.afsca.be/thematischepublicaties/inventaris-acties.asp

3. Notification system in place to the national competent authority

In Belgium the human ***Campylobacter*** surveillance system consists of a sentinel laboratory-based network and a laboratory-based network headed by the National Reference Centre for *Campylobacter* (NRC). No mandatory notification exists for this disease.

The principle of mandatory notification as foreseen in the general food law (Regulation (CE) n° 178/2002) has been regulated in national legislation: http://www.favv-afsca.fgov.be/meldingsplicht/

4. Results of investigations and national evaluation of the situation, the trends and sources of infection

The results show an improvement in campylobacter management at broiler slaughterhouses. 7% of poultry carcasses and meat cuts at retail level did not comply with the national action limit (process hygiene indicator) of 1000 cfu/g.

28. Description of Monitoring/Surveillance/Control programmes system: *Listeria*

1. Monitoring/Surveillance/Control programmes system

For food a vigilance (surveillance) program is implemented in order to detect non conformities in food or a food category that exceed a pre-determined threshold (the prevalence level to be controlled) with a high degree of confidence. The number of analysis is determined with a statistical approach. The samples are taken randomly. More information can be found in the MANCP: http://www.afsca.be/about/mancp/
This analytical surveillance program covers the entire food chain: primary production, transformation, distribution and import. The results are evaluated against legal microbiological criteria. If not existing for a given parameter/matrix combination, the results are evaluated against action limits established by the FASFC. http://www.afsca.be/thematischepublicaties/inventaris-acties.asp

The surveillance program consists of samples of all kinds of ready-to-eat foodstuffs:

- dairy products: raw milk, cheeses (fresh, soft and semi-soft from raw and pasteurized milk / milk from cows, ewes and goats), butter (from raw and pasteurized milk), yoghurt, fermented milk, deserts with milk, ice cream
- deserts with raw eggs
- meat products (fermented and cooked sausages, raw and cooked ham, paté, head meat, mayonnaise based spreads with meat products)
- meat preparations intended to be eaten raw
- meat substitutes
- fishery products: smoked salmon, mayonnaise based spreads with fishery products), fish intended to be eaten raw, surimi
- unpasteurized fruit and vegetable juices
- red berries and small fruits
- sprouted seeds
- precut and prepackaged vegetables, fruits and sprouted seeds
- leafy and fruit vegetables
- insects and foodstuffs with insects
- ready-to-eat meals
- infant and follow-up infant formulae (including for dietary use)
- vegetarian spreads

Food samples are analyzed in accredited and by FASFC approved laboratories using analytical methods which are on a by the FASFC approved list: http://www.favv-afsca.fgov.be/laboratories/approvedlaboratories/.

2. Measures in place

Positive results in ready-to-eat foods trigger measures as stipulated in regulation (EU) 2073/2005, i.e. withdrawal from the market / recall from the consumer. Measures are taken as described in the FASFC procedures: http://www.afsca.be/thematischepublicaties/inventaris-acties.asp.
Corrective measures are imposed on the concerned food business operator(s).

3. Notification system in place to the national competent authority

In Belgium the human *Listeria* surveillance system is a voluntary laboratory-based network headed by the National Reference Centre for *Listeria* (NRC) based at Sciensano. The NRC performs whole genome sequencing (WGS) analysis and checks for antibiotic resistance.
In addition, a mandatory notification exists in the regions Wallonia and Brussels for *Listeria* cases. No mandatory notification for this disease exists in Flanders. The sentinel laboratory-based network includes reporting about *Listeria*.
The NRC and the regional health authorities collaborate with the directorate epidemiology and public health of Sciensano to detect and report suspected clusters to the competent authorities at regional and national level.

The principle of mandatory notification as foreseen in the general food law (Regulation (EC) n° 178/2002) has been regulated in national legislation: http://www.favv-afsca.fgov.be/meldingsplicht/

4. Results of investigations and national evaluation of the situation, the trends and sources of infection

In the food chain, ready-to-eat products that did not comply with the criterion for Listeria monocytogenes (cf. reg. (EC) n° 2073/2005) were meat products, raw milk cheeses, raw milk butter, meat preparations and smoked salmon (incl. gravadlax).

5. Additional information

The Superior Health Council of Belgium and the Scientific Committee of FASFC issued a scientific advisory report providing to the Belgian sanitary authorities specific recommendations regarding the risk communication about listeriosis in some specific vulnerable groups (other than pregnant women). https://www.health.belgium.be/nl/advies-9311-listeriose

Description of Monitoring/Surveillance/Control programmes system: STEC

1. Monitoring/Surveillance/Control programmes system

For food a vigilance (surveillance) program is implemented in order to detect non conformities in food or a food category that exceed a pre-determined threshold (the prevalence level to be controlled) with a high degree of confidence. The number of analysis is determined with a statistical approach. The samples are taken randomly. More information can be found in the MANCP: http://www.afsca.be/about/mancp/
This analytical surveillance program covers the entire food chain: primary production, transformation, distribution and import. The results are evaluated against legal microbiological criteria. If not existing for a given parameter/matrix combination, the results are evaluated against action limits established by the FASFC. http://www.afsca.be/thematischepublicaties/inventaris-acties.asp

The surveillance program includes samples of:

- Dairy products: raw milk, raw milk cheeses (fresh, soft and semi-soft from milk from cows, ewes and goats), raw milk butter
- Meat from beef (carcasses, meat cuts)
- Meat from sheep (carcasses)
- meat preparations intended to be eaten raw (minced beef)
- sprouted seeds
- precut and prepackaged vegetables, fruits and sprouted seeds
- leafy and fruit vegetables
- fresh herbs

Food samples are analyzed in accredited and by FASFC approved laboratories using analytical methods which are on an by the FASFC approved list: http://www.favv-afsca.fgov.be/laboratories/approvedlaboratories/.

2. Measures in place)

Non-compliant results for foodstuffs for which legal food safety criteria exist in Regulation (EU) n° 2073/2005, trigger measures as stipulated in the regulation, i.e. withdrawal from the market / recall from the consumer. Corrective measures are imposed at the concerned food business operator(s).

For foodstuffs for which no legal food safety criteria exist in Regulation (EU) n° 2073/2005, a sample is considered as non-compliant if a viable E. coli bacteria is present in the food containing the *stx*- and *eae*-genes.
The products are withdrawn from the market or even a recall from the consumers is organized. Measures are taken as described in the FASFC procedures:
http://www.afsca.be/thematischepublicaties/inventaris-acties.asp.
Corrective measures are imposed on the concerned food business operator(s).

3. Notification system in place to the national competent authority

In Belgium the human STEC surveillance system consists of a sentinel laboratory-based network and a laboratory-based network headed by the National Reference Centre for STEC (NRC). A mandatory notification for cases of the haemolytic uremic syndrome exists in all 3 regions.

The principle of mandatory notification as foreseen in the general food law (Regulation (CE) n° 178/2002) has been regulated in national legislation: http://www.favv-afsca.fgov.be/meldingsplicht/

4. Results of investigations and national evaluation of the situation, the trends and sources of infection
In the food chain STEC was detected in beef meat preparations intended to be eaten raw, raw milk cheeses, raw milk, raw milk butter and on beef carcasses and meat cuts. The overall prevalence is low (0.5%).

29. Description of Monitoring/Surveillance/Control programmes system: histamine

1. Monitoring/Surveillance/Control programmes system

For food a vigilance (surveillance) program is implemented in order to detect non conformities in food or a food category that exceed a pre-determined threshold (the prevalence level to be controlled) with a high degree of confidence. The number of analysis is determined with a statistical approach. The samples are taken randomly. More information can be found in the MANCP: http://www.afsca.be/about/mancp/
This analytical surveillance program covers the entire food chain: primary production, transformation, distribution and import. The results are evaluated against legal microbiological criteria. If not existing for a given parameter/matrix combination, the results are evaluated against action limits established by the FASFC. http://www.afsca.be/thematischepublicaties/inventaris-acties.asp

The surveillance program consists of samples of fishery products rich in histidine.
The sampling consists of single samples or batch samples (= sampling according to the criterion in Regulation (EU) n° 2073/2004, i.e. 9 subsamples).

2. Measures in place

Positive results in food trigger measures as stipulated in regulation (EU) 2073/2005, i.e. withdrawal from the market / recall from the consumer. Measures are taken as described in the FASFC procedures:
http://www.afsca.be/thematischepublicaties/inventaris-acties.asp.
Corrective measures are imposed on the concerned food business operator(s).

3. Notification system in place to the national competent authority

The principle of mandatory notification as foreseen in the general food law (Regulation (CE) n° 178/2002) has been regulated in national legislation: http://www.favv-afsca.fgov.be/meldingsplicht/

4. Results of investigations and national evaluation of the situation, the trends and sources of infection

In 2019 all results complied with the criterion in Reg. (EC) n° 2073/2005.

30. Description of Monitoring/Surveillance/Control programmes system: *Cronobacter*

1. Monitoring/Surveillance/Control programmes system

For food a vigilance (surveillance) program is implemented in order to detect non conformities in food or a food category that exceed a pre-determined threshold (the prevalence level to be controlled) with a high degree of confidence. The number of analysis is determined with a statistical approach. The samples are taken randomly. More information can be found in the MANCP: http://www.afsca.be/about/mancp/
This analytical surveillance program covers the entire food chain: primary production, transformation, distribution and import. The results are evaluated against legal microbiological criteria. If not existing for a given parameter/matrix combination, the results are evaluated against action limits established by the FASFC. http://www.afsca.be/thematischepublicaties/inventaris-acties.asp

The surveillance program consists of samples of infant formula and dietary foods for special medical purposes for infants younger than 6 months.

Analytical method
Food samples are analysed in accredited and by FASFC approved laboratories using analytical methods which are on an by the FASFC approved list: http://www.favv-afsca.fgov.be/laboratories/approvedlaboratories/.

2. Measures in place

Positive results in food trigger measures as stipulated in regulation (EU) 2073/2005, i.e. withdrawal from the market / recall from the consumer. Measures are taken as described in the FASFC procedures:
http://www.afsca.be/thematischepublicaties/inventaris-acties.asp.
Corrective measures are imposed on the concerned food business operator(s).

3. Notification system in place to the national competent authority

No mandatory notification exists for ***Cronobacter*** in humans.

The principle of mandatory notification as foreseen in the general food law (Regulation (CE) n° 178/2002) has been regulated in national legislation: http://www.favv-afsca.fgov.be/meldingsplicht/

4. Results of investigations and national evaluation of the situation, the trends and sources of infection

In 2019 all results complied with the criterion in Reg. (EC) n° 2073/2005.

31. Description of Monitoring/Surveillance/Control programmes system: *Yersinia*

1. Monitoring/Surveillance/Control programmes system

For food a vigilance (surveillance) program is implemented in order to detect non conformities in food or a food category that exceed a pre-determined threshold (the prevalence level to be controlled) with a high degree of confidence. The number of analysis is determined with a statistical approach. The samples are taken randomly. More information can be found in the MANCP: http://www.afsca.be/about/mancp/
This analytical surveillance program covers the entire food chain: primary production, transformation, distribution and import. The results are evaluated against legal microbiological criteria. If not existing for a given parameter/matrix combination, the results are evaluated against action limits established by the FASFC. http://www.afsca.be/thematischepublicaties/inventaris-acties.asp

The surveillance program includes samples of pig meat (carcass swabs) and pig meat preparations.

Analytical method
Food samples are analyzed in accredited and by FASFC approved laboratories using analytical methods which are on a by the FASFC approved list: http://www.favv-afsca.fgov.be/laboratories/approvedlaboratories/.

2. Measures in place

In case of non-compliant results, posing a risk for public health, the products are withdrawn from the market or even a recall from the consumers is organized. Measures are taken as described in the FASFC procedures:
http://www.afsca.be/thematischepublicaties/inventaris-acties.asp. Corrective measures are imposed on the concerned food business operator(s).

3. Notification system in place to the national competent authority

In Belgium the human ***Yersinia*** surveillance systems consists of a sentinel laboratory-based network and a laboratory-based network headed by the National Reference Centre for *Yersinia* (NRC). No mandatory notification exists for this disease.

The principle of mandatory notification as foreseen in the general food law (Regulation (CE) n° 178/2002) has been regulated in national legislation: http://www.favv-afsca.fgov.be/meldingsplicht/

4. Results of investigations and national evaluation of the situation, the trends and sources of infection

In 2019, pathogenic Yersinia enterocolitica was detected in only 2 samples of 118 pig carcass swabs.

Foodborne outbreak

32. Food-borne Outbreaks

1. System in place for identification, epidemiological investigations and reporting of food-borne outbreaks

In Belgium different authorities are dealing with food-borne outbreaks:
* The Federal Agency for the Safety of the Food chain (FASFC) deals with the safety of foodstuffs, epidemiological investigations on foodstuffs and animal health issues in case of a food-borne outbreak;
* The local authorities (Flemish, French and German speaking Community) deal with person related matters as human health and can start an epidemiological investigation by its public health medical inspectors in case of a food-borne outbreak;
* The scientific research centre Sciensano (hosts the National reference laboratory on Food-borne Outbreaks) analyses all suspected food samples, collects all data on food-borne outbreaks and gives scientific support (including on epidemiology) to the FASFC officers and the public health inspectors.

A national "Platform Food-borne outbreaks", approved by the National Conference of Ministers of Public Health, brings together the different competent authorities on food safety, animal health and public health. Furthermore in 2007, for a better communication, a protected web application was made available to exchange outbreak data and laboratory results in real time between the different authorities dealing with FBO. In this web-application a common file is created for each individual outbreak, and the data and laboratory results are shared between food inspectors and human health inspectors.

Data in this report come from the FASFC, the Flemish Community, the Walloon and Brussels-Capital regions, the sentinel laboratories network for human microbiology, and the Federal Reference Centres for Food-borne outbreaks, for ***Clostridium botulinum***, ***Salmonella*** and ***Shigella***, and for ***Listeria***.

2. Description of the types of outbreaks covered by the reporting

A food-borne outbreak is defined as an incident, observed under given circumstances, of two or more human cases of the same disease and/or infection, or a situation in which the observed number of human cases exceeds the expected number and where the cases are linked, or are probably linked, to the same food source (Directive 2003/99/EC, Article 2(d)). Data are collected from the FASFC, the Flemish Community, the French community, the Brussels Common Community Committee, the sentinel laboratories network for human clinical microbiology, the National Reference Laboratory for Food-borne outbreaks and the National Reference Centres for ***Salmonella*** and ***Shigella***, ***Listeria*** and ***C. botulinum***.
The reporting includes both general and household outbreaks.
The causative agents covered are ***Salmonella spp***., ***Shigella*** **spp.**, ***Campylobacter*** **spp**., Verotoxigenic ***E. coli***, ***Listeria monocytogenes***, ***Staphylococcus aureus***, ***Bacillus cereus***, ***Clostridium perfringens***, **Giardia**, **Norovirus**, **Hepatitis A**, **toxins of *Staphylococcus aureus***, ***C. botulinum*** and ***Bacillus cereus*** and **histamine**.

3. National evaluation of the reported outbreaks in the country

During 2019, a total of 571 outbreaks of food-borne infections and intoxications were recorded in Belgium. More than 2457 people were ill, and at least 28 persons were hospitalized. No fatal cases were reported. The number of reported outbreaks increased in 2011 as compared to former years but after a peak in 2016 resolved to the situation as existed in the period 2011-2013. The increase in 2011 was probably due to an adapted outbreak investigation procedure at the FASFC and/or increased sensibility by consumers. In 2019, the highest number of outbreaks was reported since the registration of FBOs in Belgium in 1999. The number of strong evidence outbreaks in 2019 is lower than previous reporting years, but an increase is observed for weak evidence outbreaks reported upon consumption of a common food, but for which no samples were analysed due to late reporting by the human cases or the lack of food samples appropriate for laboratory investigation. The number of human cases involved in foodborne outbreaks has therefore also increased, but is also due to an important ***Salmonella*** outbreak involving 203 human cases.

In 2019, in total 2 verified food borne outbreaks were reported. In these outbreaks the causative agent was found in the implicated food and/or it was clear by analytical or strong descriptive epidemiology that food was at the origin of disease. All other outbreaks were classified as weak evidence outbreaks and the causative agent was unknown or the microbiological agent was detected only at human level.

The most reported causative agents in 2019 were ***Salmonella*** and **Norovirus**, responsible for 5 and 3 food-borne outbreaks, respectively. ***Salmonella*** **Enteritidis MLVA type 3-12-5-5-1** was isolated from human cases involved in a local outbreak in a school restaurant. In total 203 students suffered from diarrhoea and fever. An identical strain was isolated from tartare sauce in which raw eggs originating from Spain were used. Using NGS, the eggs could be traced back up to the Spanish farm. ***Salmonella*** **Enteritidis** was also involved in a family outbreak with 2 reported cases upon consumption of pancakes where eggs were used to prepare the dough. No ***Salmonella*** was detected in the analysed batch of eggs. Based on NGS type, 1 human case of ***Salmonella*** **Poona** could be linked to UI537. A second child is probably also linked. Both children consumed infant formula product that was linked to this multi-country outbreak. Six human cases were reported to suffer from a ***Salmonella*** **Virginia** infection upon a restaurant visit. However, no ***Salmonella*** was isolated from pork or poultry meat that was analysed. For one ***Salmonella*** outbreak, the species isolated from the human cases was not reported and the strain was not isolated from the suspected foodstuff involved. In total, 6 persons were hospitalised due to ***Salmonella*** infections. Twenty out of 26 persons that attended a staff party suffered from vomiting, diarrhoea, nausea and sometimes fever, 48h after having eaten sushi and oysters. **Norovirus** was detected in oysters. No human samples were taken. For the remaining 2 outbreaks, involving 21 human cases, Norovirus was detected from human cases and/or food handlers but not in food leftovers. Description of the outbreaks demonstrated that Norovirus was probably transmitted by a common food source. These outbreaks were therefore considered weak evidence outbreaks.

Enterotoxigenic *C perfringens* was confirmed in human cases involved in 2 outbreaks. Patients suffered from diarrhoea. No ***C. perfringens*** was detected in the witness meals from the suspected foods.

Listeria monocytogenes was at the origin of 2 outbreaks involving 4 human cases of which 2 were hospitalised. For the first outbreak, ***L. monocytogenes*** 1/2a was isolated from beef. Both human cases suffered from diarrhoea but no samples were taken. In the second outbreak cheese was reported as the possible food vehicle, but this could not be confirmed by microbiological evidence in the food. ***Listeria monocytogenes*** was only detected in the human cases.

Campylobacter spp. was reported to be at the origin of 1 outbreak upon consumption of ice cream. Patients suffered from cramps, diarrhoea and sometimes fever. This pathogen was detected only in the human cases.

Bacillus cereus was involved in 1 outbreak and was responsible for 4 human cases. Enterotoxigenic ***B. cereus*** possessing the emetic toxin gene was isolated for this outbreak from the suspected food (spaghetti) and from human stool. Human cases suffered from nausea and vomiting.

Histamine caused allergic reactions to 9 human cases and was detected in food leftovers (tuna fish) at levels of 52.9 and 80.5 mg/kg.

Pathogenic *E. coli* O26 (stx2a and eae positive) was at the origin of an outbreak involving 3 human cases of which 1 was hospitalised. Besides mild symptoms of diarrhoea and vomiting, one child developed HUS. The involved foodstuff was not identified (no leftovers were available) but was suspected to be raw beef (carpaccio).

In total, 40 out of 60 persons showed symptoms of diarrhoea upon consumption of chicken chops at a wedding dinner. ***Arcobacter butzleri***, an emerging pathogen in the food chain, was isolated from a human case. Unfortunately, leftovers from the chicken chops were frozen and the pathogen could not be detected from the received samples.

In 97% of the outbreaks (N=554 out of 571) no causative agent could be identified. An important reason for this is the absence of leftovers of the suspected meal in most of those outbreaks and late reporting by the consumer. In 18% (N=103 out of 571) of the outbreaks, samples (human and/or food) were sent for analysis of which 18% (N=18) resulted in the detection of a pathogen. Most of the latter outbreaks (N=16) have been categorized as a weak evidence outbreak.

Most food-borne outbreaks (67.3%) were due to the consumption of meals composed of different ingredients. Meat and meat based products (bovine, pig, sheep, broiler) were responsible for 12.8 % of the outbreaks. In 0.5% of the outbreaks the implicated food was unknown.

Restaurants and take away or fast food outlets were the most important location of exposure, being the setting of 70.4 % and 6.1 %, respectively, of food-borne outbreaks in Belgium in 2019. Catering at work, institutional catering or temporary mass catering are reported in respectively 0.9 %, 1.2 % and 0.7 % of the food-borne outbreaks. In 15.6 % of the outbreaks the exposure happened at home.

4. Descriptions of single outbreaks of special interest

On 6 September 2019, the inspectors of the Health Agency were informed of a probable food-borne outbreak in a hotel school. Being a hotel school, students prepared fish sticks with puree and tartare sauce for all other students at school. About 24h after serving the meal, 203 students suffered from diarrhoea and fever. Leftovers of the suspected meal were send for microbiological analysis. ***Salmonella*** **Enteritidis MLVA type 3-12-5-5-1** was isolated from human cases and the witness meal. A thorough cleaning and disinfection of the kitchen and its equipment was advised, and environmental swabs were analysed afterwards in which ***Salmonella*** was not detected. A cohort study was conducted and pointed to the tartare sauce as the most probable source of the outbreak (RR = 12.6%). An identical strain was isolated from the human cases and the tartare, the latter in which raw eggs originating from Spain were used. Using the EPIS platform, an urgent inquiry (UI 608) was launched and France identified 13 cases with the same HC2 12622, with isolation dates between May and October 2019. In parallel, a RASFF (2020.3675) was launched. Using NGS, the eggs could be traced back up to a Spanish farm.

Based on NGS type, 1 human case of ***Salmonella*** **Poona** could be linked to UI-537. A second child is probably also linked. Both children consumed infant formula product that was linked to a multi-country outbreak, also reported in UI-537.

5. Control measures or other actions taken to improve the situation

At primary production, there is a surveillance of *Salmonella* on all poultry farms, a mandatory vaccination against ***Salmonella*** Enteritidis for layers and breeders, eggs from ***Salmonella*** Enteritidis or Typhimurium infected layers are heat treated before trade, a flock of infected broilers is slaughtered at the end of the day or week and meat from infected broilers is heat treated before trade**.** Respect of good hygiene practices and procedures based on HACCP principles as stipulated by EC hygiene legislation are extremely important for the safety of the food chain, i.e. prevention of food borne outbreaks. Via the intensive inspection program of the FASFC checking the food business operators and the self-checking systems of food business operators, loss of control of hygiene can be identified and corrective measures can be taken in order to prevent unsafe situations for human health. For more information on the activities of the FASFC, please check the website: **http://www.favv-afsca.fgov.be**.

Antimicrobial resistance

33. General Antimicrobial Resistance Evaluation

1. Situation and epidemiological evolution (trends and sources) regarding AMR to critically important antimicrobials (CIAs) over time until recent situation

Antimicrobial resistance in ***Campylobacter jejuni*** isolated from poultry meat is monitored since 2010. Trends show that the predominant profile of resistance includes the fluoroquinolones together with tetracycline. Since 2014, the levels of resistance stay stable. In 2019, the resistance to ciprofloxacin is extremely high (>70%). Almost half of the isolates show a combined pattern of resistance including **ciprofloxacin**, **nalidixic acid and tetracycline**. On the other hand, resistance to erythromycin remains very low (>0.1-1%).

Since the implementation of Commission decision 2013/652/EU, antimicrobial resistance of ***Salmonella spp***. in food matrices, as specified in the decision (fresh meat of broilers in even years, fresh meat of pigs and fresh meat of bovines in uneven years), is done in an alternate 2-year system.

For ***Salmonella*** isolated from carcasses of **pigs and veal calves,** very high levels of resistance were reported for **ampicillin** and **sulfamethoxazole** (>50-70%) and high levels of resistance (>20-50%) for **tetracycline** followed by **trimethoprim**. Resistance to 3rd generation **cephalosporins**, **carbapenems** and **tigecycline** was not detected. Resistance to **fluoroquinolones**, quinolones and **colistin** was low (>1-10%). Resistance to **azithromycin** was rare (<1%), with only one isolate detected. The contribution of resistance depends on the serovar and differs greatly from one serovar to another. The most dominant serovar recovered was ***S.*** Typhimurium and its variant monophasic Typhimurium. Extremely high levels of resistance were noticed to **ampicillin**, **sulfamethoxazole** and **tetracycline** for the monophasic variant and high levels of resistance to **sulfamethoxazole** and **tetracycline** for the serovar Typhimurium. All isolates belonging to the latter serovar were resistant to **ampicillin** as well. The levels of resistance to **ciprofloxacin**, **nalidixic acid** and **colistin** were low for both serovars. We noticed that even if the global resistance to **colistin** remains low (>1-10%), the resistance is associated with other serovars than *S.* Enteritidis such as *S*. Typhimurium, monophasic *S*. Typhimurium and *S*. Derby. None of the isolates were resistant to 3rd generation **cephalosporin's**, **carbapenems**, **azithromycin** and **tigecycline**. The monophasic ***S.*** Typhimurium serovar resulted in a higher level of multidrug resistance (MDR) compared to ***S.*** Typhimurium. Approximately 62% of the isolates belonged to the serovar monophasic Typhimurium and 54% to the serovar Typhimurium were multidrug resistant, respectively. About 3% of the monophasic ***S.*** Typhimurium isolates were sensible to all the antibiotics tested. For the serovar *S*. Typhimurium approximately 8% of all the isolates were completely susceptible.
Resistance to **carbapenems** has not been detected in ***Salmonella*** isolates from carcasses of pigs and veal calves.

The antimicrobial resistance monitoring of non-pathogenic enterococci conducted in 2011-2013 was taken up again in 2019 in poultry, pigs and bovines. Since the last monitoring of 2013, daptomycin, tigecyclin and teicoplanin antimicrobials were added to the panel while florfenicol, salicylic acid and streptomycin were excluded of it.
Taking all sample origins into consideration, a decrease in resistance to tetracycline, erythromycin, ampicillin, ciprofloxacin and vancomycin was observed in 2019 in both *E. faecalis* and *E. faecium* compared to data from the monitoring conducted in 2013. However, the resistances to tetracycline and erythromycin are still extremely to very high in *E. faecalis* with 78% and 64% of resistance respectively. In *E. faecium*, resistances to tetracycline and erythromycin are also found in high levels

with 47% and 32% of resistance, respectively. While *E. faecalis* is intrinsically resistant to quinupristin/dalfopristin, resistance in *E. faecium* to this antimicrobial combination is extremely high and is reaching 77% of isolates.
Resistances to last-resort antibiotics are also observed with 14% of *E. faecium* isolates resistant to daptomycin, 1.1% of *E. faecalis* (N=6) and 0.7% of *E. faecium* (N=6) isolates resistant to linezolid and 0.2% of *E. faecalis* (N=1) isolates resistant to vancomycin. Low levels of ciprofloxacin and gentamycin resistances were observed among all isolates in this monitoring and no resistance was found for tigecycline and teicoplanin.
In general, resistance in strains from poultry origin, and particularly in broiler flocks, is higher compared to the strains from pigs and bovines. However, layers and breeders isolates revealed to be less resistant from this monitoring with a majority of these samples (98% and 86% respectively) harbouring less than 3 antimicrobial resistances. Also, *E. faecium* isolates were found to accumulate a higher number of antimicrobial resistances compared to *E. faecalis* isolates. Indeed, 28% of *E. faecium* are multi-drug resistant (≥3 antimicrobials) compared to 20% of *E. faecalis*.

2. Public health relevance of the findings on food-borne AMR in animals and foodstuffs

S. Typhimurium and its variant monophasic S. Typhimurium is a serotype that is of public health concern since it causes diseases in humans ranging from a mild gastro-enteritis to a systemic disease. In Belgium, monophasic *S*. Typhimurium was isolated in 25.8% of reported human isolates in 2019 and extremely high levels of MDR were observed in the EU in human isolates in 2017. In 2019, this serovar was also the predominant one in pigs carcasses, and a large majority exhibited a resistance profile which included **ampicillin**, **sulfamethoxazole** and **tetracycline**. **Concerning the critically important antimicrobial (CIA) ciprofloxacin, resistance was low. No co-resistance to ciprofloxacin and cefotaxime was detected in any isolate.**

Overall, resistance to **colistin** remains low (>1-10%). Other serovars of *Salmonella*, such as *S.* Derby, showed resistance to colistin in pig carcasses. This feature is under investigation.

Resistance to **3rd generation cephalosporins** and to **carbapenem** was not detected in *Salmonella spp*. neither from pig carcasses nor from calves carcasses.

Taking into consideration that campylobacteriosis is one of the most common causes of food-borne disease, the very high prevalence of resistance to **ciprofloxacin** and tetracycline of ***Campylobacter jejuni*** isolates from poultry meat is of concern. However, the resistance to the critically important antimicrobial erythromycin remains very low.

The specific monitoring of ***E.coli*** **ESBL** in fresh bovine meat, fresh pork and fresh poultry meat shows that the prevalence of ***E. coli*** **ESBL** varies between the matrices, from low in pig meat to very high in poultry meat. A decrease in resistance to **ciprofloxacin** was noticed in 2019 in particular in ESBL isolates recovered from fresh pig meat and fresh bovine meat. All but one, recovered from fresh pig meat, were multidrug resistance (MDR) and approximately 60% of those recovered from bovine meat as well.

The antimicrobial testing of vancomycin and linezolid in Enterococci is relevant considering their use as last-resort drugs in human medicine. In the monitoring of 2019 linezolid resistance was observed in 1.1% of *E. faecalis* (N=6) and 0.7% of *E. faecium* (N=6) isolates. Vancomycin resistance was found in 0.2% of *E. faecalis* (N=1) isolates. In the monitoring conducted in 2013, levels of vancomycin resistance were already very low in *E. faecalis* with 0.7% of resistance and low in *E. faecium* with 2.0% of resistance. However, since 2011, linezolid resistance has decreased from 4% of resistance in 2011 to 1% of resistance in 2019 in both *E. faecalis* and *E. faecium*. Similarly, vancomycin resistance has considerably diminished since 2011, ranging from 5.7% to 0% in *E. faecium* and from 2.2% to 0.2% in *E. faecalis* in 2019.

3. Recent actions taken to control AMR in food producing animals and food

Recent actions to control AMR in food producing animals are mainly based on reducing the overall use of antibiotics, the use of critically important antibiotics and the use of antibiotics through feed. Targets were agreed on in 2016, by the federal government and different sector organisations. In 2017, 2 targets were achieved: a 50% reduction, set between 2011 and 2017, for the use of feed medicated with antibiotics and a 75% reduction, set between 2011 and 2020, for the use of critically important antibiotics. The first target was achieved mainly due to the pressure of the Belgian Feed Association on its members by laying down specific restraints on the sales of feed medicated with antibiotics. The second target was achieved mainly by restricting the use of critically important antibiotics through national legislation. The achievement of the third target, a 50% reduction between 2011 and 2020 of the overall use of antibiotics, is ongoing. A reduction of 35% was reached in 2018. Special emphasis is put on the sensitisation of veterinarians and farmers through benchmarking of veterinarians and farmers on their use of antibiotics.
The control of AMR in food is based on the same principles and measures as for hygiene purposes.

34. General Description of Antimicrobial Resistance Monitoring: *E. coli* – bovines – animal/food sample

1. General description of sampling design and strategy

Since 2012, samples of young bovines (meat production) for the analysis of the antimicrobial resistance of commensal ***E. coli***, taken at farm level, and samples of veal calves taken at the level of the slaughterhouse are part of the national control programme of the Federal Agency for the Safety of the Food Chain. The samples of veal calves are also used for the specific monitoring of ESBL/AmpC and of carbapenemase-producing ***E. coli***. All samples are taken by official agents. The number of samples taken is calculated based on the detection percentage of commensal *E. coli*, with a maximum of 300, as to attain 170 isolates for further analysis of resistance. In 2019, 177 faeces samples of young bovines and 210 caeca samples of veal calves were taken for the analysis of AMR of commensal *E. coli*.

An on-farm sample of young bovines consists of faeces of at least 10 bovines of less than 7 month of age. At least 20 ml of fresh, moist faeces are taken from the floor from different places in a box using sterile gloves. If there are less than 10 animals present in a box, several boxes are sampled to assure to have at least faeces of 10 animals. Samples must be kept moist during sampling.
A sample at the slaughterhouse of one slaughter batch consists of 100 ml faeces taken from the colon/rectum with a sterile glove.

Since 2015, 300 samples of fresh bovine meat for the specific monitoring of ESBL/AmpC and of carbapenemase-producing ***E. coli*** taken at retail level are part of the national control programme of the FASFC. All samples are taken by official agents. A sample consists of 150 grams of fresh meat.

Samples are transported cooled and must arrive at the laboratory within 72 hours. All data concerning the sampling mission (time and place of sampling, the type of sample taken and the identity of the sampler) are registered in the central database 'Foodnet' of the FASFC. The results of the internal laboratories are also registered in the same central database. The results of the external laboratories are provided on demand using specific templates.

2. Stratification procedure per animal population and food category

The sampling is programmed evenly spread over the sampling period (January to December) on a monthly basis in each local control unit. The number of samples to be taken per local control unit is directly related to the number of cattle farms or the number and capacity of bovine slaughterhouses on its territory. Samples of fresh bovine meat are collected randomly at retail without pre-selecting samples based on the origin of the food.

3. Randomisation procedure per animal population and food category

The sampler chooses on which day of the month the sample will be taken. At the farm, the bovines sampled are also chosen by the sampler. At the slaughterhouse and at retail, the lot sampled is also chosen by the sampler.

4. Analytical method used for detection and confirmation

4.1. Isolation and identification of *E. coli*

The faecal material is inoculated either on McConkey or TBX medium and incubated at 44°C for 18 to 24 hours. Suspected colonies are inoculated on TBX medium and incubated at 37°C for 18 to 24 hours. Suspected colonies are purified on Columbia agar supplemented with 5% sheep blood. Identification is done by the OPNG test and Ureum test. Confirmed ***E. coli*** pure culture (typical green/blue colonies) are transported to the national reference laboratory (NRL Sciensano) for antimicrobial susceptibility testing (AST). Before antimicrobial susceptibility testing (AST), all strains are purified on nutrient agar.

4.2. Isolation and identification of ESBL/AmpC producing *E. coli* and carbapenemase producing *E.coli*

For the isolation and identification of ESBL/AmpC producing *E. coli* and carbapenemase producing ***E.coli***, caeca samples and fresh meat samples were analysed by the labs of the FASFC. The methods used were the EURL-AR validated methods:

"Isolation of ESBL, AmpC and carbapenemase-producing *E. coli* from fresh meat - February 2018",

"Isolation of ESBL, AmpC and carbapenemase-producing *E. coli* from caeca samples – February 2018" (see www.eurl-ar.eu/protocols.aspx).

The specific monitoring of ESBL/AmpC producing *E. coli* on caeca samples and fresh meat was performed using the isolation media MacConkey+Cefotaxime (CTX, 1mg/l) and incubation at 44°C/18-22h (Biorad 35M142.02). For the specific monitoring of carbapenemase producing E.coli the isolation media used was ChromID® CARBA SMART (Biomérieux), incubated at 37°C/18-22h.

Suspected colonies were subcultured as described in the EURL-AR protocol.

The confirmed *E. coli* isolates were re-subcultured and stored at -80°C.

5. Laboratory methodology used for detection of antimicrobial resistance

5.1. Antimicrobial susceptibility testing of *E. coli*

Antimicrobial susceptibility testing (AST) was done using a micro broth dilution method (Trek Diagnostics). To this end, 1 to 3 colonies were suspended in sterile physiological water to an optical density of 0.5 McFarland. Ten (µl) of this suspension was inoculated to the microtiter in 11 ml cation adjusted Mueller Hinton broth (MH-Broth). Fifty microliter of the MH-broth with bacteria was brought on a micro-titre plate (EUVSEC, Trek Diagnostics), with the antimicrobials lyophilized. The antimicrobials and the dilutions tested were those included in the European Decision 2013/652/EU.

When an isolate displayed resistance to cefotaxime and/or ceftazidime or meropenem, it was further tested with the second panel of antimicrobials as described in the decision. To this end, the sensititre plate used was EUVSEC 2, purchased at Trek Diagnostics.

The epidemiological cut-off values (ECOFF) used were defined in the decision 2013/652/EU (Table 1 and Table 4) and for those molecules without ECOFF established in the decision, values were provided by EFSA, 2015 as follows: Azithromycin >16 (mg/l), cefotaxime + clavulanic acid >0.25 (mg/l), Ceftazidime + clavulanic > 0.5 (mg/l) and Temocillin, > 32 (mg/l). The MIC (minimal inhibitory concentration) was defined as the lowest concentration by which no visible growth could be detected. MIC was semi-automatically recorded by Trek Vision System using the SWIN software. MIC values were automatically exported to an Excel file and subsequently imported to Starlims for automatically interpretation and validation.

5.2 Specific monitoring of ESBL, AmpC and/or carbapenemase producing *E. coli*

E. coli ESBL and/or AmpC isolates obtained by the method described by the EURL-AR were tested at Sciensano for antimicrobial susceptibility (AST) for panel 1 (EUVSEC) and panel 2 (EUVSEC2) in parallel using the same method and cut-off values as described in point 5.1. MIC was semi-automatically recorded by Trek Vision System using the SWIN software. MIC values were automatically exported to an Excel file and subsequently imported to Starlims for automatically interpretation following the criteria defined by EFSA, 2016 (see https://www.eurl-

ar.eu/CustomerData/Files/Folders/3-workshop-kgs-lyngby-april2016/25_efsa-eusr-amr-workflow-and-criteria-for-esbl-ampc-carbapenemase-phenotypes.pdf).

6. Results of investigation

6.1. E. coli – faeces samples young bovines

Of the 177 samples tested, all but one were positive for the presence of indicator *E. coli*. Of them, 166 isolates were tested for AST. Resistance of *E. coli* from faecal samples at farm from non-selective culture plate was high (>20-50%) for sulfamethoxazole and ampicillin and moderate (>10-20%) for tetracycline, trimethoprim and chloramphenicol. Low levels of resistance (>1%-10%) were seen for ciprofloxacin, gentamicin, nalidixic acid and 3rd generation cephalosporins. Resistance to colistin, tigecycline and meropenem was not detected.

6.2. *E. coli* – caeca samples veal calves

The percentage of antimicrobial resistance of commensal *E. coli* isolated from non-selective media was extremely high (>70%) for tetracycline, very high (>50-70%) for sulfamethoxazole, ampicillin and trimethoprim followed by a high resistance for chloramphenicol and ciprofloxacin. For the rest of the antimicrobials tested, the resistance was low (>1%-10%).

6.3. ESBL, AmpC, producing *E. coli* from caeca samples of veal calves

Inoculation on MacConkey agar containing cefotaxime in a selective concentration resulted in 179 isolates, out of a total of 300 samples tested. 170 isolates were subjected to antimicrobial susceptibility testing. The resistance to tetracycline and sulfamethoxazole was extremely high (>70%) and to trimethoprim very high (>50-70%). The resistance to fluoroquinolones was high (>20-50%) whereas the resistance to nalidixic acid moderate (>10-20%). Resistance to colistin was low (>1%-10%) and resistance to meropenem and tigecycline was rarely detected (<0.1%). **Overall a decrease in resistance to several antimicrobials was detected, namely, fluoroquinolones, quinolones and in a lesser extent trimethoprim and sulfamethoxazole compared to 2018.**

6.4. Carbapenemase producing E. coli from caeca samples of veal calves

Analysis of the 300 caeca samples was done in parallel of the monitoring of ESBL/AmpC producing *E. coli* for the specific monitoring of carbapenemase producing *E. coli* on the selective media carbaSmart as described in point 4.2. **None of the samples tested positive for carbapenemase producing *E. coli*.**

6.5. Specific monitoring of ESBL/AmpC and or carbapenemase producing *E. coli* from fresh meat samples

300 samples were analysed and 10 tested positive for ESBL. Further, isolates were tested for AST in parallel for panel 1 and 2. **Overall a decrease in the resistance to most of the antimicrobials (excepted β-lactams) was noticed.** Results show that isolates displayed a very high resistance (50-70%) to tetracycline, sulfamethoxazole and high resistance (20-50%) to trimethoprim. However they displayed a moderate resistance (10-20%) to ciprofloxacin compared with an extremely high resistance (>70%) in 2018 and **a rare resistance (<0.1%)** to nalidixic acid compared with a very high resistance (>50-70%) in 2018. Neither colistin resistance nor meropenem resistance was detected. Based on panel 2, 90% of the isolates had an ESBL phenotype and 10% an AmpC phenotype.

6.6. Specific monitoring of carbapenemases producing *E. coli* from fresh meat sample

Specific monitoring of carbapenemase producing *E. coli of* 300 samples on the selective media carbaSmart as described in point 4.2 revealed no carbapenemase producing ***E. coli*.**

35. General Description of Antimicrobial Resistance Monitoring: *E. coli* – poultry - animal sample

1. General description of sampling design and strategy

Samples of broiler flocks (170) and in 2019 for the first time samples of fattening turkeys (49) are taken at the level of the slaughterhouse in the framework of the national control programme of the Federal Agency for the Safety of the Food Chain by official agents for the analysis of the antimicrobial resistance of commensal ***E. coli*** (respectively 169 and 49)and the specific monitoring of ESBL/AmpC and of carbapenemase-producing ***E. coli*** (respectively 298 and 59). The yearly monitoring of broiler flocks started in 2011. **The number of samples taken** of broiler flocks **is calculated based on the detection percentage of commensal *E. Coli*.**
Additionally, faeces samples are taken of layers and breeders at farm level. A sample consists of minimum 20 ml of faeces taken from the floor with a glove.
In 2019, samples were taken over the period **January to** December. A sample of one flock consists of 10 pooled caeca samples. Both caeca of one bird are separated by prudent manual traction from the intestinal packet and placed in a sterile pot. Once all 10 pairs of caeca are collected, the sample is placed in a cooled box or a coolbox containing ice in order to cool down the sample rapidly. The samples stay cooled until arrival at the lab on the same day or at the latest the day after sampling. All data concerning the sampling mission (time and place of sampling, the type of sample taken and the identity of the sampler) are registered in the central database 'Foodnet' of the FASFC. The results of the internal laboratories are also registered in the same central database. The results of the external laboratories are provided using specific templates on demand.

2. Stratification procedure per animal population and food category

The sampling is programmed to be evenly spread over the sampling period (January to December) on a monthly basis per local control unit. The number of samples to be taken per local control unit is directly related to the number and capacity of the slaughterhouses in its territory. For this reason, only 4 local control units are involved.

3. Randomisation procedure per animal population and food category

At the slaughterhouse, the samples are taken of a previously planned flock.

4. Analytical method used for detection and confirmation

The caecal material was inoculated on McConkey or TBX medium and incubated at 44°C for 18 to 24 hours. Suspected colonies were inoculated on TBX medium and incubated at 37°C for 18 to 24 hours. Confirmed E. coli pure culture (typical green/blue colonies) were transported to the national reference laboratory for further analysis.

5. Laboratory methodology used for detection of antimicrobial resistance

5.1. Antimicrobial susceptibility testing of *E. coli*
Antimicrobial susceptibility testing (AST) was done using a micro broth dilution method (Trek Diagnostics). To this end, 1 to 3 colonies were suspended in sterile physiological water to an optical density of 0.5 McFarland. Ten (µl) of this suspension was inoculated to the microtiter in 11 ml cation adjusted Mueller Hinton broth (MH-Broth). Fifty microliter of the MH-broth with bacteria was brought

on a micro-titre plate (EUVSEC, Trek Diagnostics), with the antimicrobials lyophilized. The antimicrobials and the dilutions tested were those included in the European Decision 2013/652/EU. When an isolate displayed resistance to cefotaxime and/or ceftazidime or meropenem, it was further tested with the second panel of antimicrobials as described in the decision. To this end, the sensititre plate used was EUVSEC 2, purchased at Trek Diagnostics.
The epidemiological cut-off values (ECOFF) used were defined in the Decision 2013/652/EU (Table 1 and Table 4) and for those molecules without ECOFF established in the decision, values were provided by EFSA, 2015 as follows: Azithromycin >16 (mg/l), cefotaxime + clavulanic acid >0.25 (mg/l), Ceftazidime + clavulanic > 0.5 (mg/l) and Temocillin, > 32 (mg/l). The MIC (minimal inhibitory concentration) was defined as the lowest concentration by which no visible growth could be detected. MIC was semi-automatic recorded by Trek Vision System using the SWIN software. MIC values were automatically exported to an Excel file and subsequently imported to Starlims for automatically interpretation and validation.

5.2 Specific monitoring of ESBL, AmpC and/or carbapenemase producing *E. coli*

E. coli ESBL and/or AmpC isolates obtained by the method described by the EURL-AR were tested for antimicrobial susceptibility (AST) for panel 1 (EUVSEC) and panel 2 (EUVSEC2) in parallel using the same method and cut-off values as described in point 5.1. MIC was semi-automatically recorded by Trek Vision System using the SWIN software. MIC values were automatically exported to an Excel file and subsequently imported to Starlims for automatically interpretation following the criteria defined by EFSA, 2016 (see https://www.eurl-ar.eu/CustomerData/Files/Folders/3-workshop-kgs-lyngby-april2016/25_efsa-eusr-amr-workflow-and-criteria-for-esbl-ampc-carbapenemase-phenotypes.pdf).

6. Results of investigation

All of the 218 samples tested for the detection of indicator *E. coli* were positive. Of the isolates recovered, AST was done of 170 isolates of which 137 were recovered from broilers and 33 from turkeys. Results of the AST analyses of the 137 indicator *E.coli* isolates recovered from broilers show a decrease in resistance to ampicillin and sulfamethoxazole even though the percentage of resistance remains extremely high (>70%). The levels of resistance to ciprofloxacin and nalidixic acid were stable compared to 2018 and remain very high (>50-70%). A decreased has been noticed for 3rd generation cephalosporin's, a critically important antimicrobial. Isolates displayed a low resistance (>1-10%) compared to a moderate (>10-20%) in 2018. No resistance to meropenem was detected.

Results of the AST analyses of the 33 indicator *E.coli* recovered from turkeys show extremely high levels (>70%) of resistance to ampicillin and tetracycline. The level of resistance to ciprofloxacin was high (>20-50%) to nalidixic acid and moderate (>10-20%) to 3rd generation cephalosporin's. No resistance to azithromycin, colistin, gentamicin, meropenem and tigecycline was detected.

Comparison of results from both matrices show the following features:

(i) Overall the resistance to the antimicrobials is higher in isolates recovered from broilers than from turkeys except for the tetracycline, which is much higher in isolates recovered from turkeys (approx. 80%) than isolates recovered form broilers (approx. 50%);
(ii) isolates recovered from broilers displayed a much higher levels of resistance to quinolones and fluoroquinoles that those isolated from turkey, 60% vs 40% for ciprofloxacin and 54% vs 18% for nalidixic acid;
(iii) Similar level of resistance has been found in both food producing species regarding 3rd generation cephalosporins (10%);
(iv) No resistance to carbapenems was detected in any of the isolates.

Based on the results of the second panel, all broiler isolates had an ESBL phenotype. Seventy-five % of the isolates from turkeys had an ESBL phenotype whereas 25% displayed an AmpC phenotype.

Inoculation on MacConkey agar containing cefotaxime in a selective concentration resulted in 232 ESBL and/or AmpC strains, out of a total of 348 caecal samples tested. 176 isolates obtained were subjected to AST. Results show a very high resistance (>50-70%) to ciprofloxacin, nalidixic acid, and extremely high (>70%) to tetracycline, trimethoprim and sulfamethoxazole. Resistance to meropenem and colistin was not detected. Based on the results of the second panel 88.64% of the isolates had an ESBL phenotype, 3.41% a combined ESBL+AmpC phenotype and 6.82% an AmpC phenotype. Two isolates displayed resistance to ertapenem or imipenem (close to the cut-off value) but they were not resistant to meropenem neither in the first panel nor in the second panel. These isolates were isolated from the specific monitoring of *E. coli* ESBL from McConckey agar containing 1 mg/L cefotaxime. They displayed an AmpC phenotype. Confirmation test on CarbaSmart showed no growth in this specific media. Further studies are ongoing.

Specific monitoring of carbapenemase producing ***E. coli*** *of* 348 samples on the selective media carbaSmart as described in point 4.2 revealed no carbapenemase producing ***E. coli***.

36. General Description of Antimicrobial Resistance Monitoring: *E. coli – pigs – animal/food sample*

1. General description of sampling design and strategy

Samples of fattening pigs for the analysis of the antimicrobial resistance of commensal ***E. coli*** (208) and the specific monitoring of ESBL/AmpC and of carbapenemase producing ***E. coli*** (300) are taken at the level of the slaughterhouse in the framework of the national control programme of the Federal Agency for the Safety of the Food Chain by official agents. This yearly monitoring started in 2011. The number of samples taken is calculated based on the detection percentage of commensal ***E. coli***. In 2019, samples were taken evenly divided over the period January to December. A sample of one slaughter batch consists of 100 ml faeces taken with a sterile glove directly from the colon/rectum. One sample is representative for one farm to account for clustering.
Since 2015, 300 samples of fresh pig meat for the specific monitoring of ESBL/AmpC and of carbapenemase-producing ***E. coli*** taken at retail level are part of the national control programme of the FASFC. All samples are taken by official agents. The samples are programmed to be taken spread over the year in the whole country. A sample consists of 150 grams of fresh meat.
The sample is transported cooled and must arrive at the laboratory within 72 hours. All data concerning the sampling mission (time and place of sampling, the type of sample taken and the identity of the sampler) are registered in the central database 'Foodnet' of the FASFC. The results of the internal laboratories are also registered in the same central database. The results of the external laboratories are provided on demand using specific templates.

2. Stratification procedure per animal population and food category

The samples are programmed to be taken evenly spread over the year over all slaughterhouses in the country. The number of samples to be taken per local control unit per month is directly related to the number of slaughterhouses and the capacity of the slaughterhouses in its territory. Samples of fresh pig meat are collected randomly at retail without pre-selecting samples based on the origin of the food.

3. Randomisation procedure per animal population and food category

The sampler chooses on which day of the month the sample will be taken. At the slaughterhouse and at retail, the lot sampled is also chosen by the sampler.

4. Analytical method used for detection and confirmation

4.1 Isolation of indicator *E. coli* isolated from fattening pigs

The faecal material is inoculated on McConkey or TBX medium and incubated at 44°C for 18 to 24 hours. Suspected colonies are inoculated on TBX medium and incubated at 37°C for 18 to 24 hours. Suspected colonies are purified on Columbia agar supplemented with 5% sheep blood. Identification is done by the OPNG test and Ureum test. Confirmed ***E. coli*** pure culture (typical green/blue colonies) are transported to the national reference laboratory (NRL Sciensano) for antimicrobial susceptibility testing (AST). Before antimicrobial susceptibility testing (AST), all strains are purified on nutrient agar.

4.2. Isolation of ESBL/AmpC producing *E.coli* and carbapenemase producing *E.coli* from fattening pigs and fresh meat

For the isolation and identification of ESBL/AmpC producing ***E. coli*** and carbapenemase producing ***E.coli***, caeca samples were analysed by the laboratories of the FASFC and fresh meat samples by Sciensano. The methods used were the EURL-AR validated methods:

"Isolation of ESBL, AmpC and carbapenemase-producing ***E. coli*** from fresh meat - February 2018",

"Isolation of ESBL, AmpC and carbapenemase-producing ***E. coli*** from caeca samples – February 2018" **(se**e www.eurl-ar.eu/protocols.aspx).

The specific monitoring of ESBL/AmpC producing *E. coli* on caeca samples and fresh meat was performed using the isolation media MacConkey + Cefotaxime (CTX, 1mg/l) and incubated at 44°C/18-22h (Biorad 35M142.02). For the specific monitoring of carbapenemase producing *E.coli* the isolation media used was ChromID® CARBA SMART (Biomérieux) incubated at 37°C/18-22h. Suspected colonies were subcultured as described in the EURL-AR protocol. The confirmed *E. coli* isolates were re-subcultured and stored at -80°C.

5. Laboratory methodology used for detection of antimicrobial resistance

5.1. Antimicrobial susceptibility testing of *E. coli*

A micro broth dilution method (Trek Diagnostics) was used for the antimicrobial susceptibility testing (AST). To this end, 1 to 3 colonies were suspended in sterile physiological water to an optical density of 0.5 McFarland. Ten (µl) of this suspension was inoculated to the microtiter in 11 ml cation adjusted Mueller Hinton broth (MH-Broth). Fifty microliter of the MH-broth with bacteria was brought on a micro-titre plate (EUVSEC, Trek Diagnostics), with the antimicrobials lyophilized. The antimicrobials and the dilutions tested were those included in the European Decision 2013/652/EU.

When an isolate displayed resistance to cefotaxime and/or ceftazidime or meropenem, it was further tested with the second panel of antimicrobials as described in the decision. To this end, the sensititre plate used was EUVSEC 2, purchased at Trek Diagnostics.

The epidemiological cut-off values (ECOFF) used are defined in Decision 2013/652/EU (Table 1 and Table 4) and for those molecules without ECOFF established in the decision, values were provided by EFSA, 2015 as follows: Azithromycin >16 (mg/l), cefotaxime + clavulanic acid >0.25 (mg/l), Ceftazidime + clavulanic > 0.5 (mg/l) and Temocillin, > 32 (mg/l). The MIC (minimal inhibitory concentration) was defined as the lowest concentration by which no visible growth could be detected. MIC was semi-automatic recorded by Trek Vision System using the SWIN software. MIC values were automatically exported to an Excel file and subsequently imported to Starlims for automatically interpretation and validation.

5.2 Specific monitoring of ESBL, AmpC and/or carbapenemase producing *E. coli*

E. coli ESBL and/or AmpC isolates obtained by the method described by the EURL-AR were tested for antimicrobial susceptibility (AST) for panel 1 (EUVSEC) and panel 2 (EUVSEC2) in parallel using the same method and cut-off values as described in point 5.1. MIC was semi-automatically recorded by Trek Vision System using the SWIN software. MIC values were automatically exported to an Excel file and subsequently imported to Starlims for automatically interpretation following the criteria defined by EFSA, 2016 (see https://www.eurl-ar.eu/CustomerData/Files/Folders/3-workshop-kgs-lyngby-april2016/25_efsa-eusr-amr-workflow-and-criteria-for-esbl-ampc-carbapenemase-phenotypes.pdf).

6. Results of investigation

Overall a decrease in the resistance of commensal *E. coli* isolated from caeca samples of fattening pigs from non-selective media (MacConkey) was observed for many antimicrobials commonly used in veterinary medicine. For sulfamethoxazole and trimethoprim a decrease in resistance was noticed which shifted from very high (>50-70%) in 2018 to high (>20-50%) in 2019. Resistance to ampicillin and tetracycline was high as well. For the critically important antimicrobials, low levels (>1-10%) of resistance were seen for cefotaxime, ceftazidime, ciprofloxacin, colistin, nalidixic acid, azithromycin, gentamicin and tigecycline. Resistance to meropenem was not detected.

Inoculation on MacConkey agar containing cefotaxime in a selective concentration resulted in 152 strains out of a total of 297 caeca samples tested**. Of the 152 isolates, 144 were subjected to antimicrobial susceptibility testing.** The phenotypic *E. coli* ESBL were multi-resistant and revealed a very high (>50-70) resistance prevalence to sulfamethoxazole, trimethoprim and tetracycline. **However the most important feature is the decrease in resistance to ciprofloxacin which shift**ed **from high (>20-50%) in 2018 to moderate (>10-20%) in 2019. This was observed for nalidixic acid as well**. ***E.coli* isolates displayed a low resistance in 2019 versus moderate in 2018.** Phenotypically ESBLs showed no resistance to tigecycline and meropenem.

Specific monitoring of carbapenemase producing *E. coli of* the **297** caeca samples on the selective media carbaSmart as described in point 4.2 revealed no carbapenemase producing *E. coli*.

300 samples of fresh pig meat were analysed for detection of *E. coli* ESBL/AmpC and the detection of carbapenemase producing *E. coli*. Of those, only 7 were positive for ESBL and **none** tested positive for carbapenemase producing *E. coli*. Isolates were subjected to AST in parallel panel 1 (EUVSEC) and panel 2 (EUVSEC2). The isolates showed a high resistance (50-70%) to ciprofloxacin, sulfamethoxazole, tetracycline, chloramphenicol and nalidixic acid. **However, compared to 2018 the isolates showed a decrease in resistance to ciprofloxacin. One isolate was resistant to colistin.** Resistance to meropenem was not detected. Based on the results of the second panel, 71% had an ESBL phenotype, 14.3% an AmpC phenotype and 14.3% a combined phenotype ESBL + AmpC.

37. General Description of Antimicrobial Resistance Monitoring: *Enterococcus* poultry

1. General description of sampling design and strategy[(a)]

Samples of broiler flocks and samples of fattening turkeys taken at the level of the slaughterhouse in the framework of the national control programme of the Federal Agency for the Safety of the Food Chain by official agents for the analysis of the antimicrobial resistance of commensal *E. coli* are also used for the monitoring of the antimicrobial resistance of *Enterococcus faecium* and *faecalis*.
In 2019, 299 samples of broilers and 86 samples of meat turkeys were taken over the period January to December. A sample of one flock consists of 10 pooled caeca samples. Both caeca of one bird are separated by prudent manual traction from the intestinal packet and placed in a sterile pot. Once all 10 pairs of caeca are collected, the sample is placed in a cooled box or a coolbox containing ice in order to cool down the sample rapidly. The samples stay cooled until arrival at the lab on the same day or at the latest the day after sampling. All data concerning the sampling mission (time and place of sampling, the type of sample taken and the identity of the sampler) are registered in the central database 'Foodnet' of the FASFC. The results of the internal laboratories are also registered in the same central database. The results of the external laboratories are provided using specific templates on demand.
For the first time in 2019, the faeces samples taken of layers and breeders at farm level for the monitoring of the antimicrobial resistance of commensal *E. coli* were also used to monitor the antimicrobial resistance of *E. faecium* and *E. faecalis*. A sample consists of minimum 20 ml of faeces taken from the floor with a sterile glove. In 2019, 163 samples were taken of breeders and 210 of layers of which respectively 119 and 137 *E. faecium* and 45 and 80 *E. faecalis* isolates were further analysed.

2. Stratification procedure per animal population and food category

The sampling is programmed to be evenly spread over the sampling period (January to December) on a monthly basis per local control unit. The number of samples to be taken per local control unit is directly related to the number and capacity of the slaughterhouses in its territory or to the number of farms with layers or breeders. For this reason, only 4 local control units are involved for the monitoring at slaughter.

3. Randomisation procedure per animal population and food category

At the slaughterhouse, the samples are taken of a previously planned flock. At farm level, the sampler chooses the farm to be sampled among the farms that will be visited in a certain month.

4. Analytical method used for detection and confirmation[(b)]

A swab dipped in the faeces sample is resuspended in 2ml BPW or the caeca are parted and resuspended in 10ml BPW. 2 loops (2x10µl) are directly streaked on a Slanetz-Bartley agar and incubated at 41.5°C for 48 hours. Slanetz-Bartley plate are transported to the national reference laboratory (NRL Sciensano) for identification and antimicrobial susceptibility testing (AST). Suspected colonies on Slanetz-Bartley agar are purified on CSB medium and incubated at 37°C for 18 to 24 hours. Species identification was performed using MALDI-TOF method on pure bacterial colony isolated from CSB plates. Per sample, the antimicrobial susceptibility testing of maximum one *E. faecalis* and one *E. faecium* is conducted

5. Laboratory methodology used for detection of antimicrobial resistance[(C)]

Antimicrobial susceptibility testing was performed at Sciensano. Minimum Inhibitory Concentrations (MIC) were determined by the broth dilution method using Sensititre EUVENC panels. As recommended by the European Decision 2013/652/EU, following antimicrobials were included in the monitoring with their respective cut-off values: Ampicillin (AMP > 4), Chloramphenicol (CHL > 32); Ciprofloxacin (CIP > 4); Daptomycin (DAP > 4); Erythromycin (ERY > 4); Gentamycin (GEN > 32); Linezolid (LZD > 4); Quinupristin/dalfopristin (SYN > 1 for *E. faecium* and SYN >0.5 for *E. faecalis*); Teicoplanin (TEI > 2); Tetracycline (TET > 4); Tigecyclin (TGC > 0.25); and Vancomycin (VAN > 4). The analytical procedure used for *E. faecalis* and *E. faecium* MIC determination was the one recommended by the EU reference laboratory for antimicrobial resistance (https://www.eurl-ar.eu/). Since the combination Quinupristin/Dalfopristin (SYN) for *E. faecalis* is not analysed by EFSA, we selected a proxy value of 0.5 mg/L, taking into account the intrinsically resistance of this bacterium to this combination of antibiotics and that the selected value is between lowest and highest concentration tested.

6. Results of investigation

Among 299 samples of broilers, species isolation of *E. faecalis* and *E. faecium* was in similar proportion with 187 (62.5%) *E. faecalis* positive samples and 172 (57.5%) *E. faecium* positive samples. Among fattening turkeys samples (N=86), twice more *E. faecalis* than *E. faecium* were isolated with 68 (79%) positive samples and 37 (43%) positive samples, respectively.

Among samples from broilers and fattening turkeys, very high to extremely high levels of resistance to erythromycin, quinupristin/dalfopristin and tetracycline were found. Indeed, 82% of *E. faecalis* (N=173 AST conducted) and 72% of *E. faecium* (N=169 AST conducted) isolated from broilers and 96% of *E. faecalis* (N=67 AST conducted) and 68% of *E. faecium* (N=37 AST conducted) from fattening turkeys were resistant to tetracycline. Similarly, erythromycin resistance was observed in broilers in 84% of *E. faecalis* and 78% of *E. faecium* isolates; and in 75% of *E. faecalis* and 51% of *E. faecium* isolated from fattening turkeys. In addition, 83% of broiler *E. faecium* isolates and 62% of fattening turkeys *E. faecium* isolates were resistant to quinupristin/dalfopristin. *E. faecium* isolates have also been reported to show moderate to high level of resistance to ampicillin with 29% of broilers isolates and 16% of fattening turkey isolates.

Among 163 breeder samples and 210 layer samples, *E. faecium* was more often isolated than *E. faecalis*, with 149 (91%) and 161 (76%) positive *E. faecium* isolates against 45 (28%) and 81 (39%) *E. faecalis* positive isolates respectively. Resistances to tetracycline (76% in breeder isolates, N=45 AST conducted and 50% in layer isolates, N=80 AST conducted) and erythromycin (24% in both categories) were mainly observed in *E. faecalis*. In *E. faecium*, resistances to tetracycline (45% in breeders, N= 119 AST conducted and 13% in layers, N= 137 AST conducted) and quinupristin/dalfopristin (76% and 53% respectively) were the most observed. Also, low to moderate levels of ampicillin resistance (16% and 1%) or erythromycin resistance (12% and 13%) were reported in *E. faecium*. In general, breeder isolates tend to reach higher resistance levels compared to layer isolates.

Overall, isolates from broilers were mainly resistant to 1 (18%), 2 (42%) or 3 (17%) antimicrobials. However, few isolates showed resistance up to 5 (5.3%, N=17) or 6 (0.58%, N=2) different antimicrobials. Similarly, isolates from fattening turkeys reported mainly resistance to 1 (20%), 2 (50%) or 3 (20%) antimicrobials with no isolate showing resistance to more than 4 antimicrobials. For breeder isolates, resistance to 1 or 2 antimicrobials were the most observed with 40% and 32% of all isolates respectively whereas 44% of layer isolates were resistant to one and 20% were resistant to two antimicrobials. Among all poultry isolates, isolates from broilers were generally harbouring a high

resistance, raising up to 6 antimicrobials. Contrariwise, breeder and layer isolates were reported to have a low resistance, particularly layer isolates, with 34% harbouring no resistance at all and only 2% showing resistance to more than 2 antimicrobials.

Only one *E. faecium* isolated from a breeder sample is reported to be resistant to linezolid, with a minimal inhibitory concentration of 8mg/L. Daptomycin resistance was observed in moderate to high levels in broilers (24%), in fattening turkeys (19%), in breeders (8%) and in layers (13%), all in *E. faecium* isolates. Among broiler daptomycin-resistant isolates, 70% (N=28/40) were characterized by four or more antimicrobials resistances, including resistance to ampicillin (N=15), ciprofloxacin (N=1), erythromycin (N=27), quinupristin/dalfopristin (N=28) and tetracycline (N=28).

*** to be filled in per combination of bacterial species/matrix**

(a): Method of sampling (description of sampling technique: stage of sampling, type of sample, sampler), Frequency of sampling, Procedure of selection of isolates for susceptibility testing, Method used for collecting data.

(b): Analytical method used for detection and confirmation: according to the legislation, the protocols developed by the EURL-AR should be used and reported here. In the case of the voluntary specific monitoring on Carbapenemase-producers, the selective media used (commercial plates, 'in house' media) should be also reported here. In general, any variation with regard to the EURL-AR protocols should be stated here, number of isolates isolated per sample, in particular for *Campylobacter* spp..

(c): Antimicrobials included, Cut-off values

38. General Description of Antimicrobial Resistance Monitoring: *Enterococcus* veal calves

1. General description of sampling design and strategy[(a)]

As of 2019, the samples of veal calves taken at the level of the slaughterhouse for the monitoring of AMR in *E. coli* are also used for the monitoring of the antimicrobial resistance of *Enterococcus faecium* and *Enterococcus faecalis*. The sampling is part of the national control programme of the Federal Agency for the Safety of the Food Chain. All samples are taken by official agents. In 2019, 300 caeca samples of veal calves were taken for the analysis of AMR of *Enteroccoccus* of which 174 *E. faecium* and 115 *E. faecalis* isolates were further analysed.
Samples are transported cooled and must arrive at the laboratory within 72 hours. All data concerning the sampling mission (time and place of sampling, the type of sample taken and the identity of the sampler) are registered in the central database 'Foodnet' of the FASFC. The results of the internal laboratories are also registered in the same central database. The results of the external laboratories are provided on demand using specific templates.

2. Stratification procedure per animal population and food category

The sampling is programmed evenly spread over the sampling period (January to December) on a monthly basis in each local control unit. The number of samples to be taken per local control unit is directly related to the capacity of bovine slaughterhouses on its territory that specifically slaughter veal calves.

3. Randomisation procedure per animal population and food category

The sampler chooses on which day of the month the sample will be taken. At the slaughterhouse, the lot sampled is also chosen by the sampler.

4. Analytical method used for detection and confirmation[(b)]

A swab dipped in the faeces sample is resuspended in 2ml BPW or the caeca are parted and resuspended in 10ml BPW. 2 loops (2x10µl) are directly streaked on a Slanetz-Bartley agar and incubated at 41.5°C for 48 hours. Slanetz-Bartley plate are transported to the national reference laboratory (NRL Sciensano) for identification and antimicrobial susceptibility testing (AST). Suspected colonies on Slanetz-Bartley agar are purified on CSB medium and incubated at 37°C for 18 to 24 hours. Species identification was performed using MALDI-TOF method on pure bacterial colony isolated from CSB plates. Per sample, the antimicrobial susceptibility testing of maximum one *E. faecalis* and one *E. faecium* is conducted.

5. Laboratory methodology used for detection of antimicrobial resistance(C)

Antimicrobial susceptibility testing was performed at Sciensano. Minimum Inhibitory Concentrations (MIC) were determined by the broth dilution method using Sensititre EUVENC panels. As recommended by the European Decision 2013/652/EU, following antimicrobials were included in the monitoring with their respective cut-off values: Ampicillin (AMP > 4), Chloramphenicol (CHL > 32); Ciprofloxacin (CIP > 4); Daptomycin (DAP > 4); Erythromycin (ERY > 4); Gentamycin (GEN > 32); Linezolid (LZD > 4); Quinupristin/dalfopristin (SYN > 1 for *E. faecium* and SYN >0.5 for *E. faecalis*); Teicoplanin (TEI > 2); Tetracycline (TET > 4); Tigecyclin (TGC > 0.25); and Vancomycin (VAN > 4). The analytical procedure used for *E. faecalis* and *E. faecium* MIC determination was the one recommended by the EU reference laboratory for antimicrobial resistance (https://www.eurl-ar.eu/). Since the combination Quinupristin/Dalfopristin (SYN) for *E. faecalis* is not analysed by EFSA, we selected a proxy value of 0.5 mg/L, taking into account the intrinsically resistance of this bacterium to this combination of antibiotics and that the selected value is between lowest and highest concentration tested.

6. Results of investigation

Among 300 samples of veal calves, 180 (60%) *E. faecium* and 115 *E. faecalis* (38%) were isolated.

Extremely high levels of resistances to tetracycline and erythromycin and a very high level of chloramphenicol resistance were observed in E. *faecalis* (N=115 AST conducted) with 91%, 84% and 63% of resistant isolates, respectively. Also, 11% of *E. faecalis* isolates were resistant to gentamycin. In *E. faecium* isolates (N=174 AST conducted), an extremely high level of quinupristin/dalfopristin resistance (85%) was observed and high levels of tetracycline (41%) and erythromycin (33%) resistances were observed. In addition, a low level of ampicillin resistance was found in 8% of *E. faecium* isolates.

Overall, isolates from veal calves samples are mainly resistant to 1 (30%), 2 (22%) or 3 (35%) antimicrobials. Furthermore, few isolates showed resistance up to 5 (2.4%, N=7) or 6 (0.7%, N=2) different antimicrobials.

Four *E. faecalis* and 3 *E. faecium* isolated from veal calves samples were resistant to the last resort antibiotic linezolid, characterized by a minimal inhibitory concentration of 8mg/L. These linezolid-resistant isolates are multi-resistant and associated with chloramphenicol (N=5), ciprofloxaxin (N=1), erythromycin (N=7), gentamycin (N=5), quinupristin/dalfopristin (N=6) and tetracycline (N=7) resistances. Daptomycin resistance was also observed in 12% of the *E. Faecium* isolates from veal calves. In 76% of these daptomycin-resistant isolates (N=21), quinupristin/dalfopristin resistance was also found.

39. General Description of Antimicrobial Resistance Monitoring: *Enterococcus* pigs

1. General description of sampling design and strategy[(a)]

As of 2019, samples of fattening pigs taken at the level of the slaughterhouse in the framework of the national control programme of the Federal Agency for the Safety of the Food Chain by official agents for the analysis of the antimicrobial resistance of commensal *E. coli* are also used for the monitoring of the antimicrobial resistance of ***Enterococcus faecium*** and ***faecalis***. The number of samples taken is calculated based on the detection percentage of commensal *E. coli*. Samples were taken evenly divided over the period January to December. A sample of one slaughter batch consists of 100 ml faeces taken with a sterile glove directly from the colon/rectum. One sample is representative for one farm to account for clustering.
The samples are transported cooled and must arrive at the laboratory within 72 hours. All data concerning the sampling mission (time and place of sampling, the type of sample taken and the identity of the sampler) are registered in the central database 'Foodnet' of the FASFC. The results of the internal laboratories are also registered in the same central database. The results of the external laboratories are provided on demand using specific templates.
In 2019, 298 caeca samples of pigs were taken for the analysis of AMR of *Enteroccoccus* of which 178 *E. faecium* and 56 *E. faecalis* isolates were further analysed.

2. Stratification procedure per animal population and food category

The samples are programmed to be taken evenly spread over the year over all slaughterhouses in the country. The number of samples to be taken per local control unit per month is directly related to the number of slaughterhouses and the capacity of the slaughterhouses in its territory.

3. Randomisation procedure per animal population and food category

The sampler chooses on which day of the month the sample will be taken. also the slaughter batch is chosen by the sampler on the day of sampling.

4. Analytical method used for detection and confirmation[(b)]

A swab dipped in the faeces sample is resuspended in 2ml BPW or the caeca are parted and resuspended in 10ml BPW. 2 loops (2x10µl) are directly streaked on a Slanetz-Bartley agar and incubated at 41.5°C for 48 hours. Slanetz-Bartley plate are transported to the national reference laboratory (NRL Sciensano) for identification and antimicrobial susceptibility testing (AST). Suspected colonies on Slanetz-Bartley agar are purified on CSB medium and incubated at 37°C for 18 to 24 hours. Species identification was performed using MALDI-TOF method on pure bacterial colony isolated from CSB plates. Per sample, the antimicrobial susceptibility testing of maximum one *E. faecalis* and one *E. faecium* is conducted.

5. Laboratory methodology used for detection of antimicrobial resistance[(C)]

Antimicrobial susceptibility testing was performed at Sciensano. Minimum Inhibitory Concentrations (MIC) were determined by the broth dilution method using Sensititre EUVENC panels. As recommended by the European Decision 2013/652/EU, following antimicrobials were included in the monitoring with their respective cut-off values: Ampicillin (AMP > 4), Chloramphenicol (CHL > 32); Ciprofloxacin (CIP > 4); Daptomycin (DAP > 4); Erythromycin (ERY > 4); Gentamycin (GEN > 32);

Linezolid (LZD > 4); Quinupristin/dalfopristin (SYN > 1 for *E. faecium* and SYN >0.5 for *E. faecalis*); Teicoplanin (TEI > 2); Tetracycline (TET > 4); Tigecyclin (TGC > 0.25); and Vancomycin (VAN > 4). The analytical procedure used for *E. faecalis* and *E. faecium* MIC determination was the one recommended by the EU reference laboratory for antimicrobial resistance (https://www.eurl-ar.eu/). Since the combination Quinupristin/Dalfopristin (SYN) for *E. faecalis* is not analysed by EFSA, we selected a proxy value of 0.5 mg/L, taking into account the intrinsically resistance of this bacterium to this combination of antibiotics and that the selected value is between lowest and highest concentration tested.

6. Results of investigation

Among 298 pig samples, four times more *E. faecium* (69%, N=206) than *E. faecalis* (19%, N=56) was isolated.

Antimicrobial microdilutions revealed a very high level of tetracycline resistance (61%) and high levels of erythromycin (41%) and chloramphenicol (21%) resistance in *E. faecalis* (N=56 AST conducted). Also, around 11% of *E. faecalis* isolates were resistant to gentamycin. *E. faecium* isolates (N=178 AST conducted) were also characterized by an extremely high level of quinupristin/dalfopristin (86%) resistance and a very high level of tetracycline (51%) resistance. Lower levels of resistance to erythromycin (12%) or ampicillin (5%) were found in *E. faecium* isolates.

Overall, 33% and 35% of the isolates from pig samples were resistant to 1 and 2 antimicrobials respectively. Resistances to 3 or 4 antimicrobials were also observed in 13% and 4% of isolates respectively. A single isolate showed resistance up to 5 different antimicrobials.

Two *E. faecalis* and two *E. faecium* isolates were resistant to linezolid, characterized by a minimal inhibitory concentration of 8mg/L. These linezolid-resistant isolates were also characterized by chloramphenicol (N=4), erythromycin (N=4), gentamycin (N=1) and tetracycline (N=3) resistance. One *E. faecalis* was resistant to vancomycin, with a minimal inhibitory concentration of 8mg/L. Daptomycin resistance was observed in 9% of *E. faecium* and in 4% of *E. faecalis* isolates.

40. General Description of Antimicrobial Resistance Monitoring: *Salmonella* – pigs - carcass sample

1. General description of sampling design and strategy

Carcass samples of fattening pigs for the analysis of ***Salmonella*** and its antimicrobial resistance are taken at the level of the slaughterhouse in the framework of the national control programme of the Federal Agency for the Safety of the Food Chain (FASFC) by official agents for testing and verification of compliance, in accordance with part G of chapter IX of section IV to Regulation (EC) No 854/2004. In 2019, 1,049 samples were taken over the period January to December.
Carcass samples of fattening pigs are also taken by the FBO in the framework of self-checking in accordance with point 2.1.4. of Chapter 2 of Annex I to Regulation (EC) No 2073/2005.

2. Stratification procedure per animal population and food category

In accordance with Regulation (EC) No 854/2004, 49 random samples were taken by the FASFC in all slaughterhouses with more than 10.000 fattening pigs slaughtered per year and 35 in all slaughterhouses with between 1.000 and 10.000 fattening pigs slaughtered per year. In accordance with Regulation (EC) No 2073/2005, 5 random samples are taken each week by the FBO in each slaughterhouse.

3. Randomisation procedure per animal population and food category

All ***Salmonella*** isolates obtained in the framework of the national control programme of the FASFC are selected for antimicrobial testing. ***Salmonella*** isolates obtained by FBO's are chosen at random by the laboratory involved to achieve the minimal required number of isolates.

4. Analytical method used for detection and confirmation

Isolation of ***Salmonella*** in the framework of the national control programme of the FASFC was performed by laboratories of the FASFC. FBO's have a free choice of laboratory they want to use. The ISO 6579-1 2017 method was used. Species identification was done by Maldi-Tof and isolates were stocked at -80°C. Serotyping was performed at Sciensano, the NRL for ***Salmonella***.

5. Laboratory methodology used for detection of antimicrobial resistance

Antimicrobial susceptibility testing was performed at Sciensano. Minimum Inhibitory Concentrations (MIC) were determined by the broth dilution method using Sensititre EUVSEC and EUVSEC2 panels, as described in Decision 2013/652/EU. The antimicrobials reported as well as the breakpoints for interpretation are:
First panel EUVSEC Antimicrobials ECOFF (R> mg/l):
Ampicillin (8), Cefotaxime (0.5), Ceftazidime (2), Meropenem (0.125), Nalidixic acid (16), Ciprofloxacin (0.064), Tetracycline (8), Colistin (2), Gentamicin (2), Trimethoprim (2), Sulfamethoxazole (256), Chloramphenicol (16), Azithromycin (16), Tigecycline (1).
Second panel EUVSEC2 Antimicrobials ECOFF (R>mg/l):
Cefoxitin (8), Cefepime (0.125), Cefotaxime + clavulanic acid (0.5), ceftazidime + clavulanic acid (2), Meropenem (0.125), Temocillin (32), Imipenem (1), Ertapenem (0.06), Cefotaxime (0.5), ceftazidime (2).
Quality control was performed at each run by using an Escherichia coli ATCC 25922 strain.

6. Results of investigation

In total 103 ***Salmonella***-isolates were recovered from pig carcasses. Very high levels of resistance (>50-70%) were reported for ampicillin and sulfamethoxazole and high levels of resistance (>20-50%) for tetracycline and trimethoprim. Resistance to 3rd generation cephalosporins, carbapenems and tigecycline was not detected.. Resistance to ciprofloxacin, nalidixic acid, and colistin was low (>1-10%), to azithromycin rare (<1%), with only one isolate detected. The profile of resistance depends on the serovar and differs greatly from one serovar to another. The most dominant serovar was ***S.*** **Typhimurium** and **monophasic *S.* Typhimurium**. Extremely high resistance was noticed for ampicillin, sulfamethoxazole and tetracycline for monophasic *S*. Typhimurium and high levels of resistance to sulfamethoxazole and tetracycline for *S.* Typhimurium. All isolates belonging to the latter serovar were resistant to ampicillin as well. The level of resistance to ciprofloxacin, nalidixic acid and colistin was low for both serovars. None of the isolates were resistant to 3rd generation cephalosporin's, carbapenems, azithromycin and tigecycline. Monophasic **S.** Typhimurium isolates showed a higher level of multidrug resistance compared to *S*. Typhimurium isolates. Approximately 54% and 62% of the isolates belonging to monophasic *S.* Typhimurium and to *S*. Typhimurium were multidrug resistant, respectively. Approximately 3% of the monophasic S. Typhimurium isolates were sensible to all the antibiotics tested. For *S.* Typhimurium, approximately 8% of all isolates were completely susceptible.

41. General Description of Antimicrobial Resistance Monitoring: *Salmonella* – bovines > 1 year - carcass sample

1. General description of sampling design and strategy

Carcass samples of bovines under one year of age for the analysis of ***Salmonella*** and its antimicrobial resistance are taken at the level of the slaughterhouse in the framework of the national control programme of the Federal Agency for the Safety of the Food Chain (FASFC) by official agents for testing and verification of compliance, in accordance with part G of chapter IX of section IV to Regulation (EC) No 854/2004. In 2019, **145** samples were taken **over the period February to November**.
Samples of bovines under one year of age are also taken by FBO's in the framework of self-checking in accordance with point 2.1.3 of Chapter 2 of Annex I to Regulation (EC) No 2073/2005.

2. Stratification procedure per animal population and food category

In all slaughterhouses where more than 10.000 bovines under one year of age are slaughtered/year, 5 random samples are taken per week by the FASFC during 10 consecutive weeks to obtain 50 samples. In accordance with Regulation (EC) No 2073/2005, 5 random samples are taken each week by the FBO in the slaughterhouse.

3. Randomisation procedure per animal population and food category

All ***Salmonella*** isolates obtained in the framework of the national control programme of the FASFC are selected for antimicrobial resistance testing. ***Salmonella*** isolates obtained by FBO's are chosen at random by the laboratory involved to achieve the minimal required number of isolates.

4. Analytical method used for detection and confirmation

Isolation of ***Salmonella*** in the framework of the national control programme of the FASFC was performed by laboratories of the FASFC. FBO's have a free choice of laboratory they want to use. The ISO 6579-1 2017 detection method was used. Species identification was done by Maldi-Tof and isolates were stocked at -80°C. Serotyping was performed at Sciensano, the NRL and NRC for ***Salmonella***.

5. Laboratory methodology used for detection of antimicrobial resistance

Minimum Inhibitory Concentrations (MIC) were determined by the broth dilution method using Sensititre EUVSEC and EUVSEC2 panels, as described in Decision 2013/652/EU. The antimicrobials reported as well as the breakpoints for interpretation are:

First panel EUVSEC Antimicrobials ECOFF (R> mg/l):

Ampicillin (8), Cefotaxime (0.5), Ceftazidime (2), Meropenem (0.125), Nalidixic acid (16), Ciprofloxacin (0.064), Tetracycline (8), Colistin (2), Gentamicin (2), Trimethoprim (2), Sulfamethoxazole (256), Chloramphenicol (16), Azithromycin (16), Tigecycline (1).

Second panel EUVSEC2 Antimicrobials ECOFF (R>mg/l):

Cefoxitin (8), Cefepime (0.125), Cefotaxime + clavulanic acid (0.5), ceftazidime + clavulanic acid (2), Meropenem (0.125), Temocillin (32), Imipenem (1), Ertapenem (0.06), Cefotaxime (0.5), ceftazidime (2).

Quality control was performed at each run by using an Escherichia coli ATCC 25922 strain.

6. Results of investigation

In total two ***Salmonella*** isolates were recovered from bovine carcasses. The isolates belonged to the serovars monophasic *S.* Typhimurium and *S.* Paratyphi B Var. L(+) Tartrate (+). Both isolates shared resistance to colistin and sulfamethoxazole. The monophasic *S.* Typhimurium isolate was resistant to ampicillin and tetracycline as well, whereas the *S*. Paratyphi B Var. L(+) Tartrate (+) isolate was resistant to trimethoprim. Confirmation of colistin resistance in both isolates is ongoing.

42. General Description of Antimicrobial Resistance Monitoring: Pigs - MRSA

1. General description of sampling design and strategy

A yearly monitoring of MRSA has been performed since 2011. It is an official monitoring of MRSA and its antimicrobial resistance with a 3 year cycle: in 2011, 2014 and 2017 in broilers and laying hens, in 2012, 2015 and 2018 in bovines and in 2013, 2016 and 2019 in pigs . The monitoring is part of the Agency's national monitoring programme. Samples are taken by official veterinarians from sows and fattening pigs. The fattening pigs are sampled within two months before slaughter. The sampling is evenly divided over the year over the different local control units based on the number of farms in each control unit. 10 nasal swabs from 10 different sows or fattening pigs are taken on each farm and pooled to one sample at the laboratory. Each swab is transported in its own transportation tube. A randomly chosen isolate from each positive farm is further tested for AMR. If more than 170 samples are positive in a year, a selection of 170 isolates is made for further AST testing.
All data concerning the sampling mission (time and place of sampling, the type of sample taken and the identity of the sampler) and the results of the detection of MRSA (suspected colonies) are registered in the central database 'Foodnet', managed by the FASFC. The results of the external laboratories are provided by the external laboratories to the Agency on demand using specific templates.

2. Stratification procedure per animal population and food category

The samples are programmed to be taken for each category evenly divided over the year (stratification on a monthly basis) and over the different local control units, based on the number of farms per category per control unit.

3. Randomisation procedure per animal population and food category

The official veterinarian sampling the farms choses each month the time and place of sampling. If different categories of animals are present on one farm, only one category is sampled.

4. Analytical method used for detection and confirmation

The swabs are stored between 5°C and 25°C. Pooled samples are incubated in Mueller-Hinton (MH) broth (Becton Dickinson) supplemented with NaCl (6.5%) at 37C for 18-24h. One ml of this broth is added to Tryptic Soy Broth (TSB) supplemented with cefoxitin (3.5 mg/l) and aztreonam (75 mg/l) and incubated at 37C for 18-24h. Ten microliter of this enrichment is plated on Brilliance MRSA 2 (Oxoid) and incubated 18-24h at 37C. Presence of MRSA is suspected based on colony morphology. Per sample, one to five suspected colonies are selected from the Brilliance MRSA 2 plate. Presence of MRSA is confirmed using a triplex real-time PCR method. DNA is extracted as described in SOP/BAC/ANA/18. The PCR allows detecting the Staphylococcal aureus specific gene, nuc, the presence of the mecA gene responsible for methicillin resistance and the variant mecC gene. MRSA isolates are spa-typed by sequencing the repetitive region of the spa-gene encoding for the staphylococcal protein A. This method depicts the rapid evolution, since through recombination, the repeats may change fast. The protein A (spa) gene is amplified according to the Ridom StaphType standard protocol (www.ridom.de/staphtype) and the amplification is checked on a 2% agarose gel. Sequencing is performed with ABI3130xl using standard protocols and sequences are compared with the international Ridom database. CC398 PCR is performed on all MRSA isolates following the protocol described by Stegger et al. 2011. This method allows the rapid detection of the S. *aureus* clonal complex CC398 including sequence type ST398.

5. Laboratory methodology used for detection of antimicrobial resistance

Following antimicrobials were included in the monitoring with their respective cut-off values: Chloramphenicol (CHL > 16); Ciprofloxacin (CIP > 1); Clindamycin (CLI > 0,25); Erythromycin (ERY > 1); Cefoxitin (FOX > 4); Fusidic acid (FUS > 0,5); Gentamycin (GEN > 2); Kanamycin (KAN > 8); Linezolid (LZD > 4); Mupirocin (MUP >1); Penicillin (PEN > 0,12); Rifampicin (RIF > 0,03); Sulfamethoxazole (SMX > 128); Streptomycin (STR > 16); Quinupristin/dalfopristin (SYN > 1); Tetracycline (TET > 1); Tiamulin (TIA > 2); Trimethoprim (TMP > 2) and Vancomycin (VAN > 2). The used cut-off values were those recommended by EFSA technical specifications (EFSA Journal 2012;10(10):2897), except for streptomycin and rifampicin for which the EUCAST ECOFF (September 2019 release) was used and penicillin for which the EUCAST breakpoint value was used (January 2020 release). The analytical procedure used for MRSA MIC determination was the one recommended by the EU reference laboratory for antimicrobial resistance (**https://www.eurl-ar.eu/**).

6. Results of investigation

The results of the 2019 monitoring revealed a lower percentage of MRSA positive samples of sows (46,4%) and fattening pigs (58,3%) compared to 2016 (59,5% and 63,3% respectively) Of the 188 positive MRSA samples observed in 2019 in Belgium, 170 were further analysed. All of the 170 belonged to CC398. These CC398 isolates belonged to the following spa-types: 124 to t011, 29 to t034, 3 to t3119, 2 each to t108, t1451, t2346, t2370 and 1 each to t779, t1457, t2383, t2582, t2922 and t3041. All these spa-types are known to be associated to CC398/LA-MRSA according to the literature and all the isolates were resistant to tetracycline which is typical for LA-MRSA. As expected, all MRSA isolates were resistant to cefoxitin and penicillin. The resistance to trimethoprim was extremely high (91.2%). A very high level of resistance was observed for clindamycin (57.1%) and a high level was observed for erythromycin (41.2%), ciprofloxacin (37.1%), tiamulin (26.5%), quinupristin/dalfopristin (25.9%) and gentamycin (21.8%), The resistance to kanamycin was moderate (17.6%). The resistance to streptomycin (5.3%), sulfamethoxazole (4.1%), chloramphenicol (3.5%) and fusidic acid (1.8%) was low. No resistance to rifampicin was found.
No isolates resistant to the last resort antibiotics vancomycin and linezolid were found, one isolate (0.6%)was resistant to mupirocin. Mupirocin is classified as a highly important antimicrobial according to WHO and is not currently authorized in veterinary medicine in Europe. It is used as first line antimicrobial for decolonisation of MSSA and MRSA in humans and is also used as an antibiotic of last resort versus MRSA infections of open wounds. This isolate from sows was resistant to 10 different antimicrobials: CLI ERY FOX FUS MUP PEN SYN TET TIA TMP. Compared to 2016, the resistance to most of the tested antibiotics decreased while the resistance to clindamycin (57.1 vs. 49.1%), quinupristin/dalfopristin (25.9 vs. 14.9%) and tiamulin (26.5 vs. 22.3%) increased and the resistance to erythromycin and tetracycline remained stable. Fourty-four isolates (25.9%) showed a co-resistance or cross-resistance to quinupristin/dalfopristin, tiamulin and clindamycin. According to the literature, this phenotype could be associated to *lsaE* gene. Further genetic investigation would be needed to assess the presence of this gene. Among the 170 MRSA isolates, 32 different resistance profiles were observed. 104/170 (61.2%) MRSA isolates were resistant to more than 5 different antibiotics (including cefoxitin and penicillin). In 2019, no MRSA isolates were resistant to more than 10 different antimicrobials, while in 2016 resistance to up to 14 different antimicrobials was observed.