European Food Safety Authority

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 2017

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 2017.

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)**
Cattle (bovine animals)	Cattle (bovine animals)	27,314	2,505,752	548,096
	Cattle (bovine animals) - calves (under 1 year) - veal calves			374,620
Deer	Deer	2,236	11,647	
	Deer - farmed - fallow deer			912
	Deer - wild - fallow deer			6,654
	Deer - wild - red deer			15,319
Ducks	Ducks			42,419
Gallus gallus (fowl)	Gallus gallus (fowl)	1,543		
	Gallus gallus (fowl) - breeding flocks, unspecified - adult		2,862,853	
	Gallus gallus (fowl) - broilers		34,354,899	281,168,961
	Gallus gallus (fowl) - laying hens - adult		8,878,993	22,949,246
Geese	Geese			161
Goats	Goats	9,358	66,167	16,144
Guinea fowl	Guinea fowl			11,914
Partridges	Partridges			8,765
Pheasants	Pheasants			11,911
Pigeons	Pigeons			42,419
Pigs	Pigs	7,241		10,978,554
	Pigs - breeding animals		430,710	
	Pigs - fattening pigs		5,311,912	
Poultry, unspecified	Poultry, unspecified			305,026,217
Quails	Quails			369
Rabbits	Rabbits			2,691,367
Ratites (ostrich, emu, nandu)	Ratites (ostrich, emu, nandu) - farmed			161
Sheep	Sheep	25,139	161,157	139,238
Solipeds, domestic	Solipeds, domestic		315,011	5,613
Turkeys	Turkeys			780,485
Wild boars	Wild boars - wild			19,022

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	Number of isolations of Brucella infections	Number of abortions due to Brucella abortus	Number of animals tested by microbiology under investigations of suspect cases
BELGIUM	0	0	0	0	0	27,314	0	2,505,752	6,336	34,062	27,314	7,281	15,570	0	9,964	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	34,497	0	227,324	7,057	34,497	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	Interval between routine tuberculin tests	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	27,309	5	2,505,752	0	51,238	329,719	187	10	27,314

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	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	Not Available	39	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	Not Available	16	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	Not Available	46	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	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	Not Available	109	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	Not Available	26	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	Not Available	25	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	Not Available	41	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	Not Available	85	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	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	Not Available	3	0	Campylobacter	0
	Live bivalve molluscs - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	1	Gram	Not Available	86	0	Campylobacter	0
	Meat from bovine animals - carcase - Slaughterhouse - Not Available - food sample - carcase swabs - Surveillance - Official sampling - Objective sampling	single (food/feed)	1600	Square centimetre	Not Available	382	0	Campylobacter	0
	Meat from broilers (Gallus gallus) - carcase - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	1	Gram	Not Available	87	6	Campylobacter	6
	Meat from broilers (Gallus gallus) - carcase - Slaughterhouse - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	1	Gram	Not Available	1038	172	Campylobacter	172
	Meat from broilers (Gallus gallus) - carcase - spent hens - Slaughterhouse - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	1	Gram	Not Available	240	4	Campylobacter	4
	Meat from broilers (Gallus gallus) - fresh - skinned - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	1	Gram	Not Available	46	0	Campylobacter	0
	Meat from broilers (Gallus gallus) - fresh - with skin - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	1	Gram	Not Available	50	3	Campylobacter	3
	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	Not Available	46	1	Campylobacter	1
	Meat from poultry, unspecified - fresh - skinned - Processing plant - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	1	Gram	Not Available	231	7	Campylobacter	7
	Meat from poultry, unspecified - fresh - with skin - Processing plant - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	1	Gram	Not Available	271	17	Campylobacter	17
	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	Not Available	45	1	Campylobacter	1

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Method	Total units tested	Total units positive	Zoonoses	N of units positive
Not Available	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	Not Available	43	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	Not Available	45	2	Campylobacter	2
	Milk, cows' - raw milk - Farm - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	1	Gram	Not Available	37	0	Campylobacter	0

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Method	Total units tested	Total units positive	N of clinical affected herds	Zoonoses	N of units positive
BELGIUM	Alpacas - Farm - Not Available - animal sample - foetus/stillbirth - Clinical investigations - Private sampling - Suspect sampling	animal	Real-Time PCR (qualitative or quantitative)	1	1		Coxiella burnetii	1
	Cattle (bovine animals) - adult cattle over 2 years - Farm - Not Available - animal sample - blood - Clinical investigations - Private sampling - Suspect sampling	animal	Enzyme-linked immunosorbent assay (ELISA)	1389	255		Coxiella burnetii	255
	Cattle (bovine animals) - adult cattle over 2 years - Farm - Not Available - animal sample - foetus/stillbirth - Monitoring - passive - Private sampling - Suspect sampling	animal	Real-Time PCR (qualitative or quantitative)	4261	254		Coxiella burnetii	254
	Cattle (bovine animals) - adult cattle over 2 years - Farm - Not Available - animal sample - milk - Clinical investigations - Private sampling - Suspect sampling	animal	Real-Time PCR (qualitative or quantitative)	49	30		Coxiella burnetii	30
	Cattle (bovine animals) - adult cattle over 2 years - Farm - Not Available - animal sample - milk - Clinical investigations - Private sampling - Suspect sampling	animal	Enzyme-linked immunosorbent assay (ELISA)	233	181		Coxiella burnetii	181
	Cattle (bovine animals) - adult cattle over 2 years - Farm - Not Available - animal sample - organ/tissue - Monitoring - passive - Private sampling - Suspect sampling	animal	Real-Time PCR (qualitative or quantitative)	45	6		Coxiella burnetii	6
	Goats - Farm - Not Available - animal sample - blood - Clinical investigations - Private sampling - Suspect sampling	animal	Enzyme-linked immunosorbent assay (ELISA)	29	9		Coxiella burnetii	9
	Goats - Farm - Not Available - animal sample - blood - Monitoring - passive - Private sampling - Suspect sampling	animal	Enzyme-linked immunosorbent assay (ELISA)	8	0		Coxiella	0
	Goats - Farm - Not Available - animal sample - foetus/stillbirth - Monitoring - passive - Private sampling - Suspect sampling	animal	Real-Time PCR (qualitative or quantitative)	52	8		Coxiella burnetii	8
	Goats - Farm - Not Available - animal sample - placental swab - Monitoring - passive - Private sampling - Suspect sampling	animal	Real-Time PCR (qualitative or quantitative)	4	1		Coxiella	1
	Goats - milk goats - Farm - Not Available - animal sample - milk - Surveillance - Official sampling - Census	holding	Real-Time PCR (qualitative or quantitative)	134	16	0	Coxiella burnetii	16
	Goats - milk goats - Farm - Not Available - animal sample - milk - Surveillance - Official sampling - Census	holding	Enzyme-linked immunosorbent assay (ELISA)	134	34	0	Coxiella burnetii	34
	Sheep - Farm - Not Available - animal sample - blood - Clinical investigations - Private sampling - Suspect sampling	animal	Enzyme-linked immunosorbent assay (ELISA)	74	0		Coxiella	0
	Sheep - Farm - Not Available - animal sample - blood - Monitoring - passive - Private sampling - Suspect sampling	animal	Enzyme-linked immunosorbent assay (ELISA)	26	4		Coxiella burnetii	4
	Sheep - Farm - Not Available - animal sample - foetus/stillbirth - Monitoring - passive - Private sampling - Suspect sampling	animal	Real-Time PCR (qualitative or quantitative)	123	17		Coxiella burnetii	17
	Sheep - Farm - Not Available - animal sample - placental swab - Monitoring - passive - Private sampling - Suspect sampling	animal	Real-Time PCR (qualitative or quantitative)	20	4		Coxiella burnetii	4
	Sheep - milk ewes - Farm - Not Available - animal sample - milk - Surveillance - Official sampling - Census	holding	Real-Time PCR (qualitative or quantitative)	30	2	0	Coxiella burnetii	2
	Sheep - milk ewes - Farm - Not Available - animal sample - milk - Surveillance - Official sampling - Census	holding	Enzyme-linked immunosorbent assay (ELISA)	30	9	0	Coxiella burnetii	9

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	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 - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	Not Available	147	0	Cronobacter sakazakii	0
	Infant formula - dried - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	Not Available	138	0	Cronobacter sakazakii	0
	Infant formula - ready-to-eat - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Millilitre	Not Available	104	0	Cronobacter sakazakii	0

Table Cysticercus:CYSTICERCUS in animal

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	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	Visual inspection	animal	922797	1375	Cysticercus of Taenia saginata	1,375

Table Echinococcus:ECHINOCOCCUS in animal

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	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	Visual inspection	animal	922797	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	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	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	58	2	VTEC O111	H-antigen unknown	VT1, gene identified, subtype unspecified	eae positive	1
								VTEC, unspecified	H-antigen unknown	VT2, gene identified, subtype unspecified	eae negative	1
	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	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	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	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	25	2	VTEC O126	H-antigen unknown	VT2, gene identified, subtype unspecified	eae positive	1
								VTEC, unspecified	H-antigen unknown	VT2, gene identified, subtype unspecified ;VT1, gene identified, subtype unspecified	eae positive	1
	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	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	382	2	VTEC, unspecified	H-antigen unknown	VT1, gene identified, subtype unspecified	eae negative	1
										VT2, gene identified, subtype unspecified ;VT1, gene identified, subtype unspecified	eae positive	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	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	26	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	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 - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	101	5	VTEC, unspecified	H-antigen unknown	VT1, gene identified, subtype unspecified	eae negative	4
											eae positive	1
										VT2, gene identified, subtype unspecified ;VT1, gene identified, subtype unspecified	eae negative	4
	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	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	71	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 - Farm - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	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

Area of sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Method	total units tested	total units positive	Zoonoses	ANTH	VTX	AG	N units positive
Not Available	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	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	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	35	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 - Processing plant - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	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
	Fruits and vegetables - pre-cut - ready-to-eat - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	228	0	Verocytotoxigenic E. coli (VTEC)	Not Available	Not Available	Not Available	0
	Meat from bovine animals - Border inspection activities - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	12	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	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	297	7	VTEC O126	H-antigen unknown	VT1, gene identified, subtype unspecified	eae positive	1
								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	2
								VTEC, unspecified	H-antigen unknown	VT1, gene identified, subtype unspecified	eae positive	1
										VT2, gene identified, subtype unspecified	eae positive	2
	Meat from bovine animals - fresh - Processing plant - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	294	1	VTEC O103	H-antigen unknown	VT1, gene identified, subtype unspecified	eae positive	1
	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	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	93	1	VTEC, unspecified	H-antigen unknown	VT2, gene identified, subtype unspecified	eae negative	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	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	217	5	VTEC, unspecified	H-antigen unknown	VT1, gene identified, subtype unspecified	eae negative	1
										VT2, gene identified, subtype unspecified	eae negative	1
										VT2, gene identified, subtype unspecified ;VT1, gene identified, subtype unspecified	eae negative	3

Area of sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Method	total units tested	total units positive	Zoonoses	ANTH	VTX	AG	N units positive
Not Available	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	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	76	0	Verocytotoxigenic E. coli (VTEC)	Not Available	Not Available	Not Available	0
	Meat from bovine animals and pig - minced meat - Processing plant - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	60	1	VTEC, unspecified	H-antigen unknown	VT2, gene identified, subtype unspecified	eae negative	1
	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	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	51	1	VTEC, unspecified	H-antigen unknown	VT2, gene identified, subtype unspecified	eae negative	1
	Meat from pig - minced meat - Processing plant - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	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 sheep - Border inspection activities - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	3	2	VTEC, unspecified	H-antigen unknown	VT2, gene identified, subtype unspecified ;VT1, gene identified, subtype unspecified	eae negative	2
	Meat from sheep - carcase - Slaughterhouse - Not Available - food sample - carcase swabs - Surveillance - Official sampling - Objective sampling	single (food/feed)	400	Square centimetre	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	296	8	VTEC O103	H-antigen unknown	VT1, gene identified, subtype unspecified	eae positive	1
										VT2, gene identified, subtype unspecified	eae positive	1
								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	2
								VTEC, unspecified	H-antigen unknown	VT1, gene identified, subtype unspecified	eae positive	3
	Milk, cows' - raw milk - Farm - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	267	4	VTEC O103	H-antigen unknown	VT2, gene identified, subtype unspecified ;VT1, gene identified, subtype unspecified	eae positive	1
								VTEC, unspecified	H-antigen unknown	VT1, gene identified, subtype unspecified	eae positive	1
										VT2, gene identified, subtype unspecified	eae negative	1
										VT2, gene identified, subtype unspecified ;VT1, gene identified, subtype unspecified	eae negative	1
	Seeds, sprouted - ready-to-eat - Farm - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	80	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	Method	total units tested	total units positive	Zoonoses	ANTH	VTX	AG	N units positive
Not Available	Seeds, sprouted - ready-to-eat - Processing plant - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	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 - Official sampling - Objective sampling	single (food/feed)	25	Gram	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	103	0	Verocytotoxigenic E. coli (VTEC)	Not Available	Not Available	Not Available	0
	Spices and herbs - fresh - Processing plant - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	113	1	VTEC, unspecified	H-antigen unknown	Verotoxin production, toxin type unknown	eae negative	1
	Spices and herbs - fresh - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	109	1	VTEC, unspecified	H-antigen unknown	VT2, gene identified, subtype unspecified ;VT1, gene identified, subtype unspecified	eae negative	1
	Vegetables - leaves - Farm - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	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 - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	56	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	Total units tested	Total units positive	Method	Zoonoses	N of units tested	N of units positive
Not Available	Crustaceans - unspecified - Retail - Not Available - food sample - Surveillance - Official sampling - Suspect sampling	single (food/feed)	1	Gram	1	0	<= 100	Histamine	0	1
							>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 - Border inspection activities - Not Available - food sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	1	Gram	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 - Border inspection activities - Not Available - food sample - Surveillance - Official sampling - Suspect sampling	batch (food/feed)	1	Gram	63	0	<= 100	Histamine	0	63
							>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 - food sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	1	Gram	126	1	<= 100	Histamine	0	125
							>100 TO <= 200	Histamine	0	0
							>200	Histamine	0	1
		single (food/feed)	1	Gram	1	0	<= 100	Histamine	0	1
							>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 - food sample - Surveillance - Official sampling - Suspect sampling	batch (food/feed)	1	Gram	9	0	<= 100	Histamine	0	9
							>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 - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	1	Gram	10	0	<= 100	Histamine	0	10
							>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 - food sample - Surveillance - Official sampling - Suspect sampling	single (food/feed)	1	Gram	3	2	<= 100	Histamine	0	1
							>100 TO <= 200	Histamine	0	0
							>200	Histamine	0	2
	Fish - Fishery products from fish species associated with a high amount of histidine - not enzyme maturated - Wholesale - Not Available - food sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	1	Gram	9	0	<= 100	Histamine	0	9
							>100 TO <= 200	Histamine	0	0
							>200	Histamine	0	0
		single (food/feed)	1	Gram	2	0	<= 100	Histamine	0	2
							>100 TO <= 200	Histamine	0	0
							>200	Histamine	0	0
	Other processed food products and prepared dishes - fish and seafood based dishes - Retail - Not Available - food sample - Surveillance - Official sampling - Suspect sampling	single (food/feed)	1	Gram	2	0	<= 100	Histamine	0	2
							>100 TO <= 200	Histamine	0	0
							>200	Histamine	0	0
	Ready-to-eat salads - Retail - Not Available - food sample - Surveillance - Official sampling - Suspect sampling	single (food/feed)	1	Gram	4	4	<= 100	Histamine	0	0
							>100 TO <= 200	Histamine	0	1
							>200	Histamine	0	3

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	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	25	0	<= 100	Listeria monocytogenes, unspecified	25	0
							>100	Listeria monocytogenes, unspecified	25	0
	Bakery products - pastry - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	69	0	<= 100	Listeria monocytogenes, unspecified	57	0
							>100	Listeria monocytogenes, unspecified	57	0
	Bakery products - pastry - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	69	0	detection	Listeria monocytogenes, unspecified	12	0
	Bakery products - pastry - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	142	0	<= 100	Listeria monocytogenes, unspecified	142	0
							>100	Listeria monocytogenes, unspecified	142	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	46	0	<= 100	Listeria monocytogenes, unspecified	2	0
							>100	Listeria monocytogenes, unspecified	2	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	46	0	detection	Listeria monocytogenes, unspecified	44	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	66	0	<= 100	Listeria monocytogenes, unspecified	11	0
							>100	Listeria monocytogenes, unspecified	11	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	66	0	detection	Listeria monocytogenes, unspecified	55	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	114	0	<= 100	Listeria monocytogenes, unspecified	114	0
							>100	Listeria monocytogenes, unspecified	114	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	61	1	<= 100	Listeria monocytogenes, unspecified	5	0
							>100	Listeria monocytogenes, unspecified	5	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	61	1	detection	Listeria monocytogenes, unspecified	56	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	25	0	<= 100	Listeria monocytogenes, unspecified	9	0
							>100	Listeria monocytogenes, unspecified	9	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	25	0	detection	Listeria monocytogenes, unspecified	16	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)	25	Gram	2	0	detection	Listeria monocytogenes, unspecified	2	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	122	0	<= 100	Listeria monocytogenes, unspecified	24	0

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Total units tested	Total units positive	Method	Zoonoses	N of units tested	N of units positive
Not Available	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	122	0	>100	Listeria monocytogenes, unspecified	24	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	122	0	detection	Listeria monocytogenes, unspecified	98	0
	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	301	0	<= 100	Listeria monocytogenes, unspecified	301	0
							>100	Listeria monocytogenes, unspecified	301	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	48	2	<= 100	Listeria monocytogenes, unspecified	3	0
							>100	Listeria monocytogenes, unspecified	3	1
	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	48	2	detection	Listeria monocytogenes, unspecified	45	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 - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	24	0	<= 100	Listeria monocytogenes, unspecified	1	0
							>100	Listeria monocytogenes, unspecified	1	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	24	0	detection	Listeria monocytogenes, unspecified	23	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	334	2	<= 100	Listeria monocytogenes, unspecified	334	0
							>100	Listeria monocytogenes, unspecified	334	2
	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	35	0	<= 100	Listeria monocytogenes, unspecified	6	0
							>100	Listeria monocytogenes, unspecified	6	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	35	0	detection	Listeria monocytogenes, unspecified	29	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	100	0	<= 100	Listeria monocytogenes, unspecified	100	0
							>100	Listeria monocytogenes, unspecified	100	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	26	0	detection	Listeria monocytogenes, unspecified	26	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)	10	Gram	27	0	<= 100	Listeria monocytogenes, unspecified	6	0
							>100	Listeria monocytogenes, unspecified	6	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	27	0	detection	Listeria monocytogenes, unspecified	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	94	0	<= 100	Listeria monocytogenes, unspecified	94	0
							>100	Listeria monocytogenes, unspecified	94	0
	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	85	0	<= 100	Listeria monocytogenes, unspecified	85	0

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Total units tested	Total units positive	Method	Zoonoses	N of units tested	N of units positive
Not Available	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	85	0	>100	Listeria monocytogenes, unspecified	85	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	74	0	<= 100	Listeria monocytogenes, unspecified	74	0
							>100	Listeria monocytogenes, unspecified	74	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	3	0	detection	Listeria monocytogenes, unspecified	3	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	3	0	detection	Listeria monocytogenes, unspecified	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	3	0	detection	Listeria monocytogenes, unspecified	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)	25	Gram	10	0	detection	Listeria monocytogenes, unspecified	10	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)	10	Gram	5	0	<= 100	Listeria monocytogenes, unspecified	1	0
							>100	Listeria monocytogenes, unspecified	1	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	5	0	detection	Listeria monocytogenes, unspecified	4	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	131	0	<= 100	Listeria monocytogenes, unspecified	131	0
							>100	Listeria monocytogenes, unspecified	131	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	47	11	<= 100	Listeria monocytogenes, unspecified	1	0
							>100	Listeria monocytogenes, unspecified	1	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	47	11	detection	Listeria monocytogenes, unspecified	46	11
	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	16	3	detection	Listeria monocytogenes, unspecified	16	3
	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	68	0	<= 100	Listeria monocytogenes, unspecified	30	0
							>100	Listeria monocytogenes, unspecified	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)	25	Gram	68	0	detection	Listeria monocytogenes, unspecified	38	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	57	0	<= 100	Listeria monocytogenes, unspecified	20	0
							>100	Listeria monocytogenes, unspecified	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	57	0	detection	Listeria monocytogenes, unspecified	37	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	131	0	<= 100	Listeria monocytogenes, unspecified	131	0
							>100	Listeria monocytogenes, unspecified	131	0

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	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 - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	19	0	<= 100	Listeria monocytogenes, unspecified	19	0
							>100	Listeria monocytogenes, unspecified	19	0
	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	57	0	<= 100	Listeria monocytogenes, unspecified	57	0
							>100	Listeria monocytogenes, unspecified	57	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	47	0	<= 100	Listeria monocytogenes, unspecified	47	0
							>100	Listeria monocytogenes, unspecified	47	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	23	0	<= 100	Listeria monocytogenes, unspecified	21	0
							>100	Listeria monocytogenes, unspecified	21	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	23	0	detection	Listeria monocytogenes, unspecified	2	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	95	0	<= 100	Listeria monocytogenes, unspecified	95	0
							>100	Listeria monocytogenes, unspecified	95	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	47	0	<= 100	Listeria monocytogenes, unspecified	47	0
							>100	Listeria monocytogenes, unspecified	47	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	35	0	<= 100	Listeria monocytogenes, unspecified	35	0
							>100	Listeria monocytogenes, unspecified	35	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	70	0	<= 100	Listeria monocytogenes, unspecified	70	0
							>100	Listeria monocytogenes, unspecified	70	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	10	0	<= 100	Listeria monocytogenes, unspecified	6	0
							>100	Listeria monocytogenes, unspecified	6	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	10	0	detection	Listeria monocytogenes, unspecified	4	0
	Fish - gravad /slightly salted - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	25	0	<= 100	Listeria monocytogenes, unspecified	25	0
							>100	Listeria monocytogenes, unspecified	25	0
	Fish - smoked - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	59	1	<= 100	Listeria monocytogenes, unspecified	45	0
							>100	Listeria monocytogenes, unspecified	45	0

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Total units tested	Total units positive	Method	Zoonoses	N of units tested	N of units positive
Not Available	Fish - smoked - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	59	1	detection	Listeria monocytogenes, unspecified	14	1
	Fish - smoked - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	137	0	<= 100	Listeria monocytogenes, unspecified	137	0
							>100	Listeria monocytogenes, unspecified	137	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	181	1	<= 100	Listeria monocytogenes, unspecified	123	0
							>100	Listeria monocytogenes, unspecified	123	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	181	1	detection	Listeria monocytogenes, unspecified	58	1
	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	270	0	<= 100	Listeria monocytogenes, unspecified	270	0
							>100	Listeria monocytogenes, unspecified	270	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	20	0	<= 100	Listeria monocytogenes, unspecified	20	0
							>100	Listeria monocytogenes, unspecified	20	0
	Follow-on formulae - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	183	0	detection	Listeria monocytogenes, unspecified	183	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	147	0	detection	Listeria monocytogenes, unspecified	147	0
	Fruits - non-pre-cut - Farm - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	42	0	<= 100	Listeria monocytogenes, unspecified	42	0
							>100	Listeria monocytogenes, unspecified	42	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	86	0	<= 100	Listeria monocytogenes, unspecified	86	0
							>100	Listeria monocytogenes, unspecified	86	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	50	0	<= 100	Listeria monocytogenes, unspecified	50	0
							>100	Listeria monocytogenes, unspecified	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	50	0	<= 100	Listeria monocytogenes, unspecified	50	0
							>100	Listeria monocytogenes, unspecified	50	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)	10	Gram	89	2	<= 100	Listeria monocytogenes, unspecified	55	0
							>100	Listeria monocytogenes, unspecified	55	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	89	2	detection	Listeria monocytogenes, unspecified	34	2
	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	209	0	<= 100	Listeria monocytogenes, unspecified	209	0

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	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 - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	209	0	>100	Listeria monocytogenes, unspecified	209	0
	Infant formula - dried - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	138	0	detection	Listeria monocytogenes, unspecified	138	0
	Infant formula - ready-to-eat - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Millilitre	104	0	detection	Listeria monocytogenes, unspecified	104	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	4	0	<= 100	Listeria monocytogenes, unspecified	4	0
							>100	Listeria monocytogenes, unspecified	4	0
	Juice - fruit juice - pasteurised - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	34	0	<= 100	Listeria monocytogenes, unspecified	34	0
							>100	Listeria monocytogenes, unspecified	34	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	7	0	<= 100	Listeria monocytogenes, unspecified	7	0
							>100	Listeria monocytogenes, unspecified	7	0
	Juice - fruit juice - unpasteurised - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	99	0	<= 100	Listeria monocytogenes, unspecified	99	0
							>100	Listeria monocytogenes, unspecified	99	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	2	0	<= 100	Listeria monocytogenes, unspecified	2	0
							>100	Listeria monocytogenes, unspecified	2	0
	Juice - vegetable juice - pasteurised - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	25	0	<= 100	Listeria monocytogenes, unspecified	25	0
							>100	Listeria monocytogenes, unspecified	25	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	5	0	<= 100	Listeria monocytogenes, unspecified	4	0
							>100	Listeria monocytogenes, unspecified	4	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	5	0	detection	Listeria monocytogenes, unspecified	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	34	0	<= 100	Listeria monocytogenes, unspecified	34	0
							>100	Listeria monocytogenes, unspecified	34	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	58	2	<= 100	Listeria monocytogenes, unspecified	34	0
							>100	Listeria monocytogenes, unspecified	34	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	58	2	detection	Listeria monocytogenes, unspecified	24	2
	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	144	0	<= 100	Listeria monocytogenes, unspecified	144	0

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Total units tested	Total units positive	Method	Zoonoses	N of units tested	N of units positive
Not Available	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	144	0	>100	Listeria monocytogenes, unspecified	144	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	78	3	<= 100	Listeria monocytogenes, unspecified	52	0
							>100	Listeria monocytogenes, unspecified	52	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	78	3	detection	Listeria monocytogenes, unspecified	26	3
	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	76	0	<= 100	Listeria monocytogenes, unspecified	76	0
							>100	Listeria monocytogenes, unspecified	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	119	0	<= 100	Listeria monocytogenes, unspecified	31	0
							>100	Listeria monocytogenes, unspecified	31	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	119	0	detection	Listeria monocytogenes, unspecified	88	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	116	0	<= 100	Listeria monocytogenes, unspecified	116	0
							>100	Listeria monocytogenes, unspecified	116	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	108	1	<= 100	Listeria monocytogenes, unspecified	57	0
							>100	Listeria monocytogenes, unspecified	57	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	108	1	detection	Listeria monocytogenes, unspecified	51	1
	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	115	0	<= 100	Listeria monocytogenes, unspecified	115	0
							>100	Listeria monocytogenes, unspecified	115	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	110	3	<= 100	Listeria monocytogenes, unspecified	21	0
							>100	Listeria monocytogenes, unspecified	21	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	110	3	detection	Listeria monocytogenes, unspecified	89	3
	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	115	0	<= 100	Listeria monocytogenes, unspecified	115	0
							>100	Listeria monocytogenes, unspecified	115	0
	Meat from other poultry species - meat products - cooked, ready-to-eat - chilled - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	105	2	<= 100	Listeria monocytogenes, unspecified	24	0
							>100	Listeria monocytogenes, unspecified	24	0
	Meat from other poultry species - meat products - cooked, ready-to-eat - chilled - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	105	2	detection	Listeria monocytogenes, unspecified	81	2

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Total units tested	Total units positive	Method	Zoonoses	N of units tested	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	40	0	<= 100	Listeria monocytogenes, unspecified	40	0
							>100	Listeria monocytogenes, unspecified	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	51	0	<= 100	Listeria monocytogenes, unspecified	51	0
							>100	Listeria monocytogenes, unspecified	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	110	3	<= 100	Listeria monocytogenes, unspecified	28	0
							>100	Listeria monocytogenes, unspecified	28	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	110	3	detection	Listeria monocytogenes, unspecified	82	3
	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	112	0	<= 100	Listeria monocytogenes, unspecified	112	0
							>100	Listeria monocytogenes, unspecified	112	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	112	1	<= 100	Listeria monocytogenes, unspecified	29	0
							>100	Listeria monocytogenes, unspecified	29	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	112	1	detection	Listeria monocytogenes, unspecified	83	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	108	1	<= 100	Listeria monocytogenes, unspecified	108	0
							>100	Listeria monocytogenes, unspecified	108	1
	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	112	0	<= 100	Listeria monocytogenes, unspecified	63	0
							>100	Listeria monocytogenes, unspecified	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	112	0	detection	Listeria monocytogenes, unspecified	49	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	112	0	<= 100	Listeria monocytogenes, unspecified	112	0
							>100	Listeria monocytogenes, unspecified	112	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	108	5	<= 100	Listeria monocytogenes, unspecified	77	0
							>100	Listeria monocytogenes, unspecified	77	1
	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	108	5	detection	Listeria monocytogenes, unspecified	31	4
	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	78	0	<= 100	Listeria monocytogenes, unspecified	78	0
							>100	Listeria monocytogenes, unspecified	78	0

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Total units tested	Total units positive	Method	Zoonoses	N of units tested	N of units positive
Not Available	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	111	3	<= 100	Listeria monocytogenes, unspecified	53	0
							>100	Listeria monocytogenes, unspecified	53	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	111	3	detection	Listeria monocytogenes, unspecified	58	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	215	0	<= 100	Listeria monocytogenes, unspecified	215	0
							>100	Listeria monocytogenes, unspecified	215	0
	Other food - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	72	0	<= 100	Listeria monocytogenes, unspecified	49	0
							>100	Listeria monocytogenes, unspecified	49	0
	Other food - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	72	0	detection	Listeria monocytogenes, unspecified	23	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)	10	Gram	165	2	<= 100	Listeria monocytogenes, unspecified	74	0
							>100	Listeria monocytogenes, unspecified	74	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	165	2	detection	Listeria monocytogenes, unspecified	91	2
	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	730	0	<= 100	Listeria monocytogenes, unspecified	730	0
							>100	Listeria monocytogenes, unspecified	730	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	23	0	<= 100	Listeria monocytogenes, unspecified	19	0
							>100	Listeria monocytogenes, unspecified	19	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	23	0	detection	Listeria monocytogenes, unspecified	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	25	0	<= 100	Listeria monocytogenes, unspecified	16	0
							>100	Listeria monocytogenes, unspecified	16	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	25	0	detection	Listeria monocytogenes, unspecified	9	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	96	0	<= 100	Listeria monocytogenes, unspecified	96	0
							>100	Listeria monocytogenes, unspecified	96	0
	Surimi - chilled - Border inspection activities - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	10	0	<= 100	Listeria monocytogenes, unspecified	10	0
							>100	Listeria monocytogenes, unspecified	10	0
	Surimi - chilled - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	20	0	<= 100	Listeria monocytogenes, unspecified	19	0

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Total units tested	Total units positive	Method	Zoonoses	N of units tested	N of units positive
Not Available	Surimi - chilled - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	20	0	>100	Listeria monocytogenes, unspecified	19	0
	Surimi - chilled - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	20	0	detection	Listeria monocytogenes, unspecified	1	0
	Surimi - chilled - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	59	0	<= 100	Listeria monocytogenes, unspecified	59	0
							>100	Listeria monocytogenes, unspecified	59	0
	Vegetables - leaves - Farm - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	47	0	<= 100	Listeria monocytogenes, unspecified	47	0
							>100	Listeria monocytogenes, unspecified	47	0
	Vegetables - leaves - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	28	0	<= 100	Listeria monocytogenes, unspecified	28	0
							>100	Listeria monocytogenes, unspecified	28	0
	Vegetables - non-pre-cut - Farm - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	55	0	<= 100	Listeria monocytogenes, unspecified	55	0
							>100	Listeria monocytogenes, unspecified	55	0
	Vegetables - non-pre-cut - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	55	0	<= 100	Listeria monocytogenes, unspecified	55	0
							>100	Listeria monocytogenes, unspecified	55	0

Table Lyssavirus:LYSSAVIRUS in animal

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Method	Sampling unit	Total units tested	Total units positive	Zoonoses	N of units positive
Not Available	Bats - Natural habitat - Not Available - Not Available - Surveillance - Official sampling - Suspect sampling	Not Available	animal	42	1	European bat lyssavirus 1	1
	Cats - pet animals - Veterinary clinics - Not Available - Not Available - Surveillance - Official sampling - Suspect sampling	Not Available	animal	16	0	Rabies virus	0
	Cattle (bovine animals) - Farm - Not Available - Not Available - Surveillance - Official sampling - Suspect sampling	Not Available	animal	212	0	Rabies virus	0
	Dogs - pet animals - Veterinary clinics - Not Available - Not Available - Surveillance - Official sampling - Suspect sampling	Not Available	animal	12	0	Rabies virus	0
	Goats - Farm - Not Available - Not Available - Surveillance - Official sampling - Suspect sampling	Not Available	animal	47	0	Rabies virus	0
	Other carnivores - zoo animals - Border inspection activities - Not Available - Not Available - Surveillance - Official sampling - Suspect sampling	Not Available	animal	2	0	Rabies virus	0
	Sheep - Farm - Not Available - Not Available - Surveillance - Official sampling - Suspect sampling	Not Available	animal	55	0	Rabies virus	0
	Squirrels - zoo animal - Border inspection activities - Not Available - Not Available - Surveillance - Official sampling - Suspect sampling	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	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	Not Available	10219	242	Salmonella	1
								Salmonella 1,4,12:i:-	2
								Salmonella 4,5,12:i:-	3
								Salmonella Abony	1
								Salmonella Agona	6
								Salmonella Brancaster	1
								Salmonella Derby	4
								Salmonella enterica, subspecies enterica	2
								Salmonella Enteritidis	13
								Salmonella Gaminara	2
								Salmonella Goldcoast	2
								Salmonella group O:7	2
								Salmonella Infantis	71
								Salmonella Java	36
								Salmonella Kouka	1
								Salmonella Lagos	1
								Salmonella Livingstone	30
								Salmonella Llandoff	2
								Salmonella Manchester	8
								Salmonella Mbandaka	4
								Salmonella Minnesota	16
								Salmonella Newport	2
								Salmonella Paratyphi B	1
								Salmonella Rissen	10
								Salmonella Schwarzengrund	1
								Salmonella Senftenberg	3
								Salmonella Soerenga	5
								Salmonella spp., unspecified	1
								Salmonella Tennessee	2
								Salmonella Typhimurium	9
	Gallus gallus (fowl) - broilers - before slaughter - Farm - Not Available - environmental sample - boot swabs - Control and eradication programmes - Official and industry sampling - Census	herd/flock	10276	Y	Not Available	10276	248	Salmonella	1
								Salmonella 1,4,12:i:-	2
								Salmonella 4,5,12:i:-	3
								Salmonella Abony	1
								Salmonella Agona	6
								Salmonella Brancaster	1
								Salmonella Derby	4
								Salmonella enterica, subspecies enterica	2
								Salmonella Enteritidis	13
								Salmonella Gaminara	2
								Salmonella Goldcoast	2
								Salmonella group O:7	2
								Salmonella Infantis	73
								Salmonella Java	37
								Salmonella Kouka	1
								Salmonella Lagos	1
								Salmonella Livingstone	32
								Salmonella Llandoff	3
								Salmonella Manchester	8
								Salmonella Mbandaka	4
								Salmonella Minnesota	16
								Salmonella Newport	2
								Salmonella Paratyphi B	1
								Salmonella Rissen	10
								Salmonella Schwarzengrund	1
								Salmonella Senftenberg	3
								Salmonella Soerenga	5

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	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 - Official and industry sampling - Census	herd/flock	10276	Y	Not Available	10276	248	Salmonella spp., unspecified	1
								Salmonella Tennessee	2
								Salmonella Typhimurium	9
	Gallus gallus (fowl) - broilers - before slaughter - Farm - Not Available - environmental sample - boot swabs - Control and eradication programmes - Official sampling - Objective sampling	herd/flock		N	Not Available	78	6	Salmonella Infantis	2
								Salmonella Java	1
								Salmonella Livingstone	2
								Salmonella Llandoff	1
	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	Not Available	7103	27	Salmonella Derby	1
								Salmonella Enteritidis	8
								Salmonella Kedougou	1
								Salmonella Llandoff	2
								Salmonella Manchester	2
								Salmonella Minnesota	10
								Salmonella Senftenberg	1
								Salmonella Typhimurium	2
BELGIUM	Gallus gallus (fowl) - laying hens - adult - Farm - Not Available - environmental sample - boot swabs - Control and eradication programmes - Industry sampling - Census	herd/flock		N	Not Available	689	22	Salmonella Agona	1
								Salmonella Bredeney	1
								Salmonella Enteritidis	8
								Salmonella Infantis	10
								Salmonella Mbandaka	1
								Salmonella Senftenberg	1
	Gallus gallus (fowl) - laying hens - adult - Farm - Not Available - environmental sample - boot swabs - Control and eradication programmes - Official sampling - Census	herd/flock		N	Not Available	237	3	Salmonella Bispebjerg	1
								Salmonella Infantis	2
	Gallus gallus (fowl) - laying hens - adult - Farm - Not Available - environmental sample - boot swabs and dust - Control and eradication programmes - Official and industry sampling - Census	herd/flock	693	Y	Not Available	693	25	Salmonella Agona	1
								Salmonella Bispebjerg	1
								Salmonella Brandenburg	1
								Salmonella Bredeney	1
								Salmonella Enteritidis	7
								Salmonella Infantis	12
								Salmonella Mbandaka	1
								Salmonella Senftenberg	1
	Gallus gallus (fowl) - laying hens - adult - Farm - Not Available - environmental sample - dust - Control and eradication programmes - Official sampling - Census	herd/flock		N	Not Available	237	4	Salmonella Brandenburg	1
								Salmonella Enteritidis	1
								Salmonella Infantis	2
	Gallus gallus (fowl) - laying hens - day-old chicks - Farm - Not Available - environmental sample - delivery box liner - Control and eradication programmes - Industry sampling - Census	herd/flock		N	Not Available	286	1	Salmonella Kedougou	1
	Gallus gallus (fowl) - laying hens - during rearing period - flocks under control programme - Farm - Not Available - environmental sample - boot swabs - Control and eradication programmes - Industry sampling - Census	herd/flock		N	Not Available	320	4	Salmonella Agona	2
								Salmonella Llandoff	1
								Salmonella spp., unspecified	1
	Gallus gallus (fowl) - parent breeding flocks, unspecified - adult - Farm - Not Available - environmental sample - boot swabs - Control and eradication programmes - Official and industry sampling - Census	herd/flock	569	Y	Not Available	569	24	Salmonella 4,12:i:-	2
								Salmonella Agona	8
								Salmonella Derby	1
								Salmonella Enteritidis	3
								Salmonella I, group O:4	1
								Salmonella Infantis	4
								Salmonella Lexington	1
								Salmonella Mbandaka	2
								Salmonella Minnesota	1
								Salmonella Senftenberg	1
								Salmonella Typhimurium	1
	Gallus gallus (fowl) - parent breeding flocks, unspecified - day-old chicks - Farm - Not Available - environmental sample - delivery box liner - Control and eradication programmes - Industry sampling - Census	herd/flock		N	Not Available	167	1	Salmonella Bovismorbificans	1
	Gallus gallus (fowl) - parent breeding flocks, unspecified - during rearing period - Farm - Not Available - environmental sample - boot swabs - Control and eradication programmes - Official and industry sampling - Census	herd/flock		N	Not Available	342	2	Salmonella Bovismorbificans	1
								Salmonella spp., unspecified	1
	Turkeys - fattening flocks - before slaughter - Farm - Not Available - environmental sample - boot swabs - Control and eradication programmes - Industry sampling - Census	herd/flock		N	Not Available	211	1	Salmonella Typhimurium, monophasic - Other	1
	Turkeys - fattening flocks - before slaughter - Farm - Not Available - environmental sample - boot swabs - Control and eradication programmes - Official and industry sampling - Census	herd/flock	211	Y	Not Available	211	1	Salmonella Typhimurium, monophasic - Other	1
	Turkeys - fattening flocks - before slaughter - Farm - Not Available - environmental sample - boot swabs - Control and eradication programmes - Official sampling - Objective sampling	herd/flock		N	Not Available	4	0	Salmonella spp., unspecified	0

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	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 - Official sampling - Objective sampling	single (food/feed)	25	Gram	Not Available	25	0	Salmonella	0
	Bakery products - pastry - Processing plant - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	Not Available	30	0	Salmonella	0
	Bakery products - pastry - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	Not Available	61	0	Salmonella	0
	Cheeses made from cows' milk - fresh - made from pasteurised milk - Farm - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	Not Available	25	0	Salmonella	0
	Cheeses made from cows' milk - fresh - made from pasteurised milk - Processing plant - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	Not Available	35	0	Salmonella	0
	Cheeses made from cows' milk - fresh - made from pasteurised milk - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	Not Available	30	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	Not Available	39	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	Not Available	17	0	Salmonella	0
	Cheeses made from cows' milk - soft and semi-soft - made from pasteurised milk - Farm - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	Not Available	2	0	Salmonella	0
	Cheeses made from cows' milk - soft and semi-soft - made from pasteurised milk - Processing plant - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	Not Available	74	0	Salmonella	0
	Cheeses made from cows' milk - soft and semi-soft - made from pasteurised milk - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	Not Available	110	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	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	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	Not Available	110	0	Salmonella	0
	Cheeses made from goats' milk - unspecified - made from pasteurised milk - Processing plant - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	Not Available	34	0	Salmonella	0
	Cheeses made from goats' milk - unspecified - made from pasteurised milk - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	Not Available	56	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	Not Available	26	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	Not Available	25	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	Not Available	41	0	Salmonella	0
	Cheeses made from sheep's milk - fresh - made from pasteurised milk - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	Not Available	87	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	Not Available	85	0	Salmonella	0
	Cheeses made from sheep's milk - unspecified - made from pasteurised milk - Processing plant - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	Not Available	3	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	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	Method	Total units tested	Total units positive	Zoonoses	N of units positive
Not Available	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	Not Available	3	0	Salmonella	0
	Chocolate - Processing plant - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	Not Available	36	0	Salmonella	0
	Chocolate - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	Not Available	55	0	Salmonella	0
	Crustaceans - prawns - cooked - Farm - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	Not Available	113	0	Salmonella	0
	Crustaceans - unspecified - cooked - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	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	Not Available	61	0	Salmonella	0
	Dairy products (excluding cheeses) - butter - made from pasteurised milk - Farm - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	Not Available	10	0	Salmonella	0
	Dairy products (excluding cheeses) - butter - made from pasteurised milk - Processing plant - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	Not Available	5	0	Salmonella	0
	Dairy products (excluding cheeses) - butter - made from pasteurised milk - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	Not Available	36	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	Not Available	35	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	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	Not Available	19	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	Not Available	27	0	Salmonella	0
	Dairy products (excluding cheeses) - dairy desserts - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	Not Available	41	0	Salmonella	0
	Dairy products (excluding cheeses) - ice-cream - Farm - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	Not Available	21	0	Salmonella	0
	Dairy products (excluding cheeses) - ice-cream - Processing plant - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	Not Available	13	0	Salmonella	0
	Dairy products (excluding cheeses) - ice-cream - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	Not Available	36	0	Salmonella	0
	Dairy products (excluding cheeses) - milk powder and whey powder - Border inspection activities - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	Not Available	1	0	Salmonella	0
	Dairy products (excluding cheeses) - milk powder and whey powder - Processing plant - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	Not Available	81	0	Salmonella	0
	Egg products - dried - Processing plant - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	Not Available	4	0	Salmonella	0
	Egg products - dried - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	Not Available	21	0	Salmonella	0
	Egg products - liquid - Processing plant - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	Not Available	57	0	Salmonella	0
	Egg products - liquid - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	Not Available	4	0	Salmonella	0
	Fish - gravad /slightly salted - Processing plant - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	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	Not Available	10	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	Method	Total units tested	Total units positive	Zoonoses	N of units positive
Not Available	Fish - smoked - Processing plant - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	Not Available	20	0	Salmonella	0
	Fish - smoked - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	Not Available	51	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	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	Not Available	115	0	Salmonella	0
	Fishery products, unspecified - ready-to-eat - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	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	Not Available	50	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	Not Available	59	0	Salmonella	0
	Frogs leg - Border inspection activities - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	Not Available	1	0	Salmonella	0
	Fruits - non-pre-cut - Farm - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	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	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	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	Not Available	20	0	Salmonella	0
	Fruits - products - dried - Border inspection activities - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	Not Available	6	0	Salmonella	0
	Fruits - products - dried - Processing plant - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	Not Available	13	0	Salmonella	0
	Fruits - products - dried - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	Not Available	14	0	Salmonella	0
	Fruits and vegetables - pre-cut - ready-to-eat - Processing plant - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	Not Available	31	0	Salmonella	0
	Fruits and vegetables - pre-cut - ready-to-eat - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	Not Available	158	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	Not Available	59	0	Salmonella	0
	Infant formula - ready-to-eat - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Millilitre	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	Not Available	4	0	Salmonella	0
	Juice - fruit juice - pasteurised - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	Not Available	10	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	Not Available	7	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	Not Available	37	0	Salmonella	0
	Juice - vegetable juice - pasteurised - Processing plant - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	Not Available	2	0	Salmonella	0
	Juice - vegetable juice - pasteurised - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	Not Available	8	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	Method	Total units tested	Total units positive	Zoonoses	N of units positive
Not Available	Juice - vegetable juice - unpasteurised - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	Not Available	5	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	Not Available	14	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	Not Available	87	0	Salmonella	0
	Meat from bovine animals - Border inspection activities - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	Not Available	1	0	Salmonella	0
	Meat from bovine animals - meat preparation - intended to be eaten cooked - Border inspection activities - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	Not Available	5	0	Salmonella	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	Not Available	45	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	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	Not Available	45	1	Salmonella 4,12:i:-	1
	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	Not Available	45	2	Salmonella Derby	1
								Salmonella Infantis	1
	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	Not Available	27	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	Not Available	28	1	Salmonella Typhimurium	1
	Meat from bovine animals and pig - meat products - Border inspection activities - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	Not Available	5	0	Salmonella	0
	Meat from broilers (Gallus gallus) - Border inspection activities - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	Not Available	5	0	Salmonella	0
	Meat from broilers (Gallus gallus) - carcase - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	Not Available	89	3	Salmonella	1
								Salmonella Infantis	1
								Salmonella Paratyphi B	1
	Meat from broilers (Gallus gallus) - carcase - Slaughterhouse - Not Available - food sample - neck skin - Surveillance - Official sampling - Objective sampling	slaughter animal batch	25	Gram	Not Available	738	82	Salmonella	6
								Salmonella Agona	5
								Salmonella Bredeney	3
								Salmonella enterica, subspecies enterica	4
								Salmonella Give	1
								Salmonella Infantis	39
								Salmonella Mbandaka	1
								Salmonella Minnesota	3
								Salmonella Paratyphi B	15
								Salmonella Senftenberg	5
	Meat from broilers (Gallus gallus) - carcase - Slaughterhouse - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	Not Available	117	13	Salmonella	1
								Salmonella Agona	1
								Salmonella I 4,12:d:-	1
								Salmonella Infantis	6
								Salmonella Minnesota	1
								Salmonella Paratyphi B	3
	Meat from broilers (Gallus gallus) - carcase - spent hens - Slaughterhouse - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	Not Available	502	65	Salmonella Bareilly	1
								Salmonella Bracknell	1
								Salmonella Enteritidis	37
								Salmonella Give	8
								Salmonella Infantis	9
								Salmonella Mbandaka	8
								Salmonella Paratyphi B	1
	Meat from broilers (Gallus gallus) - fresh - skinned - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	Not Available	46	2	Salmonella Kentucky	1
								Salmonella Paratyphi B	1

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Method	Total units tested	Total units positive	Zoonoses	N of units positive
Not Available	Meat from broilers (Gallus gallus) - fresh - with skin - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	Not Available	50	3	Salmonella 4:b:-	1
								Salmonella Infantis	2
	Meat from horse - Border inspection activities - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	Not Available	6	0	Salmonella	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	Not Available	45	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	Not Available	46	0	Salmonella	0
	Meat from other animal species or not specified - meat products - fermented sausages - Processing plant - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	Not Available	45	0	Salmonella	0
	Meat from other animal species or not specified - meat products - fermented sausages - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	Not Available	46	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	Not Available	45	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	Not Available	46	0	Salmonella	0
	Meat from other animal species or not specified - mechanically separated meat (MSM) - soft-type - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	10	Gram	Not Available	20	2	Salmonella Infantis	1
								Salmonella Paratyphi B	1
	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	Not Available	46	3	Salmonella Infantis	3
	Meat from other poultry species - meat products - cooked, ready-to-eat - chilled - Processing plant - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	Not Available	45	0	Salmonella	0
	Meat from pig - carcase - Slaughterhouse - Not Available - food sample - carcase swabs - Surveillance - based on Regulation 2073 - Industry sampling - Objective sampling	single (food/feed)	600	Square centimetre	Not Available	4774	112	Salmonella	112
	Meat from pig - carcase - Slaughterhouse - Not Available - food sample - Surveillance - based on Regulation 2073 - Official, based on Regulation 854/2004 - Objective sampling	single (food/feed)	600	Square centimetre	Not Available	1048	57	Salmonella	11
								Salmonella 4,12:i:-	14
								Salmonella Agona	1
								Salmonella Bredeney	1
								Salmonella Derby	10
								Salmonella enterica, subspecies enterica	2
								Salmonella Enteritidis	1
								Salmonella Infantis	1
								Salmonella Livingstone	1
								Salmonella Rissen	1
								Salmonella Typhimurium	14
	Meat from pig - fresh - Cutting plant - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	Not Available	366	3	Salmonella Derby	1
								Salmonella Rissen	1
								Salmonella Typhimurium	1
	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)	25	Gram	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	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	Not Available	45	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	Not Available	46	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	Not Available	45	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	Not Available	43	0	Salmonella	0
	Meat from pig - meat products - raw ham - Processing plant - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	Not Available	45	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	Method	Total units tested	Total units positive	Zoonoses	N of units positive
Not Available	Meat from pig - meat products - raw ham - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	Not Available	46	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	Not Available	45	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	Not Available	46	0	Salmonella	0
	Meat from poultry, unspecified - fresh - skinned - Processing plant - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	Not Available	227	8	Salmonella Infantis	6
								Salmonella Paratyphi B	2
	Meat from poultry, unspecified - fresh - with skin - Processing plant - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	Not Available	251	11	Salmonella Infantis	9
								Salmonella Paratyphi B	2
	Meat from poultry, unspecified - meat preparation - intended to be eaten cooked - Border inspection activities - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	Not Available	125	0	Salmonella	0
	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	Not Available	45	2	Salmonella Newport	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	Not Available	45	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	Not Available	135	0	Salmonella	0
	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	Not Available	45	1	Salmonella Infantis	1
	Milk, cows' - raw milk - Farm - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	Not Available	36	0	Salmonella	0
	Molluscan shellfish - cooked - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/feed)	25	Gram	Not Available	45	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	Not Available	45	0	Salmonella	0
	Nuts and nut products - Border inspection activities - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	Not Available	12	0	Salmonella	0
	Nuts and nut products - Processing plant - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	Not Available	20	0	Salmonella	0
	Nuts and nut products - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	Not Available	29	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	Not Available	59	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	Not Available	399	0	Salmonella	0
	Other products of animal origin - gelatin and collagen - Border inspection activities - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	Not Available	2	0	Salmonella	0
	Other products of animal origin - gelatin and collagen - Processing plant - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	Not Available	15	0	Salmonella	0
	Other products of animal origin - gelatin and collagen - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	Not Available	70	0	Salmonella	0
	Seeds, dried - Border inspection activities - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	Not Available	173	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	Not Available	30	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	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	Not Available	42	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	Method	Total units tested	Total units positive	Zoonoses	N of units positive
Not Available	Spices and herbs - dried - Processing plant - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	Not Available	43	0	Salmonella	0
	Spices and herbs - dried - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	Not Available	46	0	Salmonella	0
	Spices and herbs - fresh - Processing plant - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	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	Not Available	40	0	Salmonella	0
	Surimi - chilled - Border inspection activities - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	Not Available	10	0	Salmonella	0
	Surimi - chilled - Processing plant - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	Not Available	20	0	Salmonella	0
	Surimi - chilled - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	Not Available	60	0	Salmonella	0
	Vegetables - leaves - Farm - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	Not Available	23	0	Salmonella	0
	Vegetables - leaves - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	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	Not Available	22	0	Salmonella	0
	Vegetables - non-pre-cut - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	Not Available	23	0	Salmonella	0
	Vegetables - products - dried - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	Not Available	5	0	Salmonella	0

Table Salmonella:SALMONELLA in feed

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	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	Not Available	34	0	Salmonella	0
	Compound feedingstuffs for cattle - Feed mill - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	Not Available	47	1	Salmonella	1
								Salmonella enterica	1
	Compound feedingstuffs for cattle - Packing centre - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	Not Available	1	0	Salmonella	0
	Compound feedingstuffs for cattle - Retail - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	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	Not Available	1	0	Salmonella	0
	Compound feedingstuffs for cattle - Wholesale - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	Not Available	6	0	Salmonella	0
	Compound feedingstuffs for fish - Farm - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	Not Available	6	0	Salmonella	0
	Compound feedingstuffs for fish - Feed mill - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	Not Available	2	0	Salmonella	0
	Compound feedingstuffs for fish - Packing centre - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	Not Available	3	0	Salmonella	0
	Compound feedingstuffs for fish - Wholesale - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	Not Available	1	0	Salmonella	0
	Compound feedingstuffs for horses - Farm - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	Not Available	8	0	Salmonella	0
	Compound feedingstuffs for horses - Feed mill - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	Not Available	15	0	Salmonella	0
	Compound feedingstuffs for horses - Unspecified - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	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	Not Available	3	0	Salmonella	0
	Compound feedingstuffs for pigs - Farm - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	Not Available	35	0	Salmonella	0
	Compound feedingstuffs for pigs - Feed mill - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	Not Available	52	0	Salmonella	0
	Compound feedingstuffs for pigs - Unspecified - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	Not Available	1	0	Salmonella	0
	Compound feedingstuffs for pigs - Wholesale - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	Not Available	2	0	Salmonella	0
	Compound feedingstuffs for poultry (non specified) - Farm - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	Not Available	5	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	Not Available	2	0	Salmonella	0
	Compound feedingstuffs for poultry (non specified) - Retail - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	Not Available	1	0	Salmonella	0
	Compound feedingstuffs for poultry, breeders - final product - Farm - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	Not Available	19	0	Salmonella	0
	Compound feedingstuffs for poultry, breeders - final product - Feed mill - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	Not Available	15	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	Method	Total units tested	Total units positive	Zoonoses	N of units positive
Not Available	Compound feedingstuffs for poultry, breeders - final product - Hatchery - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	Not Available	2	0	Salmonella	0
	Compound feedingstuffs for poultry, broilers - final product - Farm - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	Not Available	14	0	Salmonella	0
	Compound feedingstuffs for poultry, broilers - final product - Feed mill - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	Not Available	14	1	Salmonella	1
								Salmonella Kottbus	1
	Compound feedingstuffs for poultry, broilers - final product - Hatchery - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	Not Available	2	0	Salmonella	0
	Compound feedingstuffs for poultry, broilers - final product - Unspecified - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	Not Available	7	0	Salmonella	0
	Compound feedingstuffs for poultry, broilers - final product - Wholesale - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	Not Available	3	0	Salmonella	0
	Compound feedingstuffs for poultry, laying hens - Farm - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	Not Available	18	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	Not Available	17	0	Salmonella	0
	Compound feedingstuffs for poultry, laying hens - Unspecified - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	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	Not Available	3	0	Salmonella	0
	Compound feedingstuffs for poultry, pigeons - Farm - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	Not Available	1	0	Salmonella	0
	Compound feedingstuffs for poultry, pigeons - Feed mill - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	Not Available	5	0	Salmonella	0
	Compound feedingstuffs for rabbits - Farm - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	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	Not Available	8	0	Salmonella	0
	Compound feedingstuffs for rabbits - Unspecified - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	Not Available	1	0	Salmonella	0
	Compound feedingstuffs for sheep - final product - Farm - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	Not Available	7	0	Salmonella	0
	Compound feedingstuffs for sheep - final product - Feed mill - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	Not Available	13	0	Salmonella	0
	Compound feedingstuffs for sheep - final product - Packing centre - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	Not Available	2	0	Salmonella	0
	Compound feedingstuffs for sheep - final product - Retail - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	Not Available	2	0	Salmonella	0
	Compound feedingstuffs for turkeys - Farm - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	Not Available	5	0	Salmonella	0
	Compound feedingstuffs, not specified - Border inspection activities - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	Not Available	6	0	Salmonella	0
	Compound feedingstuffs, not specified - Cutting plant - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	Not Available	3	0	Salmonella	0
	Compound feedingstuffs, not specified - Feed mill - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	Not Available	59	2	Salmonella	2
								Salmonella Mbandaka	2
								Salmonella Typhimurium, monophasic	2
	Compound feedingstuffs, not specified - Packing centre - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	Not Available	1	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	Method	Total units tested	Total units positive	Zoonoses	N of units positive
Not Available	Compound feedingstuffs, not specified - Retail - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	Not Available	25	2	Salmonella	2
								Salmonella Paratyphi B	2
								Salmonella Tshiongwe	2
	Compound feedingstuffs, not specified - Unspecified - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	Not Available	1	0	Salmonella	0
	Compound feedingstuffs, not specified - Wholesale - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	Not Available	29	1	Salmonella	1
								Salmonella Infantis	1
	Feed material of cereal grain origin - barley derived - Feed mill - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	Not Available	2	0	Salmonella	0
	Feed material of cereal grain origin - Border inspection activities - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	Not Available	3	0	Salmonella	0
	Feed material of cereal grain origin - Conservation facilities - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	Not Available	8	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	Not Available	23	0	Salmonella	0
	Feed material of cereal grain origin - maize derived - Conservation facilities - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	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	Not Available	9	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	Not Available	1	0	Salmonella	0
	Feed material of cereal grain origin - other cereal grain derived - Conservation facilities - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	Not Available	3	0	Salmonella	0
	Feed material of cereal grain origin - other cereal grain derived - Feed mill - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	Not Available	12	0	Salmonella	0
	Feed material of cereal grain origin - rice derived - Border inspection activities - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	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	Not Available	5	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	Not Available	1	0	Salmonella	0
	Feed material of cereal grain origin - Wholesale - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	Not Available	10	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	Not Available	6	0	Salmonella	0
	Feed material of land animal origin - animal fat - Wholesale - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	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	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	Not Available	14	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	Not Available	22	0	Salmonella	0
	Feed material of land animal origin - dairy products - Packing centre - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	Not Available	45	0	Salmonella	0
	Feed material of land animal origin - dairy products - Retail - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	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	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	Method	Total units tested	Total units positive	Zoonoses	N of units positive
Not Available	Feed material of land animal origin - egg powder - Border inspection activities - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	Not Available	3	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	Not Available	24	0	Salmonella	0
	Feed material of land animal origin - egg powder - Packing centre - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	Not Available	18	1	Salmonella	1
								Salmonella Infantis	1
	Feed material of land animal origin - egg powder - Unspecified - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	Not Available	2	0	Salmonella	0
	Feed material of land animal origin - Feed mill - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	Not Available	24	0	Salmonella	0
	Feed material of land animal origin - meat and bone meal - Border inspection activities - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	Not Available	12	1	Salmonella	1
								Salmonella Infantis	1
	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	Not Available	60	8	Salmonella	8
								Salmonella Enterica, unspecified	8
								Salmonella Infantis	8
								Salmonella Isangi	8
								Salmonella Kedougou	8
								Salmonella Livingstone	8
								Salmonella Mbandaka	8
								Salmonella Montevideo	8
								Salmonella Ohio	8
								Salmonella Other serovars	8
	Feed material of land animal origin - meat and bone meal - Packing centre - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	Not Available	2	0	Salmonella	0
	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	Not Available	1	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	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	Not Available	8	1	Salmonella	1
								Salmonella Carno	1
								Salmonella Cerro	1
	Feed material of land animal origin - Unspecified - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	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	Not Available	4	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	Not Available	7	1	Salmonella	1
								Salmonella Tennessee	1
	Feed material of marine animal origin - fish meal - Retail - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	Not Available	1	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	Not Available	1	0	Salmonella	0
	Feed material of oil seed or fruit origin - Border inspection activities - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	Not Available	1	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	Not Available	8	0	Salmonella	0
	Feed material of oil seed or fruit origin - linseed derived - Feed mill - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	Not Available	3	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	Not Available	1	0	Salmonella	0
	Feed material of oil seed or fruit origin - palm kernel derived - Feed mill - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	Not Available	1	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	Method	Total units tested	Total units positive	Zoonoses	N of units positive
Not Available	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	Not Available	1	0	Salmonella	0
	Feed material of oil seed or fruit origin - rape seed derived - Unspecified - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	Not Available	1	0	Salmonella	0
	Feed material of oil seed or fruit origin - soya (bean) derived - Border inspection activities - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	Not Available	1	0	Salmonella	0
	Feed material of oil seed or fruit origin - soya (bean) derived - Conservation facilities - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	Not Available	5	0	Salmonella	0
	Feed material of oil seed or fruit origin - soya (bean) derived - Feed mill - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	Not Available	3	0	Salmonella	0
	Feed material of oil seed or fruit origin - soya (bean) derived - Hatchery - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	Not Available	1	0	Salmonella	0
	Feed material of oil seed or fruit origin - soya (bean) derived - Wholesale - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	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	Not Available	5	0	Salmonella	0
	Feed material of oil seed or fruit origin - Wholesale - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	Not Available	1	0	Salmonella	0
	Other feed material - Farm - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	Not Available	3	0	Salmonella	0
	Other feed material - Feed mill - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	Not Available	1	0	Salmonella	0
	Pet food - Border inspection activities - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	Not Available	6	0	Salmonella	0
	Pet food - Feed mill - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	Not Available	4	0	Salmonella	0
	Pet food - Retail - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	Not Available	13	1	Salmonella	1
								Salmonella Livingstone	1
								Salmonella Typhimurium	1
	Pet food - Unspecified - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	Not Available	2	0	Salmonella	0
	Pet food - Wholesale - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	Not Available	3	0	Salmonella	0

Table Sarcocystis:SARCOCYSTIS in animal

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	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	Visual inspection	animal	922797	99	Sarcocystis	99

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	Method	Total Units Tested Attribute	Total Units Positive Attribute	Zoonoses	CC	Spa type	ML	Units positive
Not Available	Gallus gallus (fowl) - broilers - during rearing period - Farm - Belgium - animal sample - nasal swab - Surveillance - Official sampling - Convenient sampling	herd/flock		Not Available	Not Available	80	2	Methicillin resistant Staphylococcus aureus (MRSA)	398	11		1
										1456		1
	Gallus gallus (fowl) - laying hens - adult - Farm - Belgium - animal sample - nasal swab - Surveillance - Official sampling - Convenient sampling	herd/flock		Not Available	Not Available	236	3	Methicillin resistant Staphylococcus aureus (MRSA)	398	11		2
										1456		1

Table Trichinella:TRICHINELLA in animal

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	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	Magnetic stirrer method for pooled sample digestion	animal	879180	0	Trichinella	0
	Pigs - fattening pigs - raised under controlled housing conditions - Slaughterhouse - Not Available - Not Available - Surveillance - Official sampling - Census	Magnetic stirrer method for pooled sample digestion	animal	9590067	0	Trichinella	0
	Solipeds, domestic - Slaughterhouse - Not Available - Not Available - Surveillance - Official sampling - Census	Magnetic stirrer method for pooled sample digestion	animal	5590	0	Trichinella	0
	Wild boars - wild - Game handling establishment - Not Available - Not Available - Surveillance - Official sampling - Census	Magnetic stirrer method for pooled sample digestion	animal	17094	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	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	ISO 10273:2017 Yersinia enterocolitica	117	1	Yersinia enterocolitica	0
								Yersinia enterocolitica unspecified	1
	Meat from pig - meat preparation - Processing plant - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	1	Gram	ISO 10273:2017 Yersinia enterocolitica	107	1	Yersinia enterocolitica	0
								Yersinia enterocolitica unspecified	1
	Meat from pig - meat preparation - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	1	Gram	ISO 10273:2017 Yersinia enterocolitica	81	0	Yersinia	0

FOODBORNE OUTBREAKS TABLES

Foodborne Outbreaks: summarized data

		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
B. cereus enterotoxins	Mixed food					1	3	1	0
Campylobacter	Broiler meat (Gallus gallus) and products thereof					1	3	0	0
	Other, mixed or unspecified poultry meat and products thereof					1	2	0	0
	Unknown					1	6	6	0
Campylobacter jejuni	Unknown					1	7	2	0
Clostridium perfringens	Pig meat and products thereof	1	142	0	0				
	Buffet meals	1	40	0	0				
Histamine	Fish and fish products	3	19	0	0				
Norovirus	Mixed food	2	60	5	0				
	Buffet meals					1	30	0	0
Salmonella Enteritidis	Eggs and egg products	1	6	5	0				
Salmonella spp., unspecified	Unknown					1	8	4	0
Unknown	Milk					2	21	1	0
	Dairy products (other than cheeses)					4	11	0	0
	Eggs and egg products					1	2	0	0
	Bovine meat and products thereof					17	59	0	0
	Pig meat and products thereof					11	27	0	0
	Sheep meat and products thereof					4	8	0	0
	Other or mixed red meat and products thereof					8	19	0	0
	Broiler meat (Gallus gallus) and products thereof					13	41	3	0
	Turkey meat and products thereof					1	3	0	0
	Fish and fish products					15	41	0	0
	Crustaceans, shellfish, molluscs and products thereof					6	26	1	0
	Vegetables and juices and other products thereof					6	15	0	0
	Cereal products including rice and seeds/pulses (nuts, almonds)					1	2	0	0
	Fruit, berries and juices and other products thereof					1	2	0	0
	Drinks, including bottled water					3	6	0	0
	Tap water, including well water					1	4	0	0
	Bakery products					8	23	0	0
	Mixed food					129	504	6	0
	Buffet meals					16	38	1	0
	Unknown					40	221	5	0
Verocytotoxigenic E. coli (VTEC)	Unknown					1	2	1	0
VTEC O157	Bovine meat and products thereof	1	8	8	0				

Strong Foodborne Outbreaks: detailed data

Causative agent	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
Clostridium perfringens	Not Available	1199	General	Pig meat and products thereof	N_A	Detection of causative agent in food vehicle or its component - Detection of indistinguishable causative agent in humans	School or kindergarten	Restaurant or Cafe or Pub or Bar or Hotel or Catering service	Not Available	Not Available	N_A	1	142	0	0
		1266	General	Buffet meals	N_A	Descriptive epidemiological evidence	Temporary mass catering (fairs or festivals)	Temporary mass catering (fairs or festivals)	Not Available	Not Available	N_A	1	40	0	0
Histamine	Not Available	1160	General	Fish and fish products	N_A	Detection of causative agent in food vehicle or its component - Detection of indistinguishable causative agent in humans	School or kindergarten	School or kindergarten	Not Available	Not Available	N_A	1	5	0	0
		1222	General	Fish and fish products	N_A	Detection of causative agent in food vehicle or its component - Detection of indistinguishable causative agent in humans	Restaurant or Cafe or Pub or Bar or Hotel or Catering service	Restaurant or Cafe or Pub or Bar or Hotel or Catering service	Not Available	Not Available	N_A	1	5	0	0
		1292	General	Fish and fish products	N_A	Detection of causative agent in food vehicle or its component - Detection of indistinguishable causative agent in humans	Canteen or workplace catering	Canteen or workplace catering	Not Available	Not Available	N_A	1	9	0	0
Norovirus	Not Available	1277	General	Mixed food	N_A	Detection of causative agent in food vehicle or its component - Detection of indistinguishable causative agent in humans	Restaurant or Cafe or Pub or Bar or Hotel or Catering service	Restaurant or Cafe or Pub or Bar or Hotel or Catering service	Not Available	Not Available	N_A	1	50	1	0

Causative agent	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	Not Available	1284	General	Mixed food	N_A	Detection of causative agent in food vehicle or its component - Detection of indistinguishable causative agent in humans	School or kindergarten	Canteen or workplace catering	Not Available	Not Available	N_A	1	10	4	0
Salmonella Enteritidis	Not Available	1257	General	Eggs and egg products	N_A	Product-tracing investigations ;Detection of causative agent in food vehicle or its component - Detection of indistinguishable causative agent in humans	Household	Household	Not Available	Not Available	N_A	1	6	5	0
VTEC O157	Not Available	1195	General	Bovine meat and products thereof	N_A	Detection of causative agent in food vehicle or its component - Detection of indistinguishable causative agent in humans	Household	Retail	Not Available	Not Available	N_A	1	8	8	0

Weak Foodborne Outbreaks: detailed data

Causative agent	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
B. cereus enterotoxins	Not Available	1272	Not Available	Mixed food	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	Restaurant or Cafe or Pub or Bar or Hotel or Catering service	Not Available	Not Available	N_A	1	3	1	0
Campylobacter	Not Available	1224	Not Available	Other, mixed or unspecified poultry meat and products thereof	N_A	Descriptive epidemiological evidence	Restaurant or Cafe or Pub or Bar or Hotel or Catering service	Restaurant or Cafe or Pub or Bar or Hotel or Catering service	Not Available	Not Available	N_A	1	2	0	0
		1295	Not Available	Broiler meat (Gallus gallus) and products thereof	N_A	Descriptive epidemiological evidence	Residential institution (nursing home or prison or boarding school)	Residential institution (nursing home or prison or boarding school)	Not Available	Not Available	N_A	1	3	0	0
		1298	Not Available	Unknown	N_A	Descriptive epidemiological evidence	Unknown	Unknown	Not Available	Not Available	N_A	1	6	6	0
Campylobacter jejuni	Not Available	1197	Not Available	Unknown	N_A	Descriptive epidemiological evidence	Residential institution (nursing home or prison or boarding school)	Unknown	Not Available	Not Available	N_A	1	7	2	0
Norovirus	Not Available	1187	Not Available	Buffet meals	N_A	Descriptive epidemiological evidence	Restaurant or Cafe or Pub or Bar or Hotel or Catering service	Restaurant or Cafe or Pub or Bar or Hotel or Catering service	Not Available	Not Available	N_A	1	30	0	0
Salmonella spp., unspecified	Not Available	1194	Not Available	Unknown	N_A	Descriptive epidemiological evidence	School or kindergarten	Unknown	Not Available	Not Available	N_A	1	8	4	0
Unknown	Not Available	1140	Not Available	Buffet meals	N_A	Unknown	Not Available	Not Available	Not Available	Not Available	N_A	16	38	1	0

Causative agent	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	Not Available	1141	Not Available	Broiler meat (Gallus gallus) and products thereof	N_A	Unknown	Not Available	Not Available	Not Available	Not Available	N_A	13	41	3	0
		1142	Not Available	Crustaceans, shellfish, molluscs and products thereof	N_A	Unknown	Not Available	Not Available	Not Available	Not Available	N_A	6	26	1	0
		1153	Not Available	Mixed food	N_A	Unknown	Not Available	Not Available	Not Available	Not Available	N_A	128	498	6	0
		1166	Not Available	Bovine meat and products thereof	N_A	Unknown	Not Available	Not Available	Not Available	Not Available	N_A	17	59	0	0
		1167	Not Available	Milk	N_A	Unknown	Not Available	Not Available	Not Available	Not Available	N_A	2	21	1	0
		1175	Not Available	Bakery products	N_A	Unknown	Not Available	Not Available	Not Available	Not Available	N_A	8	23	0	0
		1182	Not Available	Vegetables and juices and other products thereof	N_A	Unknown	Not Available	Not Available	Not Available	Not Available	N_A	6	15	0	0
		1183	Not Available	Mixed food	N_A	Descriptive epidemiological evidence	Canteen or workplace catering	Canteen or workplace catering	Not Available	Not Available	N_A	1	6	0	0
		1196	Not Available	Fish and fish products	N_A	Unknown	Not Available	Not Available	Not Available	Not Available	N_A	15	41	0	0
		1202	Not Available	Unknown	N_A	Unknown	Not Available	Not Available	Not Available	Not Available	N_A	40	221	5	0
		1203	Not Available	Dairy products (other than cheeses)	N_A	Unknown	Not Available	Not Available	Not Available	Not Available	N_A	4	11	0	0
		1234	Not Available	Drinks, including bottled water	N_A	Unknown	Not Available	Not Available	Not Available	Not Available	N_A	3	6	0	0
		1254	Not Available	Eggs and egg products	N_A	Unknown	Household	Retail	Not Available	Not Available	N_A	1	2	0	0
		1271	Not Available	Pig meat and products thereof	N_A	Unknown	Not Available	Not Available	Not Available	Not Available	N_A	11	27	0	0
		2017/0063	Not Available	Sheep meat and products thereof	N_A	Unknown	Not Available	Not Available	Not Available	Not Available	N_A	4	8	0	0

Causative agent	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	Not Available	2017/0171	Not Available	Cereal products including rice and seeds/pulses (nuts, almonds)	N_A	Unknown	Restaurant or Cafe or Pub or Bar or Hotel or Catering service	Not Available	Not Available	Not Available	N_A	1	2	0	0
		2017/0210	Not Available	Other or mixed red meat and products thereof	N_A	Unknown	Not Available	Not Available	Not Available	Not Available	N_A	8	19	0	0
		2017/0266	Not Available	Fruit, berries and juices and other products thereof	N_A	Unknown	Household	Not Available	Not Available	Not Available	N_A	1	2	0	0
		2017/0307	Not Available	Tap water, including well water	N_A	Unknown	Restaurant or Cafe or Pub or Bar or Hotel or Catering service	Not Available	Not Available	Not Available	N_A	1	4	0	0
		2017/0806	Not Available	Turkey meat and products thereof	N_A	Unknown	Household	Not Available	Not Available	Not Available	N_A	1	3	0	0
Verocytotoxigenic E. coli (VTEC)	Not Available	1265	Not Available	Unknown	N_A	Descriptive epidemiological evidence	Household	Unknown	Not Available	Not Available	N_A	1	2	1	0

ANTIMICROBIAL RESISTANCE TABLES FOR CAMPYLOBACTER

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

Sampling Stage: Slaughterhouse | 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: Netherlands

	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	**6**	**6**	**6**	**6**	**6**	**6**
MIC	**N of resistant isolates**	**4**	**0**	**0**	**4**	**0**	**2**
<=0.12		1		3			
0.25				3			
<=0.5							4
0.5		1				3	
<=1			4				
1						3	
2			1				
4			1		1		
8					1		
16		4					
>64					4		2

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

Sampling Stage: Slaughterhouse | 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: Belgium

	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	**180**	**180**	**180**	**180**	**180**	**180**
MIC	**N of resistant isolates**	**131**	**2**	**1**	**130**	**1**	**113**
<=0.12		41		111			
<=0.25						2	
0.25		6		62			
<=0.5							55
0.5		2		5		76	
<=1			116				
1				1		94	12
2		1	56		6	5	2
4			6		31	2	
8		32	1	1	13		1
16		48					8
>16		50				1	
32			1		1		8
64					1		5
>64					128		89

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

Sampling Stage: Slaughterhouse | 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: France

	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	**35**	**35**	**35**	**35**	**35**	**35**
MIC	**N of resistant isolates**	**19**	**0**	**0**	**17**	**0**	**13**
<=0.12		14		18			
<=0.25						3	
0.25		2		16			
<=0.5							19
0.5				1		12	
<=1			27				
1						16	3
2			8		4	3	
4					10	1	
8		6			3		1
16		9			1		1
>16		4					
>64					17		11

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: Lithuania

	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

	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	**5**	**5**	**5**	**5**	**5**	**5**
MIC	**N of resistant isolates**	**2**	**0**	**0**	**3**	**0**	**1**
<=0.12		3		3			
0.25				1			
<=0.5							3
0.5				1			
<=1			4				
1						3	1
2			1			1	
4					2	1	
16		1					
>16		1					
>64					3		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: Poland

	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) - 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

	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	**60**	**60**	**60**	**60**	**60**	**60**
MIC	**N of resistant isolates**	**38**	**0**	**0**	**38**	**0**	**29**
<=0.12		21		35			
<=0.25						1	
0.25		1		23			
<=0.5							24
0.5				2		23	
<=1			43				
1						34	7
2			17		2	2	
4					19		
8		8			1		
16		18					2
>16		12					
32					1		2
64							2
>64					37		23

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

	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	**6**	**6**	**6**	**6**	**6**	**6**
MIC	**N of resistant isolates**	**5**	**0**	**0**	**5**	**0**	**4**
<=0.12		1		3			
<=0.25						1	
0.25				3			
<=0.5							1
0.5						2	
<=1			2				
1						3	1
2			4		1		
8		1					
16		3					
>16		1					
>64					5		4

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

	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**	**0**	**0**	**0**	**0**	**0**	**0**
<=0.12		1		1			
<=0.5							1
0.5						1	
2			1				
8					1		

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

	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**	**0**	**0**	**0**	**0**	**0**	**1**
<=0.12		1		1			
0.25		1		1			
<=0.5							1
<=1			1				
1						1	
2			1			1	
4					1		
8					1		
>64							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

	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	**5**	**5**	**5**	**5**	**5**	**5**
MIC	**N of resistant isolates**	**3**	**0**	**0**	**3**	**0**	**4**
<=0.12		2		4			
0.25				1			
<=0.5							1
0.5						2	
<=1			4				
1						2	
2			1				
4					1	1	
8		1					
16		2			1		
32							1
>64					3		3

Table Antimicrobial susceptibility testing of Campylobacter jejuni 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

	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	**108**	**108**	**108**	**108**	**108**	**108**
MIC	**N of resistant isolates**	**67**	**3**	**1**	**67**	**2**	**64**
<=0.12		36		54			
<=0.25						1	
0.25		5		43			
<=0.5							40
0.5				5		33	
<=1			71				
1		1		5		65	4
2			29		1	6	2
4		1	5		31	1	1
8		25	1	1	9		1
16		27	1				6
>16		13				2	
32							9
64					1		3
>64					66		42
>128			1				

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

Sampling Stage: Slaughterhouse | 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: Netherlands

	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	**18**	**18**	**18**	**18**	**18**	**18**
MIC	**N of resistant isolates**	**4**	**0**	**1**	**4**	**2**	**7**
<=0.12		11		9			
<=0.25						1	
0.25		2		7			
<=0.5							11
0.5		1		1		7	
<=1			17				
1						8	
2			1		3		
4					10		
8				1	1		
16		4					2
>16						2	
64					1		2
>64					3		3

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

Sampling Stage: Slaughterhouse | 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: Belgium

	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	**28**	**28**	**28**	**28**	**28**	**28**
MIC	**N of resistant isolates**	**10**	**0**	**0**	**9**	**0**	**8**
<=0.12		15		20			
<=0.25						2	
0.25		2		7			
<=0.5							20
0.5		1		1		16	
<=1			19				
1						8	
2			9		3	2	
4					13		
8		5			1		
16		5			2		
32							1
>64					9		7

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

Sampling Stage: Slaughterhouse | 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: Germany

	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	**9**	**9**	**9**	**9**	**9**	**9**
MIC	**N of resistant isolates**	**4**	**0**	**0**	**4**	**1**	**3**
<=0.12		4		6			
0.25		1		2			
<=0.5							6
0.5				1		4	
<=1			9				
1						3	
2					1	1	
4					3		
8					1		
16		3					
>16		1				1	
>64					4		3

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

Sampling Stage: Slaughterhouse | 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: France

	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	**21**	**21**	**21**	**21**	**21**	**21**
MIC	**N of resistant isolates**	**9**	**1**	**0**	**8**	**0**	**7**
<=0.12		11		8			
0.25		1		10			
<=0.5							13
0.5				2		7	
<=1			17				
1				1		13	1
2			2		4	1	
4			1		6		
8		1			1		
16		7			2		
>16		1					
64			1				
>64					8		7

ANTIMICROBIAL RESISTANCE TABLES FOR SALMONELLA

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

	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	**19**	**19**	**19**	**19**	**19**	**19**	**19**	**19**	**19**	**19**	**19**	**19**	**19**	**19**
MIC	**N of resistant isolates**	**19**	**0**	**0**	**0**	**2**	**2**	**0**	**0**	**0**	**2**	**19**	**16**	**0**	**2**
<=0.015							6								
<=0.03										17					
0.03							11								
0.064										2					
<=0.25				19										5	13
0.25							2								
<=0.5					19				19						
0.5														13	4
<=1								18							
1														1	
<=2													3		
2								1							
<=4											12				
4			7												
<=8						17									
8			12								5				
>32															2
64		1											1		
>64		18											15		
>128						2					2				
>1024												19			

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

	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**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**3**	**0**	**2**
<=0.03										5					
0.03							5								
0.064							1			1					
<=0.25				6										2	3
<=0.5					6				5						
0.5														3	1
<=1								6							
1									1					1	
<=2													3		
2		1													
<=4											6				
4			2												
<=8						6									
8			4												
32												1			
>32															2
>64		5											3		
>1024												5			

Table Antimicrobial susceptibility testing of Salmonella 1,4,[5],12:i:- in Gallus gallus (fowl) - broilers - before slaughter

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method:

Country of Origin: Belgium

	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	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**
MIC	**N of resistant isolates**	**6**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**7**	**5**	**0**	**0**
<=0.03										4					
0.03							7								
0.064										3					
<=0.25				7										1	7
<=0.5					7				7						
0.5														4	
<=1								7							
1														2	
<=2													2		
2		1													
<=4											3				
4			3												
<=8						6									
8			4								4				
>64		6											5		
>128						1									
512												1			
>1024												6			

Table Antimicrobial susceptibility testing of Salmonella 1,4,[5],12:i:- in Turkeys - fattening flocks - before slaughter

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method:

Country of Origin: Belgium

	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**	**1**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**1**
<=0.03										1					
<=0.25				1											
<=0.5					1				1						
0.5							1							1	
<=1								1							
8			1								1				
>32															1
>64		1											1		
>128						1									
>1024												1			

Table Antimicrobial susceptibility testing of Salmonella 1,4,[5],12:i:- in Gallus gallus (fowl) - laying hens

Sampling Stage: Farm

Sampling Type: environmental sample - dust

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method:

Country of Origin: Belgium

	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**
0.064							1			1					
<=0.25				1											1
<=0.5					1				1						
0.5														1	
<=1								1							
<=8						1									
8			1												
16											1				
>64		1											1		
>1024												1			

Table Antimicrobial susceptibility testing of Salmonella 1,4,[5],12:i:- 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

	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**	**2**	**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							
<=4											1				
4			1												
<=8						2									
8			1								1				
>64		2											2		
>1024												2			

Table Antimicrobial susceptibility testing of Salmonella Abony in Gallus gallus (fowl) - broilers - before slaughter

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method:

Country of Origin: Belgium

	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								
0.064										1					
<=0.25				1											
<=0.5					1				1						
0.5														1	
<=1		1						1							
<=2													1		
<=4											1				
4			1												
<=8						1									
>32															1
>1024												1			

Table Antimicrobial susceptibility testing of Salmonella Agona 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

	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
<=1								1							
1					1										
<=2													1		
2		1													
<=4											1				
<=8						1									
8			1												
256												1			

Table Antimicrobial susceptibility testing of Salmonella Agona in Gallus gallus (fowl) - broilers - before slaughter

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method:

Country of Origin: Belgium

	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	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**
MIC	**N of resistant isolates**	**3**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**3**
<=0.015							3								
<=0.03										7					
0.03							2								
<=0.25				6										4	2
0.25							2								
<=0.5					7				6						
0.5				1										2	2
<=1		2						7							
1									1					1	
<=2													7		
2		2													
<=4											5				
4			1												
<=8						5									
8			6												
16						2					2				
32												1			
>32															3
64												2			
>64		3													
128												1			
>1024												3			

Table Antimicrobial susceptibility testing of Salmonella Agona in Gallus gallus (fowl) - laying hens

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method:

Country of Origin: Belgium

	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**	**0**
<=0.03										1					
0.064							1								
<=0.25				1											
<=0.5					1				1						
0.5														1	1
<=1		1						1							
<=4											1				
4													1		
<=8						1									
8			1												
>1024												1			

Table Antimicrobial susceptibility testing of Salmonella Bispebjerg in Gallus gallus (fowl) - laying hens

Sampling Stage: Farm

Sampling Type: environmental sample - dust

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method:

Country of Origin: Belgium

	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				
4			1												
<=8						1									
64												1			

Table Antimicrobial susceptibility testing of Salmonella Braenderup 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

	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**	**1**
<=0.03										1					
0.03							1								
<=0.25				1											
<=0.5					1				1						
0.5														1	
<=1								1							
<=4											1				
<=8						1									
8			1												
>32															1
>64		1											1		
>1024												1			

Table Antimicrobial susceptibility testing of Salmonella Braenderup 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

	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		1						1							
1					1										
<=2													1		
2									1						
<=4											1				
<=8						1									
8			1												
64												1			

Table Antimicrobial susceptibility testing of Salmonella Brancaster in Gallus gallus (fowl) - broilers - before slaughter

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method:

Country of Origin: Belgium

	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**	**0**
<=0.03										1					
0.03							1								
<=0.25				1											
<=0.5					1										
0.5														1	1
<=1								1							
1									1						
2		1													
<=4											1				
4													1		
<=8						1									
8			1												
>1024												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

	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 Brandenburg in Gallus gallus (fowl) - laying hens

Sampling Stage: Farm

Sampling Type: environmental sample - dust

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method:

Country of Origin: Belgium

	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						1							
<=2													1		
<=4											1				
<=8						1									
8			1												
32												1			

Table Antimicrobial susceptibility testing of Salmonella Bredeney 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

	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**	**1**
<=0.015							1								
<=0.03										1					
<=0.25				1										1	
<=0.5					1				1						
<=1								1							
<=4											1				
<=8						1									
16			1												
>32															1
>64		1											1		
>1024												1			

Table Antimicrobial susceptibility testing of Salmonella Bredeney in Gallus gallus (fowl) - laying hens

Sampling Stage: Farm

Sampling Type: environmental sample - dust

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method:

Country of Origin: Belgium

	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**	**0**	**0**	**0**	**0**	**0**
<=0.03										1					
0.12							1								
<=0.25				1											1
<=0.5					1				1						
0.5														1	
<=1								1							
<=2													1		
2		1													
<=4											1				
<=8						1									
16			1												
32												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

	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**	**2**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**6**	**2**	**0**	**3**
<=0.015							1								
<=0.03										13					
0.03							13								
0.064										1					
<=0.25				14										2	2
<=0.5					14				12						
0.5														10	8
<=1		3						13							
1									2					2	1
<=2													12		
2		9						1							
<=4											13				
<=8						6									
8			12								1				
16			2			7									
>32															3
64												6			
>64		2											2		
128												2			
>128						1									
512												1			
>1024												5			

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

	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**	**2**	**1**	**0**	**1**
<=0.015							1								
<=0.03										3					
0.03							2								
<=0.25				3										1	
<=0.5					3				3						
0.5														2	2
<=1		1						3							
<=2													2		
2		1													
<=4											3				
<=8						2									
8			3												
16						1									
>32															1
>64		1											1		
128												1			
512												1			
>1024												1			

Table Antimicrobial susceptibility testing of Salmonella Derby in Gallus gallus (fowl) - broilers - before slaughter

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method:

Country of Origin: Belgium

	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**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**0**
<=0.015							1								
<=0.03										4					
0.03							2								
0.064							1								
<=0.25				4											2
<=0.5					4				3						
0.5														4	2
<=1		3						4							
1									1						
<=2													3		
2		1													
<=4											4				
4			1												
<=8						3									
8			2												
16						1									
64			1									1			
>64													1		
128												1			
256												1			
>1024												1			

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

	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**	**2**	**0**	**1**
<=0.03										2					
0.03							2								
<=0.25				2										1	1
<=0.5					2				2						
<=1								2							
1														1	
<=4											2				
<=8						2									
8			1												
16			1												
>32															1
>64		2											2		
>1024												2			

Table Antimicrobial susceptibility testing of Salmonella enterica, subspecies enterica in Gallus gallus (fowl) - broilers - before slaughter

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method:

Country of Origin: Belgium

	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**	**1**	**0**	**3**	**3**	**0**	**0**	**1**
<=0.03										3					
<=0.25				3											
<=0.5					3				2						
0.5							1							1	2
<=1		1						3							
1							2							2	
<=2													1		
2		1													
4													2		
8			2												
16			1			3			1						
>32															1
>64		1													
>128											3				
>1024												3			

Table Antimicrobial susceptibility testing of Salmonella Enteritidis 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

	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 Enteritidis in Gallus gallus (fowl) - broilers - before slaughter

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method:

Country of Origin: Belgium

	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**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
<=0.015							3								
<=0.03										8					
0.03							5								
<=0.25				8										3	3
<=0.5					8				8						
0.5														4	5
<=1		3						3							
1														1	
<=2													8		
2		5						2							
<=4											8				
4			4					3							
<=8						8									
8			4												
32												3			
64												5			

Table Antimicrobial susceptibility testing of Salmonella Enteritidis in Gallus gallus (fowl) - laying hens

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method:

Country of Origin: Belgium

	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**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
<=0.015							1								
<=0.03										3					
0.03							2								
<=0.25				3										2	2
<=0.5					3				3						
0.5														1	1
<=1		2						1							
<=2													3		
2		1						1							
<=4											3				
4			1					1							
<=8						2									
8			2												
16						1									
32												1			
64												2			

Table Antimicrobial susceptibility testing of Salmonella Enteritidis in Gallus gallus (fowl) - laying hens

Sampling Stage: Farm

Sampling Type: environmental sample - dust

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method:

Country of Origin: Belgium

	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**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
<=0.03										4					
0.03							4								
<=0.25				4										2	4
<=0.5					4				4						
0.5														2	
<=1		4						3							
<=2													4		
2								1							
<=4											4				
4			1												
<=8						4									
8			3												
32												2			
64												2			

Table Antimicrobial susceptibility testing of Salmonella Gaminara in Gallus gallus (fowl) - broilers - before slaughter

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method:

Country of Origin: Belgium

	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**	**1**
<=0.015							1								
<=0.03										2					
0.03							1								
<=0.25				2											1
<=0.5					2				2						
0.5														2	
<=1		1						2							
<=2													1		
<=4											2				
<=8						2									
8			2												
16												1			
>32															1
>64		1											1		
>1024												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: HACCP and own check

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method:

Country of Origin: Belgium

	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**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**1**	**1**	**0**	**1**
<=0.03										1					
<=0.25				1											
0.25							1								
<=0.5					1										
0.5														1	
<=1								1							
1									1						
<=8						1									
>32															1
64			1												
>64		1											1		
>128											1				
>1024												1			

Table Antimicrobial susceptibility testing of Salmonella Goldcoast in Gallus gallus (fowl) - broilers - before slaughter

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method:

Country of Origin: Belgium

	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										2	2
<=0.5					2				2						
<=1		2						2							
<=2													2		
<=4											2				
<=8						2									
8			2												
32												1			
64												1			

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: Official sampling

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method:

Country of Origin: Belgium

	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	
<=0.5					2				1						
0.5														1	2
<=1		2						2							
1									1						
<=2													2		
<=4											2				
<=8						2									
8			2												
64												2			

Table Antimicrobial susceptibility testing of Salmonella Infantis in Gallus gallus (fowl) - broilers - before slaughter

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method:

Country of Origin: Belgium

	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	**55**	**55**	**55**	**55**	**55**	**55**	**55**	**55**	**55**	**55**	**55**	**55**	**55**	**55**
MIC	**N of resistant isolates**	**26**	**1**	**1**	**1**	**2**	**51**	**0**	**0**	**0**	**51**	**53**	**39**	**15**	**26**
<=0.03										52					
0.03							4								
0.064										3					
0.12							2								
<=0.25				46										1	16
0.25							20								
<=0.5					43				51						
0.5				8			20							17	11
<=1		5						55							
1					11		8		4					22	2
<=2			1										12		
2		18												15	
<=4											4				
4		6	2		1								4		
>4				1											
<=8						27									
8			32												
>8							1								
16			19			26									
32		2	1			1									
>32															26
64		1										2	3		
>64		23											36		
128											10				

	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	**55**	**55**	**55**	**55**	**55**	**55**	**55**	**55**	**55**	**55**	**55**	**55**	**55**	**55**
MIC	**N of resistant isolates**	**26**	**1**	**1**	**1**	**2**	**51**	**0**	**0**	**0**	**51**	**53**	**39**	**15**	**26**
>128						1					41				
>1024												53			

Table Antimicrobial susceptibility testing of Salmonella Infantis in Gallus gallus (fowl) - laying hens

Sampling Stage: Farm

Sampling Type: environmental sample - dust

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method:

Country of Origin: Belgium

	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**	**3**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**2**	**2**	**2**	**0**	**2**
<=0.015							2								
<=0.03										6					
0.03							2								
<=0.25				6										2	3
0.25							2								
<=0.5					6				6						
0.5														2	1
<=1		3						6							
1														2	
<=2													4		
<=4											4				
4			2												
<=8						5									
8			3												
16			1			1									
32												1			
>32															2
64												1			
>64		3											2		
128												2			
>128											2				
>1024												2			

Table Antimicrobial susceptibility testing of Salmonella Lagos in Gallus gallus (fowl) - broilers - before slaughter

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method:

Country of Origin: Belgium

	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**	**1**	**1**
0.064										1					
0.25							1								
<=0.5									1						
0.5				1											
<=1								1							
1					1										
2														1	
8			1												
16						1									
>32															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: Official sampling

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method:

Country of Origin: Belgium

	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**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
<=0.03										3					
0.03							3								
<=0.25				3											
<=0.5					3				3						
0.5														3	3
<=1		1						3							
<=2													3		
2		2													
<=4											3				
<=8						2									
8			3												
16						1									
64												3			

Table Antimicrobial susceptibility testing of Salmonella Livingstone in Gallus gallus (fowl) - broilers - before slaughter

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method:

Country of Origin: Belgium

	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	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**
MIC	**N of resistant isolates**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**
<=0.015							2								
<=0.03										17					
0.03							15								
<=0.25				17										3	
<=0.5					16				17						
0.5														12	15
<=1		12						17							
1					1									2	2
<=2													16		
2		5													
<=4											16				
<=8						16									
8			11								1				
16			5			1							1		
32												2			
64												13			
>64			1												
128												2			

Table Antimicrobial susceptibility testing of Salmonella Llandoff in Gallus gallus (fowl) - laying hens

Sampling Stage: Farm

Sampling Type: environmental sample - dust

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method:

Country of Origin: Belgium

	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**	**1**	**1**	**1**	**0**	**1**	**1**	**0**	**0**	**1**	**1**	**0**	**0**	**1**
0.12							1			1					
<=0.25														1	
<=0.5									1						
<=1		1													
<=2													1		
2				1											
4								1							1
<=8						1									
8					1										
64											1				
>64			1												
>1024												1			

Table Antimicrobial susceptibility testing of Salmonella Manchester in Gallus gallus (fowl) - broilers - before slaughter

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method:

Country of Origin: Belgium

	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**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
<=0.015							2								
<=0.03										3					
0.03							1								
<=0.25				3										2	1
<=0.5					3				3						
0.5														1	2
<=1		1						3							
<=2													3		
2		2													
<=4											3				
4			1												
<=8						3									
8			2												
64												1			
128												1			
256												1			

Table Antimicrobial susceptibility testing of Salmonella Mbandaka in Gallus gallus (fowl) - broilers - before slaughter

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method:

Country of Origin: Belgium

	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**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
<=0.015							3								
<=0.03										2					
0.064										1					
<=0.25				3										2	3
<=0.5					3				3						
0.5														1	
<=1		3						3							
<=2													3		
<=4											3				
<=8						3									
8			2												
16			1												
64												1			
128												2			

Table Antimicrobial susceptibility testing of Salmonella Mbandaka 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

	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											
<=0.5					1										
0.5															1
<=1		1						1							
1									1					1	
<=2													1		
<=4											1				
<=8						1									
8			1												
128												1			

Table Antimicrobial susceptibility testing of Salmonella Minnesota in Gallus gallus (fowl) - broilers - before slaughter

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method:

Country of Origin: Belgium

	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**	**4**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**2**
<=0.03										5					
0.03							5								
0.064							1			1					
<=0.25				6											1
<=0.5					6				4						
0.5														5	3
<=1		2						6							
1									2					1	
<=2													5		
<=4											4				
4													1		
<=8						4									
8			5								2				
16		1	1			1									
32		1				1									
>32															2
64												2			
>64		2													
128												2			
>1024												2			

Table Antimicrobial susceptibility testing of Salmonella Montevideo 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

	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				
<=8						1									
8			1												
128												1			

Table Antimicrobial susceptibility testing of Salmonella Newport in Gallus gallus (fowl) - broilers - before slaughter

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method:

Country of Origin: Belgium

	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										1	
<=0.5					1				1						
<=1		1													
<=2													1		
2								1							
<=4											1				
<=8						1									
8			1												
>32															1
>1024												1			

Table Antimicrobial susceptibility testing of Salmonella Paratyphi B in Gallus gallus (fowl) - broilers - before slaughter

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON pnl2

Analytical Method:

Country of Origin: Belgium

	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**	**0.5**	**0.5**	**8**	**2**	**2**	**0.06**	**1**	**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	
0.12				1							
0.25									1		
0.5							1				
2						1					
4		1			1						
8											1
16			1								

Table Antimicrobial susceptibility testing of Salmonella Paratyphi B in Gallus gallus (fowl) - broilers - before slaughter

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method:

Country of Origin: Belgium

	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	**23**	**23**	**23**	**23**	**23**	**23**	**23**	**23**	**23**	**23**	**23**	**23**	**23**	**23**
MIC	**N of resistant isolates**	**9**	**0**	**1**	**0**	**0**	**8**	**0**	**1**	**0**	**6**	**18**	**2**	**0**	**21**
<=0.015							4								
<=0.03										19					
0.03							11								
0.064										4					
<=0.25				18										6	
0.25							3								
<=0.5					19				21						
0.5				4										13	1
<=1		11						21							
1					3		5		1					4	1
<=2			2										16		
2		2			1			2							
<=4											13				
4		1	6						1				5		
>4				1											
<=8						18									
8			12								4				
16			3			5									
32												1			
>32															21
64												3	1		
>64		9											1		
128												1			
>128											6				

	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	**23**	**23**	**23**	**23**	**23**	**23**	**23**	**23**	**23**	**23**	**23**	**23**	**23**	**23**
MIC	**N of resistant isolates**	**9**	**0**	**1**	**0**	**0**	**8**	**0**	**1**	**0**	**6**	**18**	**2**	**0**	**21**
>1024												18			

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

	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**	**1**	**0**	**0**	**0**	**1**	**2**	**1**	**0**	**2**
<=0.03										3					
0.03							2								
<=0.25				3											
<=0.5					2				3						
0.5							1							2	1
<=1		2						3							
1					1									1	
<=2													2		
<=4											2				
<=8						2									
8			2												
16			1												
32											1				
>32															2
64												1			
>64		1											1		
>128						1									
>1024												2			

Table Antimicrobial susceptibility testing of Salmonella Rissen in Gallus gallus (fowl) - broilers - before slaughter

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method:

Country of Origin: Belgium

	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**	**1**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**1**
<=0.015							7								
<=0.03										8					
0.12							1								
<=0.25				8										3	
<=0.5					7				8						
0.5														4	6
<=1		7						8							
1					1									1	
<=2													7		
2															1
<=4											8				
4			1												
<=8						7									
8			7												
>32															1
64						1						6	1		
>64		1													
128												1			
>1024												1			

Table Antimicrobial susceptibility testing of Salmonella Schwarzengrund in Gallus gallus (fowl) - broilers - before slaughter

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method:

Country of Origin: Belgium

	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						1							
<=2													1		
<=4											1				
4			1												
<=8						1									
32												1			

Table Antimicrobial susceptibility testing of Salmonella Senftenberg in Gallus gallus (fowl) - broilers - before slaughter

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method:

Country of Origin: Belgium

	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											
<=0.5					2				2						
0.5														1	2
<=1		1						2							
1														1	
<=2													2		
2		1													
<=4											2				
4			1												
<=8						2									
8			1												
64												2			

Table Antimicrobial susceptibility testing of Salmonella Senftenberg in Gallus gallus (fowl) - laying hens

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method:

Country of Origin: Belgium

	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													
<=4											1				
4													1		
<=8						1									
8			1												
128												1			

Table Antimicrobial susceptibility testing of Salmonella Soerenga in Gallus gallus (fowl) - broilers - before slaughter

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method:

Country of Origin: Belgium

	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**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**
<=0.015							3								
<=0.03										4					
0.03							1								
<=0.25				4										1	
<=0.5					4				4						
0.5														2	4
<=1		2						4							
1														1	
<=2													4		
2		2													
<=4											4				
<=8						4									
8			3												
16			1												
64												2			
128												1			
512												1			

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

	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	**15**	**15**	**15**	**15**	**15**	**15**	**15**	**15**	**15**	**15**	**15**	**15**	**15**	**15**
MIC	**N of resistant isolates**	**10**	**1**	**0**	**0**	**1**	**2**	**0**	**0**	**0**	**1**	**10**	**9**	**1**	**5**
<=0.015							1								
<=0.03										13					
0.03							11								
0.064							1			2					
<=0.25				15										6	5
0.25							1								
<=0.5					11				14						
0.5							1							7	5
<=1		2						14							
1					4				1					1	
<=2													4		
2		3						1						1	
<=4											11				
4													1		
<=8						13									
8			10								3		1		
16			4			1						1			
32			1								1				
>32															5
64												2			
>64		10											9		
128												2			
>128						1									
>1024												10			

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

	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	1
<=0.5					1				1						
<=1								1							
<=4											1				
<=8						1									
8			1												
>64		1											1		
>1024												1			

Table Antimicrobial susceptibility testing of Salmonella spp., unspecified in Gallus gallus (fowl) - broilers - before slaughter

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method:

Country of Origin: Belgium

	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**	**0**	**0**	**1**
<=0.015							2								
<=0.03										1					
0.064										1					
<=0.25				2										2	
<=0.5					2				2						
0.5															1
<=1		2						2							
<=2			1										2		
<=4											2				
4			1												
<=8						2									
>32															1
128												1			
>1024												1			

Table Antimicrobial susceptibility testing of Salmonella spp., unspecified in Gallus gallus (fowl) - laying hens

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method:

Country of Origin: Belgium

	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						
0.5				1											1
<=1								1							
1					1										
<=2													1		
<=4											1				
4		1	1												
<=8						1									
64												1			

Table Antimicrobial susceptibility testing of Salmonella Tennessee in Gallus gallus (fowl) - broilers - before slaughter

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method:

Country of Origin: Belgium

	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											
<=0.5					2				2						
0.5														2	2
<=1		2						2							
<=2													2		
<=4											2				
<=8						2									
8			2												
32												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

	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	**20**	**20**	**20**	**20**	**20**	**20**	**20**	**20**	**20**	**20**	**20**	**20**	**20**	**20**
MIC	**N of resistant isolates**	**18**	**0**	**0**	**0**	**2**	**1**	**0**	**0**	**0**	**1**	**10**	**10**	**0**	**7**
<=0.015							3								
<=0.03										16					
0.03							16								
0.064										4					
<=0.25				20										4	8
<=0.5					20				18						
0.5														14	5
<=1								19							
1							1		2					2	
<=2													10		
2		2						1							
<=4											18				
4			4												
<=8						18									
8			13								1				
16			3									3			
32						1						2			
>32															7
64											1	4	1		
>64		18											9		
128												1			
>128						1									
>1024												10			

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

	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**	**2**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**
<=0.03										4					
0.03							3								
0.064							1								
<=0.25				4										1	1
<=0.5					4				4						
0.5														3	2
<=1		1						4							
<=2													3		
2		1													
<=4											4				
4			1												
<=8						3									
8			3										1		
32												1			
>32															1
64												2			
>64		2													
128						1						1			

Table Antimicrobial susceptibility testing of Salmonella Typhimurium in Gallus gallus (fowl) - broilers - before slaughter

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method:

Country of Origin: Belgium

	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	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**
MIC	**N of resistant isolates**	**4**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**2**	**1**	**0**	**2**
<=0.015							2								
<=0.03										6					
0.03							5								
0.064										1					
<=0.25				7										3	4
<=0.5					7				7						
0.5														3	1
<=1		3						7							
1														1	
<=2													6		
<=4											7				
4			3												
<=8						6									
8			4												
32												4			
>32															2
64												1			
>64		4											1		
>128						1									
>1024												2			

Table Antimicrobial susceptibility testing of Salmonella Typhimurium in Gallus gallus (fowl) - laying hens

Sampling Stage: Farm

Sampling Type: environmental sample - dust

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method:

Country of Origin: Belgium

	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						1							
<=2													1		
<=8						1									
8			1								1				
16												1			

Table Antimicrobial susceptibility testing of Salmonella Typhimurium 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

	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				1						
0.5															1
<=1								1							
1														1	
4		1											1		
8											1				
16			1			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) - carcase

Sampling Stage: Slaughterhouse

Sampling Type: food sample - carcase swabs

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON pnl2

Analytical Method:

Country of Origin: Netherlands

	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**	**1**	**2**	**2**	**2**	**2**	**2**	**0**	**1**	**0**	**0**
<=0.03										1	
0.03								1			
0.064								1		1	
0.12		1									
0.25									1		
0.5		1									
1									1		
4				1							
8			1	1		1	1				2
16			1			1	1				
64					2						

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

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

	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**	**1**	**0**	**0**	**1**	**1**	**0**	**0**
<=0.015							1								
<=0.03										2					
0.03							1								
<=0.25														1	
<=0.5									1						
0.5															1
<=1								2							
1														1	1
<=2													1		
<=4											2				
4			1												
>4				2											
<=8						2									
8			1		1										
>8					1										
32									1			1			
>64		2											1		
>1024												1			

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

Sampling Stage: Slaughterhouse

Sampling Type: food sample - carcase swabs

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON pnl2

Analytical Method:

Country of Origin: Belgium

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	**96**	**96**	**96**	**96**	**96**	**96**	**96**	**96**	**96**	**96**
MIC / **N of resistant isolates**	**90**	**96**	**15**	**20**	**94**	**15**	**0**	**1**	**0**	**0**
<=0.015							82			
<=0.03									93	
0.03							11			
<=0.064			76							
0.064							3		3	
<=0.12						67		58		
0.12	6		5							
0.25	23					14		33		
0.5	19				2			4		
1	15	11			10			1		
2	9	9	2	12	13					8
4	11	26	5	42	12	5				42
8	10	12	8	22	23	7				37
16	3	14		5	23	2				9
32		13		1	7	1				
64		6		11	5					

	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	**96**	**96**	**96**	**96**	**96**	**96**	**96**	**96**	**96**	**96**
MIC	**N of resistant isolates**	**90**	**96**	**15**	**20**	**94**	**15**	**0**	**1**	**0**	**0**
>64			5		3						
128						1					

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

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

	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	**96**	**96**	**96**	**96**	**96**	**96**	**96**	**96**	**96**	**96**	**96**	**96**	**96**	**96**
MIC	**N of resistant isolates**	**96**	**7**	**95**	**94**	**37**	**64**	**0**	**11**	**0**	**58**	**83**	**52**	**0**	**65**
<=0.015							20								
<=0.03										92					
0.03							12								
0.064										4					
0.12							2								
<=0.25				1										76	14
0.25							28								
<=0.5					2				53						
0.5				1			18							19	11
<=1								95							
1				10	7		3		29					1	6
<=2			1										39		
2				14	15		1	1	3						
<=4											34				
4			30	15	7				1				4		
>4				55											
<=8						55						5			
8			50		26		9				2		1		
>8					39		3								
16			8			4			3		2	5	1		
32			4			6			6		1	3	2		1
>32									1						64
64		1	2			16					4		16		

	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	**96**	**96**	**96**	**96**	**96**	**96**	**96**	**96**	**96**	**96**	**96**	**96**	**96**	**96**
MIC	**N of resistant isolates**	**96**	**7**	**95**	**94**	**37**	**64**	**0**	**11**	**0**	**58**	**83**	**52**	**0**	**65**
>64		95	1										33		
128						8					18				
>128						7					35				
256												2			
1024												23			
>1024												58			

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

Sampling Stage: Slaughterhouse

Sampling Type: food sample - carcase swabs

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON pnl2

Analytical Method:

Country of Origin: Unknown

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**	**1**	**2**	**0**	**0**	**0**	**0**	**0**
<=0.015							1			
<=0.03									2	
0.03							1			
<=0.064			2							
<=0.12								1		
0.25						2		1		
0.5	1									
1		1								
2	1									
8		1		1	1					2
16				1	1					

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

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: Unknown

	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**	**1**	**2**	**0**	**0**	**0**	**2**	**2**	**2**	**0**	**2**
<=0.03										2					
<=0.25														2	
<=0.5									2						
0.5							1								
<=1								2							
1				1			1								
<=2			1												
>4				1											
<=8						1									
>8					2										
16			1												
>32															2
64						1									
>64		2											2		
>128											2				
1024												1			
>1024												1			

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

Sampling Stage: Slaughterhouse

Sampling Type: food sample - carcase swabs

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON pnl2

Analytical Method:

Country of Origin: France

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	**8**	**8**	**8**	**8**	**8**	**8**	**8**	**8**	**8**	**8**
MIC **N of resistant isolates**	**7**	**8**	**1**	**3**	**8**	**1**	**0**	**0**	**0**	**0**
<=0.015							8			
<=0.03									7	
<=0.064			7							
0.064									1	
<=0.12						5		8		
0.12	1									
0.25	1					2				
0.5	1									
1	1									
2	2	1		1						1
4	1	3	1	2	2					2
8		1		2	1	1				5
16	1	1		1	2					
32		1		2	2					
64		1			1					

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

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

	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	**8**	**8**	**8**	**8**	**8**	**8**	**8**	**8**	**8**	**8**	**8**	**8**	**8**	**8**
MIC	**N of resistant isolates**	**8**	**1**	**8**	**8**	**3**	**5**	**1**	**0**	**0**	**5**	**7**	**4**	**0**	**5**
<=0.015							2								
<=0.03										7					
0.03							1								
0.064										1					
<=0.25														5	1
0.25							2								
<=0.5									6						
0.5							2							2	2
<=1								7							
1							1		2					1	
<=2													3		
2				2	1										
<=4											3				
4			2	2				1					1		
>4				4											
<=8						4									
8			4		3										
>8					4										
16			1			1						1			
>32															5
64			1			1							1		
>64		8											3		
128						1					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	**8**	**8**	**8**	**8**	**8**	**8**	**8**	**8**	**8**	**8**	**8**	**8**	**8**	**8**
MIC	**N of resistant isolates**	**8**	**1**	**8**	**8**	**3**	**5**	**1**	**0**	**0**	**5**	**7**	**4**	**0**	**5**
>128						1					2				
1024												3			
>1024												4			

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

Sampling Stage: Processing plant

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON pnl2

Analytical Method:

Country of Origin: Lithuania

	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	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**
MIC	**N of resistant isolates**	**2**	**2**	**1**	**1**	**2**	**1**	**0**	**0**	**0**	**0**
<=0.015								2			
<=0.03										3	
0.03								1			
<=0.064		1		2							
<=0.12							1		2		
<=0.25			1			1					
0.25		1					1		1		
2						1					
4		1		1			1				3
8			1		2	1					
32			1								
64					1						

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

Sampling Stage: Processing plant

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: Lithuania

	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	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**
MIC	**N of resistant isolates**	**3**	**1**	**2**	**2**	**1**	**2**	**0**	**0**	**0**	**1**	**3**	**2**	**0**	**2**
<=0.015							1								
<=0.03										3					
<=0.25				1										2	1
<=0.5					1				2						
0.5							1							1	
<=1								3							
1									1						
<=2													1		
2					1										
<=4											1				
4			1												
>4				2											
<=8						2									
8			1		1		1								
16											1				
32			1												
>32															2
>64		3											2		
>128						1					1				
>1024												3			

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

Sampling Stage: Processing plant

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON pnl2

Analytical Method:

Country of Origin: Netherlands

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	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**
MIC **N of resistant isolates**	**3**	**3**	**1**	**1**	**2**	**1**	**0**	**0**	**0**	**0**
<=0.015							2			
<=0.03									3	
0.03							1			
<=0.064			2							
<=0.12						2		2		
0.25	1							1		
0.5	1				1					
1	1	1								
2				1						1
4				1		1				2
8		1	1		1					
16		1			1					
64				1						

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

Sampling Stage: Processing plant

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: Netherlands

	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	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**
MIC	**N of resistant isolates**	**3**	**0**	**3**	**2**	**0**	**1**	**0**	**2**	**0**	**1**	**2**	**3**	**0**	**0**
<=0.015							2								
<=0.03										3					
<=0.25														1	1
0.25							1								
<=0.5					1				1						
0.5				1										2	1
<=1								3							
1															1
<=2			1												
<=4											2				
4			1						1						
>4				2											
<=8						3									
8			1		1										
>8					1										
16									1						
32												1	1		
64													1		
>64		3											1		
128											1				
>1024												2			

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

Sampling Stage: Processing plant

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON pnl2

Analytical Method:

Country of Origin: Poland

	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							
0.25							1		1		
2						1					
8		1			1						
16											1
64			1								

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

Sampling Stage: Processing plant

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: Poland

	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**	**0**	**1**	**0**	**0**	**0**	**1**	**1**	**1**	**0**	**1**
<=0.03										1					
<=0.25														1	
<=0.5									1						
0.5							1								
<=1								1							
2					1										
>4				1											
<=8						1									
8			1												
>32															1
>64		1											1		
>128											1				
>1024												1			

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

Sampling Stage: Processing plant

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON pnl2

Analytical Method:

Country of Origin: Belgium

	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	**44**	**44**	**44**	**44**	**44**	**44**	**44**	**44**	**44**	**44**
MIC	**N of resistant isolates**	**38**	**43**	**8**	**10**	**41**	**8**	**0**	**0**	**0**	**0**
<=0.015								35			
<=0.03										44	
0.03								8			
<=0.064		1		34							
0.064								1			
<=0.12							27		29		
0.12		5		2							
<=0.25			1			1					
0.25		8					9		15		
0.5		8	2			2					
1		1				14	1				
2		5	7	1	4	1	1				7
4		12	8	5	17	3	2				23
8		3	6	2	13	4	4				12
16		1	8		2	10					2
32			9			6					

	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	**44**	**44**	**44**	**44**	**44**	**44**	**44**	**44**	**44**	**44**
MIC	**N of resistant isolates**	**38**	**43**	**8**	**10**	**41**	**8**	**0**	**0**	**0**	**0**
64			2		8	3					
>64			1								

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

Sampling Stage: Processing plant

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: Belgium

	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	**44**	**44**	**44**	**44**	**44**	**44**	**44**	**44**	**44**	**44**	**44**	**44**	**44**	**44**
MIC	**N of resistant isolates**	**44**	**1**	**43**	**41**	**15**	**25**	**0**	**7**	**0**	**19**	**36**	**31**	**1**	**24**
<=0.015							17								
<=0.03										43					
0.03							2								
0.064										1					
0.12							2								
<=0.25				1										31	9
0.25							11								
<=0.5					3				31						
0.5				2			4							9	8
<=1								44							
1					12		4		5					3	3
<=2			4										11		
2				8	3				1					1	
<=4											21				
4			21	6	3		1						2		
>4				27											
<=8						28						2			
8			13		6		1		1		2				
>8					17		2								
16			5			1			1		2	3	1		
32			1			5			3			2	2		
>32									2						24
64		1				8					1	1	12		

	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	**44**	**44**	**44**	**44**	**44**	**44**	**44**	**44**	**44**	**44**	**44**	**44**	**44**	**44**
MIC	**N of resistant isolates**	**44**	**1**	**43**	**41**	**15**	**25**	**0**	**7**	**0**	**19**	**36**	**31**	**1**	**24**
>64		43											16		
128						1					10				
>128						1					8				
>1024												36			

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

Sampling Stage: Processing plant

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON pnl2

Analytical Method:

Country of Origin: Unknown

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	**22**	**22**	**22**	**22**	**22**	**22**	**22**	**22**	**22**	**22**
MIC **N of resistant isolates**	**22**	**22**	**2**	**4**	**22**	**2**	**0**	**0**	**0**	**0**
<=0.015							17			
<=0.03									22	
0.03							5			
<=0.064			15							
<=0.12						15		13		
0.12			5							
0.25	5					4		9		
0.5	5					1				
1	5	2			4					
2	1	3		3	3					3
4		4		8	3	1				9
8	3	4	2	7	3	1				9
16	3	3		1	6					1
32		2		1	3					
64		1		2						
>64		3								

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

Sampling Stage: Processing plant

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

	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	**22**	**22**	**22**	**22**	**22**	**22**	**22**	**22**	**22**	**22**	**22**	**22**	**22**	**22**
MIC	**N of resistant isolates**	**22**	**0**	**21**	**22**	**6**	**15**	**0**	**3**	**0**	**13**	**18**	**11**	**0**	**14**
<=0.015							3								
<=0.03										22					
0.03							3								
0.064							1								
0.12							3								
<=0.25				1										15	3
0.25							5								
<=0.5									13						
0.5							2							6	5
<=1								22							
1				2	4				6					1	
<=2			1										11		
2				3	4										
<=4											6				
4			10	3	1										
>4				13											
<=8						16						2			
8			9		6		4				1				
>8					7		1								
16			2						1		2				
32						2			2			2	1		
>32															14
64						3					3		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	**22**	**22**	**22**	**22**	**22**	**22**	**22**	**22**	**22**	**22**	**22**	**22**	**22**	**22**
MIC	**N of resistant isolates**	**22**	**0**	**21**	**22**	**6**	**15**	**0**	**3**	**0**	**13**	**18**	**11**	**0**	**14**
>64		22											7		
128											5				
>128						1					5				
1024												11			
>1024												7			

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

Sampling Stage: Processing plant

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON pnl2

Analytical Method:

Country of Origin: France

	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		1		
0.5		1									
4						1					1
8					1						
16			1								

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

Sampling Stage: Processing plant

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: France

	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**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**0**
<=0.015							1								
<=0.03										1					
<=0.25														1	
<=1								1							
1									1						1
<=4											1				
4					1										
>4				1											
<=8						1									
8			1												
64													1		
>64		1													
>1024												1			

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: ESBL MON pnl2

Analytical Method:

Country of Origin: Unknown

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	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**
MIC **N of resistant isolates**	**14**	**17**	**6**	**7**	**17**	**6**	**0**	**0**	**0**	**0**
<=0.015							14			
<=0.03									16	
0.03							3			
<=0.064			9							
0.064									1	
<=0.12						6		8		
0.12	3		2							
0.25	3					5		9		
0.5	4									
1	2	1			1					
2	2	1			1					2
4	2	5	5	7	2	4				8
8	1	5	1	3	3	2				5
16		2		1	7					2
32		1		4	2					
64		2		2	1					

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: ESBL MON

Analytical Method:

Country of Origin: Unknown

	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	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**
MIC	**N of resistant isolates**	**17**	**0**	**17**	**17**	**8**	**12**	**0**	**2**	**0**	**11**	**16**	**9**	**0**	**13**
<=0.015							4								
<=0.03										17					
0.03							1								
0.12							2								
<=0.25														16	2
0.25							4								
<=0.5									11						
0.5							5							1	1
<=1								17							
1				1	1				4						1
<=2													8		
2					1		1								
<=4											5				
4			6	5											
>4				11											
<=8						9									
8			9		5						1				
>8					10										
16			2										1		
32						2					1	1			
>32									2						13
64						5									
>64		17											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	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**
MIC	**N of resistant isolates**	**17**	**0**	**17**	**17**	**8**	**12**	**0**	**2**	**0**	**11**	**16**	**9**	**0**	**13**
128						1					6				
>128											4				
>1024												16			

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: Ireland

	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		1		
1		1				1					
4					1						1
64			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: Ireland

	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**	**1**	**1**	**1**	**1**	**1**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**1**
<=0.03										1					
<=0.25														1	
0.25							1								
<=0.5									1						
<=1								1							
1					1										
<=4											1				
>4				1											
>32															1
64			1												
>64		1											1		
128						1									
>1024												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 pnl2

Analytical Method:

Country of Origin: Belgium

	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	**14**	**14**	**14**	**14**	**14**	**14**	**14**	**14**	**14**	**14**
MIC	**N of resistant isolates**	**14**	**14**	**0**	**1**	**12**	**0**	**0**	**0**	**0**	**0**
<=0.015								12			
<=0.03										14	
0.03								2			
<=0.064				12							
<=0.12							11		13		
0.12				2							
0.25		2					3		1		
0.5						2					
1		2	2			2					
2		2	1		1	5					
4		3			9	3					11
8		3	1		3	1					3
16		2	2		1	1					
32			4								
64			3								
>64			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: Belgium

	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	**15**	**15**	**15**	**15**	**15**	**15**	**15**	**15**	**15**	**15**	**15**	**15**	**15**	**15**
MIC	**N of resistant isolates**	**14**	**0**	**14**	**13**	**12**	**13**	**0**	**5**	**0**	**9**	**13**	**11**	**0**	**13**
<=0.015							2								
<=0.03										15					
<=0.25				1										12	
0.25							8								
<=0.5					2				9						
0.5							2							3	1
<=1								15							
1				2	4										
<=2													3		
2		1			5		1		1						1
<=4											2				
4			6		2								1		
>4				12											
<=8						3						1			
8			7								4				
>8					2		2								
16			2						2			1			
32									2		1				
>32									1						13
64						2							5		
>64		14											6		
128						3					3				
>128						7					5				

	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	**15**	**15**	**15**	**15**	**15**	**15**	**15**	**15**	**15**	**15**	**15**	**15**	**15**	**15**
MIC	**N of resistant isolates**	**14**	**0**	**14**	**13**	**12**	**13**	**0**	**5**	**0**	**9**	**13**	**11**	**0**	**13**
>1024												13			

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

Sampling Stage: Processing plant

Sampling Type: food sample - milk

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON pnl2

Analytical Method:

Country of Origin: Belgium

	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	**57**	**57**	**57**	**57**	**57**	**57**	**57**	**57**	**57**	**57**
MIC	**N of resistant isolates**	**53**	**57**	**7**	**12**	**55**	**7**	**1**	**0**	**0**	**0**
<=0.015								48			
<=0.03										57	
0.03								7			
<=0.064		2		45							
0.064								1			
<=0.12							32		41		
0.12		2		5				1			
0.25		2					14		15		
0.5				2		2	4		1		
1		3	2	2		9	2				
2		5	2	2	3	11	2				3
4		14	3	1	33	11					28
8		20	3		9	17	1				24
16		9	4		7	4	1				2
32			9		2	3	1				
64			21		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	**57**	**57**	**57**	**57**	**57**	**57**	**57**	**57**	**57**	**57**
MIC	**N of resistant isolates**	**53**	**57**	**7**	**12**	**55**	**7**	**1**	**0**	**0**	**0**
>64			13		1						

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

Sampling Stage: Processing plant

Sampling Type: food sample - milk

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Belgium

	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	**57**	**57**	**57**	**57**	**57**	**57**	**57**	**57**	**57**	**57**	**57**	**57**	**57**	**57**
MIC	**N of resistant isolates**	**57**	**5**	**57**	**53**	**24**	**27**	**0**	**11**	**0**	**15**	**40**	**36**	**0**	**28**
<=0.015							25								
<=0.03										56					
0.03							5								
0.064										1					
0.12							1								
<=0.25														46	5
0.25							10								
<=0.5					4				41						
0.5							5							8	15
<=1								56							
1				3	9		1		4					3	9
<=2			1										19		
2				2	11			1	1						
<=4											33				
4			18	3	11								2		
>4				49											
<=8						31						4			
8			31		16		2		3		4				
>8					6		8								
16			2			2			1		5	9			
32			2						2			3	1		
>32									5						28
64			2			1						1	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	**57**	**57**	**57**	**57**	**57**	**57**	**57**	**57**	**57**	**57**	**57**	**57**	**57**	**57**
MIC	**N of resistant isolates**	**57**	**5**	**57**	**53**	**24**	**27**	**0**	**11**	**0**	**15**	**40**	**36**	**0**	**28**
>64		57	1										34		
128						7					1				
>128						16					14				
>1024												40			

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

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	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**6**
MIC **N of resistant isolates**	**5**	**5**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**
<=0.015							4			
<=0.03									4	
0.03							1			
<=0.064			5							
0.064									1	
<=0.12						4		2		
<=0.25					1					
0.25						1		2		
0.5		1						1		
1					1					
2	2			1	2					
4	3			3						5
8				1						1
16		2			1					
32		1								
64		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

	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	**185**	**185**	**185**	**185**	**185**	**185**	**185**	**185**	**185**	**185**	**185**	**185**	**185**	**185**
MIC	**N of resistant isolates**	**105**	**8**	**5**	**4**	**51**	**37**	**2**	**9**	**0**	**19**	**104**	**120**	**0**	**99**
<=0.015							115								
<=0.03										182					
0.03							29								
0.064							4			3					
0.12							2								
<=0.25				180										132	18
0.25							10								
<=0.5					181				133						
0.5				1			12							47	45
<=1		3						182							
1					1		3		37					6	22
<=2			1										60		
2		30			1			1	6						1
<=4											150				
4		39	56		2		1	2	2				5		
>4				4											
<=8						121						10			
8		8	103				3				9				
>8							6								
16		4	17			13					7	36			
32			8			4			1			23	2		1
>32									6						98
64		1				8					1	12	40		

	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	**185**	**185**	**185**	**185**	**185**	**185**	**185**	**185**	**185**	**185**	**185**	**185**	**185**	**185**
MIC	**N of resistant isolates**	**105**	**8**	**5**	**4**	**51**	**37**	**2**	**9**	**0**	**19**	**104**	**120**	**0**	**99**
>64		100											78		
128						12					4	1			
>128						27					14				
1024												7			
>1024												96			

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

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**	**160**	**165**	**7**	**17**	**159**	**7**	**0**	**1**	**0**	**1**
<=0.015							147			
<=0.03									168	
0.03							22			
<=0.064	7		144							
0.064							1		2	
<=0.12						111		112		
0.12	3		18							
<=0.25		5			5					
0.25			1			50		57		
0.5	11				6	2				
1	3	1	4		30			1		
2	22	6	2	14	38	2				11
4	48	9	1	100	38	2				86
8	54	5		39	35	2				64
16	16	27		7	15	1				8
32	5	33		7	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	**170**	**170**	**170**	**170**	**170**	**170**	**170**	**170**	**170**	**170**
MIC	**N of resistant isolates**	**160**	**165**	**7**	**17**	**159**	**7**	**0**	**1**	**0**	**1**
>32		1									
64			46		2	1					1
>64			38		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

	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**	**167**	**27**	**165**	**158**	**89**	**89**	**4**	**37**	**0**	**51**	**108**	**146**	**0**	**109**
<=0.015							69								
<=0.03										167					
0.03							9								
0.064							3			3					
<=0.25				5										108	13
0.25							25								
<=0.5					12				90						
0.5							18							55	38
<=1	1							162							
1				1	30		7		36					7	10
<=2													20		
2	1			6	40			4	7						
<=4											82				
4	1	25	10	32				3	7				2		
>4			148												
<=8						79						12			
8		87		35		3		8		21			2		1
>8				21		36									
16		31			2			9		16	25				
>16							1								
32		8			7			6		1	18	2			
>32								7							108
64		7			7					4	7	42			

	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**	**167**	**27**	**165**	**158**	**89**	**89**	**4**	**37**	**0**	**51**	**108**	**146**	**0**	**109**
>64		167	12										102		
128						16					3	3			
>128						59					43				
1024												9			
>1024												96			

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

	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	**4**	**4**	**4**	**4**	**4**	**4**	**4**	**4**	**4**	**4**
MIC	**N of resistant isolates**	**2**	**3**	**1**	**1**	**3**	**1**	**0**	**0**	**0**	**0**
<=0.015								3			
<=0.03										4	
0.03								1			
<=0.064		1		2							
<=0.12							2		3		
0.12		1		1							
<=0.25			1			1					
0.25							1		1		
1						1					
2		1	1	1		1					1
4					2	1	1				3
8			1		1						
16		1									
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

	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	**120**	**120**	**120**	**120**	**120**	**120**	**120**	**120**	**120**	**120**	**120**	**120**	**120**	**120**
MIC	**N of resistant isolates**	**23**	**6**	**4**	**3**	**18**	**15**	**0**	**7**	**0**	**11**	**27**	**23**	**1**	**21**
<=0.015							84								
<=0.03										117					
0.03							21								
0.064										2					
0.12							1			1					
<=0.25				116										90	21
0.25							5								
<=0.5					117				86						
0.5				1			1							25	55
<=1	1							119							
1					1		1		23					4	20
<=2		2											86		
2	35		1	1				1	4						3
<=4											106				
4	58	49		1			1		1				9		
>4			2												
<=8						93						15			
8	3	59					2		3		2		2		
>8							4							1	
16	1	4				9			2		1	41	3		
32		1				2			1		2	27	1		
>32															21
64		1										10	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	**120**	**120**	**120**	**120**	**120**	**120**	**120**	**120**	**120**	**120**	**120**	**120**	**120**	**120**
MIC	**N of resistant isolates**	**23**	**6**	**4**	**3**	**18**	**15**	**0**	**7**	**0**	**11**	**27**	**23**	**1**	**21**
>64		22	4										16		
128						4					3	1			
>128						12					6				
>1024												26			

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

	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	**15**	**15**	**15**	**15**	**15**	**15**	**15**	**15**	**15**	**15**
MIC	**N of resistant isolates**	**11**	**11**	**0**	**0**	**11**	**0**	**0**	**0**	**0**	**0**
<=0.015								15			
<=0.03										14	
<=0.064		4		14							
0.064										1	
<=0.12							12		10		
0.12				1							
<=0.25			4			4					
0.25							3		3		
0.5		1							2		
1		1				6					
2		3			1	2					
4		5	2		8	1					12
8		1			6	1					3
16			4			1					
32			3								
64			2								

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

	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**	**90**	**3**	**13**	**13**	**46**	**16**	**1**	**2**	**0**	**7**	**84**	**81**	**1**	**79**
<=0.015							131								
<=0.03										175					
0.03							29								
0.064										1					
0.12							2								
<=0.25				163										141	27
0.25							6								
<=0.5					163				121						
0.5				2			4							24	51
<=1	4							174							
1					6		1		46					10	19
<=2		4											87		
2	31		1	3				1	7					1	
<=4											159				
4	47	62	1	2					1				7		
>4			9												
<=8						117						30			
8	4	99		2		2			1		9		1		
>8							1								
16	2	8				13					1	39	1		1
>16								1							
32	2	1				13					2	17	4		
>32															78

	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**	**90**	**3**	**13**	**13**	**46**	**16**	**1**	**2**	**0**	**7**	**84**	**81**	**1**	**79**
64		1				15						6	21		
>64		85	2										55		
128						7					1	1			
>128						11					4				
1024												3			
>1024												80			

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

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	**171**	**171**	**171**	**171**	**171**	**171**	**171**	**171**	**171**	**171**
MIC **N of resistant isolates**	**159**	**166**	**12**	**15**	**148**	**12**	**0**	**0**	**0**	**0**
<=0.015							159			
<=0.03									169	
0.03							11			
<=0.064	8		150							
0.064							1		2	
<=0.12						120		124		
0.12	4		9							
<=0.25		5			9					
0.25	4					39		46		
<=0.5										1
0.5	17				14			1		
1	18	2	5		49	1				1
2	26	11	2	12	41	2				14
4	55	19	1	98	15	3				91
8	27	18	3	46	26	3				60
16	11	36	1	5	10	2				3

	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	**171**	**171**	**171**	**171**	**171**	**171**	**171**	**171**	**171**	**171**
MIC	**N of resistant isolates**	**159**	**166**	**12**	**15**	**148**	**12**	**0**	**0**	**0**	**0**
32		1	37		3	6	1				1
64			30		5	1					
>64			13		2						

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

	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	**171**	**171**	**171**	**171**	**171**	**171**	**171**	**171**	**171**	**171**	**171**	**171**	**171**	**171**
MIC	**N of resistant isolates**	**168**	**23**	**166**	**146**	**42**	**43**	**2**	**11**	**0**	**28**	**121**	**82**	**0**	**109**
<=0.015							105								
<=0.03										167					
0.03							22								
0.064							1			4					
0.12							2								
<=0.25				5										135	18
0.25							13								
<=0.5					25				116						
0.5							9							26	33
<=1								169							
1				1	49		3		37					10	9
<=2			3										73		
2		2		11	37				7						2
<=4											127				
4		1	42	14	18			2	1				14		1
>4				140											
<=8						115						11			
8			91		28		5		1		11		2		
>8					14		11								
16			12			14			1		5	20			
32			5			10			6		2	13	1		
>32									2						108
64		1	1			8					4	6	22		

	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	**171**	**171**	**171**	**171**	**171**	**171**	**171**	**171**	**171**	**171**	**171**	**171**	**171**	**171**
MIC	**N of resistant isolates**	**168**	**23**	**166**	**146**	**42**	**43**	**2**	**11**	**0**	**28**	**121**	**82**	**0**	**109**
>64		167	17										59		
128						14					4	1			
>128						10					18				
1024												4			
>1024												116			

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

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	**37**	**37**	**37**	**37**	**37**	**37**	**37**	**37**	**37**	**37**
MIC / **N of resistant isolates**	**23**	**26**	**5**	**6**	**26**	**5**	**0**	**0**	**0**	**0**
<=0.015							32			
<=0.03									37	
0.03							5			
<=0.064	11		29							
<=0.12						23		22		
0.12	3		3							
<=0.25		11			10					
0.25	7					9		14		
0.5	4	1			1			1		
1	3	6			6					
2	4			1	4					1
4		4	3	16		4				18
8	2	5	2	14	4	1				15
16	2	5		1	3					3
32		1		1	6					
>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	**37**	**37**	**37**	**37**	**37**	**37**	**37**	**37**	**37**	**37**
MIC	**N of resistant isolates**	**23**	**26**	**5**	**6**	**26**	**5**	**0**	**0**	**0**	**0**
64			2		3	3					
>64			2		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

	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	**160**	**160**	**160**	**160**	**160**	**160**	**160**	**160**	**160**	**160**	**160**	**160**	**160**	**160**
MIC	**N of resistant isolates**	**124**	**4**	**29**	**27**	**40**	**93**	**0**	**12**	**0**	**85**	**103**	**80**	**4**	**82**
<=0.015							52								
<=0.03										160					
0.03							14								
0.064							1								
0.12							6								
<=0.25				131										104	28
0.25							43								
<=0.5					133				108						
0.5				5			18							37	38
<=1	1							157							
1				3	6		9		36					15	10
<=2		5											74		
2	17			2	4		4	3	4					4	2
<=4											66				
4	17	52	4				2						4		
>4			15												
<=8						108						19			
8	1	82		4		8		3		5			2		
>8				13		3									
16		17			12			3		4	22				
32	3	1			7			5			13	5			
>32								1							82
64	2	3			15					11	3	20			

	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	**160**	**160**	**160**	**160**	**160**	**160**	**160**	**160**	**160**	**160**	**160**	**160**	**160**	**160**
MIC	**N of resistant isolates**	**124**	**4**	**29**	**27**	**40**	**93**	**0**	**12**	**0**	**85**	**103**	**80**	**4**	**82**
>64		119											55		
128						5					25				
>128						13					49				
1024												2			
>1024												101			

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

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**	**154**	**161**	**25**	**26**	**155**	**26**	**3**	**0**	**0**	**1**
<=0.015							143			
<=0.03									168	
0.03							18			
<=0.064	7		139							
0.064							6		2	
<=0.12						126		127		
0.12	9		5				2			
<=0.25		9			10					
0.25	29		1			17	1	42		
0.5	30	1	1		5	1		1		
1	25	6			28	1				1
2	19	14	1	18	19	2				19
4	28	34	11	80	16	6				65
8	18	39	11	46	24	16				75
16	3	18	1	1	31	1				8
32	1	24		4	23					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	**170**	**170**	**170**	**170**	**170**	**170**	**170**	**170**	**170**	**170**
MIC	**N of resistant isolates**	**154**	**161**	**25**	**26**	**155**	**26**	**3**	**0**	**0**	**1**
>32		1									
64			19		16	12					
>64			6		5						1
128						2					

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

	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**	**169**	**12**	**160**	**157**	**70**	**107**	**0**	**21**	**0**	**103**	**148**	**111**	**1**	**113**
<=0.015							40								
<=0.03										166					
0.03							22								
0.064							1			4					
0.12							6								
<=0.25				10										110	19
0.25							40								
<=0.5					13				109						
0.5				1			17							45	21
<=1								168							
1				6	30		15		37					14	16
<=2			11										54		
2				19	24		3	2	3					1	1
<=4											61				
4		1	66	24	5		2						4		
>4				110											
<=8						91						4			
8			64		33		11				5		1		
>8					65		13								
16			17			9			6		1	12	2		
32			9			13			10		1	5	4		1
>32									5						112
64			3			28					15	1	39		

	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**	**169**	**12**	**160**	**157**	**70**	**107**	**0**	**21**	**0**	**103**	**148**	**111**	**1**	**113**
>64		169											66		
128						15					30				
>128						14					57				
1024												1			
>1024												147			

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

Sampling Stage: Retail

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON pnl2

Analytical Method:

Country of Origin: India

	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		1		
1		1									
4			1		1						
8						1					1

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

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: India

	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**	**0**	**0**	**1**	**1**	**1**	**0**	**1**
<=0.03										1					
<=0.5									1						
0.5														1	
<=1								1							
4				1	1										
8			1				1								
32						1									
>32															1
>64		1											1		
>128											1				
>1024												1			

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

Sampling Stage: Retail

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON pnl2

Analytical Method:

Country of Origin: Vietnam

	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				
8					1						1
16						1					
32		1									
>64			1								

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

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: Vietnam

	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**	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**1**
<=0.03										1					
<=0.25														1	
0.25							1								
<=1								1							
<=4											1				
4			1												
>4				1											
<=8						1									
>8					1										
16												1			
>32									1						1
64													1		
>64		1													

Table Antimicrobial susceptibility testing of Escherichia coli, non-pathogenic, unspecified in Fish - raw - chilled

Sampling Stage: Retail

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON pnl2

Analytical Method:

Country of Origin: Norway

	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		
0.5									1		
1		2				1					
2			1								1
4			1		2						
8											1
16						1					

Table Antimicrobial susceptibility testing of Escherichia coli, non-pathogenic, unspecified in Fish - raw - chilled

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: Norway

	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**	**1**	**2**	**0**	**0**	**0**	**2**	**2**	**1**	**0**	**2**
<=0.03										2					
0.25							1								
<=0.5									2						
0.5														2	
<=1								2							
1					1										
<=2													1		
2				1											
4			1												
>4				1											
<=8						1									
8			1				1								
>8					1										
>32															2
64						1									
>64		2											1		
128											1				
>128											1				
>1024												2			

Table Antimicrobial susceptibility testing of Escherichia coli, non-pathogenic, unspecified in Fish - raw - chilled

Sampling Stage: Retail

Sampling Type: food sample

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON pnl2

Analytical Method:

Country of Origin: Bangladesh

	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	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**
MIC	**N of resistant isolates**	**3**	**3**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**
<=0.015								3			
<=0.03										3	
<=0.064				3							
<=0.12							3		3		
2											1
4		3			2	1					
8					1	2					2
16			1								
32			1								
64			1								

Table Antimicrobial susceptibility testing of Escherichia coli, non-pathogenic, unspecified in Fish - raw - chilled

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: Bangladesh

	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	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**
MIC	**N of resistant isolates**	**3**	**0**	**3**	**3**	**0**	**3**	**0**	**0**	**0**	**1**	**1**	**2**	**0**	**1**
<=0.03										3					
<=0.25														1	1
0.25							1								
<=0.5									2						
0.5							1							2	1
<=1								3							
1							1		1						
<=2													1		
4			2		1										
>4				3											
<=8						3						1			
8			1		2						2				
16												1			
32													1		
>32															1
64											1		1		
>64		3													
>1024												1			

Table Antimicrobial susceptibility testing of Escherichia coli, non-pathogenic, unspecified in Fish - raw - chilled

Sampling Stage: Retail

Sampling Type: food sample

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON pnl2

Analytical Method:

Country of Origin: Vietnam

	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		1		
2					1						
4						1					
8											1
32		1									
64			1								

Table Antimicrobial susceptibility testing of Escherichia coli, non-pathogenic, unspecified in Fish - raw - chilled

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: Vietnam

	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								
0.5														1	
<=1								1							
>4				1											
8			1		1						1				
>32									1						1
>64		1											1		
>128						1									
>1024												1			

Table Antimicrobial susceptibility testing of Escherichia coli, non-pathogenic, unspecified in Fish - raw - chilled

Sampling Stage: Retail

Sampling Type: food sample

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON pnl2

Analytical Method:

Country of Origin: China

	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		
1		1				1					
4					1						
8											1
32			1								

Table Antimicrobial susceptibility testing of Escherichia coli, non-pathogenic, unspecified in Fish - raw - chilled

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: China

	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**	**0**	**0**	**0**	**1**	**1**	**0**	**1**
<=0.03										1					
0.5							1							1	
<=1								1							
1					1				1						
>4				1											
8			1												
16											1				
>32															1
>64		1											1		
>128						1									
>1024												1			

Table Antimicrobial susceptibility testing of Escherichia coli, non-pathogenic, unspecified in Fish - raw - chilled

Sampling Stage: Retail

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON pnl2

Analytical Method:

Country of Origin: China

	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		1		
4					1	1					
8	1										1
>64		1									

Table Antimicrobial susceptibility testing of Escherichia coli, non-pathogenic, unspecified in Fish - raw - chilled

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: China

	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**	**1**	**1**	**1**	**0**	**1**
<=0.03										1					
<=0.25														1	
0.25							1								
<=1								1							
2					1										
4			1												
>4				1											
>32									1						1
>64		1											1		
128											1				
>128						1									
>1024												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 pnl2

Analytical Method:

Country of Origin: Netherlands

	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		1		
1						1					
2		1			1						
4											1
16			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: Netherlands

	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**	**1**	**0**	**0**	**1**
<=0.015							1								
<=0.03										1					
<=0.25														1	
<=0.5					1										
<=1								1							
1									1						
<=2			1										1		
<=4											1				
>4				1											
16						1									
>32															1
>64		1													
>1024												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 pnl2

Analytical Method:

Country of Origin: Belgium

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	**12**	**12**	**12**	**12**	**12**	**12**	**12**	**12**	**12**	**12**
MIC **N of resistant isolates**	**12**	**12**	**0**	**3**	**12**	**0**	**0**	**0**	**0**	**0**
<=0.015							10			
<=0.03									11	
0.03							1			
<=0.064			10							
0.064							1		1	
<=0.12						8		5		
0.12			2							
0.25	1					4		5		
0.5	2							2		
1	2	1			3					
2					1					1
4	4	2		6	1					4
8	3	2		3	5					4
16		3		2	1					3
32		1		1						
64		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	**12**	**12**	**12**	**12**	**12**	**12**	**12**	**12**	**12**	**12**
MIC	**N of resistant isolates**	**12**	**12**	**0**	**3**	**12**	**0**	**0**	**0**	**0**	**0**
>64			1								
128						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: Belgium

	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	**12**	**12**	**12**	**12**	**12**	**12**	**12**	**12**	**12**	**12**	**12**	**12**	**12**	**12**
MIC	**N of resistant isolates**	**12**	**1**	**12**	**12**	**4**	**6**	**0**	**2**	**0**	**3**	**8**	**5**	**0**	**8**
<=0.015							6								
<=0.03										11					
0.064										1					
<=0.25														8	1
0.25							5								
<=0.5									7						
0.5							1							4	
<=1								12							
1				1	3				3						3
<=2													7		
2					1										
<=4											6				
4			3	2	3				2						
>4				9											
<=8						5						1			
8			8		2						3				
>8					3										
16						3						1			
32						2						2			
>32															8
64						1							1		
>64		12	1										4		
128											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	**12**	**12**	**12**	**12**	**12**	**12**	**12**	**12**	**12**	**12**	**12**	**12**	**12**	**12**
MIC	**N of resistant isolates**	**12**	**1**	**12**	**12**	**4**	**6**	**0**	**2**	**0**	**3**	**8**	**5**	**0**	**8**
>128						1					2				
>1024												8			

OTHER ANTIMICROBIAL RESISTANCE TABLES

Table Antimicrobial susceptibility testing of Methicillin resistant Staphylococcus aureus (MRSA) in Gallus gallus (fowl)

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

Spa Type	Multilocus Seq	Clonal Complex	MIC	AM Substance	Cefoxitin	Chloramphenicol	Ciprofloxacin	Clindamycin	Erythromycin	Fusidic acid	Gentamicin	Kanamycin	Linezolid	Mupirocin	Penicillin	Quinupristin/Dalfopristin	Rifampicin	Streptomycin
				Performed CC MRSA characterisation	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
				ECOFF	4	16	1	0.25	1	0.5	2	8	4	1	0.12	1	0.03	16
				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
				Highest limit	16	64	8	4	8	4	16	64	8	256	2	4	0.5	32
11		398	<=0.016														4	
			<=0.12					1										
			<=0.25				1											
			<=0.5							4				4		2		
			0.5						2									
			<=1								3							
			1				1											
			2										4			2		
			>2												4			
			<=4									3						4
			>4					3										
			8	2	2	1												
			>8			1			2									
			16	1	2													
			>16	1							1							
			>64									1						
37		398	<=0.12					1										
			<=0.25				1											
			<=0.5							1				1				
			>0.5														1	
			<=1								1							
			1													1		
			2										1					
			>2												1			
			>8						1									
			>16	1														
			>32															1
			>64			1						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
CARBA MON	Cattle (bovine animals) - calves (under 1 year) - veal calves	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	300	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	283	0
										France	N_A	4	0
										Ireland	N_A	10	0
										Netherlands	N_A	1	0
										Non European Union	N_A	1	0
										Uruguay	N_A	1	0
	Meat from broilers (Gallus gallus) - fresh	Escherichia coli, non-pathogenic, unspecified	Objective sampling	Retail	N_A	Monitoring	Official sampling	food sample - meat	batch (food/feed)	Belgium	N_A	257	0
										France	N_A	27	0
										Lithuania	N_A	2	0
										Netherlands	N_A	14	0
										Non European Union	N_A	3	0
										Poland	N_A	2	0
										Unknown	N_A	166	0

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	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	269	0
										Ireland	N_A	1	0
										Luxembourg	N_A	2	0
										Netherlands	N_A	12	0
										Non European Union	N_A	13	0
										Spain	N_A	2	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

European Food Safety Authority

Latest Transmission set

Table Name	Last submitted dataset transmission date
Antimicrobial Resistance	03-Jan-2019
Esbl	23-Jul-2018
Animal Population	23-Jul-2018
Disease Status	24-Jul-2018
Food Borne Outbreaks	24-Jul-2018
Prevalence	23-Jul-2018

Belgium, Text Forms 2017

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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 with 2 of them performing 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.

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 is the central database for identification and registration of facilities and animals. Due to an ongoing update of the identification and registration of poultry and poultry farms, the capacity data reported by the farmers in the framework of their biosecurity questionnaire were used instead of data from SANITEL. The reported figures concern the number of active holdings on 31/12/2017. For bovines, the number of animals is the number of animals present on 31/12/2017, for poultry and pigs, it concerns the maximum capacity of animals. For sheep and goats, it concerns the animals present on 15 December 2017. The number of slaughtered animals equals the total of animals slaughtered during the year 2017.

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 and shall have the same health status.

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. The total number of bovine animals, sows and sheep decreased compared to 2016. The number of goats, layers and broilers and horses increased compared to 2016.

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 ten percent of poultry farms and 22 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 2017, 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 750 bovine herds of all herds that did not declare any abortion during the past year and did send some lightweight carcasses of newborns to the rendering plant. On these herds a maximum of 20 female animals 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 2017. There were no cases of bovine brucellosis in 2017.

Blood samples are taken by the farm veterinarian, bulkmilk 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 tank 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 2017.

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, 7.057 caprine/ovine serum samples were tested. 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. In 2017, 5 infected herds were found. No infected wild and farmed deer were found in 2017.

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 tubercuolosis* 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 (CODA-CERVA). 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 2017, 5 outbreaks of bovine tuberculosis were detected. On the first outbreak (2017/01) a general stamping out was applied and 4 contact herds had to be followed up by tuberculination. Hereby one secondary outbreak was detected with a clear epidemiological link to the primary outbreak. On the second outbreak (2017-02) also a total stamping-out was performed. Due to this second outbreak 259 contact herds had to be followed-up by tuberculination. Hereby three secondary outbreaks (2017-03, 2017-04 and 2017-05) were detected with a clear epidemiological link to the second case. On the outbreak (2017-03) a total stamping-out was performed. Due to this third outbreak 60 contact herds had to be followed-up by tuberculination. On outbreaks (2017-04) and (2017-05) a partial stamping-out was performed. Due to this fourth outbreak 23 contact herds had to be followed-up by tuberculination. There was no contact herd for the fifth outbreak. The 2 last outbreaks will be tested (skin test) twice at six months interval, with a satisfactory result, before being released.
Of outbreak (2017-01), 3 isolates were obtained by bacteriological examination. Of outbreak (2017-02), 3 isolates were obtained by bacteriological examination. Of outbreak (2017-03), 1 isolate was obtained by bacteriological examination. Of outbreak (2017-04), 2 isolates were obtained by bacteriological examination. Of outbreak (2017-05), 1 isolate was obtained by bacteriological examination.

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 stopped 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 387 animals were tested in 2017 of which one bat was infected with European bat Lyssa virus type 1b. The dying bat was found in a private garden and taken to a wildlife shelter where it died the same day. It had neurological symptoms (aggression, not able to fly, falling on its back, etc). This is the second case in a two-years time period. The source of the infection was not found but EBL-1 is known to be present in French wildlife close to the border with the Belgian Ardennes, where the bat was found.

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 Commision to Belgium end December 2010. ***Trichinella* spiralis** was detected in 2015 and in 2016 in a wild boar. ***Trichinella* britovi** was detected in 2016, also in a wild boar. In 2017, there were no ***Trichinella*** cases in domestic animals but three ***Trichinella***-suspected pools of wild boar meat. These pools and collected larvae could not be molecularly confirmed by the NRL as ***Trichinella*** spp. 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.

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

In the near future, accreditation of ***Trichinella***-labs attached to a slaughterhouse won't be mandatory. At the EU Reference Laboratory workshop, the initiative was taken to create guidelines for these ***Trichinella***-laboratories.

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 (EC) 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 2017.

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, also in a 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. In 2017, there were three ***Trichinella***-suspected pools of wild boar meat. These pools and collected larvae could not be molecularly confirmed by the NRL as ***Trichinella* spp**.

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 2017.

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. No cysts were detected in 2017.

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 2017, 1375 contaminated carcasses were found of which 1.348 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 75 in 2013 and 107 in 2015. 99 cases were reported in 2017.

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 diarrhea, 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 2011, and 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 varies over the past 5 years with a maximum of 16 in 2016 and a minimum of 6 in 2013. In 2017, 7 confirmed, 8 probable and 4 possible cases were seen of which the origin of 5 cases was probably Belgium, of 5 another country and of 9 unknown.

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 advise on the prevention of the spread of ***Coxiella burnetii*** to other animals and visitors/workers on the farm is given. The location of positive farms is reported to the regional public health departments and the general practitioners within a radius of 5 km are informed.

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 continues in 2017. After abortion 4.306 samples (foetuses and organs) were tested of which 260 (6%) were positive. This is an increase of 2,2% compared to 2016.

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 every 2 months 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 a 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 the general practitioners within a radius of 5 km are informed.

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 2017, 134 farms with dairy goats and 30 farms with dairy ewes were monitored for the presence of ***Coxiella burnetii*** in bulk milk of which respectively 16 and 2 had at least one positive PCR.
In sheep, 147 samples from 103 herds were examined by PCR after abortion. Coxiella was detected on 14 herds. 56 samples from 28 herds with goats were examined, ***Coxiella burnetii*** was detected in 5 herds. In addition, one alpaca was tested and found positive for ***Coxiella burnetii.***
The prevalence of ***Coxiella*** in bulk milk remains stable compared to previous years. However, for sheep and goats, more abortions were notified and samples tested compared to previous years. It is not yet clear if this is due to a better compliance of the mandatory notification or a higher prevalence of ***Coxiella burnetii***.

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% in 2013 and 53% in 2016), a lower prevalence in bovines (veal calves, young bovines and dairy cows respectively 47%, 10% and 10% in 2012 and 44%, 8% and 9% in 2015) 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. 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 sbupopulations in Belgian patients. Eur J Clin Microbiol Infect Dis 36(8):1527-1529.

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

1. Monitoring/Surveillance/Control programmes system

The monitoring of MRSA and its antimicrobial resistance in broilers and laying hens is repeated every 3 years. The samples are programmed to be taken by official veterinarians at the same time official samples are taken in the framework of the national *Salmonella* control programme on all layer farms with a capacity of 200 or more birds and on 10% of the broiler farms with a capacity of 200 or more birds. The 80 samplings of broilers and the 236 samplings of layers were evenly divided over the year over the different local control units based respectively on the number of broiler and laying hen farms in each control unit. 10 nasal swabs from 10 different birds are taken on each holding and pooled to one sample. 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. Per sample, one to five suspected colonies are selected from the Brilliance MRSA 2 plate. 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. All 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 was amplified according to the Ridom StaphType standard protocol (www.ridom.de/staphtype) and the amplification was checked on a 2% agarose gel. Sequencing was performed with ABI3130xl using standard protocols and sequences were compared with the international Ridom database. CC398 PCR is performed on all MRSA-isolates following a protocol described by Stegger et al. 2011. This method allows the rapid detection of the ***S. aureus*** 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 2017 monitoring revealed a lower percentage of MRSA positive samples (1,58%) compared to 2014 (2,4%) and 2011 (2,4%). All isolates belonged to CC398, spa types t011 and t037. Only spa type t011 was found in broilers. The spa type t037 has shown to be associated to ST239, a dominant sequence type of HA-MRSA (**http://spa.ridom.de/**). This suggests the spread to livestock of MRSA originating from humans and an adaptation of the strains to an animal host. Isolates resistant to last resort antibiotics were not found.

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.

No increase in the number of cases is reported in recent years. 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.
A mandatory notification exists for the clinical suspicion of thyphoid 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 2017 the NRC ***Salmonella*** received 2.301 isolates from patients for serotyping. 1163 isolates were serotyped ***Salmonella*** **Typhimurium**.

Serotype	Subtype	N° of isolates
Salmonella **spp.**		2301
Salmonella **Typhimurium**		1163
	S. Typhimurium	451
	S. Typhimurium O5- (Var Copenhagen)	218
	S. Typhimurium monophasic	286
	S. Typhimurium monophasic O5-	208
Salmonella **Enteritidis**		383
Salmonella **Infantis**		43
Salmonella **Virchow**		16
Salmonella **Hadar**		21

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 on targeted serotypes has been very low and reached 0% in 2015, 2016 and 2017. Between 2011 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 the prevalence of targeted serotypes was 1.8%. The high prevalence observed in 2017 is principally due to one holding that had 4 Salmonella Infantis positive flocks. The Salmonella spp. flock prevalence in 2017 was 4.04% in adult breeders.
In rearing laying flocks, the prevalence on targeted serotypes has been very low since 2012 and is now 0% since 2016. In adult laying flocks, the prevalence was around 2% from 2011 to 2014. In 2015, the prevalence was 1.2% and strongly decreased in 2016 to 0.3%. In 2017, 7 Salmonella Enteritidis positive flocks were detected increasing the prevalence to 1%. The Salmonella spp flock prevalence in 2017 for adult layers was 3.61%.
As in previous years, the prevalence in broilers of the targeted serotypes S. Enteritidis and S. Typhimurium, was low (0,26%). However, also as in previous years, different other serotypes circulated with a prevalence of 2,4% for all serotypes.
In meat turkeys, one Salmonella Typhimurium positive flock was detected in 2017.

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, the total number of ***Salmonella*** **spp**. strains isolated is decreasing: in 2010 more than 3500 strains have been isolated while in 2017 less than 2500. This is mainly due to the decrease of **S. Enteritidis** serotype which is correlated to the diminution of **S. Enteritis** in poultry thanks to the vaccination of layers and breeders.
However, in 2017 about 50% of human infections is caused by **S. Typhimurium**, followed by **S. Enteritidis** (16.6%).
In poultry, the number of **S. Typhimurium** strains isolated in 2017 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. In humans, **S. Infantis** is the fourth 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 will enter into force in the summer of 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 basketliners 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 and 2017. Two flocks were positive for non-targeted ***Salmonella*** spp. in 2017. 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 the prevalence of targeted serotypes is 1.8%. 10 flocks were positive for a targeted serotype. One holding had 4 ***S.* Infantis** positive flocks.
In **rearing layer flocks**, 4 flocks were positive for non-targeted ***Salmonella*** serotypes. The targeted serotypes **S. Enteritidis and S. Typhimurium** were not found. The prevalence of **S. Enteritidis** or **S. Typhimurium** positive flocks in the last years was low in rearing layer flocks. Maximum one positive flock per year was seen. 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%.
As in previous years, the prevalence of **S. Enteritidis and S. Typhimurium** in **broilers** in 2017 was low (0,26%). However, also as in previous years, different other serotypes circulated with a prevalence of 2,4% for all serotypes. In broilers within 3 weeks before slaughtering, a decrease in **S. Typhimurium** prevalence was observed in 2017 compared to 2016 but an increase of **S. Livingstone** and **S. Paratyphi B varians Java** was observed.
In **meat turkeys**, one **S. Typhimurium** positive flock was detected in 2017.

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 (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 contains samples of:

- 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, 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
- gelatine
- 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, bivalve molluscs intended to be eaten cooked
- 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
- frog legs
- chocolate

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.
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

A trend observation and analysis was performed on the results from the surveillance program for the yeas 2012 to 2015 by the means of logistic regression. De regression analysis was performed by the means of a “Firth logistic model (penalised maximum likelihood estimation; Heinze & Schemper, 2002) making use of the logistf package in R.

An increasing trend (95 % confidence) exists for *Salmonella* spp. in meat products and an increasing trend (99,9 % confidence) in skin from turkeys and broilers. As the trend analysis was performed for the calculated annual prevalence over a period of 4 years, the interpretation of this trend analysis is limited to an indication of the increase of the prevalence.

In 2017, 8.949 samples were tested. In 259 samples (2,9 %) ***Salmonella* spp**. was detected. All isolates were serotyped by the NRL *Salmonella*. The most prevalent serotype is **S. Infantis** (79 isolates (30.5 %), mostly detected in poultry (broilers, spent hens, other species and derived products)), followed by ***S.* Enteritidis** (38 isolates (14.7 %) of which 37 were isolated from spent hens (whole birds at slaughterhouse), ***S.* Typhimurium** (31 isolates (11.9 %) from pig carcasses and pork meat preparations), ***S*. Paratyhi B** (27 isolates (10.4 %) from poultry (broilers, spent hens and other species), **S. Derby** (12 isolates (4.6 %) of pig (carcasses, meat and derived products) and **S. Mbandaka** (10 isolates (3.9 %) from poultry). Other identified serotypes concern less than 10 isolates.

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 food.

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. Feed materials of animal origin, oilseeds and wheat bran, DDGS or compound feed for bovins, poultry and pig containing these feed materials, are considered as 'at-risk' products and receive specific focus in the control programme. However, also other compound feed for farmed animals and petfood are part of the control programme.

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 2008, more stringent actions are taken if the contamination concerned 5 critical serotypes in poultry feed and finishing feed. Those critical serotypes were ***S. Typhimurium***, ***S. Enteritidis***, ***S. Virchow***, ***S. Hadar*** and ***S. Infantis***. For 2010 a

new strategy was implemented determining more critical serotypes and fine-tuning the 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/meldingsplicht/

The notification to the competent authority by the responsible of the laboratory of the presence of Salmonella in samples taken at primary production is mandatory.

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

In 2017, 516 units of compound feedingstuffs (all types of animals including pets) were tested, of which 7 were positive for ***Salmonella***: 5 raw pet foods, 1 for broilers and 1 for dairy cows. In addition, 405 feed materials were tested, and 13 were positive for *Salmonella* (all of animal origin). In total 18 different serotypes where identified. The most common serotype was *S. infantis* (4 detections), followed by *S. Livingstone* (3 detections) and *S. Kedougou*, *S. Isangi*, *S. Typhimurium*, *S. Mbandaka*, and *S. Montevideo* (all 2 detections). All other serotypes where single detections. These data indicate no significant changes between 2016 and 2017.

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 2017 the NRC registered 74 cases of listeriosis (104 in 2016). ***Listeria monocytogenes*** received 74 isolates for serotyping.

The serotypes are distributed as follows:

Serotype	N° of isolates
1/2a	33
4b	26
1/2b	8
IIa	3
IVb	1
3a	1
1/2c	1
IIb	1
Sum:	**74**

Campylobacteriosis

In 2017 the NRC registered 8.730 cases of campylobacteriosis.

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 meat 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 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.
Live bivalve molluscs intended to be eaten raw, 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

A trend observation and analysis was performed on the results of the surveillance program for the years 2012 to 2015 by the means of logistic regression. De regression analysis was performed by the means of a “Firth logistic model (penalised maximum likelihood estimation; Heinze & Schemper, 2002) making use of the logistf package in R.

An increasing trend (99% confidence) exists for ***Campylobacter* spp**. in poultry meat. As the trend analysis was performed for the calculated annual prevalence over a period of 4 years, the interpretation of this trend analysis is limited to an indication of the increase of the prevalence.

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)

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 (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

A trend observation and analysis was performed on the results from the surveillance program for the years 2012 to 2015 by the means of logistic regression. De regression analysis was performed by the means of a “Firth logistic model (penalized maximum likelihood estimation; Heinze & Schemper, 2002) making use of the logistf package in R.
An increasing trend (95 % confidence) exists for ***Listeria monocytogenes*** in meat products. As the trend analysis was performed for the calculated annual prevalence over a period of 4 years, the interpretation of this trend analysis is limited to an indication of the increase of the prevalence.

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

A trend observation and analysis was performed on the results from the surveillance program for the years 2012 to 2015 by the means of logistic regression. De regression analysis was performed by the means of a “Firth logistic model (penalised maximum likelihood estimation; Heinze & Schemper, 2002) making use of the logistf package in R.
No trends could be observed for foodstuffs.

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

A trend observation and analysis was performed on the results from the surveillance program for the years 2012 to 2015 by the means of logistic regression. De regression analysis was performed by the means of a “Firth logistic model (penalised maximum likelihood estimation; Heinze & Schemper, 2002) making use of the logistf package in R.
No trends could be observed.

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

A trend observation and analysis was performed on the results from the surveillance program for the years 2012 to 2015 by the means of logistic regression. De regression analysis was performed by the means of a “Firth logistic model (penalised maximum likelihood estimation; Heinze & Schemper, 2002) making use of the logistf package in R.
No trend could be observed.

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

A trend observation and analysis was performed on the results from the surveillance program for the years 2012 to 2015 by the means of logistic regression. De regression analysis was performed by the means of a “Firth logistic model (penalised maximum likelihood estimation; Heinze & Schemper, 2002) making use of the logistf package in R.
No trend could be observed.

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 communal 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 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). 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 2017, a total of 304 outbreaks of food-borne infections and intoxications were recorded in Belgium. More than 1409 people were ill, and at least 49 persons were hospitalized. None of the human cases died. 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 of the FASFC and/or increased sensibility by consumers. The same evolution is observed for the number of human cases involved. The number of people hospitalized due to a collective food-borne outbreak is similar as in previous years.

In 2017, in total 8 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 agent could be only detected at human level. ***Campylobacter*** was the most frequently reported causative agent in 2017 and was involved in 4 outbreaks and was responsible for 18 human cases of which 8 were hospitalized. For none of these outbreaks, ***Campylobacter*** was detected in the suspected food (mainly poultry meat) but only confirmed in the human cases and thus considered weak evidence outbreaks.

The second most reported agents were **histamine** and **Norovirus**, each responsible for 3 food-borne outbreaks. **Histamine** caused allergic reactions to 19 human cases and was detected in food leftovers (tuna fish) at levels ranging from 550 mg/kg to 4400 mg/kg. **Norovirus** food-borne outbreaks involved 90 human cases of which 5 were hospitalised. **Norovirus** was detected from human cases and/or food handlers for these outbreaks but also in food leftovers for 2 outbreaks, which were therefore considered strong evidence outbreaks.

Enterotoxigenic ***Clostridium perfringens*** being at the origin of 2 outbreaks, involved 182 human cases. High levels of **enterotoxigenic *C. perfringens*** were present in stools of human cases and for 1 outbreak also in the suspected foods (gyros). Otherwise, a link was demonstrated using descriptive epidemiological data.

Enterotoxigenic *Bacillus cereus* was reported to be at the origin of 1 outbreak upon consumption of pasta with ham-cheese sauce. In total 3 persons became ill and 1 was hospitalized.

Two outbreaks were reported involving ***Salmonella*** **Enteritidis** affecting 8 and 6 human cases, respectively. The first outbreak occurred in a kindergarten and no link was established with a suspected food source. The second outbreak was due to the consumption of home-made tiramisu that contained raw eggs contaminated with ***Salmonella*** **Enteritidis MLVA type 3-9-5-4-1**.

Pathogenic *E. coli* O157:H7 was at the origin of 1 outbreak involving 8 human cases. An indistinguishable agent could be identified in leftovers and the human cases. For another **EHEC** outbreak, involving 2 human cases, no food source was identified.

In 94.4% of the outbreaks (N=287 out of 304) 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 20.7% (N=63 out of 304) of the outbreaks, samples (human and/or food) were send for analysis among which 27% (N=17) resulted in the detection of a pathogen. Some of the latter outbreaks (N=9) have been categorized as a weak evidence outbreak.

Most food-borne outbreaks (43.4%) were due to the consumption of meals composed of different ingredients. Meat and meat based products (bovine, pig, sheep, broiler) were responsible for 19.1 % of the outbreaks. In 14.5% 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 52.6 % and 18.4 %, respectively, of food-borne outbreaks in Belgium in 2017. Catering at work, institutional catering or temporary mass catering are reported in respectively 3.0 %, 1.6 and 1.3 % of the food-borne outbreaks. 15.1 % of the outbreaks happened at home.

4. Descriptions of single outbreaks of special interest

In 2017, 10 out of 21 school children at camp suffered from abdominal pain, diarrhoea and vomiting. **Norovirus GI** was identified in human cases and in a sandwich leftover from the day before symptoms started. This sandwich was prepared by a food handler that showed symptoms of vomiting and diarrhoea the night just before, indicating the probable transmission route of **norovirus**.

Another **Norovirus** outbreak, involving 50 human cases, could be linked to the consumption of different foodstuffs from a buffet meal contaminated with **Norovirus**. The **genotype GI.7** was confirmed in the human cases and food handler. Relatives of the food handler also became ill and tested positive for **Norovirus**.

At the end of August 2017, a hospital reported a cluster of 6 human ***Salmonella*** **Enteritidis** cases to the health inspection officers. All human cases consumed home-made tiramisu. The eggs used in the tiramisu originated from domestic chickens from a neighbour and also resulted positive for ***Salmonella*** **Enteritidis**. The **MLVA type** of the involved strains was **3-9-5-4-1**.

In April 2017, individual cases of **EHEC** (***E. coli*** **O157** ***stx1, stx2, eae***) were reported to the health inspection officers since these were all from a similar region. Investigations through inquiries revealed that each of them consumed steak tartare that was traced back to a single provider that delivered meat to different food business operators. A can with leftovers delivered by one of the human cases resulted positive for ***E. coli*** **O157** ***stx1, stx2, eae*** , baring the same properties as the human strains isolated in this outbreak (same PFGE profile and IS629-type AW).

142 children from 2 different schools became ill several hours after lunch at school. Lunch consisted of gyros (turkey meat) with French fries and a raw chicory salad and was delivered to both schools by a common catering company. A case-control investigation was conducted indicating that 72% of the students became ill and abdominal pain and diarrhoea were reported for most of the human cases. High levels of enterotoxigenic ***C. perfringens*** were present in witness meals and leftovers from the lunch form both schools, and in stool samples from human cases.

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

Logistic slaughtering is applied for poultry which means that poultry where Salmonella was not detected in the last 3 weeks before slaughter, are slaughtered before other poultry. The vaccination of breeders and laying hens against ***Salmonella*** **Enteritidis** that started in 2003, was a strong factor in reducing the number of food-borne outbreaks of ***Salmonella*** **Enteritidis** through eggs.

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. From 2014, the levels of resistance stay stable. The resistance to ciprofloxacin is very high (>50-70%). Almost half of the isolates show a combined pattern of resistance including ciprofloxacin. On the other hand, resistance to erythromycin is 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, fresh meat of pigs, and fresh meat of bovines), is done in an alternate 2-year system.
For ***Salmonella*** isolated from fresh meat of broilers, the total contribution of different ***Salmonella*** serovars to the antimicrobial resistance prevalence was from high (>20-50%) in 2014 to very high (>50-70%) in 2016 for sulfamethoxazole, ciprofloxacin and nalidixic acid. This increase may be explained by the relative contribution of different serovars, considering that the predominant serovar may change over the years as well as the proportion of serovars detected yearly. In this context, in 2014 the predominant serovar was ***S*. Enteritidis** and in 2016 ***S.* Infantis**. Considering all the ***S*. Infantis** subjected to AST in 2016, all except 4 showed resistance to ciprofloxacin together with resistance to other non-CIA antimicrobials. Colistin resistance remains low (>1-10%) and no increase has been noticed. The resistance to 3rd generation cephalosporines was also low (>1-10%) and no increase was noticed.
For ***Salmonella*** isolated from fresh pig meat, an increase in resistance to not critically important antimicrobials is seen over the years, such as ampicillin, sulfamethoxazole and tetracycline, while the resistance to critically important antimicrobials such as ciprofloxacin and colistin remains low (>1-10%). Resistance to 3rd generation cephalosporins was not detected in 2017.

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

S. Infantis is a serotype that is of public health concern. In 2016, this serovar was the predominant one in broiler meat and a large majority exhibited a resistance profile which included ciprofloxacin. This resistance was also noticed in **S. Infantis** isolated from broiler chickens in 2016 and 2017. These results in broilers and fresh poultry meat are of concern and further investigation is on-going. The resistance to ciprofloxacin was not detected in other serovars as **S. Typhimurium** and its **monophasic variant** or ***S*. Enteritidis.**

Overall, resistance to colistin remains low (>1-10%) in the different ***Salmonella*** isolates. Only the serovar ***S.* Enteritidis** showed resistance to this antimicrobial in half of the isolates collected. The other half was susceptible to all the antimicrobials tested.

Resistance to 3rd generation cephalosporins is rare and resistance to carbapenem is not detected in ***Salmonella spp***. neither from broiler chickens nor from fresh broiler meat.

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 broiler chickens and 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 meat 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.
Bacteria that produce ESBL show multi-drug resistance including ciprofloxacin resistance in a very dramatic proportion in fresh meat from bovines.

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. 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 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 2017, 178 faeces samples of young bovines and 210 caeca samples of veal calves were taken for the analysis of AMR of commensal *E. Coli*. 90 supplementary caeca samples were taken of veal calves to have a total of 300 samples for the specific monitoring of ESBL/AmpC and of carbapenemase-producing *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 lot 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 was inoculated on TBX medium and incubated at 44°C for 18 to 24 hours. Suspected colonies (green/blue) were inoculated on TBX medium and incubated at 37°C for 18 to 24 hours and transported to the national reference laboratory.

Suspected colonies were purified on Columbia agar supplemented with 5% sheep blood. Identification was done by the OPNG test, Ureum test and indol test. Finally, before antimicrobial susceptibility testing (AST), all strains were purified on Columbia agar with 5% sheep blood and confirmed to be *E. coli* by MALDI-TOF.

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 Sciensano and 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 and species identified by Maldi-Tof.

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 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

Resistance of ***E.coli*** from faecal samples at farm from non-selective culture plate was high (>20-50%) for sulfamethoxazole and moderate (>10-20%) for tetracycline, ampicillin, trimethoprim, chloramphenicol and ciprofloxacin. Low levels of resistance were seen for gentamicin, nalidixic acid, 3rd generation cephalosporins and tigecycline. Resistance to colistin 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 very high for tetracycline, ampicillin, sulfamethoxazole and trimethoprim and high for chloramphenicol and ciprofloxacin. For the rest of the antimicrobials tested, the resistance was low (10-1%).

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 208 strains, out of a total of 300 samples tested. 170 isolates were subjected to antimicrobial susceptibility testing. The resistance to tetracycline and trimethoprim was very high, followed by chloramphenicol, ciprofloxacin and nalidixic acid which was high. Resistance to colistin was low and resistance to meropenem and tigecycline was not detected.

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***.

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

Three hundred samples were analysed and 16 tested positive for ESBL. Further, isolates were tested for AST in parallel for panel 1 and 2. Results show that isolates displayed an extremely high resistance to ciprofloxacin (>70%), sulfamethoxazole and trimethoprim. They showed a very high resistance to nalidixic acid (>50-70%) as well. Neither colistin resistance, nor meropenem resistance was detected. Based on panel 2, 94% of the isolates had an ESBL phenotype and 5% a combined ESBL + AmpC phenotype.

6.5. 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 for the analysis of the antimicrobial resistance of commensal ***E. coli*** (170) 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 2017, samples were taken over the period May 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 in each 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.

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 TBX medium and incubated at 44°C for 18 to 24 hours. Suspected colonies (green/blue) were inoculated on TBX medium and incubated at 37°C for 18 to 24 hours and 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

The levels of antimicrobial resistance of commensal ***E.coli*** isolated from non-selective media were extremely high (>70%) for ampicillin and very high (50-70%) for sulfamethoxazole, ciprofloxacin, nalidixic acid, tetracycline and trimethoprim. Moderate levels (>10-20%) of resistance to 3rd generation cephalosporins was also noticed in broiler chickens in 2017. Resistance to tigecycline and azithromycin was low (>1-10%) and no isolates were resistant to colistin and meropenem.

Inoculation on MacConkey agar containing cefotaxime in a selective concentration resulted in 257 ESBL and/or AmpC strains, out of a total of 300 samples tested. The isolates obtained were subjected to AST. Results show a very high resistance (>50-70%) to ciprofloxacin, nalidixic acid, tetracycline and trimethoprim. Resistance to meropenem and colistin was not detected. Based on the results of the second panel 80% of the isolates had an ESBL phenotype.

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***.

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*** (210) 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 2017, samples were taken evenly divided over the period March to December. A sample of one lot 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 was inoculated on TBX medium and incubated at 44°C for 18 to 24 hours. Suspected colonies (green/blue) were inoculated on TBX medium and incubated at 37°C for 18 to 24 hours and transported to the national reference laboratory for further analysis.
Suspected colonies were purified on Columbia agar supplemented with 5% sheep blood. Identification was done by the OPNG test, Ureum test and indol test. Finally, before antimicrobial susceptibility testing (AST), all strains were purified on Columbia agar with 5% sheep blood and confirmed to be *E. coli* by MALDI-TOF.

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 and fresh meat samples were analysed by the laboratories of the FASFC and 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" (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 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 and species identification was done by Maldi-Tof. 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 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

The levels of antimicrobial resistance of commensal *E.coli* isolated from caeca samples of fattening pigs from non-selective media (MacConkey) were very high (>50-70%) for ampicillin and high (>20-50%) for sulfamethoxazole, tetracycline and trimethoprim. Low levels (>1-10%) of resistance were seen for cefotaxime, ceftazidime, ciprofloxacin, nalidixic acid, azithromycin, colistin, gentamicin and tigecycline. Resistance to meropenem was not detected.

Inoculation on MacConkey agar containing cefotaxime in a selective concentration resulted in 202 strains out of a total of 297 caeca samples tested. Of the 202 isolates, 170 were subjected to antimicrobial susceptibility testing. The *E.coli* ESBL were multi-resistant and revealed extremely higher resistance prevalence to sulfamethoxazole, trimethoprim, and high resistance to ciprofloxacin compared to non-ESBL (6.1.1). Phenotypically ESBLs showed no resistance to tigecycline and meropenem.

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

299 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 13 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 very high resistance (>70%) to sulfamethoxazole and trimethoprim and a high resistance (>20-50%) to ciprofloxacin, tetracycline, chloramphenicol and nalidixic acid. Neither colistin nor meropenem resistance were detected. Based

on the results of the second panel, 77% had an ESBL phenotype and 23% a combined phenotype ESBL + AmpC.

37. 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 2017, 1.060 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 98 ***Salmonella***-isolates were recovered from pig carcasses. Very high levels of resistance were reported for ampicillin and sulfamethoxazole (>50-70%) and high levels of resistance (>20-50%) for tetracycline and trimethoprim. Resistance to 3rd generation cephalosporins was not detected, nor to carbapenems. Resistance to ciprofloxacin, nalidixic acid, azithromycin, tigecycline and gentamicin was low (>1-10%). The predominant serovar was **monophasic S. Typhimurium**. The profile of resistance depends on the serovar and differs greatly from one serovar to another. Almost all the isolates belonging to the serovar ***S.*** **Typhimurium** had a common core of resistance to ampicillin, sulfamethoxazole and tetracycline. However, the second most predominant serotype, ***S.*** **Derby**, showed a diversity of profiles. Half of its isolates were susceptible to all antimicrobials tested and 20% of the isolates were resistant to 1 antimicrobial.

38. 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 2017, 150 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 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 five ***Salmonella*** isolates were recovered from bovine carcasses. Two were susceptible to all the antimicrobials tested, the single isolate of **S. Give** displayed a multiresistant phenotype including resistance to fluoroquinolones and azithromycin, together with resistance to ampicillin, sulfamethoxazole, trimethoprim and tetracycline. The other 2 isolates belonged to the serovar **monophasic *S.* Typhimurium** and displayed a common profile of resistance to ampicillin, sulfamethoxazole and trimethoprim.

39. General Description of Antimicrobial Resistance Monitoring: *Campylobacter jejuni* – poultry - animal sample

1. General description of sampling design and strategy

Caeca samples of broiler flocks for the analyses of ***Campylobacter jejuni*** 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. This monitoring started in 2014 and was implemented in 2014, 2016 and 2017. A maximum of 500 samples are taken. The samples are programmed to be taken evenly spread over the year over all slaughterhouses in the country. In 2017, 500 samples were taken over the period March 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 on demand using specific templates.

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 in each 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.

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 detection of ***Campylobacter*** from caeca samples is done by the laboratory of the animal health association ARSIA (www.arsia.be) and by other laboratories approved by the FASFC. The method used for isolation is the ISO 10272-1. After direct inoculation in m-CCDA agar plates and incubation at 41.5°C in microaerophilic conditions, lecture was done after 44h ± 4h. Purification of the isolates was done in Columbia sheep blood agar and species identification was performed by Maldi-Tof;

5. Laboratory methodology used for detection of antimicrobial resistance

Minimum Inhibitory Concentrations (MIC) were determined by using broth microdilution method (Sensititre EUCAMP2 panel). The antimicrobials tested and the epidemiological cut-off values (ECOFF) used were those listed in table 2 of Decision 2013/652/EU. Antimicrobials and breakpoints (g / ml) included for ***C. jejuni*** are: Tetracycline (>1), Nalidixic acid (>16), Ciprofloxacin (>0.5), Erythromycin (>4), Gentamicin (>2) and Streptomycin (>4).

6. Results of investigation

108 isolates of ***Campylobacter jejuni*** isolated from caeca samples gathered at time of slaughter were subjected to AST. The prevalence of resistance to ciprofloxacin, nalidixic acid and tetracycline was very high (>50-70%). The prevalence of resistance to erythromycin, streptomycin and gentamicin was very low of rare (<0.1%). Overall, 31% of the isolates were susceptible to all the antibiotics tested and 45% of the isolates had a profile of resistance including ciprofloxacin, nalidixic acid and tetracycline.

40. General Description of Antimicrobial Resistance Monitoring: Poultry - 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 and 2015 in bovines and in 2013 and 2016 in pigs. The monitoring is part of the Agency's national monitoring programme. The samples of laying hens and broilers are programmed to be taken by official veterinarians at the same time official samples are taken in the framework of the national Salmonella control programme on all layer farms with a capacity of 200 or more birds and on 10% of the broiler farms with a capacity of 200 or more birds. For broiler farms, the sampling is evenly divided over the year over the different local control units based on the number of broiler farms in each control unit. The age of the flock is not taken into consideration. 10 nasal swabs from 10 different birds and one nostril per bird, are taken on each holding and pooled to one sample at the laboratory. Each swab is transported in its own transportation tube. Seen the low number of MRSA isolated from poultry, a randomly chosen isolate from each positive farm was further tested for its AMR.
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', managed by the FASFC. The results of the detection of MRSA (suspected colonies) are also registered in the same central database. 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 evenly divided over the year (stratification on a monthly basis) and over the different provinces, based on the number of farms per category (laying hens in production/broilers) per province.

3. Randomisation procedure per animal population and food category

The official veterinarian sampling the farms choses each month the time and place of sampling. All subsamples are taken from one flock.

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 was 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 was 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. Per sample, one to five suspected colonies are selected from the Brilliance MRSA 2 plate. 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. All 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 were compared with the international Ridom database. CC398 PCR was performed on all MRSA following protocol described by Stegger et al. 2011. This method allows the rapid detection of the S. aureus 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); Clindamycine (CLI > 0,25); Erythromycine (ERY > 1); cefoxitin (FOX > 4); Fusidic acid (FUS > 0,5); Gentamycin (GEN > 2); Kanamycine (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 EUCAST (May 2018 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 in 2017 were comparable to the results in 2014. Only 5 MRSA-isolates were found, all belonging to the CC398 (LA-MRSA). The ST239 isolate found in 2011 which was a HA-MRSA, was not found in 2014 and 2017. Interestingly, a spa-type t037 was observed in 2017 in a CC398 isolate, while this spa-type has shown to be associated to ST239, a dominant sequence type of HA-MRSA (**http://spa.ridom.de/**). This suggest the spread to livestock of MRSA originating from humans and an adaptation of the strains to an animal host. 3 isolates were from laying hens, 2 of them had a SPA-type t011 with resistance patterns FoxPenSmxTetTmp and CipCliEryFoxGenKanPenTetTmp. The third isolate had a SPA-type t037 with resistance pattern ChlEryFoxKanPenRifSmxStrTet. The 2 isolates from broilers had a SPA-type t011 with resistance patterns CipCliEryFoxPenSmxSynTetTmp and CliFoxPenSynTetTia. Resistance against last resort antibiotics for human use was not found.