

Germany

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

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

IN 2018

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 Germany during the year 2018.

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.

* 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

Animal species	Category of animals	Population		
		holding	animal	herd/flock
Cattle (bovine animals)	Cattle (bovine animals)	143,245	11,825,363	
	Cattle (bovine animals) - calves (under 1 year)		3,583,693	
	Cattle (bovine animals) - dairy cows		4,100,863	
	Cattle (bovine animals) - young cattle (1-2 years)		2,829,080	
Gallus gallus (fowl)	Gallus gallus (fowl) - broilers - before slaughter	9,895		32,450
	Gallus gallus (fowl) - elite breeding flocks, unspecified - adult	731		1,245
	Gallus gallus (fowl) - laying hens - adult	226,984		315,629
Pigs	Pigs		26,445,400	
	Pigs - breeding animals		1,854,900	
	Pigs - fattening pigs		11,870,200	
Sheep and goats	Sheep and goats	133,053	2,390,909	
Solipeds, domestic	Solipeds, domestic		441,954	
Turkeys	Turkeys - breeding flocks, unspecified - adult	102		153
	Turkeys - fattening flocks - before slaughter	4,891		8,994

DISEASE STATUS TABLES

Table Bovine brucellosis 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 herds
GERMANY	143,245	0	143,245

Table Ovine or Caprine brucellosis 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 herds
GERMANY	133,053	0	133,053

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 herds
GERMANY	143,245	6	143,245

PREVALENCE TABLES

Table Campylobacter:CAMPYLOBACTER in animal

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling Details	Method	Sampling unit	Total units tested	Total units positive	Zoonoses	N of units positive
Not Available	Gallus gallus (fow) - broilers - Slaughterhouse - Germany - animal sample - caecum - Monitoring - active - Official sampling - Objective sampling	N_A	ISO/TS 10272-2:2006 Campylobacter	animal	592	246	Campylobacter	246
	Turkeys - meat production flocks - Slaughterhouse - Germany - animal sample - caecum - Monitoring - active - Official sampling - Objective sampling	N_A	ISO/TS 10272-2:2006 Campylobacter	animal	485	312	Campylobacter	312
GERMANY	Cattle (bovine animals) - calves (under 1 year) - Farm - Germany - animal sample - Unspecified - Official sampling - Not specified	N_A	Microbiological tests	animal	54	12	Campylobacter	0
							Campylobacter coli	1
							Campylobacter jejuni	11
	Cattle (bovine animals) - dairy cows - Farm - Germany - animal sample - Unspecified - Official sampling - Not specified	N_A	Microbiological tests	animal	53	2	Campylobacter	0
							Campylobacter jejuni	2
	Cattle (bovine animals) - meat production animals - calves (under 1 year) - Farm - Germany - animal sample - Unspecified - Official sampling - Not specified	N_A	Microbiological tests	animal	2	2	Campylobacter jejuni	2

Table Campylobacter:CAMPYLOBACTER in food

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Sampling Details	Method	Total units tested	Total units positive	Zoonoses	N of units positive
Not Available	Meat from broilers (Gallus gallus) - carcase - Slaughterhouse - Germany - food sample - neck skin - Monitoring - active - Official sampling - Objective sampling	slaughte r animal batch	1	Gram	N_A	ISO 10272-2:2017 Campylobacter	434	166	Campylobacter	166
	Meat from broilers (Gallus gallus) - carcase - Slaughterhouse - Germany - food sample - neck skin - Monitoring - active - Official sampling - Objective sampling	slaughte r animal batch	25	Gram	N_A	ISO 10272-1:2017 Campylobacter	431	206	Campylobacter	206
	Meat from broilers (Gallus gallus) - fresh - skinned - Retail - Germany - food sample - meat - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	ISO 10272-1:2017 Campylobacter	407	211	Campylobacter	211
	Meat from poultry, unspecified - meat products - ready-to-eat - Retail - Germany - food sample - meat - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	ISO 10272-1:2017 Campylobacter	203	1	Campylobacter	1
	Meat from turkey - fresh - skinned - Retail - Germany - food sample - meat - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	ISO 10272-1:2017 Campylobacter	527	102	Campylobacter	102
GERMANY	Cheeses made from goats' milk - unspecified - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	6	0	Campylobacter	0
	Cheeses made from sheep's milk - unspecified - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	1	0	Campylobacter	0
	Dairy products (excluding cheeses) - butter - made from raw or low heat-treated milk - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	1	0	Campylobacter	0
	Meat from bovine animals - fresh - Cutting plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	3	0	Campylobacter	0
	Meat from bovine animals - fresh - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	2	0	Campylobacter	0
	Meat from bovine animals - fresh - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	6	0	Campylobacter	0
	Meat from bovine animals - fresh - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	18	0	Campylobacter	0
	Meat from bovine animals - fresh - Slaughterhouse - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	3	0	Campylobacter	0
	Meat from bovine animals - meat preparation - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	1	0	Campylobacter	0
	Meat from bovine animals - meat preparation - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	3	0	Campylobacter	0
	Meat from bovine animals - meat products - fermented sausages - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	1	0	Campylobacter	0
	Meat from bovine animals - meat products - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	1	0	Campylobacter	0
	Meat from bovine animals - minced meat - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	12	0	Campylobacter	0
	Meat from bovine animals - minced meat - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	1	0	Campylobacter	0
	Meat from broilers (Gallus gallus) - fresh - Cutting plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	1	1	Campylobacter jejuni	1
	Meat from broilers (Gallus gallus) - fresh - Cutting plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	39	31	Campylobacter	0
									Campylobacter coli	6
									Campylobacter jejuni	20
									Campylobacter, unspecified sp.	5

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Sampling Details	Method	Total units tested	Total units positive	Zoonoses	N of units positive
GERMANY	Meat from broilers (Gallus gallus) - fresh - Cutting plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	17	15	Campylobacter	0
									Campylobacter coli	4
									Campylobacter jejuni	5
									Campylobacter, unspecified sp.	5
									thermotolerant Campylobacter, unspecified	1
	Meat from broilers (Gallus gallus) - fresh - Farm - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	2	1	Campylobacter	0
									Campylobacter jejuni	1
	Meat from broilers (Gallus gallus) - fresh - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	34	22	Campylobacter	0
									Campylobacter coli	7
									Campylobacter jejuni	11
									Campylobacter, unspecified sp.	2
									thermotolerant Campylobacter, unspecified	2
	Meat from broilers (Gallus gallus) - fresh - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	17	14	Campylobacter	0
									Campylobacter coli	4
									Campylobacter jejuni	5
									Campylobacter, unspecified sp.	5
	Meat from broilers (Gallus gallus) - fresh - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	4	3	Campylobacter	0
									Campylobacter jejuni	1
									Campylobacter, unspecified sp.	2
	Meat from broilers (Gallus gallus) - fresh - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	244	151	Campylobacter	0
									Campylobacter coli	32
									Campylobacter jejuni	62
									Campylobacter, unspecified sp.	52
									thermotolerant Campylobacter, unspecified	5
	Meat from broilers (Gallus gallus) - fresh - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	229	150	Campylobacter	0
									Campylobacter coli	18
									Campylobacter jejuni	64
									Campylobacter lari	1
									Campylobacter, unspecified sp.	62
	Meat from broilers (Gallus gallus) - fresh - Slaughterhouse - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	2	2	thermotolerant Campylobacter, unspecified	5
									Campylobacter jejuni	1
	Meat from broilers (Gallus gallus) - fresh - Slaughterhouse - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	39	19	Campylobacter	0
									Campylobacter coli	1
									Campylobacter jejuni	2
Campylobacter, unspecified sp.									15	
thermotolerant Campylobacter, unspecified									1	
Meat from broilers (Gallus gallus) - meat preparation - Cutting plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	3	2	Campylobacter	0	
								Campylobacter jejuni	1	
								Campylobacter, unspecified sp.	1	
Meat from broilers (Gallus gallus) - meat preparation - Cutting plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	3	2	Campylobacter	0	
								Campylobacter, unspecified sp.	2	
Meat from broilers (Gallus gallus) - meat preparation - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	12	9	Campylobacter	0	
								Campylobacter jejuni	6	
								Campylobacter, unspecified sp.	2	
								thermotolerant Campylobacter, unspecified	1	
Meat from broilers (Gallus gallus) - meat preparation - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	14	10	Campylobacter	0	
								Campylobacter coli	3	
								Campylobacter jejuni	4	
								Campylobacter, unspecified sp.	3	
Meat from broilers (Gallus gallus) - meat preparation - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	35	15	Campylobacter	0	
								Campylobacter coli	3	
								Campylobacter jejuni	6	

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Sampling Details	Method	Total units tested	Total units positive	Zoonoses	N of units positive
GERMANY	Meat from broilers (Gallus gallus) - meat preparation - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	35	15	Campylobacter, unspecified sp.	4
									thermotolerant Campylobacter, unspecified	2
	Meat from broilers (Gallus gallus) - meat preparation - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	50	25	Campylobacter	0
									Campylobacter coli	6
									Campylobacter jejuni	8
									Campylobacter, unspecified sp.	11
	Meat from broilers (Gallus gallus) - meat preparation - Slaughterhouse - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	8	3	Campylobacter	0
									Campylobacter, unspecified sp.	3
	Meat from broilers (Gallus gallus) - meat preparation - Slaughterhouse - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	14	7	Campylobacter	0
									Campylobacter coli	2
									Campylobacter jejuni	2
									Campylobacter, unspecified sp.	3
	Meat from broilers (Gallus gallus) - meat products - Cutting plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	2	0	Campylobacter	0
	Meat from broilers (Gallus gallus) - meat products - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	1	0	Campylobacter	0
	Meat from broilers (Gallus gallus) - meat products - ready-to-eat - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	1	0	Campylobacter	0
	Meat from broilers (Gallus gallus) - meat products - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	17	5	Campylobacter	0
									Campylobacter jejuni	2
									Campylobacter, unspecified sp.	3
	Meat from pig - fresh - Cutting plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	8	0	Campylobacter	0
	Meat from pig - fresh - Cutting plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	1	0	Campylobacter	0
	Meat from pig - fresh - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	16	2	Campylobacter	0
									Campylobacter coli	2
	Meat from pig - fresh - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	26	6	Campylobacter	0
									Campylobacter coli	2
									Campylobacter, unspecified sp.	4
	Meat from pig - fresh - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	73	0	Campylobacter	0
	Meat from pig - fresh - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	37	0	Campylobacter	0
	Meat from pig - fresh - Slaughterhouse - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	15	2	Campylobacter	0
									Campylobacter coli	2
	Meat from pig - fresh - Slaughterhouse - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	14	3	Campylobacter	0
									Campylobacter, unspecified sp.	3
	Meat from pig - meat preparation - Cutting plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	2	0	Campylobacter	0
	Meat from pig - meat preparation - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	1	0	Campylobacter	0
	Meat from pig - meat preparation - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	2	0	Campylobacter	0
	Meat from pig - meat preparation - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	75	0	Campylobacter	0
	Meat from pig - meat preparation - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	13	0	Campylobacter	0
	Meat from pig - meat preparation - Slaughterhouse - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	1	0	Campylobacter	0

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Sampling Details	Method	Total units tested	Total units positive	Zoonoses	N of units positive
GERMANY	Meat from pig - meat preparation - Slaughterhouse - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	1	0	Campylobacter	0
	Meat from pig - meat products - cooked, ready-to-eat - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	1	0	Campylobacter	0
	Meat from pig - meat products - fermented sausages - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	1	0	Campylobacter	0
	Meat from pig - meat products - fermented sausages - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	1	0	Campylobacter	0
	Meat from pig - meat products - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	5	0	Campylobacter	0
	Meat from pig - meat products - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	1	0	Campylobacter	0
	Meat from pig - meat products - Slaughterhouse - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	1	0	Campylobacter	0
	Meat from pig - mechanically separated meat (MSM) - Slaughterhouse - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	1	0	Campylobacter	0
	Meat from pig - minced meat - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	1	0	Campylobacter	0
	Meat from pig - minced meat - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	94	0	Campylobacter	0
	Meat from pig - minced meat - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	29	0	Campylobacter	0
	Meat from pig - minced meat - Slaughterhouse - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	2	0	Campylobacter	0
	Meat from turkey - fresh - Cutting plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	2	1	Campylobacter	0
									Campylobacter, unspecified sp.	1
	Meat from turkey - fresh - Cutting plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	2	1	Campylobacter	0
									Campylobacter jejuni	1
	Meat from turkey - fresh - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	14	8	Campylobacter	0
									Campylobacter coli	1
									Campylobacter jejuni	6
									Campylobacter, unspecified sp.	1
	Meat from turkey - fresh - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	8	1	Campylobacter	0
									Campylobacter, unspecified sp.	1
	Meat from turkey - fresh - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	5	1	Campylobacter	0
									Campylobacter, unspecified sp.	1
	Meat from turkey - fresh - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	105	31	Campylobacter	0
									Campylobacter coli	9
									Campylobacter jejuni	13
									Campylobacter, unspecified sp.	9
	Meat from turkey - fresh - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	93	28	Campylobacter	0
									Campylobacter coli	5
									Campylobacter jejuni	10
									Campylobacter, unspecified sp.	12
	Meat from turkey - fresh - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	93	28	thermotolerant Campylobacter, unspecified	1
									Campylobacter, unspecified sp.	1
	Meat from turkey - fresh - Slaughterhouse - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	1	1	Campylobacter, unspecified sp.	1
	Meat from turkey - fresh - Slaughterhouse - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	2	2	Campylobacter lari	1
									thermotolerant Campylobacter, unspecified	1

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Sampling Details	Method	Total units tested	Total units positive	Zoonoses	N of units positive
GERMANY	Meat from turkey - meat preparation - Cutting plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	1	0	Campylobacter	0
	Meat from turkey - meat preparation - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	12	1	Campylobacter	0
									Campylobacter jejuni	1
	Meat from turkey - meat preparation - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	1	0	Campylobacter	0
	Meat from turkey - meat preparation - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	16	6	Campylobacter	0
									Campylobacter coli	1
									Campylobacter jejuni	1
									Campylobacter, unspecified sp.	4
	Meat from turkey - meat preparation - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	57	20	Campylobacter	0
									Campylobacter coli	5
									Campylobacter jejuni	6
									Campylobacter, unspecified sp.	9
	Meat from turkey - meat products - ready-to-eat - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	1	0	Campylobacter	0
	Meat from turkey - meat products - ready-to-eat - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	4	0	Campylobacter	0
	Meat from turkey - meat products - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	2	0	Campylobacter	0
	Meat from turkey - meat products - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	3	0	Campylobacter	0
	Meat from turkey - mechanically separated meat (MSM) - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	1	0	Campylobacter	0
	Milk, cows' - raw milk - intended for direct human consumption - Farm - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	84	0	Campylobacter	0
	Milk, cows' - raw milk - intended for direct human consumption - Farm - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	113	5	Campylobacter	0
									Campylobacter jejuni	2
									Campylobacter, unspecified sp.	3
	Milk, cows' - raw milk - intended for direct human consumption - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	5	0	Campylobacter	0
	Milk, cows' - raw milk - intended for direct human consumption - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	4	0	Campylobacter	0
	Milk, cows' - raw milk - intended for direct human consumption - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	17	0	Campylobacter	0
	Milk, cows' - raw milk - intended for direct human consumption - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	101	0	Campylobacter	0
	Milk, cows' - raw milk for manufacture - Automatic distribution system for raw milk - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	1	0	Campylobacter	0
	Milk, cows' - raw milk for manufacture - Automatic distribution system for raw milk - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	2	0	Campylobacter	0
	Milk, cows' - raw milk for manufacture - Farm - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	60	0	Campylobacter	0
	Milk, cows' - raw milk for manufacture - Farm - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	53	3	Campylobacter	0
									Campylobacter jejuni	1
									thermotolerant Campylobacter, unspecified	2
	Milk, cows' - raw milk for manufacture - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	13	0	Campylobacter	0

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Sampling Details	Method	Total units tested	Total units positive	Zoonoses	N of units positive
GERMANY	Milk, cows' - raw milk for manufacture - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed d)	25	Gram	N_A	PCR	12	2	Campylobacter	0
									Campylobacter jejuni	1
									thermotolerant Campylobacter, unspecified	1
	Milk, cows' - raw milk for manufacture - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed d)	25	Gram	N_A	Unspecified	17	0	Campylobacter	0
	Milk, cows' - raw milk for manufacture - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed d)	25	Gram	N_A	PCR	14	0	Campylobacter	0
	Milk, goats' - raw milk for manufacture - Farm - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed d)	25	Gram	N_A	Unspecified	2	0	Campylobacter	0
	Milk, goats' - raw milk for manufacture - Farm - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed d)	25	Gram	N_A	PCR	1	0	Campylobacter	0
	Milk, goats' - raw milk for manufacture - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed d)	25	Gram	N_A	PCR	2	0	Campylobacter	0
	Milk, goats' - raw milk for manufacture - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed d)	25	Gram	N_A	Unspecified	1	0	Campylobacter	0
	Milk, goats' - raw milk for manufacture - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed d)	25	Gram	N_A	PCR	2	0	Campylobacter	0
	Milk, sheep's - raw milk - intended for direct human consumption - Farm - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed d)	25	Gram	N_A	PCR	1	0	Campylobacter	0
	Milk, sheep's - raw milk - intended for direct human consumption - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed d)	25	Gram	N_A	Unspecified	1	0	Campylobacter	0
	Milk, sheep's - raw milk - intended for direct human consumption - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed d)	25	Gram	N_A	PCR	4	0	Campylobacter	0

Table Cronobacter:CRONOBACTER in food

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Sampling Details	Method	Total units tested	Total units positive	Zoonoses	N of units positive
GERMANY	Foodstuffs intended for special nutritional uses - dried dietary foods for special medical purposes intended for infants below 6 months - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N/A	ISO 22964:2017 Cronobacter	2	0	Cronobacter	0
	Infant formula - dried - intended for infants below 6 months - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N/A	ISO 22964:2017 Cronobacter	50	0	Cronobacter	0
	Infant formula - dried - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N/A	ISO 22964:2017 Cronobacter	2	0	Cronobacter	0
	Infant formula - dried - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N/A	ISO 22964:2017 Cronobacter	9	0	Cronobacter	0

Table Echinococcus:ECHINOCOCCUS in animal

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling Details	Method	Sampling unit	Total units tested	Total units positive	Zoonoses	N of units positive
GERMANY	Foxes - Unspecified - Germany - animal sample - Unspecified - Official sampling - Not specified	N_A	Unspecified	animal	555	115	Echinococcus	0
							Echinococcus multilocularis	64
							Echinococcus, unspecified sp.	51
	Foxes - wild - Unspecified - Germany - animal sample - Unspecified - Official sampling - Not specified	N_A	Unspecified	animal	255	29	Echinococcus multilocularis	29

Table Escherichia coli:ESCHERICHIA COLI in animal

Area of sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight unit	Sampling Details	Method	total units tested	total units positive	Zoonoses	ANTH	VTX	AG	N units positive
GERMANY	Cattle (bovine animals) - calves (under 1 year) - Farm - Germany - animal sample - Unspecified - Official sampling - Not specified	animal	Not Available	N_A	In house real time PCR methods based on ISO/TS 13136:2012	308	8	VTEC, unspecified	Not Available	Verotoxin production, toxin type unknown	Adhesion genes investigation not reported	8
	Goats - animals under 1 year - Farm - Germany - animal sample - Unspecified - Official sampling - Not specified	animal	Not Available	N_A	In house real time PCR methods based on ISO/TS 13136:2012	4	2	VTEC, unspecified	Not Available	Verotoxin production, toxin type unknown	Adhesion genes investigation not reported	2
	Goats - Farm - Germany - animal sample - Unspecified - Official sampling - Not specified	animal	Not Available	N_A	In house real time PCR methods based on ISO/TS 13136:2012	1	0	Verocytotoxinogenic E. coli (VTEC)	Not Available	Not Available	Not Available	0
	Pigs - fattening pigs - Farm - Germany - animal sample - Unspecified - Official sampling - Not specified	animal	Not Available	N_A	In house real time PCR methods based on ISO/TS 13136:2012	1	0	Verocytotoxinogenic E. coli (VTEC)	Not Available	Not Available	Not Available	0

Table Escherichia coli:ESCHERICHIA COLI in food

Area of sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Sampling Details	Method	total units tested	total units positive	Zoonoses	ANTH	VTX	AG	N units positive
GERMANY	Cheeses made from goats' milk - unspecified - made from raw or low heat-treated milk - Farm - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	1	0	Verocytotoxin genic 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 - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	10	0	Verocytotoxin genic 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 - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	1	0	Verocytotoxin genic E. coli (VTEC)	Not Available	Not Available	Not Available	0
	Cheeses made from goats' milk - unspecified - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	2	0	Verocytotoxin genic E. coli (VTEC)	Not Available	Not Available	Not Available	0
	Cheeses made from goats' milk - unspecified - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	10	2	VTEC, unspecified	Not Available	Verotoxin production, toxin type unknown	Adhesion genes investigation not reported	2
	Cheeses made from sheep's milk - unspecified - Farm - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	2	0	Verocytotoxin genic E. coli (VTEC)	Not Available	Not Available	Not Available	0
	Cheeses made from sheep's milk - unspecified - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	2	0	Verocytotoxin genic 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 - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	4	0	Verocytotoxin genic E. coli (VTEC)	Not Available	Not Available	Not Available	0
	Fruits - non-pre-cut - frozen - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	13	0	Verocytotoxin genic E. coli (VTEC)	Not Available	Not Available	Not Available	0
	Fruits - products - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	3	0	Verocytotoxin genic E. coli (VTEC)	Not Available	Not Available	Not Available	0
	Fruits - products - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	102	0	Verocytotoxin genic E. coli (VTEC)	Not Available	Not Available	Not Available	0
	Meat from bovine animals - fresh - Cutting plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	32	1	VTEC, unspecified	Not Available	Verotoxin production, toxin type unknown	Adhesion genes investigation not reported	1
	Meat from bovine animals - fresh - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	31	1	VTEC, unspecified	Not Available	Verotoxin production, toxin type unknown	Adhesion genes investigation not reported	1

Area of sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Sampling Details	Method	total units tested	total units positive	Zoonoses	ANTH	VTX	AG	N units positive
GERMANY	Meat from bovine animals - fresh - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	158	4	VTEC, unspecified	Not Available	Verotoxin production, toxin type unknown	Adhesion genes investigation not reported	4
	Meat from bovine animals - fresh - Slaughterhouse - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	33	0	Verocytotoxinogenic E. coli (VTEC)	Not Available	Not Available	Not Available	0
	Meat from bovine animals - meat preparation - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	13	0	Verocytotoxinogenic E. coli (VTEC)	Not Available	Not Available	Not Available	0
	Meat from bovine animals - meat preparation - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	54	0	Verocytotoxinogenic E. coli (VTEC)	Not Available	Not Available	Not Available	0
	Meat from bovine animals - meat preparation - Slaughterhouse - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	3	0	Verocytotoxinogenic E. coli (VTEC)	Not Available	Not Available	Not Available	0
	Meat from bovine animals - meat products - fermented sausages - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	4	0	Verocytotoxinogenic E. coli (VTEC)	Not Available	Not Available	Not Available	0
	Meat from bovine animals - meat products - fermented sausages - Slaughterhouse - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	1	0	Verocytotoxinogenic E. coli (VTEC)	Not Available	Not Available	Not Available	0
	Meat from bovine animals - meat products - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	1	0	Verocytotoxinogenic E. coli (VTEC)	Not Available	Not Available	Not Available	0
	Meat from bovine animals - meat products - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	19	0	Verocytotoxinogenic E. coli (VTEC)	Not Available	Not Available	Not Available	0
	Meat from bovine animals - mechanically separated meat (MSM) - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	1	0	Verocytotoxinogenic E. coli (VTEC)	Not Available	Not Available	Not Available	0
	Meat from bovine animals - mechanically separated meat (MSM) - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	1	0	Verocytotoxinogenic E. coli (VTEC)	Not Available	Not Available	Not Available	0
	Meat from bovine animals - minced meat - Cutting plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	4	0	Verocytotoxinogenic E. coli (VTEC)	Not Available	Not Available	Not Available	0
	Meat from bovine animals - minced meat - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	36	1	VTEC, unspecified	Not Available	Verotoxin production, toxin type unknown	Adhesion genes investigation not reported	1
	Meat from bovine animals - minced meat - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	787	46	VTEC, unspecified	Not Available	Verotoxin production, toxin type unknown	Adhesion genes investigation not reported	46

Area of sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Sampling Details	Method	total units tested	total units positive	Zoonoses	ANTH	VTX	AG	N units positive
GERMANY	Meat from bovine animals - minced meat - Slaughterhouse - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	8	0	Verocytotoxin genic E. coli (VTEC)	Not Available	Not Available	Not Available	0
	Meat from deer (venison) - fresh - Farm - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	1	0	Verocytotoxin genic E. coli (VTEC)	Not Available	Not Available	Not Available	0
	Meat from deer (venison) - fresh - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	7	2	VTEC, unspecified	Not Available	Verotoxin production, toxin type unknown	Adhesion genes investigation not reported	2
	Meat from deer (venison) - fresh - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	43	14	VTEC, unspecified	Not Available	Verotoxin production, toxin type unknown	Adhesion genes investigation not reported	14
	Meat from deer (venison) - meat preparation - Cutting plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	2	1	VTEC, unspecified	Not Available	Verotoxin production, toxin type unknown	Adhesion genes investigation not reported	1
	Meat from deer (venison) - meat preparation - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	1	0	Verocytotoxin genic E. coli (VTEC)	Not Available	Not Available	Not Available	0
	Meat from deer (venison) - meat preparation - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	4	4	VTEC, unspecified	Not Available	Verotoxin production, toxin type unknown	Adhesion genes investigation not reported	4
	Meat from deer (venison) - meat products - fermented sausages - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	2	0	Verocytotoxin genic E. coli (VTEC)	Not Available	Not Available	Not Available	0
	Meat from deer (venison) - meat products - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	2	0	Verocytotoxin genic E. coli (VTEC)	Not Available	Not Available	Not Available	0
	Meat from farmed game- land mammals - fresh - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	3	0	Verocytotoxin genic E. coli (VTEC)	Not Available	Not Available	Not Available	0
	Meat from goat - fresh - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	1	0	Verocytotoxin genic E. coli (VTEC)	Not Available	Not Available	Not Available	0
	Meat from goat - fresh - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	1	0	Verocytotoxin genic E. coli (VTEC)	Not Available	Not Available	Not Available	0
	Meat from pig - fresh - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	13	0	Verocytotoxin genic E. coli (VTEC)	Not Available	Not Available	Not Available	0
	Meat from pig - fresh - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	25	1	VTEC, unspecified	Not Available	Verotoxin production, toxin type unknown	Adhesion genes investigation not reported	1

Area of sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Sampling Details	Method	total units tested	total units positive	Zoonoses	ANTH	VTX	AG	N units positive
GERMANY	Meat from pig - fresh - Slaughterhouse - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	20	0	Verocytotoxinogenic E. coli (VTEC)	Not Available	Not Available	Not Available	0
	Meat from pig - meat preparation - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	14	0	Verocytotoxinogenic E. coli (VTEC)	Not Available	Not Available	Not Available	0
	Meat from pig - meat preparation - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	81	2	VTEC, unspecified	Not Available	Verotoxin production, toxin type unknown	Adhesion genes investigation not reported	2
	Meat from pig - meat products - cooked, ready-to-eat - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	1	0	Verocytotoxinogenic E. coli (VTEC)	Not Available	Not Available	Not Available	0
	Meat from pig - meat products - fermented sausages - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	13	0	Verocytotoxinogenic E. coli (VTEC)	Not Available	Not Available	Not Available	0
	Meat from pig - meat products - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	1	0	Verocytotoxinogenic E. coli (VTEC)	Not Available	Not Available	Not Available	0
	Meat from pig - meat products - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	1	0	Verocytotoxinogenic E. coli (VTEC)	Not Available	Not Available	Not Available	0
	Meat from pig - mechanically separated meat (MSM) - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	11	2	VTEC, unspecified	Not Available	Verotoxin production, toxin type unknown	Adhesion genes investigation not reported	2
	Meat from pig - mechanically separated meat (MSM) - Slaughterhouse - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	1	0	Verocytotoxinogenic E. coli (VTEC)	Not Available	Not Available	Not Available	0
	Meat from pig - minced meat - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	8	0	Verocytotoxinogenic E. coli (VTEC)	Not Available	Not Available	Not Available	0
	Meat from pig - minced meat - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	55	6	VTEC, unspecified	Not Available	Verotoxin production, toxin type unknown	Adhesion genes investigation not reported	6
	Meat from sheep - fresh - Cutting plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	1	0	Verocytotoxinogenic E. coli (VTEC)	Not Available	Not Available	Not Available	0
	Meat from sheep - fresh - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	4	2	VTEC, unspecified	Not Available	Verotoxin production, toxin type unknown	Adhesion genes investigation not reported	2
	Meat from sheep - fresh - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	44	8	VTEC, unspecified	Not Available	Verotoxin production, toxin type unknown	Adhesion genes investigation not reported	8

Area of sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Sampling Details	Method	total units tested	total units positive	Zoonoses	ANTH	VTX	AG	N units positive
GERMANY	Meat from sheep - fresh - Slaughterhouse - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	1	0	Verocytotoxin genic E. coli (VTEC)	Not Available	Not Available	Not Available	0
	Meat from sheep - meat preparation - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	16	1	VTEC, unspecified	Not Available	Verotoxin production, toxin type unknown	Adhesion genes investigation not reported	1
	Meat from sheep - meat products - fermented sausages - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	1	0	Verocytotoxin genic E. coli (VTEC)	Not Available	Not Available	Not Available	0
	Meat from sheep - meat products - fermented sausages - Slaughterhouse - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	2	0	Verocytotoxin genic E. coli (VTEC)	Not Available	Not Available	Not Available	0
	Meat from sheep - minced meat - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	2	2	VTEC, unspecified	Not Available	Verotoxin production, toxin type unknown	Adhesion genes investigation not reported	2
	Meat from wild boar - fresh - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	6	0	Verocytotoxin genic E. coli (VTEC)	Not Available	Not Available	Not Available	0
	Meat from wild boar - fresh - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	14	4	VTEC, unspecified	Not Available	Verotoxin production, toxin type unknown	Adhesion genes investigation not reported	4
	Meat from wild boar - meat products - fermented sausages - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	1	0	Verocytotoxin genic E. coli (VTEC)	Not Available	Not Available	Not Available	0
	Meat from wild boar - meat products - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	1	0	Verocytotoxin genic E. coli (VTEC)	Not Available	Not Available	Not Available	0
	Meat from wild game - land mammals - fresh - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	2	2	VTEC, unspecified	Not Available	Verotoxin production, toxin type unknown	Adhesion genes investigation not reported	2
	Meat from wild game - land mammals - fresh - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	5	0	Verocytotoxin genic E. coli (VTEC)	Not Available	Not Available	Not Available	0
	Milk, cows' - raw milk - intended for direct human consumption - Farm - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	178	12	VTEC, unspecified	Not Available	Verotoxin production, toxin type unknown	Adhesion genes investigation not reported	12
	Milk, cows' - raw milk - intended for direct human consumption - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	13	1	VTEC, unspecified	Not Available	Verotoxin production, toxin type unknown	Adhesion genes investigation not reported	1
	Milk, cows' - raw milk - intended for direct human consumption - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	53	5	VTEC, unspecified	Not Available	Verotoxin production, toxin type unknown	Adhesion genes investigation not reported	5

Area of sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Sampling Details	Method	total units tested	total units positive	Zoonoses	ANTH	VTX	AG	N units positive
GERMANY	Milk, cows' - raw milk for manufacture - Automatic distribution system for raw milk - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	2	1	VTEC, unspecified	Not Available	Verotoxin production, toxin type unknown	Adhesion genes investigation not reported	1
	Milk, cows' - raw milk for manufacture - Farm - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	74	2	VTEC, unspecified	Not Available	Verotoxin production, toxin type unknown	Adhesion genes investigation not reported	2
	Milk, cows' - raw milk for manufacture - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	22	0	Verocytotoxinogenic E. coli (VTEC)	Not Available	Not Available	Not Available	0
	Milk, cows' - raw milk for manufacture - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	22	1	VTEC, unspecified	Not Available	Verotoxin production, toxin type unknown	Adhesion genes investigation not reported	1
	Milk, goats' - raw milk for manufacture - Farm - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	1	0	Verocytotoxinogenic E. coli (VTEC)	Not Available	Not Available	Not Available	0
	Milk, goats' - raw milk for manufacture - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	3	0	Verocytotoxinogenic E. coli (VTEC)	Not Available	Not Available	Not Available	0
	Milk, goats' - raw milk for manufacture - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	2	0	Verocytotoxinogenic E. coli (VTEC)	Not Available	Not Available	Not Available	0
	Milk, sheep's - raw milk - intended for direct human consumption - Farm - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	1	0	Verocytotoxinogenic E. coli (VTEC)	Not Available	Not Available	Not Available	0
	Milk, sheep's - raw milk - intended for direct human consumption - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	3	0	Verocytotoxinogenic E. coli (VTEC)	Not Available	Not Available	Not Available	0
	Seeds, sprouted - Farm - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	15	0	Verocytotoxinogenic E. coli (VTEC)	Not Available	Not Available	Not Available	0
	Seeds, sprouted - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	8	0	Verocytotoxinogenic E. coli (VTEC)	Not Available	Not Available	Not Available	0
	Seeds, sprouted - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4)	95	1	VTEC, unspecified	Not Available	Verotoxin production, toxin type unknown	Adhesion genes investigation not reported	1

Table LISTERIA in food

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Sampling Details	Total units tested	Total units positive	Method	Zoonoses	N of units tested	N of units positive
GERMANY	Bakery products - bread - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	11	0	detection	Listeria monocytogenes	11	0
	Bakery products - cakes - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	43	0	detection	Listeria monocytogenes	43	0
	Bakery products - cakes - Restaurant or Cafe or Pub or Bar or Hotel or Catering service - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	72	1	detection	Listeria monocytogenes	72	1
	Bakery products - cakes - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	1084	3	detection	Listeria monocytogenes	1,084	3
	Bakery products - desserts - Restaurant or Cafe or Pub or Bar or Hotel or Catering service - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	1	0	detection	Listeria monocytogenes	1	0
	Bakery products - desserts - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	8	0	detection	Listeria monocytogenes	8	0
	Bakery products - pastry - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	55	0	detection	Listeria monocytogenes	55	0
	Bakery products - pastry - Restaurant or Cafe or Pub or Bar or Hotel or Catering service - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	34	0	detection	Listeria monocytogenes	34	0
	Bakery products - pastry - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	844	0	detection	Listeria monocytogenes	844	0
	Cheeses made from goats' milk - unspecified - made from raw or low heat-treated milk - Farm - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	1	0	detection	Listeria monocytogenes	1	0
	Cheeses made from goats' milk - unspecified - made from raw or low heat-treated milk - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	3	0	detection	Listeria monocytogenes	3	0
	Cheeses made from goats' milk - unspecified - made from raw or low heat-treated milk - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	2	0	detection	Listeria monocytogenes	2	0
	Cheeses made from goats' milk - unspecified - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	12	0	detection	Listeria monocytogenes	12	0
	Cheeses made from goats' milk - unspecified - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	64	0	detection	Listeria monocytogenes	64	0
	Cheeses made from sheep's milk - unspecified - Farm - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	2	0	detection	Listeria monocytogenes	2	0
	Cheeses made from sheep's milk - unspecified - made from raw or low heat-treated milk - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	1	0	detection	Listeria monocytogenes	1	0
	Cheeses made from sheep's milk - unspecified - made from raw or low heat-treated milk - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	2	0	detection	Listeria monocytogenes	2	0
	Cheeses made from sheep's milk - unspecified - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	7	0	detection	Listeria monocytogenes	7	0
	Cheeses made from sheep's milk - unspecified - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	41	0	detection	Listeria monocytogenes	41	0
	Crustaceans - lobsters - cooked - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	1	0	detection	Listeria monocytogenes	1	0
	Crustaceans - shrimps - cooked - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	2	0	detection	Listeria monocytogenes	2	0
	Crustaceans - shrimps - cooked - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	14	0	detection	Listeria monocytogenes	14	0
	Crustaceans - unspecified - cooked - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	11	0	detection	Listeria monocytogenes	11	0

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Sampling Details	Total units tested	Total units positive	Method	Zoonoses	N of units tested	N of units positive
GERMANY	Crustaceans - unspecified - cooked - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	1	0	detection	Listeria monocytogenes	1	0
	Crustaceans - unspecified - cooked - Unspecified - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	4	0	detection	Listeria monocytogenes	4	0
	Dairy products (excluding cheeses) - butter - made from raw or low heat-treated milk - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	12	0	detection	Listeria monocytogenes	12	0
	Dairy products (excluding cheeses) - cream - made from pasteurised milk - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	32	0	detection	Listeria monocytogenes	32	0
	Dairy products (excluding cheeses) - cream - made from pasteurised milk - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	16	0	detection	Listeria monocytogenes	16	0
	Dairy products (excluding cheeses) - cream - made from raw or low heat-treated milk - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	1	0	detection	Listeria monocytogenes	1	0
	Dairy products (excluding cheeses) - milk powder and whey powder - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	19	0	detection	Listeria monocytogenes	19	0
	Dairy products (excluding cheeses) - milk powder and whey powder - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	3	0	detection	Listeria monocytogenes	3	0
	Dairy products (excluding cheeses) - yoghurt - Farm - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	7	0	detection	Listeria monocytogenes	7	0
	Dairy products (excluding cheeses) - yoghurt - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	51	0	detection	Listeria monocytogenes	51	0
	Dairy products (excluding cheeses) - yoghurt - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	52	0	detection	Listeria monocytogenes	52	0
	Fish - gravad /slightly salted - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	5	0	detection	Listeria monocytogenes	5	0
	Fish - gravad /slightly salted - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	128	0	detection	Listeria monocytogenes	128	0
	Fish - marinated - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	25	0	detection	Listeria monocytogenes	25	0
	Fish - marinated - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	107	0	detection	Listeria monocytogenes	107	0
	Fish - smoked - Farm - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	28	1	detection	Listeria monocytogenes	28	1
	Fish - smoked - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	180	5	detection	Listeria monocytogenes	180	5
	Fish - smoked - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	1066	21	detection	Listeria monocytogenes	1,066	21
	Fish - smoked - Unspecified - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	1	0	detection	Listeria monocytogenes	1	0
	Foodstuffs intended for special nutritional uses - dried dietary foods for special medical purposes intended for infants below 6 months - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	9	0	detection	Listeria monocytogenes	9	0
	Foodstuffs intended for special nutritional uses - dried dietary foods for special medical purposes intended for infants below 6 months - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	17	0	detection	Listeria monocytogenes	17	0
	Foodstuffs intended for special nutritional uses - ready-to-eat meal for infants and young children - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	6	0	detection	Listeria monocytogenes	6	0
	Foodstuffs intended for special nutritional uses - ready-to-eat meal for infants and young children - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	58	0	detection	Listeria monocytogenes	58	0
	Fruits - non-pre-cut - frozen - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	7	0	detection	Listeria monocytogenes	7	0

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Sampling Details	Total units tested	Total units positive	Method	Zoonoses	N of units tested	N of units positive
GERMANY	Fruits - non-pre-cut - frozen - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	15	0	detection	Listeria monocytogenes	15	0
	Fruits - pre-cut - frozen - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	2	0	detection	Listeria monocytogenes	2	0
	Fruits - pre-cut - frozen - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	6	0	detection	Listeria monocytogenes	6	0
	Fruits - products - canned - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	2	0	detection	Listeria monocytogenes	2	0
	Fruits - products - dried - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	1	1	detection	Listeria monocytogenes	1	1
	Fruits - products - dried - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	2	0	detection	Listeria monocytogenes	2	0
	Fruits - products - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	7	0	detection	Listeria monocytogenes	7	0
	Fruits - products - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	102	0	detection	Listeria monocytogenes	102	0
	Infant formula - dried - intended for infants below 6 months - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	16	0	detection	Listeria monocytogenes	16	0
	Infant formula - dried - intended for infants below 6 months - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	48	0	detection	Listeria monocytogenes	48	0
	Infant formula - dried - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	52	0	detection	Listeria monocytogenes	52	0
	Infant formula - dried - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	54	0	detection	Listeria monocytogenes	54	0
	Infant formula - liquid - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	2	0	detection	Listeria monocytogenes	2	0
	Live bivalve molluscs - mussels - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	28	0	detection	Listeria monocytogenes	28	0
	Meat from bovine animals - meat products - cooked, ready-to-eat - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	2	0	detection	Listeria monocytogenes	2	0
	Meat from bovine animals - meat products - fermented sausages - Farm - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	1	0	detection	Listeria monocytogenes	1	0
	Meat from bovine animals - meat products - fermented sausages - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	12	0	detection	Listeria monocytogenes	12	0
	Meat from bovine animals - meat products - fermented sausages - Slaughterhouse - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	2	0	detection	Listeria monocytogenes	2	0
	Meat from bovine animals - meat products - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	12	1	detection	Listeria monocytogenes	12	1
	Meat from bovine animals - meat products - ready-to-eat - Farm - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	1	1	detection	Listeria monocytogenes	1	1
	Meat from bovine animals - meat products - ready-to-eat - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	2	1	detection	Listeria monocytogenes	2	1
	Meat from bovine animals - meat products - ready-to-eat - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	42	0	detection	Listeria monocytogenes	42	0
	Meat from bovine animals - meat products - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	60	1	detection	Listeria monocytogenes	60	1
	Meat from broilers (Gallus gallus) - meat products - cooked, ready-to-eat - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	2	0	detection	Listeria monocytogenes	2	0

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Sampling Details	Total units tested	Total units positive	Method	Zoonoses	N of units tested	N of units positive
GERMANY	Meat from broilers (Gallus gallus) - meat products - Cutting plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	2	0	detection	Listeria monocytogenes	2	0
	Meat from broilers (Gallus gallus) - meat products - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	16	0	detection	Listeria monocytogenes	16	0
	Meat from broilers (Gallus gallus) - meat products - ready-to-eat - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	5	0	detection	Listeria monocytogenes	5	0
	Meat from broilers (Gallus gallus) - meat products - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	96	1	detection	Listeria monocytogenes	96	1
	Meat from broilers (Gallus gallus) - meat products - Slaughterhouse - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	3	0	detection	Listeria monocytogenes	3	0
	Meat from pig - meat products - cooked, ready-to-eat - Cutting plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	4	0	detection	Listeria monocytogenes	4	0
	Meat from pig - meat products - cooked, ready-to-eat - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	18	0	detection	Listeria monocytogenes	18	0
	Meat from pig - meat products - cooked, ready-to-eat - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	126	1	detection	Listeria monocytogenes	126	1
	Meat from pig - meat products - cooked, ready-to-eat - Slaughterhouse - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	4	0	detection	Listeria monocytogenes	4	0
	Meat from pig - meat products - Cutting plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	18	0	detection	Listeria monocytogenes	18	0
	Meat from pig - meat products - Farm - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	1	0	detection	Listeria monocytogenes	1	0
	Meat from pig - meat products - fermented sausages - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	4	0	detection	Listeria monocytogenes	4	0
	Meat from pig - meat products - fermented sausages - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	17	0	detection	Listeria monocytogenes	17	0
	Meat from pig - meat products - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	138	1	detection	Listeria monocytogenes	138	1
	Meat from pig - meat products - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	678	16	detection	Listeria monocytogenes	678	16
	Meat from pig - meat products - Slaughterhouse - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	29	1	detection	Listeria monocytogenes	29	1
	Meat from sheep - meat products - fermented sausages - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	4	0	detection	Listeria monocytogenes	4	0
	Meat from sheep - meat products - fermented sausages - Slaughterhouse - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	2	0	detection	Listeria monocytogenes	2	0
	Meat from turkey - meat products - cooked, ready-to-eat - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	2	0	detection	Listeria monocytogenes	2	0
	Meat from turkey - meat products - Cutting plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	11	0	detection	Listeria monocytogenes	11	0
	Meat from turkey - meat products - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	4	0	detection	Listeria monocytogenes	4	0
	Meat from turkey - meat products - ready-to-eat - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	12	0	detection	Listeria monocytogenes	12	0
	Meat from turkey - meat products - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	15	0	detection	Listeria monocytogenes	15	0
	Meat from turkey - meat products - Slaughterhouse - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	1	0	detection	Listeria monocytogenes	1	0

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Sampling Details	Total units tested	Total units positive	Method	Zoonoses	N of units tested	N of units positive
GERMANY	Milk, cows' - pasteurised milk - Automatic distribution system for raw milk - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	5	0	detection	Listeria monocytogenes	5	0
	Milk, cows' - pasteurised milk - Farm - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	13	0	detection	Listeria monocytogenes	13	0
	Milk, cows' - pasteurised milk - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	104	0	detection	Listeria monocytogenes	104	0
	Milk, cows' - pasteurised milk - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	224	0	detection	Listeria monocytogenes	224	0
	Milk, cows' - raw milk - intended for direct human consumption - Farm - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	102	12	detection	Listeria monocytogenes	102	12
	Milk, cows' - raw milk - intended for direct human consumption - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	10	1	detection	Listeria monocytogenes	10	1
	Milk, cows' - raw milk - intended for direct human consumption - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	46	3	detection	Listeria monocytogenes	46	3
	Milk, cows' - raw milk for manufacture - Automatic distribution system for raw milk - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	2	0	detection	Listeria monocytogenes	2	0
	Milk, cows' - raw milk for manufacture - Farm - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	84	5	detection	Listeria monocytogenes	84	5
	Milk, cows' - raw milk for manufacture - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	9	2	detection	Listeria monocytogenes	9	2
	Milk, cows' - raw milk for manufacture - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	19	1	detection	Listeria monocytogenes	19	1
	Milk, goats' - pasteurised milk - Farm - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	1	0	detection	Listeria monocytogenes	1	0
	Milk, goats' - raw milk for manufacture - Farm - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	1	0	detection	Listeria monocytogenes	1	0
	Milk, goats' - raw milk for manufacture - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	4	0	detection	Listeria monocytogenes	4	0
	Milk, goats' - raw milk for manufacture - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	2	0	detection	Listeria monocytogenes	2	0
	Milk, sheep's - pasteurised milk - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	1	0	detection	Listeria monocytogenes	1	0
	Milk, sheep's - raw milk - intended for direct human consumption - Farm - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	1	0	detection	Listeria monocytogenes	1	0
	Milk, sheep's - raw milk - intended for direct human consumption - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	4	0	detection	Listeria monocytogenes	4	0
	Ready-to-eat salads - Cutting plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	3	0	detection	Listeria monocytogenes	3	0
	Ready-to-eat salads - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	223	2	detection	Listeria monocytogenes	223	2
	Ready-to-eat salads - Restaurant or Cafe or Pub or Bar or Hotel or Catering service - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	5	0	detection	Listeria monocytogenes	5	0
	Ready-to-eat salads - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	1706	25	detection	Listeria monocytogenes	1,706	25
	Spices and herbs - frozen - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	18	0	detection	Listeria monocytogenes	18	0
	Vegetables - pre-cut - frozen vegetables - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	8	3	detection	Listeria monocytogenes	8	3

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Sampling Details	Total units tested	Total units positive	Method	Zoonoses	N of units tested	N of units positive
GERMANY	Vegetables - pre-cut - frozen vegetables - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	97	9	detection	Listeria monocytogenes	97	9
	Vegetables - pre-cut - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	1	0	detection	Listeria monocytogenes	1	0
	Vegetables - products - canned - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	4	0	detection	Listeria monocytogenes	4	0
	Vegetables - products - canned - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	41	0	detection	Listeria monocytogenes	41	0
	Vegetables - products - cooked - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	8	0	detection	Listeria monocytogenes	8	0
	Vegetables - products - cooked - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	22	0	detection	Listeria monocytogenes	22	0
	Vegetables - products - dried - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	2	0	detection	Listeria monocytogenes	2	0
	Vegetables - products - Farm - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	18	0	detection	Listeria monocytogenes	18	0
	Vegetables - products - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	16	1	detection	Listeria monocytogenes	16	1
	Vegetables - products - Restaurant or Cafe or Pub or Bar or Hotel or Catering service - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	1	0	detection	Listeria monocytogenes	1	0
	Vegetables - products - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	181	5	detection	Listeria monocytogenes	181	5

Table Lyssavirus:LYSSAVIRUS in animal

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling Details	Method	Sampling unit	Total units tested	Total units positive	Zoonoses	N of units positive
GERMANY	Bats - Natural habitat - Germany - animal sample - Surveillance - Official sampling - Suspect sampling	N/A	Classification not possible	animal	203	17	Lyssavirus	17

Table Salmonella:SALMONELLA in animal

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	N of flocks under control programme	Target verification	Sampling Details	Method	Total units tested	Total units positive	Zoonoses	N of units positive
Not Available	Gallus gallus (fowl) - breeding flocks for broiler production line - adult - Farm - Germany - environmental sample - boot swabs - Control and eradication programmes - Industry sampling - Census	herd/flock	371	N	N_A	Not Available	370	4	Salmonella Enteritidis	2
									Salmonella Hadar	0
									Salmonella Infantis	0
									Salmonella spp., unspecified	2
									Salmonella Typhimurium	0
									Salmonella Virchow	0
	Gallus gallus (fowl) - breeding flocks for broiler production line - adult - Farm - Germany - environmental sample - boot swabs - Control and eradication programmes - Official and industry sampling - Census	herd/flock	371	Y	N_A	Not Available	370	4	Salmonella Enteritidis	2
									Salmonella Hadar	0
									Salmonella Infantis	0
									Salmonella spp., unspecified	2
									Salmonella Typhimurium	0
	Gallus gallus (fowl) - breeding flocks for broiler production line - adult - Farm - Germany - environmental sample - boot swabs - Control and eradication programmes - Official sampling - Census	herd/flock	371	N	N_A	Not Available	352	2	Salmonella Enteritidis	2
									Salmonella Hadar	0
									Salmonella Infantis	0
									Salmonella spp., unspecified	0
									Salmonella Typhimurium	0
	Gallus gallus (fowl) - breeding flocks for egg production line - adult - Farm - Germany - environmental sample - boot swabs - Control and eradication programmes - Industry sampling - Census	herd/flock	211	N	N_A	Not Available	211	0	Salmonella Enteritidis	0
									Salmonella Hadar	0
									Salmonella Infantis	0
									Salmonella spp., unspecified	0
									Salmonella Typhimurium	0
	Gallus gallus (fowl) - breeding flocks for egg production line - adult - Farm - Germany - environmental sample - boot swabs - Control and eradication programmes - Official and industry sampling - Census	herd/flock	211	Y	N_A	Not Available	211	1	Salmonella Virchow	0
									Salmonella Enteritidis	0
									Salmonella Hadar	0
									Salmonella Infantis	0
									Salmonella spp., unspecified	1
	Gallus gallus (fowl) - breeding flocks for egg production line - adult - Farm - Germany - environmental sample - boot swabs - Control and eradication programmes - Official sampling - Census	herd/flock	211	N	N_A	Not Available	211	1	Salmonella Typhimurium	0
									Salmonella Virchow	0
									Salmonella Enteritidis	0
									Salmonella Hadar	0
									Salmonella Infantis	0
	Gallus gallus (fowl) - breeding flocks, unspecified - during rearing period - Farm - Germany - environmental sample - boot swabs - Control and eradication programmes - Industry sampling - Census	herd/flock	257	N	N_A	Not Available	256	0	Salmonella spp., unspecified	1
									Salmonella Typhimurium	0
									Salmonella Virchow	0
									Salmonella Enteritidis	0
									Salmonella Hadar	0
	Gallus gallus (fowl) - breeding flocks, unspecified - during rearing period - Farm - Germany - environmental sample - boot swabs - Control and eradication programmes - Official and industry sampling - Census	herd/flock	257	N	N_A	Not Available	256	0	Salmonella Infantis	0
									Salmonella spp., unspecified	0
									Salmonella Typhimurium	0
									Salmonella Virchow	0
									Salmonella Enteritidis	0
	Gallus gallus (fowl) - broilers - before slaughter - Farm - Germany - environmental sample - boot swabs - Control and eradication programmes - Industry sampling - Census	herd/flock	21388	N	N_A	Not Available	21265	557	Salmonella Hadar	0
									Salmonella Infantis	0
									Salmonella spp., unspecified	543
									Salmonella Typhimurium	5
									Salmonella Enteritidis	14
	Gallus gallus (fowl) - broilers - before slaughter - Farm - Germany - environmental sample - boot swabs - Control and eradication programmes - Official and industry sampling - Census	herd/flock	21388	Y	N_A	Not Available	21277	578	Salmonella spp., unspecified	551
									Salmonella Typhimurium	13
									Salmonella Enteritidis	8
									Salmonella spp., unspecified	10
									Salmonella Typhimurium	10

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	N of flocks under control programme	Target verification	Sampling Details	Method	Total units tested	Total units positive	Zoonoses	N of units positive
Not Available	Gallus gallus (fowl) - broilers - Slaughterhouse - Germany - animal sample - caecum - Monitoring - active - Official sampling - Objective sampling	animal		N_A	N_A	ISO 6579:2002/Annex D of ISO 6579) Salmonella	590	11	Salmonella	11
	Gallus gallus (fowl) - elite breeding flocks, unspecified - adult - Farm - Germany - environmental sample - boot swabs - Control and eradication programmes - Industry sampling - Census	herd/flock	7	N	N_A	Not Available	7	0	Salmonella Enteritidis Salmonella Hadar Salmonella Infantis Salmonella spp., unspecified Salmonella Typhimurium Salmonella Virchow	0 0 0 0 0 0
	Gallus gallus (fowl) - elite breeding flocks, unspecified - adult - Farm - Germany - environmental sample - boot swabs - Control and eradication programmes - Official and industry sampling - Census	herd/flock	7	Y	N_A	Not Available	7	0	Salmonella Enteritidis Salmonella Hadar Salmonella Infantis Salmonella spp., unspecified Salmonella Typhimurium Salmonella Virchow	0 0 0 0 0 0
	Gallus gallus (fowl) - elite breeding flocks, unspecified - adult - Farm - Germany - environmental sample - boot swabs - Control and eradication programmes - Official sampling - Census	herd/flock	7	N	N_A	Not Available	7	0	Salmonella Enteritidis Salmonella Hadar Salmonella Infantis Salmonella spp., unspecified Salmonella Typhimurium Salmonella Virchow	0 0 0 0 0 0
	Gallus gallus (fowl) - grandparent breeding flocks, unspecified - adult - Farm - Germany - environmental sample - boot swabs - Control and eradication programmes - Industry sampling - Census	herd/flock	179	N	N_A	Not Available	179	0	Salmonella Enteritidis Salmonella Hadar Salmonella Infantis Salmonella spp., unspecified Salmonella Typhimurium Salmonella Virchow	0 0 0 0 0 0
	Gallus gallus (fowl) - grandparent breeding flocks, unspecified - adult - Farm - Germany - environmental sample - boot swabs - Control and eradication programmes - Official and industry sampling - Census	herd/flock	179	Y	N_A	Not Available	179	0	Salmonella Enteritidis Salmonella Hadar Salmonella Infantis Salmonella spp., unspecified Salmonella Typhimurium Salmonella Virchow	0 0 0 0 0 0
	Gallus gallus (fowl) - grandparent breeding flocks, unspecified - adult - Farm - Germany - environmental sample - boot swabs - Control and eradication programmes - Official sampling - Census	herd/flock	179	N	N_A	Not Available	172	0	Salmonella Enteritidis Salmonella Hadar Salmonella Infantis Salmonella spp., unspecified Salmonella Typhimurium Salmonella Virchow	0 0 0 0 0 0
	Gallus gallus (fowl) - laying hens - adult - Farm - Germany - environmental sample - boot swabs - Control and eradication programmes - Industry sampling - Census	herd/flock	5968	N	N_A	Not Available	5863	24	Salmonella Enteritidis Salmonella Other serovars Salmonella Typhimurium	8 6 10
	Gallus gallus (fowl) - laying hens - adult - Farm - Germany - environmental sample - boot swabs - Control and eradication programmes - Official and industry sampling - Census	herd/flock	5968	Y	N_A	Not Available	5870	52	Salmonella Enteritidis Salmonella spp., unspecified Salmonella Typhimurium	23 11 18
	Gallus gallus (fowl) - laying hens - adult - Farm - Germany - environmental sample - boot swabs - Control and eradication programmes - Official sampling - Census	herd/flock	5968	N	N_A	Not Available	3084	72	Salmonella Enteritidis Salmonella spp., unspecified Salmonella Typhimurium	38 9 25
	Gallus gallus (fowl) - laying hens - during rearing period - Farm - Germany - environmental sample - boot swabs - Control and eradication programmes - Industry sampling - Census	herd/flock	663	N	N_A	Not Available	662	1	Salmonella Enteritidis Salmonella spp., unspecified Salmonella Typhimurium	1 0 0
	Gallus gallus (fowl) - laying hens - during rearing period - Farm - Germany - environmental sample - boot swabs - Control and eradication programmes - Official and industry sampling - Census	herd/flock	663	N	N_A	Not Available	662	1	Salmonella Enteritidis Salmonella spp., unspecified Salmonella Typhimurium	1 0 0
	Gallus gallus (fowl) - laying hens - during rearing period - Farm - Germany - environmental sample - boot swabs - Control and eradication programmes - Official sampling - Census	herd/flock	663	N	N_A	Not Available	40	0	Salmonella Enteritidis Salmonella spp., unspecified Salmonella Typhimurium	0 0 0

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	N of flocks under control programme	Target verification	Sampling Details	Method	Total units tested	Total units positive	Zoonoses	N of units positive
Not Available	Turkeys - breeding flocks, unspecified - adult - Farm - Germany - environmental sample - boot swabs - Control and eradication programmes - Industry sampling - Census	herd/flock	92	N	N_A	Not Available	92	0	Salmonella Enteritidis	0
									Salmonella spp., unspecified	0
									Salmonella Typhimurium	0
	Turkeys - breeding flocks, unspecified - adult - Farm - Germany - environmental sample - boot swabs - Control and eradication programmes - Official and industry sampling - Census	herd/flock	92	Y	N_A	Not Available	92	1	Salmonella Enteritidis	0
									Salmonella spp., unspecified	0
									Salmonella Typhimurium	1
	Turkeys - breeding flocks, unspecified - adult - Farm - Germany - environmental sample - boot swabs - Control and eradication programmes - Official sampling - Census	herd/flock	92	N	N_A	Not Available	76	1	Salmonella Enteritidis	0
									Salmonella spp., unspecified	0
									Salmonella Typhimurium	1
	Turkeys - breeding flocks, unspecified - during rearing period - Farm - Germany - environmental sample - boot swabs - Control and eradication programmes - Industry sampling - Census	herd/flock	54	N	N_A	Not Available	49	1	Salmonella Enteritidis	0
									Salmonella spp., unspecified	1
									Salmonella Typhimurium	0
	Turkeys - breeding flocks, unspecified - during rearing period - Farm - Germany - environmental sample - boot swabs - Control and eradication programmes - Official and industry sampling - Census	herd/flock	54	N	N_A	Not Available	49	1	Salmonella Enteritidis	0
									Salmonella spp., unspecified	1
									Salmonella Typhimurium	0
	Turkeys - breeding flocks, unspecified - during rearing period - Farm - Germany - environmental sample - boot swabs - Control and eradication programmes - Official sampling - Census	herd/flock	54	N	N_A	Not Available	1	0	Salmonella Enteritidis	0
									Salmonella spp., unspecified	0
									Salmonella Typhimurium	0
	Turkeys - fattening flocks - before slaughter - Farm - Germany - environmental sample - boot swabs - Control and eradication programmes - Industry sampling - Census	herd/flock	4684	N	N_A	Not Available	4618	20	Salmonella Enteritidis	0
									Salmonella spp., unspecified	8
									Salmonella Typhimurium	12
	Turkeys - fattening flocks - before slaughter - Farm - Germany - environmental sample - boot swabs - Control and eradication programmes - Official and industry sampling - Census	herd/flock	4684	Y	N_A	Not Available	4643	33	Salmonella Enteritidis	1
									Salmonella spp., unspecified	16
									Salmonella Typhimurium	16
	Turkeys - fattening flocks - before slaughter - Farm - Germany - environmental sample - boot swabs - Control and eradication programmes - Official sampling - Census	herd/flock	4684	N	N_A	Not Available	210	13	Salmonella Enteritidis	1
									Salmonella spp., unspecified	8
									Salmonella Typhimurium	4
	Turkeys - meat production flocks - Slaughterhouse - Germany - animal sample - caecum - Monitoring - active - Official sampling - Objective sampling	animal		N_A	N_A	ISO 6579:2002/Annex D of ISO 6579) Salmonella	484	1	Salmonella	1
GERMANY	Cattle (bovine animals) - calves (under 1 year) - Farm - Germany - animal sample - Unspecified - Official sampling - Not specified	animal	0	N	N_A	Microbiological tests	625	12	Salmonella	0
									Salmonella Dublin	5
									Salmonella Enteritidis	2
									Salmonella group D	5
	Cattle (bovine animals) - dairy cows - Farm - Germany - animal sample - Unspecified - Official sampling - Not specified	animal	0	N	N_A	Microbiological tests	116	3	Salmonella	0
									Salmonella Coeln	1
									Salmonella Dublin	2
	Cattle (bovine animals) - meat production animals - calves (under 1 year) - Farm - Germany - animal sample - Unspecified - Official sampling - Not specified	animal	0	N	N_A	Microbiological tests	2	0	Salmonella	0
	Pigs - fattening pigs - Farm - Germany - animal sample - Unspecified - Official sampling - Not specified	animal	0	N	N_A	Microbiological tests	101	6	Salmonella	0
									Salmonella Derby	1
									Salmonella Rissen	3
									Salmonella Typhimurium	2

Table Salmonella:SALMONELLA in food

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Sampling Details	Method	Total units tested	Total units positive	Zoonoses	N of units positive
Not Available	Meat from broilers (Gallus gallus) - carcass - Slaughterhouse - Germany - food sample - neck skin - Monitoring - active - Official sampling - Objective sampling	batch (food/fee d)	25	Gram	N_A	ISO 6579:2002 Salmonella	459	35	Salmonella	35
	Meat from broilers (Gallus gallus) - fresh - skinned - Retail - Germany - food sample - meat - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	ISO 6579:2002 Salmonella	450	25	Salmonella	25
	Meat from pig - carcass - Slaughterhouse - Germany - food sample - carcass swabs - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	400	Square centimetre	N_A	ISO 6579:2002 Salmonella	395	20	Salmonella	20
	Meat from pig - carcass - Slaughterhouse - Germany - food sample - carcass swabs - Surveillance - based on Regulation 2073 - HACCP and own check - Objective sampling	single (food/fee d)	400	Square centimetre	N_A	Classification not possible	29924	253	Salmonella	253
	Meat from pig - minced meat - Retail - Germany - food sample - meat - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	ISO 6579:2002 Salmonella	468	6	Salmonella	6
	Meat from poultry, unspecified - meat products - ready-to-eat - Retail - Germany - food sample - meat - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	ISO 6579:2002 Salmonella	462	1	Salmonella	1
	Meat from turkey - carcass - Slaughterhouse - Germany - food sample - neck skin - Monitoring - active - Official sampling - Objective sampling	batch (food/fee d)	25	Gram	N_A	ISO 6579:2002 Salmonella	428	97	Salmonella	97
	Meat from turkey - fresh - skinned - Retail - Germany - food sample - meat - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	ISO 6579:2002 Salmonella	528	21	Salmonella	21
GERMANY	Bakery products - bread - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	3	0	Salmonella	0
	Bakery products - bread - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	9	0	Salmonella	0
	Bakery products - bread - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	2	0	Salmonella	0
	Bakery products - cakes - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	48	0	Salmonella	0
	Bakery products - cakes - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	4	0	Salmonella	0
	Bakery products - cakes - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	1	0	Salmonella	0
	Bakery products - cakes - Restaurant or Cafe or Pub or Bar or Hotel or Catering service - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	35	0	Salmonella	0
	Bakery products - cakes - Restaurant or Cafe or Pub or Bar or Hotel or Catering service - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	2	0	Salmonella	0
	Bakery products - cakes - Restaurant or Cafe or Pub or Bar or Hotel or Catering service - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	4	0	Salmonella	0
	Bakery products - cakes - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	768	1	Salmonella	0
									Salmonella spp., unspecified	1
	Bakery products - cakes - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	36	0	Salmonella	0
	Bakery products - cakes - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	19	0	Salmonella	0
	Bakery products - desserts - Restaurant or Cafe or Pub or Bar or Hotel or Catering service - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	1	0	Salmonella	0
	Bakery products - desserts - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	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	Sampling Details	Method	Total units tested	Total units positive	Zoonoses	N of units positive
GERMANY	Bakery products - pastry - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	44	1	Salmonella	0
									Salmonella spp., unspecified	1
	Bakery products - pastry - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	8	0	Salmonella	0
	Bakery products - pastry - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	11	0	Salmonella	0
	Bakery products - pastry - Restaurant or Cafe or Pub or Bar or Hotel or Catering service - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	17	0	Salmonella	0
	Bakery products - pastry - Restaurant or Cafe or Pub or Bar or Hotel or Catering service - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	3	0	Salmonella	0
	Bakery products - pastry - Restaurant or Cafe or Pub or Bar or Hotel or Catering service - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	4	0	Salmonella	0
	Bakery products - pastry - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	628	0	Salmonella	0
	Bakery products - pastry - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	114	0	Salmonella	0
	Bakery products - pastry - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	35	0	Salmonella	0
	Cheeses made from goats' milk - unspecified - Farm - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	6	0	Salmonella	0
	Cheeses made from goats' milk - unspecified - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	19	0	Salmonella	0
	Cheeses made from goats' milk - unspecified - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	3	0	Salmonella	0
	Cheeses made from goats' milk - unspecified - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	46	0	Salmonella	0
	Cheeses made from goats' milk - unspecified - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	10	0	Salmonella	0
	Cheeses made from goats' milk - unspecified - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	2	0	Salmonella	0
	Cheeses made from sheep's milk - unspecified - Farm - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	2	0	Salmonella	0
	Cheeses made from sheep's milk - unspecified - Farm - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	1	0	Salmonella	0
	Cheeses made from sheep's milk - unspecified - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	14	0	Salmonella	0
	Cheeses made from sheep's milk - unspecified - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	1	0	Salmonella	0
	Cheeses made from sheep's milk - unspecified - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	20	0	Salmonella	0
	Cheeses made from sheep's milk - unspecified - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	6	0	Salmonella	0
	Cheeses made from sheep's milk - unspecified - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	2	0	Salmonella	0
	Crustaceans - shrimps - cooked - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	2	0	Salmonella	0
	Crustaceans - shrimps - cooked - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	13	0	Salmonella	0

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Sampling Details	Method	Total units tested	Total units positive	Zoonoses	N of units positive
GERMANY	Crustaceans - unspecified - cooked - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	11	0	Salmonella	0
	Crustaceans - unspecified - cooked - Unspecified - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	4	0	Salmonella	0
	Dairy products (excluding cheeses) - butter - made from raw or low heat-treated milk - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	12	0	Salmonella	0
	Dairy products (excluding cheeses) - cream - made from raw or low heat-treated milk - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	1	0	Salmonella	0
	Dairy products (excluding cheeses) - cream - made from raw or low heat-treated milk - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	1	0	Salmonella	0
	Dairy products (excluding cheeses) - ice-cream - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	2096	1	Salmonella spp., unspecified	1
	Dairy products (excluding cheeses) - milk powder and whey powder - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	40	0	Salmonella	0
	Dairy products (excluding cheeses) - milk powder and whey powder - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	15	0	Salmonella	0
	Dairy products (excluding cheeses) - milk powder and whey powder - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	4	0	Salmonella	0
	Dairy products (excluding cheeses) - milk powder and whey powder - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	5	0	Salmonella	0
	Dairy products (excluding cheeses) - milk powder and whey powder - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	1	0	Salmonella	0
	Egg products - dried - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	8	0	Salmonella	0
	Egg products - dried - Restaurant or Cafe or Pub or Bar or Hotel or Catering service - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	1	0	Salmonella	0
	Egg products - dried - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	1	0	Salmonella	0
	Egg products - liquid - Packing centre - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	1	0	Salmonella	0
	Egg products - liquid - Packing centre - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	1	0	Salmonella	0
	Egg products - liquid - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	13	0	Salmonella	0
	Egg products - liquid - Restaurant or Cafe or Pub or Bar or Hotel or Catering service - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	39	0	Salmonella	0
	Egg products - liquid - Restaurant or Cafe or Pub or Bar or Hotel or Catering service - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	7	0	Salmonella	0
	Egg products - liquid - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	50	0	Salmonella	0
	Egg products - liquid - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	16	0	Salmonella	0
	Egg products - liquid - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	5	0	Salmonella	0
	Egg products - liquid - Retail - Germany - food sample - Unspecified - Official sampling - Not specified	single (food/fee d)	25	Gram	N_A	Microbiological tests	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	Sampling Details	Method	Total units tested	Total units positive	Zoonoses	N of units positive
GERMANY	Egg products - ready-to-eat - Farm - Germany - food sample - Unspecified - Official sampling - Not specified	single (food/fee d)	25	Gram	N_A	Unspecified	2	0	Salmonella	0
	Egg products - ready-to-eat - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	2	0	Salmonella	0
	Egg products - ready-to-eat - Restaurant or Cafe or Pub or Bar or Hotel or Catering service - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	2	0	Salmonella	0
	Egg products - ready-to-eat - Restaurant or Cafe or Pub or Bar or Hotel or Catering service - Germany - food sample - Unspecified - Official sampling - Not specified	single (food/fee d)	25	Gram	N_A	Unspecified	1	0	Salmonella	0
	Egg products - ready-to-eat - Restaurant or Cafe or Pub or Bar or Hotel or Catering service - Germany - food sample - Unspecified - Official sampling - Not specified	single (food/fee d)	25	Gram	N_A	PCR	1	0	Salmonella	0
	Egg products - ready-to-eat - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	47	0	Salmonella	0
	Egg products - ready-to-eat - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	1	0	Salmonella	0
	Egg products - ready-to-eat - Retail - Germany - food sample - Unspecified - Official sampling - Not specified	single (food/fee d)	25	Gram	N_A	Microbiological tests	2	0	Salmonella	0
	Egg products - Restaurant or Cafe or Pub or Bar or Hotel or Catering service - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	1	0	Salmonella	0
	Egg products - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	1	0	Salmonella	0
	Foodstuffs intended for special nutritional uses - dried dietary foods for special medical purposes intended for infants below 6 months - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	4	0	Salmonella	0
	Foodstuffs intended for special nutritional uses - dried dietary foods for special medical purposes intended for infants below 6 months - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	4	0	Salmonella	0
	Foodstuffs intended for special nutritional uses - dried dietary foods for special medical purposes intended for infants below 6 months - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	9	0	Salmonella	0
	Fruits - non-pre-cut - frozen - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	7	0	Salmonella	0
	Fruits - non-pre-cut - frozen - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	6	0	Salmonella	0
	Fruits - pre-cut - frozen - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	2	0	Salmonella	0
	Fruits - products - canned - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	2	0	Salmonella	0
	Fruits - products - canned - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	1	0	Salmonella	0
	Fruits - products - dried - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	4	0	Salmonella	0
	Fruits - products - dried - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	35	0	Salmonella	0
	Fruits - products - dried - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	13	0	Salmonella	0
	Fruits - products - fruit purée - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	2	0	Salmonella	0

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Sampling Details	Method	Total units tested	Total units positive	Zoonoses	N of units positive
GERMANY	Fruits - products - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	13	0	Salmonella	0
	Fruits - products - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	125	0	Salmonella	0
	Infant formula - dried - intended for infants below 6 months - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	14	0	Salmonella	0
	Infant formula - dried - intended for infants below 6 months - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	25	0	Salmonella	0
	Infant formula - dried - intended for infants below 6 months - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	28	0	Salmonella	0
	Infant formula - dried - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	2	0	Salmonella	0
	Infant formula - dried - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	41	0	Salmonella	0
	Infant formula - dried - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	28	0	Salmonella	0
	Infant formula - dried - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	3	0	Salmonella	0
	Infant formula - dried - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	20	0	Salmonella	0
	Juice - fruit juice - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	10	0	Salmonella	0
	Juice - fruit juice - Restaurant or Cafe or Pub or Bar or Hotel or Catering service - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	3	0	Salmonella	0
	Juice - fruit juice - Restaurant or Cafe or Pub or Bar or Hotel or Catering service - Germany - food sample - Unspecified - Official sampling - Not specified	single (food/fee d)	25	Gram	N_A	Microbiological tests	1	0	Salmonella	0
	Juice - fruit juice - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	40	0	Salmonella	0
	Juice - fruit juice - Retail - Germany - food sample - Unspecified - Official sampling - Not specified	single (food/fee d)	25	Gram	N_A	Microbiological tests	6	0	Salmonella	0
	Juice - vegetable juice - Restaurant or Cafe or Pub or Bar or Hotel or Catering service - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	1	0	Salmonella	0
	Juice - vegetable juice - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	2	0	Salmonella	0
	Juice - vegetable juice - Retail - Germany - food sample - Unspecified - Official sampling - Not specified	single (food/fee d)	25	Gram	N_A	Microbiological tests	1	0	Salmonella	0
	Live bivalve molluscs - mussels - Farm - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	4	0	Salmonella	0
	Live bivalve molluscs - mussels - Farm - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	1	0	Salmonella	0
	Live bivalve molluscs - mussels - Farm - Germany - food sample - Unspecified - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	156	0	Salmonella	0
	Live bivalve molluscs - mussels - Farm - Germany - food sample - Unspecified - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	56	0	Salmonella	0
	Live bivalve molluscs - mussels - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	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	Sampling Details	Method	Total units tested	Total units positive	Zoonoses	N of units positive
GERMANY	Live bivalve molluscs - mussels - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	46	0	Salmonella	0
	Live bivalve molluscs - oysters - Farm - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	5	0	Salmonella	0
	Live bivalve molluscs - oysters - Farm - Germany - food sample - Unspecified - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	15	0	Salmonella	0
	Meat from bovine animals - carcase - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Square centimetre	N_A	Unspecified	2	0	Salmonella	0
	Meat from bovine animals - carcase - Slaughterhouse - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Square centimetre	N_A	Unspecified	1	0	Salmonella	0
	Meat from bovine animals - fresh - Cutting plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	20	2	Salmonella	0
									Salmonella Enteritidis	2
	Meat from bovine animals - fresh - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	152	8	Salmonella	0
									Salmonella spp., unspecified	5
									Salmonella Typhimurium	3
	Meat from bovine animals - fresh - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	2	0	Salmonella	0
	Meat from bovine animals - fresh - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	7	0	Salmonella	0
	Meat from bovine animals - fresh - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	318	0	Salmonella	0
	Meat from bovine animals - fresh - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	27	0	Salmonella	0
	Meat from bovine animals - fresh - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	54	0	Salmonella	0
	Meat from bovine animals - fresh - Slaughterhouse - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	58	0	Salmonella	0
	Meat from bovine animals - meat preparation - Cutting plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	2	0	Salmonella	0
	Meat from bovine animals - meat preparation - Farm - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	2	0	Salmonella	0
	Meat from bovine animals - meat preparation - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	34	0	Salmonella	0
	Meat from bovine animals - meat preparation - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	1	0	Salmonella	0
	Meat from bovine animals - meat preparation - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	1	0	Salmonella	0
	Meat from bovine animals - meat preparation - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	80	0	Salmonella	0
	Meat from bovine animals - meat preparation - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	7	0	Salmonella	0
	Meat from bovine animals - meat preparation - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	11	0	Salmonella	0
	Meat from bovine animals - meat preparation - Slaughterhouse - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	5	0	Salmonella	0
	Meat from bovine animals - meat products - cooked, ready-to-eat - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	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	Sampling Details	Method	Total units tested	Total units positive	Zoonoses	N of units positive
GERMANY	Meat from bovine animals - meat products - Cutting plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	1	0	Salmonella	0
	Meat from bovine animals - meat products - Farm - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	1	0	Salmonella	0
	Meat from bovine animals - meat products - fermented sausages - Farm - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	1	0	Salmonella	0
	Meat from bovine animals - meat products - fermented sausages - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	6	0	Salmonella	0
	Meat from bovine animals - meat products - fermented sausages - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	6	0	Salmonella	0
	Meat from bovine animals - meat products - fermented sausages - Slaughterhouse - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	2	0	Salmonella	0
	Meat from bovine animals - meat products - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	7	0	Salmonella	0
	Meat from bovine animals - meat products - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	1	0	Salmonella	0
	Meat from bovine animals - meat products - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	1	0	Salmonella	0
	Meat from bovine animals - meat products - ready-to-eat - Farm - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	1	0	Salmonella	0
	Meat from bovine animals - meat products - ready-to-eat - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	2	0	Salmonella	0
	Meat from bovine animals - meat products - ready-to-eat - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	29	0	Salmonella	0
	Meat from bovine animals - meat products - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	43	0	Salmonella	0
	Meat from bovine animals - meat products - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	1	0	Salmonella	0
	Meat from bovine animals - meat products - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	3	0	Salmonella	0
	Meat from bovine animals - mechanically separated meat (MSM) - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	7	2	Salmonella	0
									Salmonella spp., unspecified	1
									Salmonella Typhimurium	1
	Meat from bovine animals - mechanically separated meat (MSM) - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	1	0	Salmonella	0
	Meat from bovine animals - mechanically separated meat (MSM) - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	4	0	Salmonella	0
	Meat from bovine animals - mechanically separated meat (MSM) - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	2	1	Salmonella	0
									Salmonella spp., unspecified	1
	Meat from bovine animals - minced meat - Cutting plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	1	0	Salmonella	0
	Meat from bovine animals - minced meat - Cutting plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	2	0	Salmonella	0
	Meat from bovine animals - minced meat - Farm - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	29	0	Salmonella	0
	Meat from bovine animals - minced meat - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	79	0	Salmonella	0

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Sampling Details	Method	Total units tested	Total units positive	Zoonoses	N of units positive
GERMANY	Meat from bovine animals - minced meat - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	3	0	Salmonella	0
	Meat from bovine animals - minced meat - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	699	3	Salmonella	0
									Salmonella Dublin	1
									Salmonella spp., unspecified	1
									Salmonella Typhimurium	1
	Meat from bovine animals - minced meat - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	49	2	Salmonella	0
									Salmonella spp., unspecified	2
	Meat from bovine animals - minced meat - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	62	0	Salmonella	0
	Meat from bovine animals - minced meat - Slaughterhouse - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	10	0	Salmonella	0
	Meat from broilers (Gallus gallus) - fresh - Cutting plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	19	8	Salmonella	0
									Salmonella Indiana	1
									Salmonella Paratyphi B	5
									Salmonella spp., unspecified	2
	Meat from broilers (Gallus gallus) - fresh - Cutting plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	4	0	Salmonella	0
	Meat from broilers (Gallus gallus) - fresh - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	76	9	Salmonella	0
									Salmonella Indiana	1
									Salmonella Infantis	2
									Salmonella Paratyphi B	2
									Salmonella spp., unspecified	4
	Meat from broilers (Gallus gallus) - fresh - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	4	0	Salmonella	0
	Meat from broilers (Gallus gallus) - fresh - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	242	26	Salmonella	0
									Salmonella Enteritidis	2
									Salmonella Indiana	1
									Salmonella Infantis	12
									Salmonella Paratyphi B	4
									Salmonella spp., unspecified	7
	Meat from broilers (Gallus gallus) - fresh - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	4	0	Salmonella	0
	Meat from broilers (Gallus gallus) - fresh - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	38	1	Salmonella	0
									Salmonella spp., unspecified	1
	Meat from broilers (Gallus gallus) - fresh - Slaughterhouse - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	42	6	Salmonella	0
									Salmonella Infantis	2
									Salmonella spp., unspecified	4
	Meat from broilers (Gallus gallus) - fresh - Slaughterhouse - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	2	0	Salmonella	0
	Meat from broilers (Gallus gallus) - fresh - Slaughterhouse - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	32	0	Salmonella	0
	Meat from broilers (Gallus gallus) - meat preparation - Cutting plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	4	0	Salmonella	0
	Meat from broilers (Gallus gallus) - meat preparation - Cutting plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	3	0	Salmonella	0
	Meat from broilers (Gallus gallus) - meat preparation - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	46	4	Salmonella	0
									Salmonella Infantis	2
									Salmonella Paratyphi B	1
									Salmonella spp., unspecified	1
	Meat from broilers (Gallus gallus) - meat preparation - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	1	1	Salmonella spp., unspecified	1

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Sampling Details	Method	Total units tested	Total units positive	Zoonoses	N of units positive
GERMANY	Meat from broilers (Gallus gallus) - meat preparation - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	2	0	Salmonella	0
	Meat from broilers (Gallus gallus) - meat preparation - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	68	10	Salmonella	0
									Salmonella Heidelberg	1
									Salmonella Infantis	3
									Salmonella Paratyphi B	1
									Salmonella spp., unspecified	5
	Meat from broilers (Gallus gallus) - meat preparation - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	1	1	Salmonella spp., unspecified	1
	Meat from broilers (Gallus gallus) - meat preparation - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	6	1	Salmonella	0
									Salmonella spp., unspecified	1
	Meat from broilers (Gallus gallus) - meat preparation - Slaughterhouse - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	12	0	Salmonella	0
	Meat from broilers (Gallus gallus) - meat preparation - Slaughterhouse - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	8	0	Salmonella	0
	Meat from broilers (Gallus gallus) - meat products - cooked, ready-to-eat - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	1	0	Salmonella	0
	Meat from broilers (Gallus gallus) - meat products - Cutting plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	1	0	Salmonella	0
	Meat from broilers (Gallus gallus) - meat products - Cutting plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	2	0	Salmonella	0
	Meat from broilers (Gallus gallus) - meat products - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	3	0	Salmonella	0
	Meat from broilers (Gallus gallus) - meat products - ready-to-eat - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	3	0	Salmonella	0
	Meat from broilers (Gallus gallus) - meat products - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	42	2	Salmonella	0
									Salmonella Paratyphi B	1
									Salmonella spp., unspecified	1
	Meat from broilers (Gallus gallus) - meat products - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	1	0	Salmonella	0
	Meat from broilers (Gallus gallus) - meat products - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	1	0	Salmonella	0
	Meat from goat - fresh - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	1	0	Salmonella	0
	Meat from goat - fresh - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	1	0	Salmonella	0
	Meat from goat - fresh - Slaughterhouse - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	1	0	Salmonella	0
	Meat from pig - fresh - Cutting plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	47	0	Salmonella	0
	Meat from pig - fresh - Cutting plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	2	1	Salmonella	0
									Salmonella spp., unspecified	1
	Meat from pig - fresh - Cutting plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	6	0	Salmonella	0
	Meat from pig - fresh - Farm - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	17	0	Salmonella	0
	Meat from pig - fresh - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	254	1	Salmonella	0
									Salmonella Derby	1

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Sampling Details	Method	Total units tested	Total units positive	Zoonoses	N of units positive
GERMANY	Meat from pig - fresh - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	9	0	Salmonella	0
	Meat from pig - fresh - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	5	0	Salmonella	0
	Meat from pig - fresh - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	943	6	Salmonella	0
									Salmonella Derby	1
									Salmonella spp., unspecified	5
	Meat from pig - fresh - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	33	0	Salmonella	0
	Meat from pig - fresh - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	130	1	Salmonella	0
									Salmonella spp., unspecified	1
	Meat from pig - fresh - Slaughterhouse - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	141	2	Salmonella	0
									Salmonella spp., unspecified	1
									Salmonella Typhimurium	1
	Meat from pig - fresh - Slaughterhouse - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	8	0	Salmonella	0
	Meat from pig - meat preparation - Cutting plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	4	0	Salmonella	0
	Meat from pig - meat preparation - Cutting plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	7	0	Salmonella	0
	Meat from pig - meat preparation - Farm - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	19	0	Salmonella	0
	Meat from pig - meat preparation - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	63	0	Salmonella	0
	Meat from pig - meat preparation - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	2	0	Salmonella	0
	Meat from pig - meat preparation - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	19	0	Salmonella	0
	Meat from pig - meat preparation - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	691	14	Salmonella	0
									Salmonella Derby	1
									Salmonella enterica subsp. enterica rough	1
									Salmonella Infantis	1
									Salmonella London	3
									Salmonella spp., unspecified	5
									Salmonella Typhimurium	3
	Meat from pig - meat preparation - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	15	1	Salmonella	0
									Salmonella spp., unspecified	1
	Meat from pig - meat preparation - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	122	6	Salmonella	0
									Salmonella spp., unspecified	6
	Meat from pig - meat preparation - Slaughterhouse - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	8	0	Salmonella	0
	Meat from pig - meat preparation - Slaughterhouse - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	5	0	Salmonella	0
	Meat from pig - meat products - cooked, ready-to-eat - Farm - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	5	0	Salmonella	0
	Meat from pig - meat products - cooked, ready-to-eat - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	15	0	Salmonella	0
	Meat from pig - meat products - cooked, ready-to-eat - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	77	0	Salmonella	0

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Sampling Details	Method	Total units tested	Total units positive	Zoonoses	N of units positive
GERMANY	Meat from pig - meat products - cooked, ready-to-eat - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	7	0	Salmonella	0
	Meat from pig - meat products - cooked, ready-to-eat - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	1	0	Salmonella	0
	Meat from pig - meat products - cooked, ready-to-eat - Slaughterhouse - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	2	0	Salmonella	0
	Meat from pig - meat products - Cutting plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	11	0	Salmonella	0
	Meat from pig - meat products - Cutting plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	1	0	Salmonella	0
	Meat from pig - meat products - Farm - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	4	0	Salmonella	0
	Meat from pig - meat products - fermented sausages - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	3	0	Salmonella	0
	Meat from pig - meat products - fermented sausages - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	2	0	Salmonella	0
	Meat from pig - meat products - fermented sausages - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	15	0	Salmonella	0
	Meat from pig - meat products - fermented sausages - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	1	0	Salmonella	0
	Meat from pig - meat products - fermented sausages - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	2	0	Salmonella	0
	Meat from pig - meat products - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	116	0	Salmonella	0
	Meat from pig - meat products - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	28	0	Salmonella	0
	Meat from pig - meat products - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	671	0	Salmonella	0
	Meat from pig - meat products - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	3	0	Salmonella	0
	Meat from pig - meat products - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	58	0	Salmonella	0
	Meat from pig - meat products - Slaughterhouse - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	20	0	Salmonella	0
	Meat from pig - mechanically separated meat (MSM) - hard-type - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	2	0	Salmonella	0
	Meat from pig - mechanically separated meat (MSM) - hard-type - Slaughterhouse - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	2	0	Salmonella	0
	Meat from pig - mechanically separated meat (MSM) - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	4	1	Salmonella	0
	Meat from pig - mechanically separated meat (MSM) - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	17	0	Salmonella	0
	Meat from pig - mechanically separated meat (MSM) - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	5	0	Salmonella	0
	Meat from pig - mechanically separated meat (MSM) - Slaughterhouse - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	5	0	Salmonella	0
									Salmonella spp., unspecified	1

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Sampling Details	Method	Total units tested	Total units positive	Zoonoses	N of units positive
GERMANY	Meat from pig - minced meat - Cutting plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	3	0	Salmonella	0
	Meat from pig - minced meat - Cutting plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	1	0	Salmonella	0
	Meat from pig - minced meat - Cutting plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	1	0	Salmonella	0
	Meat from pig - minced meat - Farm - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	63	0	Salmonella	0
	Meat from pig - minced meat - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	19	0	Salmonella	0
	Meat from pig - minced meat - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	2	0	Salmonella	0
	Meat from pig - minced meat - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	294	5	Salmonella	0
									Salmonella 1,4,[5],12:i:-	2
									Salmonella enterica, subspecies enterica	1
									Salmonella spp., unspecified	2
	Meat from pig - minced meat - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	11	6	Salmonella	0
									Salmonella Derby	1
									Salmonella spp., unspecified	5
									Salmonella	0
	Meat from pig - minced meat - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	38	0	Salmonella	0
	Meat from pig - minced meat - Slaughterhouse - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	1	0	Salmonella	0
	Meat from sheep - carcass - Slaughterhouse - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Square centimetre	N_A	Unspecified	1	0	Salmonella	0
	Meat from sheep - fresh - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	9	0	Salmonella	0
	Meat from sheep - fresh - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	1	0	Salmonella	0
	Meat from sheep - fresh - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	33	1	Salmonella	0
									Salmonella spp., unspecified	1
	Meat from sheep - fresh - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	2	0	Salmonella	0
	Meat from sheep - fresh - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	10	0	Salmonella	0
	Meat from sheep - fresh - Slaughterhouse - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	3	0	Salmonella	0
	Meat from sheep - meat preparation - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	14	0	Salmonella	0
	Meat from sheep - meat preparation - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	7	0	Salmonella	0
	Meat from sheep - meat preparation - Slaughterhouse - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	1	0	Salmonella	0
	Meat from sheep - meat products - fermented sausages - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	3	0	Salmonella	0
	Meat from sheep - meat products - fermented sausages - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	2	0	Salmonella	0
	Meat from sheep - meat products - fermented sausages - Slaughterhouse - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	2	0	Salmonella	0

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Sampling Details	Method	Total units tested	Total units positive	Zoonoses	N of units positive
GERMANY	Meat from sheep - minced meat - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N/A	Microbiological tests	3	0	Salmonella	0
	Meat from turkey - fresh - Cutting plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N/A	Microbiological tests	1	0	Salmonella	0
	Meat from turkey - fresh - Cutting plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N/A	PCR	4	0	Salmonella	0
	Meat from turkey - fresh - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N/A	Microbiological tests	35	11	Salmonella	0
									Salmonella Blockley	1
									Salmonella Bredeney	1
									Salmonella Muenchen	1
									Salmonella Newport	2
									Salmonella spp., unspecified	6
	Meat from turkey - fresh - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N/A	Microbiological tests	125	5	Salmonella	0
									Salmonella Derby	1
									Salmonella spp., unspecified	3
									Salmonella Typhimurium	1
	Meat from turkey - fresh - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N/A	Unspecified	3	0	Salmonella	0
	Meat from turkey - fresh - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N/A	PCR	12	0	Salmonella	0
	Meat from turkey - fresh - Slaughterhouse - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N/A	Microbiological tests	2	0	Salmonella	0
	Meat from turkey - meat preparation - Cutting plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N/A	PCR	1	0	Salmonella	0
	Meat from turkey - meat preparation - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N/A	Microbiological tests	19	2	Salmonella	0
									Salmonella Hadar	1
									Salmonella spp., unspecified	1
	Meat from turkey - meat preparation - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N/A	PCR	6	0	Salmonella	0
	Meat from turkey - meat preparation - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N/A	Microbiological tests	69	3	Salmonella	0
									Salmonella Agona	1
									Salmonella Brandenburg	1
									Salmonella spp., unspecified	1
	Meat from turkey - meat preparation - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N/A	PCR	4	0	Salmonella	0
	Meat from turkey - meat products - cooked, ready-to-eat - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N/A	Microbiological tests	1	0	Salmonella	0
	Meat from turkey - meat products - Cutting plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N/A	Microbiological tests	1	0	Salmonella	0
	Meat from turkey - meat products - ready-to-eat - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N/A	Microbiological tests	5	0	Salmonella	0
	Meat from turkey - meat products - ready-to-eat - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N/A	PCR	5	0	Salmonella	0
	Meat from turkey - meat products - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N/A	Microbiological tests	14	0	Salmonella	0
	Meat from turkey - meat products - Slaughterhouse - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N/A	Microbiological tests	1	0	Salmonella	0
	Meat from turkey - mechanically separated meat (MSM) - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N/A	Microbiological tests	2	2	Salmonella Hadar	1
									Salmonella spp., unspecified	1
	Milk, cows' - raw milk - intended for direct human consumption - Farm - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N/A	Microbiological tests	175	0	Salmonella	0

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Sampling Details	Method	Total units tested	Total units positive	Zoonoses	N of units positive
GERMANY	Milk, cows' - raw milk - intended for direct human consumption - Farm - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	1	0	Salmonella	0
	Milk, cows' - raw milk - intended for direct human consumption - Farm - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	30	0	Salmonella	0
	Milk, cows' - raw milk - intended for direct human consumption - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	25	0	Salmonella	0
	Milk, cows' - raw milk - intended for direct human consumption - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	1	0	Salmonella	0
	Milk, cows' - raw milk - intended for direct human consumption - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	103	0	Salmonella	0
	Milk, cows' - raw milk - intended for direct human consumption - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	1	0	Salmonella	0
	Milk, cows' - raw milk - intended for direct human consumption - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	1	0	Salmonella	0
	Milk, cows' - raw milk for manufacture - Automatic distribution system for raw milk - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	1	0	Salmonella	0
	Milk, cows' - raw milk for manufacture - Farm - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	68	0	Salmonella	0
	Milk, cows' - raw milk for manufacture - Farm - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	38	0	Salmonella	0
	Milk, cows' - raw milk for manufacture - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	23	0	Salmonella	0
	Milk, cows' - raw milk for manufacture - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	4	0	Salmonella	0
	Milk, cows' - raw milk for manufacture - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	20	0	Salmonella	0
	Milk, cows' - raw milk for manufacture - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	7	0	Salmonella	0
	Milk, goats' - raw milk for manufacture - Farm - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	2	0	Salmonella	0
	Milk, goats' - raw milk for manufacture - Farm - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	3	0	Salmonella	0
	Milk, goats' - raw milk for manufacture - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	6	0	Salmonella	0
	Milk, goats' - raw milk for manufacture - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	3	0	Salmonella	0
	Milk, goats' - raw milk for manufacture - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	1	0	Salmonella	0
	Milk, sheep's - raw milk - intended for direct human consumption - Farm - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	1	0	Salmonella	0
	Milk, sheep's - raw milk - intended for direct human consumption - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	1	0	Salmonella	0
	Milk, sheep's - raw milk - intended for direct human consumption - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	1	0	Salmonella	0
	Milk, sheep's - raw milk - intended for direct human consumption - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	5	0	Salmonella	0

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Sampling Details	Method	Total units tested	Total units positive	Zoonoses	N of units positive
GERMANY	Ready-to-eat salads - Cutting plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	1	0	Salmonella	0
	Ready-to-eat salads - Farm - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	6	0	Salmonella	0
	Ready-to-eat salads - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	184	0	Salmonella	0
	Ready-to-eat salads - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	21	0	Salmonella	0
	Ready-to-eat salads - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	18	0	Salmonella	0
	Ready-to-eat salads - Restaurant or Cafe or Pub or Bar or Hotel or Catering service - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	2	0	Salmonella	0
	Ready-to-eat salads - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	1398	1	Salmonella	0
									Salmonella spp., unspecified	1
	Ready-to-eat salads - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	80	2	Salmonella	0
									Salmonella Derby	2
	Ready-to-eat salads - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	PCR	16	0	Salmonella	0
	Ready-to-eat salads - Slaughterhouse - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	2	0	Salmonella	0
	Seeds, sprouted - Farm - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	2	0	Salmonella	0
	Seeds, sprouted - Farm - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	1	0	Salmonella	0
	Seeds, sprouted - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	12	0	Salmonella	0
	Seeds, sprouted - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	35	0	Salmonella	0
	Spices and herbs - frozen - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	2	0	Salmonella	0
	Vegetables - pre-cut - frozen vegetables - Farm - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	1	0	Salmonella	0
	Vegetables - pre-cut - frozen vegetables - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	4	0	Salmonella	0
	Vegetables - pre-cut - frozen vegetables - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	3	0	Salmonella	0
	Vegetables - pre-cut - frozen vegetables - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	1	0	Salmonella	0
	Vegetables - products - canned - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	3	0	Salmonella	0
	Vegetables - products - canned - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	35	0	Salmonella	0
	Vegetables - products - canned - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Unspecified	1	0	Salmonella	0
	Vegetables - products - cooked - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	9	0	Salmonella	0
	Vegetables - products - cooked - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	N_A	Microbiological tests	4	0	Salmonella	0

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Sampling Details	Method	Total units tested	Total units positive	Zoonoses	N of units positive
GERMANY	Vegetables - products - cooked - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed d)	25	Gram	N_A	Unspecified	19	0	Salmonella	0
	Vegetables - products - dried - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed d)	25	Gram	N_A	Microbiological tests	5	0	Salmonella	0
	Vegetables - products - dried - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed d)	25	Gram	N_A	Microbiological tests	32	0	Salmonella	0
	Vegetables - products - Farm - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed d)	25	Gram	N_A	Microbiological tests	17	0	Salmonella	0
	Vegetables - products - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed d)	25	Gram	N_A	Microbiological tests	51	0	Salmonella	0
	Vegetables - products - Restaurant or Cafe or Pub or Bar or Hotel or Catering service - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed d)	25	Gram	N_A	Microbiological tests	1	0	Salmonella	0
	Vegetables - products - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed d)	25	Gram	N_A	Microbiological tests	211	0	Salmonella	0
	Vegetables - products - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed d)	25	Gram	N_A	Unspecified	47	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	Sampling Details	Method	Total units tested	Total units positive	Zoonoses	N of units positive
GERMANY	Compound feedingstuffs for pigs - Farm - Germany - feed sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Microbiological tests	3	0	Salmonella	0
	Compound feedingstuffs for pigs - Feed mill - Germany - feed sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Microbiological tests	90	0	Salmonella	0
	Compound feedingstuffs for pigs - Feed mill - Germany - feed sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Unspecified	1	0	Salmonella	0
	Compound feedingstuffs for poultry, broilers - Feed mill - Germany - feed sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Microbiological tests	14	0	Salmonella	0
	Compound feedingstuffs for poultry, laying hens - Farm - Germany - feed sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Microbiological tests	1	0	Salmonella	0
	Compound feedingstuffs for poultry, laying hens - Feed mill - Germany - feed sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Microbiological tests	37	1	Salmonella	0
									Salmonella spp., unspecified	1
	Compound feedingstuffs for poultry, laying hens - Retail - Germany - feed sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Microbiological tests	1	0	Salmonella	0
	Compound feedingstuffs for turkeys - Feed mill - Germany - feed sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N_A	Microbiological tests	6	0	Salmonella	0

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

Area of sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Sampling Details	Method	Total Units Tested Attribute	Total Units Positive Attribute	Zoonoses	CC	Spa type ML	Units positive
Not Available	Turkeys - fattening flocks - before slaughter - Farm - Germany - environmental sample - dust - Monitoring - active - Official sampling - Objective sampling	herd/flock	25	Gram	N_A	Microbiological tests	297	51	Methicillin resistant Staphylococcus aureus (MRSA)			51

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

Area of sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Sampling Details	Method	Total Units Tested Attribute	Total Units Positive Attribute	Zoonoses	CC	Spa type ML	Units positive
Not Available	Meat from broilers (Gallus gallus) - fresh - skinned - Retail - Germany - food sample - meat - Monitoring - active - Official sampling - Objective sampling	single (food/fe ed)	25	Gram	N_A	Microbiological tests	444	73	Methicillin resistant Staphylococcus aureus (MRSA)			73
	Meat from turkey - fresh - skinned - Retail - Germany - food sample - meat - Monitoring - active - Official sampling - Objective sampling	single (food/fe ed)	25	Gram	N_A	Microbiological tests	525	224	Methicillin resistant Staphylococcus aureus (MRSA)			224

Table Toxoplasma:TOXOPLASMA in animal

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling Details	Method	Sampling unit	Total units tested	Total units positive	Zoonoses	N of units positive
GERMANY	Cats - pet animals - Unspecified - Germany - animal sample - Unspecified - Official sampling - Not specified	N_A	Microscopical and histometrical tests	animal	12	0	Toxoplasma	0
	Cats - Unspecified - Germany - animal sample - Unspecified - Official sampling - Not specified	N_A	Unspecified	animal	848	0	Toxoplasma	0
	Cats - Unspecified - Germany - animal sample - Unspecified - Official sampling - Not specified	N_A	PCR	animal	5	0	Toxoplasma	0
	Dogs - pet animals - Unspecified - Germany - animal sample - Unspecified - Official sampling - Not specified	N_A	Microscopical and histometrical tests	animal	27	0	Toxoplasma	0
	Dogs - pet animals - Unspecified - Germany - animal sample - Unspecified - Official sampling - Not specified	N_A	Real-Time PCR (qualitative or quantitative)	animal	1	0	Toxoplasma	0
	Dogs - pet animals - Unspecified - Germany - animal sample - Unspecified - Official sampling - Not specified	N_A	Unspecified	animal	84	0	Toxoplasma	0
	Dogs - Unspecified - Germany - animal sample - Unspecified - Official sampling - Not specified	N_A	Real-Time PCR (qualitative or quantitative)	animal	1	0	Toxoplasma	0
	Dogs - Unspecified - Germany - animal sample - Unspecified - Official sampling - Not specified	N_A	Unspecified	animal	87	0	Toxoplasma	0
	Dogs - Unspecified - Germany - animal sample - Unspecified - Official sampling - Not specified	N_A	Enzyme-linked immunosorbent assay (ELISA)	animal	1	0	Toxoplasma	0
	Dogs - Unspecified - Germany - animal sample - Unspecified - Official sampling - Not specified	N_A	PCR	animal	1	0	Toxoplasma	0
	Goats - animals under 1 year - Unspecified - Germany - animal sample - Unspecified - Official sampling - Not specified	N_A	Microscopical and histometrical tests	animal	11	0	Toxoplasma	0
	Goats - animals under 1 year - Unspecified - Germany - animal sample - Unspecified - Official sampling - Not specified	N_A	Unspecified	animal	3	0	Toxoplasma	0
	Goats - Unspecified - Germany - animal sample - Unspecified - Official sampling - Not specified	N_A	Microscopical and histometrical tests	animal	38	0	Toxoplasma	0
	Goats - Unspecified - Germany - animal sample - Unspecified - Official sampling - Not specified	N_A	Unspecified	animal	3	0	Toxoplasma	0
	Goats - Unspecified - Germany - animal sample - Unspecified - Official sampling - Not specified	N_A	PCR	animal	1	0	Toxoplasma	0
	Pigs - fattening pigs - Unspecified - Germany - animal sample - Unspecified - Official sampling - Not specified	N_A	Microscopical and histometrical tests	animal	5	0	Toxoplasma	0
	Pigs - fattening pigs - Unspecified - Germany - animal sample - Unspecified - Official sampling - Not specified	N_A	Unspecified	animal	37	0	Toxoplasma	0
	Pigs - fattening pigs - unspecified - weaners to growers - Unspecified - Germany - animal sample - Unspecified - Official sampling - Not specified	N_A	Unspecified	animal	16	0	Toxoplasma	0
	Sheep - animals over 1 year - Unspecified - Germany - animal sample - Unspecified - Official sampling - Not specified	N_A	Unspecified	animal	7	0	Toxoplasma	0
	Sheep - animals under 1 year (lambs) - Unspecified - Germany - animal sample - Unspecified - Official sampling - Not specified	N_A	Microscopical and histometrical tests	animal	33	0	Toxoplasma	0
	Sheep - animals under 1 year (lambs) - Unspecified - Germany - animal sample - Unspecified - Official sampling - Not specified	N_A	Real-Time PCR (qualitative or quantitative)	animal	9	0	Toxoplasma	0
	Sheep - animals under 1 year (lambs) - Unspecified - Germany - animal sample - Unspecified - Official sampling - Not specified	N_A	Unspecified	animal	15	0	Toxoplasma	0
	Sheep - Unspecified - Germany - animal sample - Unspecified - Official sampling - Not specified	N_A	Microscopical and histometrical tests	animal	100	0	Toxoplasma	0
	Sheep - Unspecified - Germany - animal sample - Unspecified - Official sampling - Not specified	N_A	Unspecified	animal	17	0	Toxoplasma	0
	Sheep - Unspecified - Germany - animal sample - Unspecified - Official sampling - Not specified	N_A	PCR	animal	9	1	Toxoplasma gondii	1

Table Trichinella:TRICHINELLA in animal

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling Details	Method	Sampling unit	Total units tested	Total units positive	Zoonoses	N of units positive
GERMANY	Pigs - fattening pigs - not raised under controlled housing conditions - Slaughterhouse - Germany - animal sample - Surveillance - Official sampling - Census	N_A	Classification not possible	animal	56942 423	0	Trichinella	0
	Solipeds, domestic - horses - Slaughterhouse - Germany - animal sample - Surveillance - Official sampling - Census	N_A	Classification not possible	animal	6848	0	Trichinella	0
	Wild boars - Hunting - Germany - animal sample - Surveillance - Official sampling - Census	N_A	Classification not possible	animal	45446 6	22	Trichinella	22

Table Yersinia:YERSINIA in food

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Sampling Details	Method	Total units tested	Total units positive	Zoonoses	N of units positive
Not Available	Meat from pig - minced meat - Retail - Germany - food sample - meat - Monitoring - active - Official sampling - Objective sampling	single (food/feed)	25	Gram	N/A	ISO 10273:2017 Yersinia enterocolitica	457	11	Yersinia enterocolitica unspecified	11
GERMANY	Meat from bovine animals - minced meat - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N/A	Microbiological tests	1	0	Yersinia	0
	Meat from bovine animals - minced meat - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N/A	Unspecified	3	0	Yersinia	0
	Meat from pig - fresh - Cutting plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N/A	Unspecified	1	0	Yersinia	0
	Meat from pig - fresh - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N/A	Microbiological tests	1	0	Yersinia	0
	Meat from pig - fresh - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N/A	Unspecified	2	0	Yersinia	0
	Meat from pig - fresh - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N/A	Microbiological tests	21	1	Yersinia	0
									Yersinia enterocolitica	1
	Meat from pig - fresh - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N/A	Unspecified	21	1	Yersinia	0
									Yersinia enterocolitica	1
	Meat from pig - fresh - Slaughterhouse - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N/A	Microbiological tests	1	0	Yersinia	0
	Meat from pig - fresh - Slaughterhouse - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N/A	Unspecified	1	0	Yersinia	0
	Meat from pig - meat preparation - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N/A	Microbiological tests	1	0	Yersinia	0
	Meat from pig - meat preparation - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N/A	Unspecified	1	0	Yersinia	0
	Meat from pig - meat products - cooked, ready-to-eat - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N/A	Unspecified	1	0	Yersinia	0
	Meat from pig - meat products - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N/A	Microbiological tests	1	0	Yersinia	0
	Meat from pig - mechanically separated meat (MSM) - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N/A	Microbiological tests	3	0	Yersinia	0
	Meat from pig - mechanically separated meat (MSM) - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N/A	Unspecified	5	2	Yersinia	0
									Yersinia enterocolitica	2
	Meat from pig - minced meat - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N/A	Microbiological tests	2	0	Yersinia	0
	Meat from pig - minced meat - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N/A	Microbiological tests	29	3	Yersinia	0
									Yersinia enterocolitica	3
	Meat from pig - minced meat - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N/A	Unspecified	8	0	Yersinia	0
	Meat from pig - minced meat - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N/A	PCR	7	0	Yersinia	0
	Meat from pig - minced meat - Slaughterhouse - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N/A	Microbiological tests	1	0	Yersinia	0
	Meat from wild boar - fresh - Retail - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	N/A	Unspecified	1	0	Yersinia	0

FOODBORNE OUTBREAKS TABLES

Foodborne Outbreaks: summarized data

Causative agent	Food vehicle	Outbreak strenght							
		Strong				Weak			
		N outbreaks	N human cases	N hospitalized	N deaths	N outbreaks	N human cases	N hospitalized	N deaths
Bacillus cereus	Eggs and egg products	1	19	0	0				
	Cereal products including rice and seeds/pulses (nuts, almonds)	6	201	1	0				
	Buffet meals	1	23	0	0				
	Unknown					2	16	0	0
Campylobacter	Milk	1	3	0	0				
	Unknown					160	363	27	0
Campylobacter jejuni	Milk	8	81	4	0				
	Broiler meat (Gallus gallus) and products thereof	1	2	0	0				
Clostridium botulinum	Vegetables and juices and other products thereof	1	2	2	1				
Clostridium botulinum toxins	Pig meat and products thereof	1	2	1	0				
Clostridium perfringens	Buffet meals	1	13	0	0				
Cryptosporidium	Unknown					5	13	0	0
Giardia	Unknown					8	17	0	0
Hepatitis A	Fruit, berries and juices and other products thereof	2	52	40	0				
	Unknown					6	15	14	0
Histamine	Fish and fish products	1	9	0	0				
Listeria monocytogenes	Pig meat and products thereof	1	33	29	5				
	Unknown					3	7	7	3
Mycotoxins	Bakery products	1	18	0	0				
Norovirus	Buffet meals	1	83	1	0				
	Unknown					18	74	2	0
	Meat and meat products	1	4	1	0				
Orthohantavirus	Unknown					3	6	1	0
Salmonella	Unknown					12	30	6	0
Salmonella Enteritidis	Eggs and egg products	2	250	76	2				
	Vegetables and juices and other products thereof	1	3	0	0				
	Other foods	1	11	0	0				
	Mixed food	1	9	1	0				
	Unknown					69	253	52	0
Salmonella group D	Broiler meat (Gallus gallus) and products thereof	1	5	5	0				
Salmonella Other serovars	Unknown					8	34	6	0
Salmonella Typhimurium	Pig meat and products thereof	1	15	6	0				
	Mixed food	1	20	1	0				
	Unknown					31	94	22	0
Shigella	Unknown					7	19	3	0

Causative agent	Food vehicle	Outbreak strenght							
		Strong				Weak			
		N outbreaks	N human cases	N hospitalized	N deaths	N outbreaks	N human cases	N hospitalized	N deaths
Staphylococcus aureus	Mixed food	1	17	9	0				
Unknown	Unknown					35	606	3	0
Verocytotoxigenic E. coli (VTEC)	Milk	1	3	1	0				
VTEC, unspecified	Unknown					8	45	3	0
Yersinia enterocolitica	Unknown					3	6	0	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
Bacillus cereus	Not Available	BVL_2018_0049	General	Cereal products including rice and seeds/pulses (nuts, almonds)	Cooked rice	Descriptive environmental evidence; Detection of causative agent in food chain or its environment - Symptoms and onset of illness pathognomonic to causative agent; Descriptive epidemiological evidence	School or kindergarten	Restaurant or Cafe or Pub or Bar or Hotel or Catering service	Unknown	Storage time/temperature abuse; Inadequate chilling	N_A	1	28	0	0
		BVL_2018_0060	General	Eggs and egg products	Pancake	Descriptive environmental evidence; Detection of causative agent in food chain or its environment - Symptoms and onset of illness pathognomonic to causative agent; Descriptive epidemiological evidence	School or kindergarten	School or kindergarten	Germany	Storage time/temperature abuse; Inadequate chilling; Cross-contamination	N_A	1	19	0	0
		BVL_2018_0065	Unknown	Cereal products including rice and seeds/pulses (nuts, almonds)	Rice with tomato sauce	Detection of causative agent in food chain or its environment - Symptoms and onset of illness pathognomonic to causative agent; 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	Unknown	Storage time/temperature abuse; Inadequate chilling	N_A	1	3	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
Bacillus cereus	Not Available	BVL_2018_0073	General	Cereal products including rice and seeds/pulses (nuts, almonds)	Cheese noodles	Descriptive environmental evidence; Detection of causative agent in food vehicle or its component - Symptoms and onset of illness pathognomonic to causative agent; Descriptive epidemiological evidence	School or kindergarten	Canteen or workplace catering	Germany	Inadequate chilling	N_A	1	38	1	0
		BVL_2018_0076	General	Cereal products including rice and seeds/pulses (nuts, almonds)	Cooked rice	Detection of causative agent in food vehicle or its component - Symptoms and onset of illness pathognomonic to causative agent; Descriptive epidemiological evidence	School or kindergarten	Processing plant	Italy	Storage time/temperature abuse; Inadequate chilling	N_A	1	119	0	0
		BVL_2018_0084	General	Cereal products including rice and seeds/pulses (nuts, almonds)	Soya escalope	Detection of causative agent in food vehicle or its component - Symptoms and onset of illness pathognomonic to causative agent	Canteen or workplace catering	Canteen or workplace catering	Germany	Inadequate chilling	N_A	1	unk	unk	0
		BVL_2018_0094	General	Buffet meals	Canapes with turkey (sausage), ham canapes (prosciutto), canapes with salmon (smoked salmon), vital wraps with vegetables (tortillia stuffed with paprika, cucumber and tomato strips, salad)	Detection of causative agent in food chain or its environment - Detection of indistinguishable causative agent in humans; Descriptive epidemiological evidence	Residential institution (nursing home or prison or boarding school)	Restaurant or Cafe or Pub or Bar or Hotel or Catering service	Germany	Unknown	N_A	1	23	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
Bacillus cereus	Not Available	BVL_2018_0095	Unknown	Cereal products including rice and seeds/pulses (nuts, almonds)	Cooked brown rice	Descriptive environmental evidence; Detection of causative agent in food vehicle or its component - Symptoms and onset of illness pathognomonic to causative agent	School or kindergarten	Restaurant or Cafe or Pub or Bar or Hotel or Catering service	Unknown	Storage time/temperature abuse; Inadequate chilling	N_A	1	13	unk	0
Campylobacter	Not Available	BVL_2018_0070	General	Milk	Raw milk	Detection of causative agent in food chain or its environment - Detection of indistinguishable causative agent in humans	Household	Household	Germany	Inadequate heat treatment	N_A	1	3	0	0
Campylobacter jejuni	Not Available	BVL_2018_0023	General	Milk	Raw milk	Detection of causative agent in food chain or its environment - Detection of indistinguishable causative agent in humans; Descriptive epidemiological evidence; Descriptive epidemiological evidence	School or kindergarten	Farm	Germany	Unknown	N_A	1	18	0	0
		BVL_2018_0026	General	Milk	Raw milk	Descriptive epidemiological evidence	Household	Household	Germany	Inadequate heat treatment	N_A	1	5	0	0
		BVL_2018_0030	General	Milk	Raw milk	Descriptive environmental evidence; Descriptive epidemiological evidence	School or kindergarten	Restaurant or Cafe or Pub or Bar or Hotel or Catering service	Germany	Inadequate heat treatment	N_A	1	12	0	0
		BVL_2018_0037	General	Milk	Raw milk	Descriptive epidemiological evidence	Household	Household	Unknown	Inadequate heat treatment	N_A	1	5	1	0
		BVL_2018_0055	General	Milk	Raw milk	Detection of causative agent in food chain or its environment - Detection of indistinguishable causative agent in humans	Farm	Farm	Germany	Unprocessed contaminated ingredient; Inadequate heat treatment	N_A	1	12	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
Campylobacter jejuni	Not Available	BVL_2018_0063	Unknown	Broiler meat (Gallus gallus) and products thereof	Half chicken	Detection of causative agent in food vehicle or its component - Symptoms and onset of illness pathognomonic to causative agent	Take-away or fast-food outlet	Take-away or fast-food outlet	Unknown	Cross-contamination	N_A	1	2	0	0
		BVL_2018_0066	Household	Milk	Raw milk	Descriptive epidemiological evidence	Unknown	Unknown	Germany	Inadequate heat treatment	N_A	1	3	0	0
		BVL_2018_0067	Household	Milk	Raw milk	Descriptive epidemiological evidence	Unknown	Unknown	Germany	Inadequate heat treatment	N_A	1	5	0	0
		BVL_2018_0068	General	Milk	Raw milk	Descriptive epidemiological evidence	School or kindergarten	Unknown	Germany	Inadequate heat treatment	N_A	1	21	3	0
Clostridium botulinum	Not Available	BVL_2018_0051	Household	Vegetables and juices and other products thereof	Canning in jar, later frozen yellow wax beans	Detection of causative agent in food vehicle or its component - Detection of indistinguishable causative agent in humans; Descriptive epidemiological evidence	Others	Household	Germany	Other contributory factor; Inadequate heat treatment	N_A	1	2	2	1
Clostridium botulinum toxins	Not Available	BVL_2018_0015	Household	Pig meat and products thereof	Cured ham (smoked)	Detection of causative agent in food vehicle or its component - Symptoms and onset of illness pathognomonic to causative agent	Household	Household	Unknown	Unknown	N_A	1	2	1	0
Clostridium perfringens	Not Available	BVL_2018_0003	Household	Buffet meals	Chicken slices in cream sauce, steak with spiced meat	Detection of causative agent in food vehicle or its component - Detection of indistinguishable causative agent in humans; Descriptive epidemiological evidence	Household	Restaurant or Cafe or Pub or Bar or Hotel or Catering service	Germany	Storage time/temperature abuse; Inadequate heat treatment	N_A	1	13	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
Hepatovirus A	Not Available	BVL_2018_0090	General	Fruit, berries and juices and other products thereof	Strawberries	Detection of causative agent in food chain or its environment - Symptoms and onset of illness pathognomonic to causative agent	Unknown	Unknown	Unknown	Unknown	N_A	1	29	23	0
		BVL_2018_0101	General	Fruit, berries and juices and other products thereof	Dates	Descriptive epidemiological evidence; Analytical epidemiological evidence	Multiple places of exposure in one country	Unknown	Morocco	Unknown	N_A	1	23	17	0
Histamine	Not Available	BVL_2018_0052	General	Fish and fish products	Tuna	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	Unknown	Storage time/temperature abuse; Inadequate chilling	N_A	1	9	unk	0
Listeria monocytogenes	Not Available	BVL_2018_0102	General	Pig meat and products thereof	Blood sausage	Detection of causative agent in food vehicle or its component - Detection of indistinguishable causative agent in humans; Descriptive epidemiological evidence; Analytical epidemiological evidence	Multiple places of exposure in one country	Processing plant	Unknown	Cross-contamination	N_A	1	33	29	5
Mycotoxins	Staphylococcus aureus	BVL_2018_0096	General	Bakery products	Pumpkin bread	Detection of causative agent in food vehicle or its component - Symptoms and onset of illness pathognomonic to causative agent; Descriptive epidemiological evidence	School or kindergarten	School or kindergarten	Unknown	Unprocessed contaminated ingredient; Storage time/temperature abuse	N_A	1	18	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
Norovirus	Bacillus cereus	BVL_2018_0042	General	Meat and meat products	Frozen leftover skewer Doner	Detection of causative agent in food chain or its environment - Symptoms and onset of illness pathognomonic to causative agent; Detection of causative agent in food chain or its environment - Detection of indistinguishable causative agent in humans	Take-away or fast-food outlet	Take-away or fast-food outlet	Germany	Cross-contamination	N_A	1	4	1	0
	Not Available	BVL_2018_0089	General	Buffet meals	Cold dishes: ham, roast beef, cheese specialties and mozzarella	Analytical epidemiological evidence	Restaurant or Cafe or Pub or Bar or Hotel or Catering service	Unknown	Unknown	Cross-contamination	N_A	1	83	1	0
Salmonella Enteritidis	Not Available	BVL_2018_0020	Unknown	Mixed food	Potato salad	Descriptive environmental evidence; Detection of causative agent in food vehicle or its component - Symptoms and onset of illness pathognomonic to causative agent	Canteen or workplace catering	Canteen or workplace catering	Germany	Unknown	N_A	1	9	1	0
		BVL_2018_0025	General	Other foods	Kebab sauce	Descriptive environmental evidence; Detection of causative agent in food vehicle or its component - Symptoms and onset of illness pathognomonic to causative agent; Descriptive epidemiological evidence	Take-away or fast-food outlet	Take-away or fast-food outlet	Unknown	Storage time/temperature abuse	N_A	1	11	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
Salmonella Enteritidis	Not Available	BVL_2018_0050	Household	Vegetables and juices and other products thereof	Cucumber salad	Detection of causative agent in food vehicle or its component - Detection of indistinguishable causative agent in humans	Household	Unknown	Unknown	Unknown	N_A	1	3	0	0
		BVL_2018_0092	General	Eggs and egg products	Eggs/noodles	Detection of causative agent in food vehicle or its component - Detection of indistinguishable causative agent in humans;Detection of causative agent in food chain or its environment - Symptoms and onset of illness pathognomonic to causative agent;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	Germany	Inadequate heat treatment	N_A	1	32	6	1
		BVL_2018_0110	General	Eggs and egg products	Eggs	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	Germany	Infected food handler;Inadequate chilling;Cross-contamination	N_A	1	218	70	1
Salmonella group D	Not Available	BVL_2018_0027	Household	Broiler meat (Gallus gallus) and products thereof	Meat from the chicken	Descriptive epidemiological evidence	Household	Household	Unknown	Unknown	N_A	1	5	5	0
Salmonella Typhimurium	Not Available	BVL_2018_0002	General	Mixed food	Potato salad with boiled eggs, cucumber and mayonnaise	Descriptive environmental evidence;Descriptive epidemiological evidence	School or kindergarten	School or kindergarten	Germany	Storage time/temperature abuse;Inadequate chilling;Cross-contamination	N_A	1	20	1	0
		BVL_2018_0111	General	Pig meat and products thereof	Raw minced meat, sausages	Descriptive epidemiological evidence;Analytical epidemiological evidence	Household	Retail	Germany	Unknown	N_A	1	15	6	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
Staphylococcus aureus	Bacillus cereus	BVL_2018_0072	General	Mixed food	Pasta salad	Detection of causative agent in food vehicle or its component - Symptoms and onset of illness pathognomonic to causative agent; Descriptive epidemiological evidence	Household	Household	Germany	Other contributory factor	N_A	1	17	9	0
Verocytotoxigenic E. coli (VTEC)	Not Available	BVL_2018_0021	Household	Milk	Raw milk	Descriptive environmental evidence; Detection of causative agent in food vehicle or its component - Detection of indistinguishable causative agent in humans	Household	Household	Germany	Inadequate heat treatment	N_A	1	3	1	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
Bacillus cereus	Not Available	BVL_2018_0128	Not Available	Unknown	N_A	Unknown	Not Available	Not Available	Not Available	Not Available	N_A	2	16	unk	0
Campylobacter	Not Available	BVL_2018_0124	Not Available	Unknown	N_A	Unknown	Not Available	Not Available	Not Available	Not Available	N_A	160	363	27	0
Cryptosporidium	Not Available	BVL_2018_0131	Not Available	Unknown	N_A	Unknown	Not Available	Not Available	Not Available	Not Available	N_A	5	13	0	0
Giardia	Not Available	BVL_2018_0130	Not Available	Unknown	N_A	Unknown	Not Available	Not Available	Not Available	Not Available	N_A	8	17	0	0
Hepatitis A	Not Available	BVL_2018_0133	Not Available	Unknown	N_A	Unknown	Not Available	Not Available	Not Available	Not Available	N_A	6	15	14	0
Listeria monocytogenes	Not Available	BVL_2018_0125	Not Available	Unknown	N_A	Unknown	Not Available	Not Available	Not Available	Not Available	N_A	3	7	7	3
Norovirus	Not Available	BVL_2018_0132	Not Available	Unknown	N_A	Unknown	Not Available	Not Available	Not Available	Not Available	N_A	18	74	2	0
Orthohepatitis virus	Not Available	BVL_2018_0134	Not Available	Unknown	N_A	Unknown	Not Available	Not Available	Not Available	Not Available	N_A	3	6	1	0
Salmonella	Not Available	BVL_2018_0123	Not Available	Unknown	N_A	Unknown	Not Available	Not Available	Not Available	Not Available	N_A	12	30	6	0
Salmonella Enteritidis	Not Available	BVL_2018_0121	Not Available	Unknown	N_A	Unknown	Not Available	Not Available	Not Available	Not Available	N_A	69	253	52	0
Salmonella Other serovars	Not Available	BVL_2018_0122	Not Available	Unknown	N_A	Unknown	Not Available	Not Available	Not Available	Not Available	N_A	8	34	6	0
Salmonella Typhimurium	Not Available	BVL_2018_0120	Not Available	Unknown	N_A	Unknown	Not Available	Not Available	Not Available	Not Available	N_A	31	94	22	0
Shigella	Not Available	BVL_2018_0129	Not Available	Unknown	N_A	Unknown	Not Available	Not Available	Not Available	Not Available	N_A	7	19	3	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	BVL_2018_0135	Not Available	Unknown	N_A	Unknown	Not Available	Not Available	Not Available	Not Available	N_A	30	493	3	0
		BVL_2018_0136	Not Available	Unknown	N_A	Unknown	Not Available	Not Available	Not Available	Not Available	N_A	5	113	unk	0
VTEC, unspecified	Not Available	BVL_2018_0127	Not Available	Unknown	N_A	Unknown	Not Available	Not Available	Not Available	Not Available	N_A	8	45	3	0
Yersinia enterocolitica	Not Available	BVL_2018_0126	Not Available	Unknown	N_A	Unknown	Not Available	Not Available	Not Available	Not Available	N_A	3	6	0	0

ANTIMICROBIAL RESISTANCE TABLES FOR CAMPYLOBACTER

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

Sampling Stage: Slaughterhouse		Sampling Type: food sample - neck skin		Sampling Context: Monitoring			
Sampler: Official sampling		Sampling Strategy: Objective sampling		Programme Code: OTHER AMR MON			
Analytical Method:							
Country of Origin: Germany							
Sampling details:							
MIC	AM substance	Ciprofloxacin	Erythromycin	Gentamicin	Nalidixic acid	Streptomycin	Tetracycline
	ECOFF	0.5	8	2	16	4	2
	Lowest limit	0.12	1	0.12	1	0.25	0.5
	Highest limit	16	128	16	64	16	64
	N of tested isolates	16	16	16	16	16	16
	N of resistant isolates	13	1	0	13	1	12
	<=0.12	3					
	0.25			2			
	<=0.5						4
	0.5			13			
<=1		12					
1			1		7		
2		3			8		
4				3			
8	6						
16	2						
>16	5				1		
64				8		3	
>64				5		9	
>128		1					

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

Sampling Stage: Retail

Sampler: Official sampling

Analytical Method:

Country of Origin: Germany

Sampling details:

Sampling Type: food sample - meat

Sampling Strategy: Objective sampling

Sampling Context: Monitoring

Programme Code: OTHER AMR MON

MIC	AM substance	Ciprofloxacin	Erythromycin	Gentamicin	Nalidixic acid	Streptomycin	Tetracycline
	ECOFF	0.5	8	2	16	4	2
	Lowest limit	0.12	1	0.12	1	0.25	0.5
	Highest limit	16	128	16	64	16	64
	N of tested isolates	34	34	34	34	34	34
	N of resistant isolates	27	3	0	27	5	29
<=0.12		5					
0.25		2		3			
<=0.5							4
0.5				25			
<=1			27				
1				6		10	
2			3			19	1
4			1		2		
8		7			5		
16		15					
>16		5				5	
32							1
64					18		6
>64					9		22
128			1				
>128			2				

Table Antimicrobial susceptibility testing of Campylobacter coli in Gallus gallus (fowl) - broilers

Sampling Stage: Slaughterhouse

Sampler: Official sampling

Analytical Method:

Country of Origin: Germany

Sampling details:

Sampling Type: animal sample - caecum

Sampling Strategy: Objective sampling

Sampling Context: Monitoring

Programme Code: OTHER AMR MON

MIC	AM substance	Ciprofloxacin	Erythromycin	Gentamicin	Nalidixic acid	Streptomycin	Tetracycline
	ECOFF	0.5	8	2	16	4	2
	Lowest limit	0.12	1	0.12	1	0.25	0.5
	Highest limit	16	128	16	64	16	64
	N of tested isolates	54	54	54	54	54	54
	N of resistant isolates	51	6	0	51	8	44
<=0.12		3					
0.25				3			
<=0.5							10
0.5				37			
<=1			37				
1				14		13	
2			11			33	
4					3		
8		20					
16		15					
>16		16				8	
32					2		1
64					32		9
>64					17		34
>128			6				

Table Antimicrobial susceptibility testing of Campylobacter coli in Meat from turkey - fresh

Sampling Stage: Retail

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Germany

Sampling details:

MIC	AM substance	Ciprofloxacin	Erythromycin	Gentamicin	Nalidixic acid	Streptomycin	Tetracycline
	ECOFF	0.5	8	2	16	4	2
	Lowest limit	0.12	1	0.12	1	0.25	0.5
	Highest limit	16	128	16	64	16	64
	N of tested isolates	22	22	22	22	22	22
	N of resistant isolates	18	3	0	18	4	18
<=0.12		4					
0.25				1			
<=0.5							4
0.5				14			
<=1			15				
1				7		5	
2			3			11	
4					3	2	
8		6	1		1		
16		7					
>16		5				4	
64			1		11		3
>64					7		15
>128			2				

Table Antimicrobial susceptibility testing of Campylobacter coli in Turkeys - fattening flocks

Sampling Stage: Slaughterhouse

Sampling Type: animal sample - caecum

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Germany

Sampling details:

AM substance	Ciprofloxacin	Erythromycin	Gentamicin	Nalidixic acid	Streptomycin	Tetracycline
	ECOFF	8	2	16	4	2
	Lowest limit	0.12	1	0.12	1	0.25
	Highest limit	16	128	16	64	64
	N of tested isolates	185	185	185	185	185
MIC	N of resistant isolates	162	46	1	162	22
<=0.12	20					
0.25	2		8			
<=0.5						14
0.5	1		144		2	
<=1		104				
1			32		59	
2		30			97	
4		4		17	5	
8	29	1		6		
16	75					
>16	58		1		22	
32		1				2
64				91		34
>64				71		135
128		2				
>128		43				

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

Sampling Stage: Slaughterhouse

Sampling Type: food sample - neck skin

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Germany

Sampling details:

	AM substance	Ciprofloxacin	Erythromycin	Gentamicin	Nalidixic acid	Streptomycin	Tetracycline
MIC	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	85	85	85	85	85	85
	N of resistant isolates	71	0	0	66	3	47
	<=0.12	13		1			
	0.25	1		8			
	<=0.5						38
	0.5			72		4	
	<=1		83		1		
	1			4		57	
	2		2		2	20	
	4				12	1	
	8	17			4		1
	16	42					3
	>16	12				3	
	32						1
	64				8		4
	>64				58		38

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

Sampling Stage: Retail

Sampler: Official sampling

Analytical Method:

Country of Origin: Germany

Sampling details:

Sampling Type: food sample - meat

Sampling Strategy: Objective sampling

Sampling Context: Monitoring

Programme Code: OTHER AMR MON

MIC	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	172	172	172	172	172	172
	N of resistant isolates	128	0	0	124	2	102
<=0.12		42		4			
<=0.25						1	
0.25		2		30			
<=0.5							69
0.5				130		18	
<=1			169		2		
1				8		104	1
2			3			46	1
4		3			42	1	
8		54			1		3
16		54					4
>16		17				2	
32					3		5
64					15		18
>64					106		71

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: Germany

Sampling details:

MIC	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	175	175	175	175	175	175
	N of resistant isolates	141	2	2	136	7	112
<=0.12		31		1			
<=0.25						1	
0.25		3		28			
<=0.5							62
0.5				136		19	
<=1			171				
1				7		119	1
2			1	1	8	28	
4	4	1			28	1	
8	55	1	1	3			
16	65						5
>16	17			1		7	
32					2		6
64					15		19
>64					119		82
>128			1				

Table Antimicrobial susceptibility testing of Campylobacter jejuni in Meat from turkey - fresh

Sampling Stage: Retail

Sampler: Official sampling

Analytical Method:

Country of Origin: Germany

Sampling details:

Sampling Type: food sample - meat

Sampling Strategy: Objective sampling

Sampling Context: Monitoring

Programme Code: OTHER AMR MON

MIC	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	70	70	70	70	70	70
	N of resistant isolates	54	0	0	48	2	38
<=0.12		16					
0.25				21			
<=0.5							31
0.5				46		12	
<=1			69		2		
1				3		41	1
2			1		3	15	
4					16		
8		25			1		3
16		25					1
>16		4				2	
32							3
64					4		12
>64					44		19

Table Antimicrobial susceptibility testing of Campylobacter jejuni in Turkeys - fattening flocks

Sampling Stage: Slaughterhouse

Sampling Type: animal sample - caecum

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method:

Country of Origin: Germany

Sampling details:

MIC	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	120	120	120	120	120	120
	N of resistant isolates	81	0	0	75	3	60
<=0.12		35		1			
0.25		4		33			
<=0.5							59
0.5				82		19	
<=1			120				
1				4		82	1
2					10	15	1
4		3			33	1	
8		31			2		1
16		33					
>16		14				3	
32					1		4
64					12		16
>64					62		38

ANTIMICROBIAL RESISTANCE TABLES FOR SALMONELLA

Table Antimicrobial susceptibility testing of Salmonella 1,4,[5],12:i:- in Meat from turkey - carcase - chilled

Sampling Stage: Slaughterhouse
 Sampling Type: food sample - neck skin
 Sampling Context: Monitoring

Sampler: HACCP and own check
 Sampling Strategy: Objective sampling
 Programme Code: AMR MON

Analytical Method:

Country of Origin: Germany

Sampling Details:

MIC	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	0.25	8	0.015	1	0.5	0.03	4	8	2	0.25	0.25
	Highest limit	64	64	4	16	128	8	16	32	16	128	1024	64	8	32
	N of tested isolates	39	39	39	39	39	39	39	39	39	39	39	39	39	39
	N of resistant isolates	5	0	0	0	0	24	0	0	0	24	6	29	0	0
<=0.03										35					
0.03							15								
0.064										4					
<=0.25				39										2	39
<=0.5									35						
0.5					39		22							32	
<=1	25							37							
1							2		4					5	
<=2													10		
2	9							2							
<=4											3				
4			21												
<=8						38						8			
8			17								12				
16			1			1						22			
32											14	2			
64											10	1	1		
>64	5												28		
>1024												6			

Table Antimicrobial susceptibility testing of Salmonella 1,4,[5],12:i:- in Meat from turkey - fresh

Sampling Stage: Retail

Sampler: Official sampling

Analytical Method:

Country of Origin: Germany

Sampling Details:

Sampling Type: food sample - meat

Sampling Strategy: Objective sampling

Sampling Context: Monitoring

Programme Code: OTHER AMR MON

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	0.25	8	0.015	1	0.5	0.03	4	8	2	0.25	0.25
Highest limit	64	64	4	16	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
N of resistant isolates	1	0	0	0	0	2	0	0	0	2	1	2	0	0
MIC														
<=0.03														
0.064														
<=0.25														
<=0.5														
0.5														
<=1														
1														
<=8														
8														
16														
32														
64														
>64														
>1024														

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

Sampling Stage: Farm

Sampler: Official sampling

Analytical Method:

Country of Origin: Germany

Sampling Details:

Sampling Type: environmental sample - boot swabs

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

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	0.25	8	0.015	1	0.5	0.03	4	8	2	0.25	0.25
Highest limit	64	64	4	16	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
N of resistant isolates	3	0	0	0	0	0	0	0	0	0	3	0	0	0
MIC														
<=0.03									2					
0.03						3								
0.064									1					
<=0.25			3										1	3
<=0.5								3						
0.5				3									2	
<=1							2							
<=2												3		
2							1							
<=4										3				
<=8					3									
8		3												
>64	3													
>1024											3			

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

Sampling Stage: Farm

Sampler: Official sampling

Analytical Method:

Country of Origin: Germany

Sampling Details:

Sampling Type: environmental sample - boot swabs

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

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	0.25	8	0.015	1	0.5	0.03	4	8	2	0.25	0.25
Highest limit	64	64	4	16	128	8	16	32	16	128	1024	64	8	32
N of tested isolates	11	11	11	11	11	11	11	11	11	11	11	11	11	11
N of resistant isolates	2	0	0	0	0	0	0	0	0	0	3	2	0	0
MIC														
<=0.015						2								
<=0.03									10					
0.03						9								
0.064									1					
<=0.25			11										3	11
<=0.5								10						
0.5				11									5	
<=1	7						10							
1								1					3	
<=2												8		
2	2						1							
<=4										10				
4		3										1		
<=8					11						3			
8		8								1				
16											3			
32											1			
64											1			
>64	2											2		
>1024											3			

Table Antimicrobial susceptibility testing of Salmonella 1,4,[5],12:i:- in Meat from broilers (Gallus gallus) - carcase - chilled

Sampling Stage: Slaughterhouse

Sampling Type: food sample - neck skin

Sampling Context: Monitoring

Sampler: HACCP and own check

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method:

Country of Origin: Germany

Sampling Details:

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

Table Antimicrobial susceptibility testing of Salmonella Agona in Meat from turkey - carcase - chilled

Sampling Stage: Slaughterhouse

Sampler: HACCP and own check

Analytical Method:

Country of Origin: Germany

Sampling Details:

Sampling Type: food sample - neck skin

Sampling Strategy: Objective sampling

Sampling Context: Monitoring

Programme Code: AMR MON

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	0.25	8	0.015	1	0.5	0.03	4	8	2	0.25	0.25
Highest limit	64	64	4	16	128	8	16	32	16	128	1024	64	8	32
N of tested isolates	21	21	21	21	21	21	21	21	21	21	21	21	21	21
N of resistant isolates	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MIC														
<=0.015						10								
<=0.03									20					
0.03						11								
0.064									1					
<=0.25			20										1	20
<=0.5								21						
0.5			1	21									17	1
<=1	20						21							
1													3	
<=2												19		
2	1													
<=4										18				
4		3										2		
<=8					19						3			
8		18								3				
16					2						16			
32											2			

Table Antimicrobial susceptibility testing of Salmonella Agona in Meat from turkey - fresh

Sampling Stage: Retail

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Germany

Sampling Details:

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

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

Sampling Stage: Farm

Sampler: Official sampling

Analytical Method:

Country of Origin: Germany

Sampling Details:

Sampling Type: environmental sample - boot swabs

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

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

Table Antimicrobial susceptibility testing of Salmonella Agona in Meat from broilers (Gallus gallus) - carcase - chilled

Sampling Stage: Slaughterhouse

Sampling Type: food sample - neck skin

Sampling Context: Monitoring

Sampler: HACCP and own check

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method:

Country of Origin: Germany

Sampling Details:

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

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

Sampling Stage: Farm

Sampler: Official sampling

Analytical Method:

Country of Origin: Germany

Sampling Details:

Sampling Type: environmental sample - boot swabs

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

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	0.25	8	0.015	1	0.5	0.03	4	8	2	0.25	0.25
Highest limit	64	64	4	16	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
N of resistant isolates	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MIC														
<=0.015						1								
<=0.03									1					
<=0.25			1											1
<=0.5								1						
0.5				1									1	
<=1	1						1							
<=2												1		
<=4										1				
<=8					1									
8		1												
32											1			

Table Antimicrobial susceptibility testing of Salmonella Bareilly in Meat from broilers (Gallus gallus) - carcase - chilled

Sampling Stage: Slaughterhouse

Sampling Type: food sample - neck skin

Sampling Context: Monitoring

Sampler: HACCP and own check

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method:

Country of Origin: Germany

Sampling Details:

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

Table Antimicrobial susceptibility testing of Salmonella Blockley in Meat from turkey - carcase - chilled

Sampling Stage: Slaughterhouse

Sampling Type: food sample - neck skin

Sampling Context: Monitoring

Sampler: HACCP and own check

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method:

Country of Origin: Germany

Sampling Details:

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

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

Sampling Stage: Slaughterhouse

Sampling Type: food sample - neck skin

Sampling Context: Monitoring

Sampler: HACCP and own check

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method:

Country of Origin: Germany

Sampling Details:

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

Table Antimicrobial susceptibility testing of Salmonella Bredeney in Meat from turkey - fresh

Sampling Stage: Retail

Sampler: Official sampling

Analytical Method:

Country of Origin: Germany

Sampling Details:

Sampling Type: food sample - meat

Sampling Strategy: Objective sampling

Sampling Context: Monitoring

Programme Code: OTHER AMR MON

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

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

Sampling Stage: Slaughterhouse

Sampling Type: food sample - neck skin

Sampling Context: Monitoring

Sampler: HACCP and own check

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method:

Country of Origin: Germany

Sampling Details:

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

Table Antimicrobial susceptibility testing of Salmonella enterica subsp. enterica rough in Gallus gallus (fowl) - broilers - before slaughter

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

Sampler: Official sampling

Sampling Strategy: Census

Analytical Method:

Country of Origin: Germany

Sampling Details:

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

Table Antimicrobial susceptibility testing of Salmonella enterica subsp. enterica rough in Gallus gallus (fowl) - laying hens

Sampling Stage: Farm

Sampler: Official sampling

Analytical Method:

Country of Origin: Germany

Sampling Details:

Sampling Type: environmental sample - boot swabs

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

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	0.25	8	0.015	1	0.5	0.03	4	8	2	0.25	0.25
Highest limit	64	64	4	16	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
N of resistant isolates	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MIC														
<=0.03									1					
0.03						2								
0.064									1					
<=0.25			2											2
<=0.5								2						
0.5				2									2	
<=1	1						2							
<=2												2		
2	1													
<=4										2				
<=8					2						2			
8		2												

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

Sampling Stage: Retail

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Germany

Sampling Details:

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

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

Sampling Stage: Slaughterhouse

Sampling Type: food sample - neck skin

Sampling Context: Monitoring

Sampler: HACCP and own check

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method:

Country of Origin: Germany

Sampling Details:

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

Table Antimicrobial susceptibility testing of Salmonella enterica, subspecies enterica in Meat from turkey - fresh

Sampling Stage: Retail

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Germany

Sampling Details:

AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
ECOFF	8	16	0.5	2	16	0.064	2	2	0.125	16	256	8	1	2
Lowest limit	1	2	0.25	0.25	8	0.015	1	0.5	0.03	4	8	2	0.25	0.25
Highest limit	64	64	4	16	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
N of resistant isolates	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MIC														
<=0.03									1					
0.03						1								
<=0.25			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 enterica, subspecies enterica in Gallus gallus (fowl) - laying hens

Sampling Stage: Farm

Sampler: Official sampling

Analytical Method:

Country of Origin: Germany

Sampling Details:

Sampling Type: environmental sample - boot swabs

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

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	0.25	8	0.015	1	0.5	0.03	4	8	2	0.25	0.25
Highest limit	64	64	4	16	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
N of resistant isolates	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MIC														
<=0.015						1								
<=0.03									1					
<=0.25			1										1	1
0.5				1										
<=1	1						1							
1								1						
<=2												1		
<=4										1				
<=8					1									
8		1												
32											1			

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

Sampling Stage: Slaughterhouse

Sampling Type: food sample - neck skin

Sampling Context: Monitoring

Sampler: HACCP and own check

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method:

Country of Origin: Germany

Sampling Details:

MIC	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	0.25	8	0.015	1	0.5	0.03	4	8	2	0.25	0.25
	Highest limit	64	64	4	16	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
	N of resistant isolates	0	0	0	0	0	2	0	0	0	0	0	0	0	0
<=0.03	2														
<=0.25	2														2
<=0.5	2														
0.5	2				2								1		
<=1	1	2						1							
1	1													1	
<=2	2														
2	1														
4	2														
<=8	2														
16											2	2			

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: Germany

Sampling Details:

MIC	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	0.25	8	0.015	1	0.5	0.03	4	8	2	0.25	0.25
	Highest limit	64	64	4	16	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
	N of resistant isolates	0	0	0	0	0	0	1	0	0	0	0	0	0	0
<=0.03	2														
0.03	2														
0.064	1									1					
<=0.25	3												1	3	
<=0.5	3														
0.5	3				2										
<=1	1														
<=2	3														
2	2	1													
<=4	3														
4	1	1	1												
<=8	3					1									
8	2														
16	1														
32	1														

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

Sampling Stage: Farm

Sampler: Official sampling

Analytical Method:

Country of Origin: Germany

Sampling Details:

Sampling Type: environmental sample - boot swabs

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

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	0.25	8	0.015	1	0.5	0.03	4	8	2	0.25	0.25
Highest limit	64	64	4	16	128	8	16	32	16	128	1024	64	8	32
N of tested isolates	52	52	52	52	52	52	52	52	52	52	52	52	52	52
N of resistant isolates	0	0	0	0	0	1	32	0	0	1	0	0	0	0
MIC														
<=0.015						26								
<=0.03									52					
0.03						24								
0.064						1								
0.12						1								
<=0.25			51										11	45
<=0.5								50						
0.5			1	51									32	7
<=1	26						5							
1				1				2					9	
<=2												51		
2	25						15							
<=4										49				
4	1	23					31					1		
<=8					51						6			
8		28					1			2				
16		1			1						19			
32											21			
64											6			
>128										1				

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

Sampling Stage: Slaughterhouse

Sampling Type: food sample - neck skin

Sampling Context: Monitoring

Sampler: HACCP and own check

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method:

Country of Origin: Germany

Sampling Details:

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

Table Antimicrobial susceptibility testing of Salmonella Hadar in Meat from turkey - carcase - chilled

Sampling Stage: Slaughterhouse

Sampling Type: food sample - neck skin

Sampling Context: Monitoring

Sampler: HACCP and own check

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method:

Country of Origin: Germany

Sampling Details:

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

Table Antimicrobial susceptibility testing of Salmonella Hadar in Meat from turkey - fresh

Sampling Stage: Retail

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Germany

Sampling Details:

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

Table Antimicrobial susceptibility testing of Salmonella Hadar in Turkeys - fattening flocks

Sampling Stage: Slaughterhouse

Sampling Type: animal sample - caecum

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Germany

Sampling Details:

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

Table Antimicrobial susceptibility testing of Salmonella Hadar in Turkeys - fattening flocks - before slaughter

Sampling Stage: Farm

Sampler: Official sampling

Analytical Method:

Country of Origin: Germany

Sampling Details:

Sampling Type: environmental sample - boot swabs

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

MIC	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	0.25	8	0.015	1	0.5	0.03	4	8	2	0.25	0.25
	Highest limit	64	64	4	16	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
	N of resistant isolates	0	0	0	0	0	1	0	0	0	1	0	1	0	0
<=0.03	1														
<=0.25	1														
<=0.5	1														
0.5	1														
<=1	1	1													
1	1														
<=8	1														
8	1														
16	1														
32	1														
64	1														

Table Antimicrobial susceptibility testing of Salmonella Hessarek in Meat from turkey - fresh

Sampling Stage: Retail

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Germany

Sampling Details:

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

Table Antimicrobial susceptibility testing of Salmonella Idikan 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: Germany

Sampling Details:

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

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

Sampling Stage: Farm

Sampler: Official sampling

Analytical Method:

Country of Origin: Germany

Sampling Details:

Sampling Type: environmental sample - boot swabs

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

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	0.25	8	0.015	1	0.5	0.03	4	8	2	0.25	0.25
Highest limit	64	64	4	16	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
N of resistant isolates	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MIC														
<=0.03									1					
0.03						1								
<=0.25			1											1
<=0.5								1						
0.5				1									1	
<=1	1						1							
<=2												1		
<=4										1				
<=8					1									
8		1												
16											1			

Table Antimicrobial susceptibility testing of Salmonella Indiana in Meat from turkey - carcase - chilled

Sampling Stage: Slaughterhouse

Sampling Type: food sample - neck skin

Sampling Context: Monitoring

Sampler: HACCP and own check

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method:

Country of Origin: Germany

Sampling Details:

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

Table Antimicrobial susceptibility testing of Salmonella Indiana in Gallus gallus (fowl) - broilers

Sampling Stage: Slaughterhouse

Sampler: Official sampling

Analytical Method:

Country of Origin: Germany

Sampling Details:

Sampling Type: animal sample - caecum

Sampling Strategy: Objective sampling

Sampling Context: Monitoring

Programme Code: OTHER AMR MON

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

Table Antimicrobial susceptibility testing of Salmonella Indiana in Meat from broilers (Gallus gallus) - carcase - chilled

Sampling Stage: Slaughterhouse

Sampling Type: food sample - neck skin

Sampling Context: Monitoring

Sampler: HACCP and own check

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method:

Country of Origin: Germany

Sampling Details:

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

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

Sampling Stage: Retail

Sampler: Official sampling

Analytical Method:

Country of Origin: Germany

Sampling Details:

Sampling Type: food sample - meat

Sampling Strategy: Objective sampling

Sampling Context: Monitoring

Programme Code: OTHER AMR MON

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	0.25	8	0.015	1	0.5	0.03	4	8	2	0.25	0.25
Highest limit	64	64	4	16	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
N of resistant isolates	1	0	0	0	2	14	0	0	0	14	14	14	1	3
MIC														
<=0.03									14					
<=0.25			12											10
0.25						3								
<=0.5								14						
0.5			2	11		10							1	
<=1	1						12							
1				3		1							12	
2	10						2						1	1
4	2													
<=8					11									
8		13												
16		1			1									
32					1									
>32														3
>64	1											14		
>128					1					14				
>1024											14			

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

Sampling Stage: Slaughterhouse

Sampling Type: food sample - neck skin

Sampling Context: Monitoring

Sampler: HACCP and own check

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method:

Country of Origin: Germany

Sampling Details:

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

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

Sampling Stage: Farm

Sampler: Official sampling

Analytical Method:

Country of Origin: Germany

Sampling Details:

Sampling Type: environmental sample - boot swabs

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

MIC	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	0.25	8	0.015	1	0.5	0.03	4	8	2	0.25	0.25
	Highest limit	64	64	4	16	128	8	16	32	16	128	1024	64	8	32
	N of tested isolates	9	9	9	9	9	9	9	9	9	9	9	9	9	9
	N of resistant isolates	2	0	0	0	0	8	1	0	0	8	9	8	0	1
<=0.03															
0.03															
<=0.25															
0.25															
<=0.5															
0.5															
<=1															
1															
<=2															
2															
<=4															
4															
<=8															
8															
16															
>32															
>64															
>128															
>1024															

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

Sampling Stage: Slaughterhouse

Sampling Type: animal sample - caecum

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Germany

Sampling Details:

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

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

Sampling Stage: Farm

Sampler: Official sampling

Analytical Method:

Country of Origin: Germany

Sampling Details:

Sampling Type: environmental sample - boot swabs

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

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

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

Sampling Stage: Slaughterhouse

Sampler: HACCP and own check

Analytical Method:

Country of Origin: Germany

Sampling Details:

Sampling Type: food sample - neck skin

Sampling Strategy: Objective sampling

Sampling Context: Monitoring

Programme Code: AMR MON

MIC	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	0.25	8	0.015	1	0.5	0.03	4	8	2	0.25	0.25
	Highest limit	64	64	4	16	128	8	16	32	16	128	1024	64	8	32
	N of tested isolates	9	9	9	9	9	9	9	9	9	9	9	9	9	9
	N of resistant isolates	0	0	0	0	1	7	0	0	0	7	7	7	1	0
<=0.015															
<=0.03															
0.03															
<=0.25															
<=0.5															
0.5															
<=1															
1															
<=2															
2															
<=4															
4															
<=8															
8															
16															
32															
>64															
>128															
>1024															

Table Antimicrobial susceptibility testing of Salmonella Kentucky in Meat from turkey - fresh

Sampling Stage: Retail

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Germany

Sampling Details:

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

Table Antimicrobial susceptibility testing of Salmonella Livingstone in Meat from turkey - fresh

Sampling Stage: Retail

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Germany

Sampling Details:

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

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

Sampling Stage: Farm

Sampler: Official sampling

Analytical Method:

Country of Origin: Germany

Sampling Details:

Sampling Type: environmental sample - boot swabs

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

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	0.25	8	0.015	1	0.5	0.03	4	8	2	0.25	0.25
Highest limit	64	64	4	16	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
N of resistant isolates	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MIC														
<=0.015						1								
<=0.03									1					
<=0.25			1											1
<=0.5								1						
0.5				1									1	
<=1	1						1							
<=2												1		
<=4										1				
<=8					1									
8		1												
16											1			

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

Sampling Stage: Farm

Sampler: Official sampling

Analytical Method:

Country of Origin: Germany

Sampling Details:

Sampling Type: environmental sample - boot swabs

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

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	0.25	8	0.015	1	0.5	0.03	4	8	2	0.25	0.25
Highest limit	64	64	4	16	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
N of resistant isolates	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MIC														
<=0.015						1								
<=0.03									1					
<=0.25			1											1
<=0.5								1						
0.5				1									1	
<=1							1							
<=2												1		
2	1													
<=4										1				
<=8					1									
8		1												
32											1			

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

Sampling Stage: Farm

Sampler: Official sampling

Analytical Method:

Country of Origin: Germany

Sampling Details:

Sampling Type: environmental sample - boot swabs

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

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	0.25	8	0.015	1	0.5	0.03	4	8	2	0.25	0.25
Highest limit	64	64	4	16	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
N of resistant isolates	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MIC														
<=0.015						1								
<=0.03									1					
<=0.25			1											1
<=0.5								1						
0.5				1									1	
<=1	1						1							
<=2												1		
<=4										1				
<=8					1									
8		1												
32											1			

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

Sampling Stage: Farm

Sampler: Official sampling

Analytical Method:

Country of Origin: Germany

Sampling Details:

Sampling Type: environmental sample - boot swabs

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

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	0.25	8	0.015	1	0.5	0.03	4	8	2	0.25	0.25
Highest limit	64	64	4	16	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
N of resistant isolates	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MIC														
<=0.015						2								
<=0.03									2					
<=0.25			2											2
<=0.5								2						
0.5				2									2	
<=1	1						2							
<=2												2		
2	1													
<=4										2				
<=8					2									
8		2												
16											2			

Table Antimicrobial susceptibility testing of Salmonella Newport in Meat from turkey - carcase - chilled

Sampling Stage: Slaughterhouse

Sampler: HACCP and own check

Analytical Method:

Country of Origin: Germany

Sampling Details:

Sampling Type: food sample - neck skin

Sampling Strategy: Objective sampling

Sampling Context: Monitoring

Programme Code: AMR MON

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

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

Sampling Stage: Farm

Sampler: Official sampling

Analytical Method:

Country of Origin: Germany

Sampling Details:

Sampling Type: environmental sample - boot swabs

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

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	0.25	8	0.015	1	0.5	0.03	4	8	2	0.25	0.25
Highest limit	64	64	4	16	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
N of resistant isolates	0	0	0	0	0	1	0	0	0	0	0	0	0	0
MIC														
<=0.03									1					
<=0.25			1											1
<=0.5								1						
0.5				1		1							1	
<=1	1						1							
<=2												1		
<=8					1									
8		1												
16										1	1			

Table Antimicrobial susceptibility testing of Salmonella Other serovars in Meat from broilers (Gallus gallus) - fresh

Sampling Stage: Retail

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Germany

Sampling Details:

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

Table Antimicrobial susceptibility testing of Salmonella Other serovars in Meat from broilers (Gallus gallus) - carcase - chilled

Sampling Stage: Slaughterhouse

Sampling Type: food sample - neck skin

Sampling Context: Monitoring

Sampler: HACCP and own check

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method:

Country of Origin: Germany

Sampling Details:

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

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

Sampling Stage: Retail

Sampler: Official sampling

Analytical Method:

Country of Origin: Germany

Sampling Details:

Sampling Type: food sample - meat

Sampling Strategy: Objective sampling

Sampling Context: Monitoring

Programme Code: OTHER AMR MON

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

Table Antimicrobial susceptibility testing of Salmonella Paratyphi B in Meat from turkey - carcase - chilled

Sampling Stage: Slaughterhouse

Sampling Type: food sample - neck skin

Sampling Context: Monitoring

Sampler: HACCP and own check

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method:

Country of Origin: Germany

Sampling Details:

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

Analytical Method:

Country of Origin: Germany

Sampling Details:

MIC	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	0.25	8	0.015	1	0.5	0.03	4	8	2	0.25	0.25
	Highest limit	64	64	4	16	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
	N of resistant isolates	0	0	0	0	0	2	0	0	0	2	2	0	0	2
<=0.03										1					
0.064										1					
<=0.25				2											
<=0.5								2							
0.5					2	2			2						
<=1	2														2
<=2												2			
4			2												
<=8						2									
>32															2
>128											2				
>1024												2			

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

Sampling Stage: Slaughterhouse

Sampling Type: animal sample - caecum

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Germany

Sampling Details:

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

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

Sampling Stage: Slaughterhouse

Sampling Type: food sample - neck skin

Sampling Context: Monitoring

Sampler: HACCP and own check

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method:

Country of Origin: Germany

Sampling Details:

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

Table Antimicrobial susceptibility testing of Salmonella Rissen in Turkeys - fattening flocks - before slaughter

Sampling Stage: Farm

Sampler: Official sampling

Analytical Method:

Country of Origin: Germany

Sampling Details:

Sampling Type: environmental sample - boot swabs

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

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	0.25	8	0.015	1	0.5	0.03	4	8	2	0.25	0.25
Highest limit	64	64	4	16	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
N of resistant isolates	0	0	0	0	0	1	0	0	0	0	0	0	0	0
MIC														
<=0.03									1					
<=0.25			1											1
<=0.5								1						
0.5				1		1							1	
<=1	1						1							
<=2												1		
<=8					1									
8		1												
16										1	1			

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

Sampling Stage: Farm

Sampler: Official sampling

Analytical Method:

Country of Origin: Germany

Sampling Details:

Sampling Type: environmental sample - boot swabs

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

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	0.25	8	0.015	1	0.5	0.03	4	8	2	0.25	0.25
Highest limit	64	64	4	16	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
N of resistant isolates	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MIC														
<=0.03									1					
0.03						1								
<=0.25			1											1
<=0.5								1						
0.5				1									1	
<=1	1						1							
<=2												1		
4		1												
<=8					1									
8										1				
32											1			

Table Antimicrobial susceptibility testing of Salmonella Saintpaul in Gallus gallus (fowl) - broilers

Sampling Stage: Slaughterhouse

Sampler: Official sampling

Analytical Method:

Country of Origin: Germany

Sampling Details:

Sampling Type: animal sample - caecum

Sampling Strategy: Objective sampling

Sampling Context: Monitoring

Programme Code: OTHER AMR MON

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	0.25	8	0.015	1	0.5	0.03	4	8	2	0.25	0.25
Highest limit	64	64	4	16	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
N of resistant isolates	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MIC														
<=0.015						1								
<=0.03									1					
<=0.25			1											1
<=0.5								1						
0.5				1									1	
<=1	1						1							
<=2												1		
<=4										1				
4		1												
<=8					1									
32											1			

Table Antimicrobial susceptibility testing of Salmonella Saintpaul in Meat from turkey - fresh

Sampling Stage: Retail

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Germany

Sampling Details:

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

Table Antimicrobial susceptibility testing of Salmonella Saintpaul 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: Germany

Sampling Details:

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

Table Antimicrobial susceptibility testing of Salmonella Saintpaul in Meat from broilers (Gallus gallus) - carcase - chilled

Sampling Stage: Slaughterhouse

Sampling Type: food sample - neck skin

Sampling Context: Monitoring

Sampler: HACCP and own check

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method:

Country of Origin: Germany

Sampling Details:

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

Table Antimicrobial susceptibility testing of Salmonella Schwarzengrund in Meat from turkey - carcase - chilled

Sampling Stage: Slaughterhouse

Sampling Type: food sample - neck skin

Sampling Context: Monitoring

Sampler: HACCP and own check

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method:

Country of Origin: Germany

Sampling Details:

MIC	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	0.25	8	0.015	1	0.5	0.03	4	8	2	0.25	0.25
	Highest limit	64	64	4	16	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
	N of resistant isolates	0	0	0	0	0	3	0	0	0	3	0	0	0	0
<=0.03										3					
<=0.25				3											3
<=0.5									3						
0.5					3		3							3	
<=1	3							2							
<=2													3		
2								1							
<=8						3									
8			3												
16												3			
32											3				

Table Antimicrobial susceptibility testing of Salmonella Schwarzengrund in Meat from broilers (Gallus gallus) - carcase - chilled

Sampling Stage: Slaughterhouse

Sampling Type: food sample - neck skin

Sampling Context: Monitoring

Sampler: HACCP and own check

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method:

Country of Origin: Germany

Sampling Details:

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

Table Antimicrobial susceptibility testing of Salmonella Senftenberg in Meat from turkey - carcase - chilled

Sampling Stage: Slaughterhouse

Sampler: HACCP and own check

Analytical Method:

Country of Origin: Germany

Sampling Details:

Sampling Type: food sample - neck skin

Sampling Strategy: Objective sampling

Sampling Context: Monitoring

Programme Code: AMR MON

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	0.25	8	0.015	1	0.5	0.03	4	8	2	0.25	0.25
Highest limit	64	64	4	16	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
N of resistant isolates	0	0	0	0	0	1	0	0	0	1	0	0	0	0
MIC														
<=0.03									1					
<=0.25			1											1
<=0.5								1						
0.5				1									1	
<=1							1							
1						1								
2	1													
4												1		
8		1												
16					1									
32										1	1			

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

Sampling Stage: Farm

Sampler: Official sampling

Analytical Method:

Country of Origin: Germany

Sampling Details:

Sampling Type: environmental sample - boot swabs

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

MIC	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	0.25	8	0.015	1	0.5	0.03	4	8	2	0.25	0.25	
	Highest limit	64	64	4	16	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	
	N of resistant isolates	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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

Sampling Stage: Farm

Sampler: Official sampling

Analytical Method:

Country of Origin: Germany

Sampling Details:

Sampling Type: environmental sample - boot swabs

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

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

Table Antimicrobial susceptibility testing of Salmonella Stourbridge in Meat from turkey - carcase - chilled

Sampling Stage: Slaughterhouse

Sampling Type: food sample - neck skin

Sampling Context: Monitoring

Sampler: HACCP and own check

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method:

Country of Origin: Germany

Sampling Details:

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

Table Antimicrobial susceptibility testing of Salmonella 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: Germany

Sampling Details:

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

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

Sampling Stage: Retail

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Germany

Sampling Details:

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

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

Sampling Stage: Slaughterhouse

Sampling Type: food sample - neck skin

Sampling Context: Monitoring

Sampler: HACCP and own check

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method:

Country of Origin: Germany

Sampling Details:

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

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

Sampling Stage: Farm

Sampler: Official sampling

Analytical Method:

Country of Origin: Germany

Sampling Details:

Sampling Type: environmental sample - boot swabs

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

MIC	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	0.25	8	0.015	1	0.5	0.03	4	8	2	0.25	0.25
	Highest limit	64	64	4	16	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
	N of resistant isolates	0	0	0	0	0	0	0	0	0	0	1	0	0	0
<=0.015															
<=0.03															
0.03															
0.064															
<=0.25															
<=0.5															
0.5															
<=1															
1															
<=2															
2															
<=4															
4															
<=8															
8															
16															
32															
>1024															

Table Antimicrobial susceptibility testing of Salmonella Typhimurium in Meat from turkey - fresh

Sampling Stage: Retail

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Germany

Sampling Details:

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

Table Antimicrobial susceptibility testing of Salmonella Typhimurium in Turkeys - fattening flocks - before slaughter

Sampling Stage: Farm

Sampler: Official sampling

Analytical Method:

Country of Origin: Germany

Sampling Details:

Sampling Type: environmental sample - boot swabs

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

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	0.25	8	0.015	1	0.5	0.03	4	8	2	0.25	0.25
Highest limit	64	64	4	16	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
N of resistant isolates	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MIC														
<=0.03									4					
0.03						4								
<=0.25			4										1	4
<=0.5								4						
0.5				4									3	
<=1	3						4							
<=2												3		
2	1													
<=4										4				
4		2										1		
<=8					4									
8		2												
16											3			
32											1			

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

Sampling Stage: Farm

Sampler: Official sampling

Analytical Method:

Country of Origin: Germany

Sampling Details:

Sampling Type: environmental sample - boot swabs

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

MIC	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	0.25	8	0.015	1	0.5	0.03	4	8	2	0.25	0.25
	Highest limit	64	64	4	16	128	8	16	32	16	128	1024	64	8	32
	N of tested isolates	21	21	21	21	21	21	21	21	21	21	21	21	21	21
	N of resistant isolates	1	0	0	0	0	0	0	0	0	0	2	1	0	1
<=0.015															
<=0.03															
0.03															
0.064															
<=0.25															
<=0.5															
0.5															
<=1															
1															
<=2															
2															
<=4															
4															
<=8															
8															
16															
32															
>32															
>64															
128															
>1024															

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

Sampling Stage: Slaughterhouse

Sampling Type: food sample - neck skin

Sampling Context: Monitoring

Sampler: HACCP and own check

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method:

Country of Origin: Germany

Sampling Details:

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

ANTIMICROBIAL RESISTANCE TABLES FOR INDICATOR ESCHERICHIA COLI

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

Sampling Stage: Retail
 Sampling Type: food sample - meat
 Sampling Context: Monitoring

Sampler: Official sampling
 Sampling Strategy: Objective sampling
 Programme Code: ESBL MON pnI2

Analytical Method:

Country of Origin: Germany

Sampling Details:

AM substance	Cefepime	Cefotaxim	Cefotaxime + Clavulanic acid		Cefoxitin	Ceftazidim	Ceftazidime + Clavulanic acid		Ertapenem	Imipenem	Meropenem	Temocillin	
	Cefotaxime synergy test	Not Available	Not Available	Positive/Pres ent	Negative/Abs ent	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	Positive/Pres ent	Negative/Abs ent	Not Available	Not Available	Not Available	
	ECOFF	0.125	0.25	0.25	0.25	8	0.5	0.5	0.5	0.064	0.5	0.125	32
	Lowest limit	0.064	0.25	0.064	0.064	0.5	0.25	0.12	0.12	0.015	0.12	0.03	0.5
	Highest limit	32	64	64	64	64	128	128	128	2	16	16	128
	N of tested isolates	152	152	152	152	152	152	152	152	152	152	152	152
	N of resistant isolates	148	152	19	19	38	147	18	18	3	0	0	0
MIC													
<=0.015										116			
<=0.03											151		
0.03										25			
<=0.064	1		100										
0.064										8		1	
<=0.12								83	5		55		
0.12	3		32							3			
0.25	29		1					40	4		93		
0.5	33			1		5	1	1		4			
1	30	4				10							
2	10	23			4	45							1

AM substance	Cefepime	Cefotaxim	Cefotaxime + Clavulanic acid		Cefoxitin	Ceftazidim	Ceftazidime + Clavulanic acid		Ertapenem	Imipenem	Meropenem	Temocillin
			Positive/Pres ent	Negative/Abs ent			Positive/Pres ent	Negative/Abs ent				
Cefotaxime synergy test	Not Available	Not Available	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	Not Available	Not Available
ECOFF	0.125	0.25	0.25	0.25	8	0.5	0.5	0.5	0.064	0.5	0.125	32
Lowest limit	0.064	0.25	0.064	0.064	0.5	0.25	0.12	0.12	0.015	0.12	0.03	0.5
Highest limit	32	64	64	64	64	128	128	128	2	16	16	128
N of tested isolates	152	152	152	152	152	152	152	152	152	152	152	152
N of resistant isolates	148	152	19	19	38	147	18	18	3	0	0	0
MIC												
4	5	18		5	45	19		4				49
8	12	38		9	65	19		10				84
16	16	21		4	19	20		4				17
32	7	10			3	25						1
>32	6											
64		24			10	8						
>64		14			6							
128						1						

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

Sampling Stage: Retail

Sampler: Official sampling

Analytical Method:

Country of Origin: Germany

Sampling Type: food sample - meat

Sampling Strategy: Objective sampling

Sampling Context: Monitoring

Programme Code: ESBL MON

Sampling Details:

MIC	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Collistin	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	0.25	8	0.015	1	0.5	0.03	4	8	2	0.25	0.25
	Highest limit	64	64	4	16	128	8	16	32	16	128	1024	64	8	32
	N of tested isolates	152	152	152	152	152	152	152	152	152	152	152	152	152	152
	N of resistant isolates	152	4	152	149	23	105	12	20	0	82	86	57	0	54
<=0.015							35								
<=0.03										151					
0.03							11								
0.064							1			1					
0.12							3								
<=0.25														67	85
0.25							39								
<=0.5									72						
0.5					3		17							67	10
<=1								139							
1				6	15		3		51					18	3
<=2			13										83		
2				20	44		2	1	9						
<=4											49				
4			73	25	20		12	11	3				11		
>4				101											
<=8						125						47			
8			52		15		17	1	2		16		1		
>8							12								
16			10		55	4			4		5	15			
32						6			6			4	3		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	0.25	8	0.015	1	0.5	0.03	4	8	2	0.25	0.25
	Highest limit	64	64	4	16	128	8	16	32	16	128	1024	64	8	32
	N of tested isolates	152	152	152	152	152	152	152	152	152	152	152	152	152	152
MIC	N of resistant isolates	152	4	152	149	23	105	12	20	0	82	86	57	0	54
	>32								5						53
	64		4			8					6		16		
	>64	152											38		
	128					3					23				
	>128					6					53				
	>1024											86			

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

Sampling Stage: Retail

Sampler: Official sampling

Analytical Method:

Country of Origin: Germany

Sampling Type: food sample - meat

Sampling Strategy: Objective sampling

Sampling Context: Monitoring

Programme Code: OTHER AMR MON pnl2

Sampling Details:

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

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

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

Sampling Stage: Retail

Sampler: Official sampling

Analytical Method:

Country of Origin: Germany

Sampling Type: food sample - meat

Sampling Strategy: Objective sampling

Sampling Context: Monitoring

Programme Code: OTHER AMR MON

Sampling Details:

MIC	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Collistin	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	0.25	8	0.015	1	0.5	0.03	4	8	2	0.25	0.25
	Highest limit	64	64	4	16	128	8	16	32	16	128	1024	64	8	32
	N of tested isolates	181	181	181	181	181	181	181	181	181	181	181	181	181	181
	N of resistant isolates	97	3	6	5	16	85	8	3	0	71	66	49	0	53
<=0.015							82								
<=0.03										179					
0.03							13								
0.064							1			2					
0.12							3								
<=0.25				175										77	97
0.25							42								
<=0.5									101						
0.5				1	176		15							82	29
<=1	2							171							
1					2		4		61					22	2
<=2			11										103		
2	36						2	2	16						
<=4											94				
4	45	91			2		3	7					28		
>4			5												
<=8						159						84			
8	1	67					11				12		1		
>8							5								
16		9			1	6					4	28	1		
>16								1							

MIC	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	0.25	8	0.015	1	0.5	0.03	4	8	2	0.25	0.25
	Highest limit	64	64	4	16	128	8	16	32	16	128	1024	64	8	32
	N of tested isolates	181	181	181	181	181	181	181	181	181	181	181	181	181	181
	N of resistant isolates	97	3	6	5	16	85	8	3	0	71	66	49	0	53
32			1			3			2		1	3			
>32									1						53
64			1			4					3		13		
>64		97	1										35		
128						3					25				
>128						6					42				
512												1			
>1024												65			

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: Germany

Sampling Details:

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

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

Sampling Stage: Slaughterhouse

Sampling Type: animal sample - caecum

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method:

Country of Origin: Germany

Sampling Details:

MIC	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Collistin	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	0.25	8	0.015	1	0.5	0.03	4	8	2	0.25	0.25
	Highest limit	64	64	4	16	128	8	16	32	16	128	1024	64	8	32
	N of tested isolates	214	214	214	214	214	214	214	214	214	214	214	214	214	214
	N of resistant isolates	139	5	3	3	18	119	10	15	0	112	106	53	0	72
<=0.015							84								
<=0.03										212					
0.03							11								
0.064										2					
0.12							9								
<=0.25				211										88	107
0.25							59								
<=0.5									122						
0.5					211		24							100	30
<=1		1						201							
1				1	1		8		66					26	5
<=2			10										127		
2		26		1	1		4	3	11						
<=4											95				
4		44	71					4	1				31		
>4				1											
<=8						173						87			
8		4	95				10	6	2		2		3		
>8							5								
16		1	33		1	23			5		5	18	2		
32		2	1						6		1	3	2		

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	8	16	0.25	0.5	16	0.064	2	2	0.125	16	64	8	1	2
	Lowest limit	1	2	0.25	0.25	8	0.015	1	0.5	0.03	4	8	2	0.25	0.25
	Highest limit	64	64	4	16	128	8	16	32	16	128	1024	64	8	32
	N of tested isolates	214	214	214	214	214	214	214	214	214	214	214	214	214	214
MIC	N of resistant isolates	139	5	3	3	18	119	10	15	0	112	106	53	0	72
	>32								1						72
	64	1	2			6					11		10		
	>64	135	2										39		
	128					3					47	1			
	>128					9					53				
	1024											1			
	>1024											104			

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: Germany

Sampling Details:

AM substance	Cefepime	Cefotaxim	Cefotaxime + Clavulanic acid		Cefoxitin	Ceftazidim	Ceftazidime + Clavulanic acid		Ertapenem	Imipenem	Meropenem	Temocillin
			Positive/Pres ent	Negative/Abs ent			Positive/Pres ent	Negative/Abs ent				
Cefotaxime synergy test	Not Available	Not Available	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	Not Available	Not Available
ECOFF	0.125	0.25	0.25	0.25	8	0.5	0.5	0.5	0.064	0.5	0.125	32
Lowest limit	0.064	0.25	0.064	0.064	0.5	0.25	0.12	0.12	0.015	0.12	0.03	0.5
Highest limit	32	64	64	64	64	128	128	128	2	16	16	128
N of tested isolates	184	184	184	184	184	184	184	184	184	184	184	184
N of resistant isolates	180	184	29	29	43	183	30	30	3	0	0	1
MIC												
<=0.015												
<=0.03												
0.03												
<=0.064												
0.064												
<=0.12												
0.12	4		22				90	1		58		
0.25	38		1				54	2		120		
0.5	40					1	7			6		
1	42	2		1		6	1	1				
2	14	16		1	4	34						1
4	7	25	1	10	71	17		8				44
8	11	52		16	66	32		19				119
16	13	43			14	41		1				18

AM substance	Cefepime	Cefotaxim	Cefotaxime + Clavulanic acid		Cefoxitin	Ceftazidim	Ceftazidime + Clavulanic acid		Ertapenem	Imipenem	Meropenem	Temocillin
			Positive/Pres ent	Negative/Abs ent			Positive/Pres ent	Negative/Abs ent				
Cefotaxime synergy test	Not Available	Not Available	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	Not Available	Not Available
ECOFF	0.125	0.25	0.25	0.25	8	0.5	0.5	0.5	0.064	0.5	0.125	32
Lowest limit	0.064	0.25	0.064	0.064	0.5	0.25	0.12	0.12	0.015	0.12	0.03	0.5
Highest limit	32	64	64	64	64	128	128	128	2	16	16	128
N of tested isolates	184	184	184	184	184	184	184	184	184	184	184	184
N of resistant isolates	180	184	29	29	43	183	30	30	3	0	0	1
MIC												
32	7	9			6	46						1
>32	8											
64		20			19	7						1
>64		17			4							

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: Germany

Sampling Details:

MIC	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Collistin	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	0.25	8	0.015	1	0.5	0.03	4	8	2	0.25	0.25
	Highest limit	64	64	4	16	128	8	16	32	16	128	1024	64	8	32
	N of tested isolates	184	184	184	184	184	184	184	184	184	184	184	184	184	184
	N of resistant isolates	184	5	184	183	26	123	8	21	0	81	94	61	0	59
<=0.015							48								
<=0.03										181					
0.03							10								
0.064							3			3					
0.12							3								
<=0.25														82	104
0.25							38								
<=0.5									102						
0.5					1		44							89	16
<=1								172							
1				5	16		4		55					13	4
<=2			3										103		
2				13	24		7	4	6						1
<=4											66				
4			89	33	23		3	7	1				20		
>4				133											
<=8						142						63			
8			77		28		9	1	2		23				
>8							15								
16			10		92	16			5		14	25	1		
32			2			2			6		3	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	0.25	8	0.015	1	0.5	0.03	4	8	2	0.25	0.25
	Highest limit	64	64	4	16	128	8	16	32	16	128	1024	64	8	32
	N of tested isolates	184	184	184	184	184	184	184	184	184	184	184	184	184	184
MIC	N of resistant isolates	184	5	184	183	26	123	8	21	0	81	94	61	0	59
	>32								7						59
	64		1			9					7	1	19		
	>64	184	2										40		
	128					9					22				
	>128					6					49				
	>1024											94			

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

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: Germany

Sampling Details:

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

AM substance			Cefotaxime + Clavulanic acid				Ceftazidime + Clavulanic acid					
	Cefepime	Cefotaxim										
Cefotaxime synergy test	Not Available	Not Available	Positive/Pres ent	Negative/Abs ent	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	Positive/Pres ent	Negative/Abs ent	Not Available	Not Available	Not Available	Not Available
ECOFF	0.125	0.25	0.25	0.25	8	0.5	0.5	0.5	0.064	0.5	0.125	32
Lowest limit	0.064	0.25	0.064	0.064	0.5	0.25	0.12	0.12	0.015	0.12	0.03	0.5
Highest limit	32	64	64	64	64	128	128	128	2	16	16	128
N of tested isolates	5	5	5	5	5	5	5	5	5	5	5	5
N of resistant isolates	5	5	0	0	2	3	0	0	0	0	0	0
MIC												
64		1										
>64		2										

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

Sampling Stage: Retail

Sampler: Official sampling

Analytical Method:

Country of Origin: Germany

Sampling Type: food sample - meat

Sampling Strategy: Objective sampling

Sampling Context: Monitoring

Programme Code: OTHER AMR MON

Sampling Details:

MIC	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Collistin	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	0.25	8	0.015	1	0.5	0.03	4	8	2	0.25	0.25
	Highest limit	64	64	4	16	128	8	16	32	16	128	1024	64	8	32
	N of tested isolates	196	196	196	196	196	196	196	196	196	196	196	196	196	196
	N of resistant isolates	125	3	5	3	43	70	13	15	0	46	82	111	0	64
<=0.015							109								
<=0.03										194					
0.03							17								
0.064										2					
0.12							4								
<=0.25				191										62	113
0.25							21								
<=0.5									86						
0.5				2	193		15							104	17
<=1		2						179							
1							2		71					30	2
<=2			35										77		
2		37						4	24						
<=4											128				
4		29	101		1		2	10	2				7		
>4				3											
<=8						148						79			
8		3	52		1		10	3			12		1		
>8							16								
16			5		1	5			1		10	32			
32			1			6			1		3	1	2		

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	8	16	0.25	0.5	16	0.064	2	2	0.125	16	64	8	1	2
	Lowest limit	1	2	0.25	0.25	8	0.015	1	0.5	0.03	4	8	2	0.25	0.25
	Highest limit	64	64	4	16	128	8	16	32	16	128	1024	64	8	32
	N of tested isolates	196	196	196	196	196	196	196	196	196	196	196	196	196	196
MIC	N of resistant isolates	125	3	5	3	43	70	13	15	0	46	82	111	0	64
>32									11						64
64			2			10					2	2	44		
>64		125											65		
128						9					5				
>128						18					36				
>1024												82			

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

Sampling Stage: Retail

Sampler: Official sampling

Analytical Method:

Country of Origin: Germany

Sampling Type: food sample - meat

Sampling Strategy: Objective sampling

Sampling Context: Monitoring

Programme Code: OTHER ESBL MON pnl2

Sampling Details:

AM substance	Cefepime	Cefotaxim	Cefotaxime + Clavulanic acid		Cefoxitin	Ceftazidim	Ceftazidime + Clavulanic acid		Ertapenem	Imipenem	Meropenem	Temocillin	
	Cefotaxime synergy test	Not Available	Not Available	Positive/Pres ent	Negative/Abs ent	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	
MIC	Ceftazidime synergy test	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Positive/Pres ent	Negative/Abs ent	Not Available	Not Available	Not Available	Not Available
	ECOFF	0.125	0.25	0.25	0.25	8	0.5	0.5	0.5	0.064	0.5	0.125	32
	Lowest limit	0.064	0.25	0.064	0.064	0.5	0.25	0.12	0.12	0.015	0.12	0.03	0.5
	Highest limit	32	64	64	64	64	128	128	128	2	16	16	128
	N of tested isolates	169	169	169	169	169	169	169	169	169	169	169	169
	N of resistant isolates	158	169	14	14	39	168	14	14	4	0	0	0
	<=0.015	117											
	<=0.03	162											
	0.03	31											
	<=0.064	1	110										
0.064	17												
<=0.12	79							1	60				
0.12	10	40											
0.25	3	67							98				
0.5	4	1					7	1	11				
1	5	1	4			1	6						
2	4	3	6			5	31	6			1		
4	10	9	3			50	25	6			43		
8	24	5	1			74	64	2			102		
16	29	9				24	32						22

AM substance	Cefepime	Cefotaxim	Cefotaxime + Clavulanic acid		Cefoxitin	Ceftazidim	Ceftazidime + Clavulanic acid		Ertapenem	Imipenem	Meropenem	Temocillin
			Positive/Pres ent	Negative/Abs ent			Positive/Pres ent	Negative/Abs ent				
Cefotaxime synergy test	Not Available	Not Available	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	Not Available	Not Available
ECOFF	0.125	0.25	0.25	0.25	8	0.5	0.5	0.5	0.064	0.5	0.125	32
Lowest limit	0.064	0.25	0.064	0.064	0.5	0.25	0.12	0.12	0.015	0.12	0.03	0.5
Highest limit	32	64	64	64	64	128	128	128	2	16	16	128
N of tested isolates	169	169	169	169	169	169	169	169	169	169	169	169
N of resistant isolates	158	169	14	14	39	168	14	14	4	0	0	0
MIC												
32	38	9			9	6						1
>32	41											
64		40			6	3						
>64		93										
128						1						

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

Sampling Stage: Retail

Sampler: Official sampling

Analytical Method:

Country of Origin: Germany

Sampling Type: food sample - meat

Sampling Strategy: Objective sampling

Sampling Context: Monitoring

Programme Code: OTHER ESBL MON

Sampling Details:

MIC	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Collistin	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	0.25	8	0.015	1	0.5	0.03	4	8	2	0.25	0.25
	Highest limit	64	64	4	16	128	8	16	32	16	128	1024	64	8	32
	N of tested isolates	169	169	169	169	169	169	169	169	169	169	169	169	169	169
	N of resistant isolates	169	3	169	168	58	134	3	20	0	79	99	111	0	62
<=0.015							34								
<=0.03										167					
0.03							1								
0.064										2					
0.12							9								
<=0.25														76	87
0.25							33								
<=0.5									55						
0.5					1		19							77	19
<=1								166							
1					13		2		67					16	1
<=2			20										51		
2				8	30		4		27						
<=4											67				
4			81	10	22		3	2	4				6		
>4				151											
<=8						105						43			
8			57		57		15	1	1		14		1		
>8							49								
16			8		46	6			3		9	27			
32		1				9			5		4		10		

	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	0.25	8	0.015	1	0.5	0.03	4	8	2	0.25	0.25
	Highest limit	64	64	4	16	128	8	16	32	16	128	1024	64	8	32
	N of tested isolates	169	169	169	169	169	169	169	169	169	169	169	169	169	169
MIC	N of resistant isolates	169	3	169	168	58	134	3	20	0	79	99	111	0	62
	>32								7						62
	64	1	3			4					1		26		
	>64	167											75		
	128					15					4				
	>128					30					70				
	>1024											99			

Table Antimicrobial susceptibility testing of Escherichia coli, non-pathogenic, unspecified in Turkey - fattening flocks

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: Germany

Sampling Details:

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

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

Table Antimicrobial susceptibility testing of Escherichia coli, non-pathogenic, unspecified in Turkey - fattening flocks

Sampling Stage: Slaughterhouse

Sampling Type: animal sample - caecum

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method:

Country of Origin: Germany

Sampling Details:

MIC	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Collistin	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	0.25	8	0.015	1	0.5	0.03	4	8	2	0.25	0.25
	Highest limit	64	64	4	16	128	8	16	32	16	128	1024	64	8	32
	N of tested isolates	199	199	199	199	199	199	199	199	199	199	199	199	199	199
	N of resistant isolates	133	3	5	4	41	65	18	11	0	41	83	100	0	54
<=0.015		118													
<=0.03		198													
0.03		16													
0.064		1													
0.12		3													
<=0.25		194152120													
0.25		17													
<=0.5		92													
0.5		1941310124													
<=1		176													
1		1684461													
<=2		2987													
2		231512													
<=4		135													
4		421081212													
>4		4													
<=8		14982													
8		15411518													
>8		13													
16		51911530													
32		2634321													

	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	0.25	8	0.015	1	0.5	0.03	4	8	2	0.25	0.25
	Highest limit	64	64	4	16	128	8	16	32	16	128	1024	64	8	32
	N of tested isolates	199	199	199	199	199	199	199	199	199	199	199	199	199	199
MIC	N of resistant isolates	133	3	5	4	41	65	18	11	0	41	83	100	0	54
	>32								5						53
	64	1	1			13					2	1	33		
	>64	132											65		
	128					11					3				
	>128					11					32				
	>1024											83			

Table Antimicrobial susceptibility testing of Escherichia coli, non-pathogenic, unspecified in Turkey - fattening flocks

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: Germany

Sampling Details:

AM substance	Cefepime	Cefotaxim	Cefotaxime + Clavulanic acid	Cefoxitin	Ceftazidim	Ceftazidime + Clavulanic acid	Ertapenem	Imipenem	Meropenem	Temocillin		
Cefotaxime synergy test	Not Available	Not Available	Positive/Pres ent	Negative/Abs ent	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	Positive/Pres ent	Negative/Abs ent	Not Available	Not Available	Not Available	
ECOFF	0.125	0.25	0.25	0.25	8	0.5	0.5	0.5	0.064	0.5	0.125	32
Lowest limit	0.064	0.25	0.064	0.064	0.5	0.25	0.12	0.12	0.015	0.12	0.03	0.5
Highest limit	32	64	64	64	64	128	128	128	2	16	16	128
N of tested isolates	157	157	157	157	157	157	157	157	157	157	157	157
N of resistant isolates	146	157	15	15	28	157	15	15	3	0	0	0
MIC												
<=0.015	112											
<=0.03	152											
0.03	34											
<=0.064	1	112										
0.064	8											
<=0.12	85											
0.12	10	29										
0.25	4	1										
0.5	4	1										
1	2	3	4									
2	3	5	7									
4	13	7	2									
8	28	5	1									
16	29	3	17									

AM substance	Cefepime	Cefotaxim	Cefotaxime + Clavulanic acid		Cefoxitin	Ceftazidim	Ceftazidime + Clavulanic acid		Ertapenem	Imipenem	Meropenem	Temocillin
			Positive/Pres ent	Negative/Abs ent			Positive/Pres ent	Negative/Abs ent				
Cefotaxime synergy test	Not Available	Not Available	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	Not Available	Not Available
ECOFF	0.125	0.25	0.25	0.25	8	0.5	0.5	0.5	0.064	0.5	0.125	32
Lowest limit	0.064	0.25	0.064	0.064	0.5	0.25	0.12	0.12	0.015	0.12	0.03	0.5
Highest limit	32	64	64	64	64	128	128	128	2	16	16	128
N of tested isolates	157	157	157	157	157	157	157	157	157	157	157	157
N of resistant isolates	146	157	15	15	28	157	15	15	3	0	0	0
MIC												
32	33	7			6	4						1
>32	30											
64		39			4	2						
>64		88			1							

Table Antimicrobial susceptibility testing of Escherichia coli, non-pathogenic, unspecified in Turkeys - fattening flocks

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: Germany

Sampling Details:

MIC	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Collistin	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	0.25	8	0.015	1	0.5	0.03	4	8	2	0.25	0.25
	Highest limit	64	64	4	16	128	8	16	32	16	128	1024	64	8	32
	N of tested isolates	157	157	157	157	157	157	157	157	157	157	157	157	157	157
	N of resistant isolates	157	8	157	152	55	130	6	16	0	77	102	89	0	61
<=0.015							25								
<=0.03										152					
0.03							2								
0.064										5					
0.12							15								
<=0.25														67	79
0.25							30								
<=0.5									84						
0.5					5		5							85	16
<=1								147							
1				2	10		4		47					5	1
<=2			13										62		
2				9	21		3	4	10						
<=4											60				
4			67	5	32			2					6		
>4				141											
<=8						98						30			
8			63		64		16	4			12				
>8							57								
16			6		25	4					8	23			
32			6			7			3		1	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	0.25	8	0.015	1	0.5	0.03	4	8	2	0.25	0.25
	Highest limit	64	64	4	16	128	8	16	32	16	128	1024	64	8	32
	N of tested isolates	157	157	157	157	157	157	157	157	157	157	157	157	157	157
MIC	N of resistant isolates	157	8	157	152	55	130	6	16	0	77	102	89	0	61
	>32								13						61
	64		1			8						1	21		
	>64	157	1										65		
	128					26					1				
	>128					14					75				
	1024											2			
	>1024											100			

OTHER ANTIMICROBIAL RESISTANCE TABLES

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

Sampling Stage: Slaughterhouse

Sampling Type: animal sample - caecum

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method:

Country Of Origin:Germany

Sampling Details:

AM substance	Ampicillin	Chloramphenicol	Ciprofloxacin	Daptomycin	Erythromycin	Gentamicin	Linezolid	Quinupristin/Dalfopristin	Teicoplanin	Tetracycline	Tigecycline	Vancomycin
ECOFF	4	32	4	4	4	32	4	1	2	4	0.25	4
Lowest limit	0.5	4	0.12	0.25	1	8	0.5	0.5	0.5	1	0.03	1
Highest limit	64	128	16	32	128	1024	64	64	64	128	4	128
MIC												
0.064											5	
0.12											86	
<=0.25				6								
0.25			9								54	
<=0.5	7						14		145			
0.5			44	9								
<=1					25					49		67
1	117		78	68			102					
2	19		6	61	12		28	2		2		77
<=4		35										
4	1			1	4		1	13				1
<=8						106						
8		105	1		5			69				
16			1		8	35		55		1		
>16			6									
32					5	2		6		50		

MIC	AM substance	Ampicillin	Chloramphenicol	Ciprofloxacin	Daptomycin	Erythromycin	Gentamicin	Linezolid	Quinupristin/Dalfopristin	Teicoplanin	Tetracycline	Tigecycline	Vancomycin
	ECOFF	4	32	4	4	4	32	4	1	2	4	0.25	4
	Lowest limit	0.5	4	0.12	0.25	1	8	0.5	0.5	0.5	1	0.03	1
	Highest limit	64	128	16	32	128	1024	64	64	64	128	4	128
64			1			1					17		
>64		1											
128			4			1					26		
>128						84							
512							1						
>1024							1						

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

Sampling Stage: Slaughterhouse

Sampling Type: animal sample - caecum

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method:

Country Of Origin:Germany

Sampling Details:

AM substance	Ampicillin	Chloramphenicol	Ciprofloxacin	Daptomycin	Erythromycin	Gentamicin	Linezolid	Quinupristin/Dalfopristin	Teicoplanin	Tetracycline	Tigecycline	Vancomycin
ECOFF	4	32	4	4	4	32	4	1	2	4	0.25	4
Lowest limit	0.5	4	0.12	0.25	1	8	0.5	0.5	0.5	1	0.03	1
Highest limit	64	128	16	32	128	1024	64	64	64	128	4	128
MIC												
<=0.03											1	
0.064											3	
<=0.12			2									
0.12											96	
<=0.25				22								
0.25			22								91	
<=0.5	25						11	1	191			
0.5			49	20								
<=1					54					37		147
1	156		93	109			118	8				
2	9		7	37	36		62	8				43
<=4		64										
4	1		1	3	6			22				1
<=8						164						
8		98	1		12			88				
16		3	5		4	22		61		1		
>16			11									
32		15			3			3		6		
64		8								51		

MIC	AM substance	Ampicillin	Chloramphenicol	Ciprofloxacin	Daptomycin	Erythromycin	Gentamicin	Linezolid	Quinupristin/Dalfopristin	Teicoplanin	Tetracycline	Tigecycline	Vancomycin
	ECOFF	4	32	4	4	4	32	4	1	2	4	0.25	4
	Lowest limit	0.5	4	0.12	0.25	1	8	0.5	0.5	0.5	1	0.03	1
	Highest limit	64	128	16	32	128	1024	64	64	64	128	4	128
128			3			3					96		
>128						73							
256							1						
512							1						
1024							1						
>1024							2						

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

Sampling Stage: Slaughterhouse

Sampling Type: animal sample - caecum

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method:

Country Of Origin:Germany

Sampling Details:

AM substance	MIC	Ampicillin	Chloramphenicol	Ciprofloxacin	Daptomycin	Erythromycin	Gentamicin	Linezolid	Quinupristin/Dalfopristin	Teicoplanin	Tetracycline	Tigecycline	Vancomycin
ECOFF		4	32	4	4	4	32	4	1	2	4	0.25	4
Lowest limit		0.5	4	0.12	0.25	1	8	0.5	0.5	0.5	1	0.03	1
Highest limit		64	128	16	32	128	1024	64	64	64	128	4	128
<=0.03												3	
0.064												23	
0.12												110	
<=0.25					4								
0.25												19	
<=0.5		36						2	2	151			
0.5					5								
<=1						40					86		141
1		32		15	23			74	21	4			
2		36		35	82	5		79	17		2		14
<=4			82										
4		19		83	36	7			88		3		
<=8							143						
8		9	56	20	5	3			26		4		
16		1	6	1		4	10		1		2		
>16				1									
32		5	11			2	1				3		
64		6									23		
>64		11											

AM substance	Ampicillin	Chloramphenicol	Ciprofloxacin	Daptomycin	Erythromycin	Gentamicin	Linezolid	Quinupristin/Dalfopristin	Teicoplanin	Tetracycline	Tigecycline	Vancomycin
ECOFF	4	32	4	4	4	32	4	1	2	4	0.25	4
Lowest limit	0.5	4	0.12	0.25	1	8	0.5	0.5	0.5	1	0.03	1
Highest limit	64	128	16	32	128	1024	64	64	64	128	4	128
MIC												
128					2	1				32		
>128					92							

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

Sampling Stage: Slaughterhouse

Sampling Type: animal sample - caecum

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method:

Country Of Origin:Germany

Sampling Details:

AM substance	Ampicillin	Chloramphenicol	Ciprofloxacin	Daptomycin	Erythromycin	Gentamicin	Linezolid	Quinupristin/Dalfopristin	Teicoplanin	Tetracycline	Tigecycline	Vancomycin
ECOFF	4	32	4	4	4	32	4	1	2	4	0.25	4
Lowest limit	0.5	4	0.12	0.25	1	8	0.5	0.5	0.5	1	0.03	1
Highest limit	64	128	16	32	128	1024	64	64	64	128	4	128
MIC												
<=0.03											2	
0.064											18	
0.12											89	
<=0.25				1								
0.25			3								25	
<=0.5	8						3	4	129			
0.5				3								
<=1					33					55		126
1	27		18	11			46	23	5			
2	44		26	89	15		85	25				7
<=4		37										
4	47		80	25	9			67				1
<=8						115						
8	2	30	6	5	7			11		1		
16		16	1		14	16		3				
32	2	50			7	1		1		1		
64	1	1			1					18		
>64	3											
128					1					45		

AM substance	Ampicillin	Chloramphenicol	Ciprofloxacin	Daptomycin	Erythromycin	Gentamicin	Linezolid	Quinupristin/Dalfopristin	Teicoplanin	Tetracycline	Tigecycline	Vancomycin
ECOFF	4	32	4	4	4	32	4	1	2	4	0.25	4
Lowest limit	0.5	4	0.12	0.25	1	8	0.5	0.5	0.5	1	0.03	1
Highest limit	64	128	16	32	128	1024	64	64	64	128	4	128
MIC												
>128					47					14		
512						1						
>1024						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	Gallus gallus (fowl) - broilers	Escherichia coli, non-pathogenic, unspecified	Objective sampling	Slaughterhouse	N_A	Monitoring	Official sampling	animal sample - caecum	slaughter animal batch	Germany	N_A	300	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)	Germany	N_A	384	0
	Turkeys - fattening flocks	Escherichia coli, non-pathogenic, unspecified	Objective sampling	Slaughterhouse	N_A	Monitoring	Official sampling	animal sample - caecum	slaughter animal batch	Germany	N_A	300	0

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

Latest Transmission set

Table Name	Last submitted dataset transmission date
Antimicrobial Resistance	07-Jan-2020
Esbl	30-Jul-2019
Animal Population	30-Jul-2019
Disease Status	30-Jul-2019
Food Borne Outbreaks	29-Jul-2019
Prevalence	30-Jul-2019

Institutions and Laboratories involved in zoonoses monitoring and reporting

In Germany, monitoring and surveillance of zoonotic agents in the food chain are carried out by collaboration of the county level authorities of the Laender and the federal institutions. County level authorities are responsible for collecting the samples. Surveillance samples are collected risk based while for specific monitoring programs random sampling is applied. Food samples are examined by accredited regional state laboratories. If zoonotic agents are isolated they may be sent to the National Reference Laboratories for respective agents for further typing and/or resistance testing. However, species identification, serotyping or further analyses can also be carried out by regional laboratories themselves.

Data on zoonotic agents in animals stem from a multitude of sources including monitoring programs on the national level, surveillance and diagnostic investigations for diverse reasons. Large differences can be observed between different zoonotic species and different animal populations. Those are therefore outlined in the respective chapters. Data on zoonotic agents in animals are mostly provided by the Laender authorities that in turn collect them from different regional bodies that are in charge of surveilling these agents. The primary collection point for data often is the county level that is in charge of the control of contagious diseases and farm inspections. However, data may also originate from animal health services and other regional institutions that have been tasked with the surveillance of certain pathogens.

Concerning food data, the greatest part originates from investigations carried out in the regional accredited labs. Their investigations are largely based on surveillance legislation, the so called general official instruction surveillance demanding the risk based examination of five food samples per 1000 inhabitants on an annual basis. The categorization of risk in this respect is carried out by the regional authorities that also decide on the matrix/agent combinations to be investigated.

Short description of the institutions and laboratories involved in data collection and reporting

Animal population

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

Data on cattle, pigs, sheep and goats were collected from the Federal Statistical Office. They relate to November 2017. Data on poultry were collected in the framework of the *Salmonella* Control Programs according to Reg. (EC) No. 2016/2003.

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

While the number of cattle holdings and cattle has been declining in the last two years, the numbers of pigs and sheep are constant. However, the numbers of holdings with pigs are also declining, while the numbers of holdings with sheep has been increasing slightly.

4. Geographical distribution and size distribution of the herds, flocks and holdings^(b)

Animal density differs regionally. While most cattle are housed in Bavaria, pigs and poultry are mostly housed in the western part of Lower Saxony. Herd sizes differ with larger herds frequently being located in the east of Germany and smaller herd sizes found in the south.

(a): National identification and registration system(s), source of reported statistics (Eurostat, others) (b): Link to website with density maps if available, tables with number of herds and flocks according to geographical area

General evaluation*: *Salmonella*

1. History of the disease and/or infection in the country^(a)

Non typhoidal Salmonellosis in humans is a notifiable disease in Germany. The incidence of the reported cases has dropped from nearly 77,000 cases in 2001 to 13,490 in 2017 (<https://survstat.rki.de>, accessed 16.02.2018). After years of continuous decline, cases increased again for the first time in 2017 from 12974 in 2016 to 14,272 in 2017. In 2018, it declined again to 13,528 reported cases (as by 01.05.2019). Over the years, *S. Enteritidis* was by far the most frequently identified serovar in human cases (in 2018 34,0 % of reported cases) and it is only since few years that *S. Typhimurium* has caught up (24,4 % of reported cases). Other serovars are fairly infrequent. Among those, *S. Infantis* in recent years has been more frequent than others (2,0 % of reported cases).

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

While control of *Salmonella* in *Gallus gallus* and turkey flocks has been successful in recent years, the prevalence of *Salmonella* in pig farms has been constant. In cattle, the number of outbreaks of Salmonellosis in cattle dropped from 109 in 2017 to 98 farms in 2018. Considering meat, the prevalence of *Salmonella* was lowest in beef, followed by turkey meat, pork and broiler meat. *Salmonella* were also found in meat from wild boars. Minced meat from pigs and cattle was rarely positive for *Salmonella* (0.56 % and 0.9 % respectively). Given the fact that minced meat is also consumed raw in Germany even a low percentage of positive samples may contribute to the overall disease burden.

4. Additional information

In Germany Salmonellosis is notifiable in cattle. However, the number of observed cases is fairly low. No systematic screening policy is in place and outbreaks on farms are typically detected through the investigation of clinical disease in cattle.

In pigs, *Salmonella* control in Germany is largely based on serological screening for antibodies of pigs at slaughter. Based on these data herds are categorized in three categories (Kat) namely: Kat I, low risk and less than 20 % serologically positive samples; Kat II, medium risk and 20-40 % positive samples; and Kat III, high risk and more than 40 % positive samples. Surveys carried out in 2011 and 2015 found that the risk of animals being culturally positive at farm or at slaughter was substantially higher for Kat II and KIII pigs than for Kat I pigs. However, we also found *Salmonella* in Kat I herds, indicating that these herds should not be considered free of *Salmonella*.

In poultry, European legislation to control *Salmonella* based on Reg. (EC) No. 2160/2003 is fully implemented in Germany.

* For each zoonotic agent

(a): Epidemiological evaluation (trends and sources) over time until recent/current situation for the different relevant matrixes (food, feed, animal). If relevant: the official "disease status" to be specified for the whole country and/or specific regions within the country

(b): If applicable

General evaluation*: *Campylobacter***1. History of the disease and/or infection in the country^(a)**

Campylobacteriosis in humans is a notifiable disease in Germany. The number of reported cases has ranged between 50.000 and 75.000 cases during the last 15 years (Infectious Disease Epidemiology Annual Report, RKI). The relation of *C. jejuni* and *C. coli* among the identified species was 7.6 to 1 and has been fairly constant over the last years. As in other countries *C. jejuni* is frequently found in broilers and turkeys and their respective meat but also in cattle. In contrast, *C. coli* is mostly found in pigs. Other species of *Campylobacter* have a negligible share of the human infections.

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

During the last 5 years Campylobacteriosis cases among humans have increased. However, in 2018 the reported number of cases decreased to 67,905 compared to 74051 in 2017 (<https://survstat.rki.de>, accessed 17.05.2019). Based on the comparison of timely trends of detection of *Campylobacter* in broiler meat and source attribution studies, broiler meat is assumed to be an important source of *Campylobacter* for human infections. Concerning *Campylobacter* on broiler carcasses currently there is no progress with respect to the reduction of the proportion of carcasses >1000 cfu/g. However, recent outbreaks of *C. coli* infections linked to minced pork and *C. jejuni* originating from raw milk underlined that it is not only broiler meat that causes the risk for humans.

3. Any recent specific action in the Member State or suggested for the European Union^(b)

In 2016 a specific annual monitoring for quantitative data on *Campylobacter* on broiler carcasses and broiler meat at retail started in order to get more detailed quantitative data on the contamination of broiler meat.

4. Additional information

No control plans are in place in Germany for *Campylobacter* in poultry, cattle or pigs. From monitoring results of recent years it is evident that the bacteria can frequently be found in the caeca of all farm animal species. However, the prevalence on meat is highest in broilers, followed by turkey meat. In bovine or pig meat *Campylobacter* is generally infrequent. However, due to consumption of raw meat (especially minced meat) and raw milk even low prevalences can contribute to the occurrence of Campylobacteriosis in humans. In particular, raw milk consumption has been associated with outbreaks of Campylobacteriosis.

*** For each zoonotic agent**

(a): Epidemiological evaluation (trends and sources) over time until recent/current situation for the different relevant matrixes (food, feed, animal). If relevant: the official "disease status" to be specified for the whole country and/or specific regions within the country

(b): If applicable

General evaluation*: Shigatoxin producing *E. coli***1. History of the disease and/or infection in the country^(a)**

Infections with Shiga-toxin producing *E. coli* are by far less frequent than Salmonellosis and Campylobacteriosis in Germany. In recent years the number of reported cases ranged between 1500 and 2300 with an exceptional peak in 2011 caused by a large outbreak associated with sprouted seeds.

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

Since 2012 the number of reported human cases has been slowly increasing to 2226 cases in 2018 (<https://survstat.rki.de>, accessed 17.05.2019). The reason for this increase is not known.

4. Additional information

Ruminants are the main known reservoir. This includes cattle, small ruminants and likewise wild ruminants.

*** For each zoonotic agent**

(a): Epidemiological evaluation (trends and sources) over time until recent/current situation for the different relevant matrixes (food, feed, animal). If relevant: the official "disease status" to be specified for the whole country and/or specific regions within the country

(b): If applicable

General evaluation*: *Listeria monocytogenes***1. History of the disease and/or infection in the country^(a)**

Listeriosis in humans in Germany is an infrequent condition compared to other zoonotic diseases. However, due to the high associated morbidity and mortality, it is considered an important zoonosis. In 2018, 698 cases were reported (<https://survstat.rki.de>, accessed 19.05.2019). The number of annually reported cases in humans has been increasing since the implementation of the infection protection law in 2001 until 2017 with a high of 769 in 2017. In 2018 it decreased for the first time.

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

Listeria monocytogenes is observed in different kinds of foods. It is regularly detected in raw food from animal origin, dairy products made from raw milk, and smoked or gravled fishery products. In 2018, a specific monitoring program was carried out investigating *L. monocytogenes* in spreadable fermented sausages mainly from poultry (see food chapter).

3. Any recent specific action in the Member State or suggested for the European Union^(b)**4. Additional information**

Investigations in animals are not carried out systematically. Therefore, data on *Listeria monocytogenes* in animals should not be considered prevalence data. In animals, clinical listeriosis is a reportable disease in Germany and between 140 and 220 cases have been reported annually between 2012 and 2016 (FLI 2017).

*** For each zoonotic agent**

(a): Epidemiological evaluation (trends and sources) over time until recent/current situation for the different relevant matrixes (food, feed, animal). If relevant: the official "disease status" to be specified for the whole country and/or specific regions within the country

(b): If applicable

General evaluation*: *Yersinia***1. History of the disease and/or infection in the country^(a)**

Yersiniosis caused by *Y. enterocolitica* is among the most frequent human bacterial enteric diseases. In 2018 2385 cases in humans were reported (<https://survstat.rki.de>, accessed 17.05.2019). The number of annual cases decreased consistently from 2001 to 2014. In 2015 and 2016 there was a slight transient increase to 2754 and 2770 cases.

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

In 2018 a systematic monitoring of *Yersinia* was carried out in minced pork and 2.4 % of samples were positive.

4. Additional information

In animals no specific monitoring programs for *Y. enterocolitica* and *Y. pseudotuberculosis* are in place. Investigations in food, mainly meat, are carried out in the framework of official food controls i.e. risk based.

*** For each zoonotic agent**

(a): Epidemiological evaluation (trends and sources) over time until recent/current situation for the different relevant matrixes (food, feed, animal). If relevant: the official "disease status" to be specified for the whole country and/or specific regions within the country

(b): If applicable

General evaluation*: Tuberculosis (*M. bovis*)**1. History of the disease and/or infection in the country^(a)**

Tuberculosis (TB) in cattle caused by *Mycobacterium (M.) bovis* / *M. caprae* is a notifiable disease. In 1996, Germany was declared officially free from bovine tuberculosis (Commission decision 97/76/EC), which means that at least 99.9% of the cattle holdings per year are TB-free. Since then this status has been maintained.

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

As bovine tuberculosis is rare, its relevance for public health is negligible. In 2018, in six cattle herds some animals were identified positive for tuberculosis and affected animals were culled.

3. Any recent specific action in the Member State or suggested for the European Union^(b)

In 2017 the national regulation on bovine Tuberculosis (Verordnung zum Schutz gegen die Tuberkulose des Rindes) was updated. It now covers infections of cattle caused by *M. bovis*, *M. tuberculosis*, *M. caprae*, *M. microti* and *M. africanum*.

*** For each zoonotic agent**

(a): Epidemiological evaluation (trends and sources) over time until recent/current situation for the different relevant matrixes (food, feed, animal). If relevant: the official "disease status" to be specified for the whole country and/or specific regions within the country

(b): If applicable

General evaluation*: **Brucella**

1. History of the disease and/or infection in the country^(a)

In 2018 37 cases of Brucellosis were reported in humans in Germany (<https://survstat.rki.de>, accessed 15.05.2019). Generally, most of the reported cases are assumed to have been acquired abroad. However, domestic infections are also observed.

Germany is free from Brucellosis of cattle, sheep and goats. This status is controlled by routine serological investigations of cattle, sheep and goat herds. For sheep and goats a sampling scheme is in place. In cattle a census sample is carried out. No mandatory sampling is carried out in pigs. Pigs are tested when meant to be exported or included in an AI-station. However there is a specific monitoring in one province (Land) for outdoor pigs.

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

The number of human cases has been more or less stable in recent years. No indication of specific potential sources for the domestic infections is identified.

Brucellosis in pigs caused by *Brucella suis* is occasionally reported. In 2018 1 pig herd was reported positive for *Brucella suis*. No brucellosis was detected in cattle and small ruminants.

4. Additional information

Monitoring of brucellosis in animals is carried out by the regional state or contract laboratories using serological methods. Usually an ELISA is used for milk, serum or plasma samples of cattle. In sheep and goats the Rose-Bengal-Test (RBT) or the complement fixation test are used according to the prescription of the „Manual of Diagnostic Tests and Vaccines for Terrestrial Animals“ of OIE.

General evaluation*: *Trichinella***1. History of the disease and/or infection in the country^(a)**

Trichinellosis cases occur only sporadically in humans in Germany and mostly originate from imported raw meat products. In 2018, no case was observed in humans (<https://survstat.rki.de>, accessed 17.05.2019). In housed pigs, *Trichinella* has not been detected for a couple of years. Likewise, horses were free of *Trichinella* spp. in 2018. However, Trichinellosis is still sporadically observed in hunted wild boars.

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

As in recent years Trichinellosis was not observed in housed pigs and horses and farmed wild boar in 2018. Reported cases stem from hunted wild boars.

4. Additional information

All slaughtered pigs and horses in Germany are tested for *Trichinella* spp.. Likewise testing is carried out on farmed and hunted wild boars. Other animal species like foxes are also frequently examined.

However, no *Trichinella* has been found in foxes in recent years

Data on *Trichinella* in pigs, farmed wild boar and horses at slaughter are collected through the Federal Statistical Office (www.destatis.de) and reported in a national report.

Testing of hunted wild boars is done by the veterinary authorities on the county level.

*** For each zoonotic agent**

(a): Epidemiological evaluation (trends and sources) over time until recent/current situation for the different relevant matrixes (food, feed, animal). If relevant: the official "disease status" to be specified for the whole country and/or specific regions within the country

(b): If applicable

General evaluation*: *Echinococcus***1. History of the disease and/or infection in the country^(a)**

Since 9 November 2004, infections of animals with *Echinococcus* spp. are notifiable in Germany.

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

In 2018 15 % of examined foxes were positive for *Echinococcus* spp. This is within the range of the numbers reported in the years before.

*** For each zoonotic agent**

(a): Epidemiological evaluation (trends and sources) over time until recent/current situation for the different relevant matrixes (food, feed, animal). If relevant: the official "disease status" to be specified for the whole country and/or specific regions within the country

(b): If applicable

General evaluation*: *Toxoplasma***1. History of the disease and/or infection in the country^(a)**

Toxoplasmosis is an infrequent disease in humans in Germany with case numbers ranging between 51 and 127 cases per year (<https://survstat.rki.de>). In fact, in 2018, only 36 cases were reported, the lowest figure since 2002. Likewise, in animals toxoplasmosis is very rarely reported with 14 to 27 cases reported annually in the last 5 years.

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

In 2018 *Toxoplasma spp.* was rarely reported in samples from cats, dogs, goats and sheep.

4. Additional information

There is no routine monitoring system for *Toxoplasma* in animals in Germany. Investigations are mainly based on clinical signs. Therefore, the proportion of positive samples should not be interpreted as prevalence.

*** For each zoonotic agent**

(a): Epidemiological evaluation (trends and sources) over time until recent/current situation for the different relevant matrixes (food, feed, animal). If relevant: the official "disease status" to be specified for the whole country and/or specific regions within the country

(b): If applicable

General evaluation*: Rabies**1. History of the disease and/or infection in the country(a)**

Germany has been officially free of rabies since 2008. The last human case was reported in 2007 and that was an imported case, as were the cases of the previous years. To maintain the status of freedom of disease a large number of animals is annually tested.

In contrast, rabies in insectivores occurs sporadically in Germany.

Rabies surveillance and diagnosis follows international recommendations as laid down in the Manual of Diagnostic Test and Vaccines for Terrestrial Animals (Terrestrial Manual) of the OIE and the national Legislation on rabies control as amended and promulgated on 4 October 2010 (BGBl. I S. 1313).

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

In 2018, 17 cases of bat rabies were reported. No cases of rabies in other animals were reported.

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

No further specific measures were taken in 2018.

*** For each zoonotic agent**

(a): Epidemiological evaluation (trends and sources) over time until recent/current situation for the different relevant matrixes (food, feed, animal). If relevant: the official "disease status" to be specified for the whole country and/or specific regions within the country

(b): If applicable

General evaluation*: *Staphylococcus* spp.**1. History of the disease and/or infection in the country^(a)**

Staphylococci have public health relevance for two reasons. One reason is that *S. aureus* is able to produce heat resistant enterotoxins in contaminated foods. The second aspect is associated with multi-resistant of *Staphylococcus aureus* (MRSA) occurring as an important nosocomial problem in the public health sector especially in hospitals. In Germany blood stream infections with MRSA are notifiable in humans since 2009. The highest number of reported cases was in 2012 with 4487 cases. Since then, numbers have been decreasing to 2428 cases in 2018.

In farm animals, a certain type of MRSA has been identified in samples from pigs since 2004. However, little is known about earlier times because *S. aureus* is not an important pig pathogen and was therefore not tested for AMR in the past. Since then, MRSA have been detected in all kinds of farm animals including those from organic farms and in meat and raw milk. Likewise, these strains have been found to be widespread among farmers, especially pig farmers. Food however, is currently not a major source of colonization or infection for humans, despite the frequent detection of these bacteria in raw meat.

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

MRSA have been frequently found in livestock in recent years with no clear trends being displayed. As an exception an increase in MRSA prevalence in dairy cattle was reported between 2009/10 and 2014. In 2018 MRSA were specifically investigated in fattening turkeys at farm. Results were within the range reported in the years before. In humans, livestock associated MRSA continue to be observed more frequently among screening samples than among clinical samples. However, in both types of samples the proportion of the livestock strains increased in recent years.

4. Additional information

No control plans are in place in Germany for MRSA in farm animals. In contrast, bloodstream infections in humans with MRSA are notifiable in Germany.

*** For each zoonotic agent**

(a): Epidemiological evaluation (trends and sources) over time until recent/current situation for the different relevant matrixes (food, feed, animal). If relevant: the official "disease status" to be specified for the whole country and/or specific regions within the country

(b): If applicable

Description of Monitoring/Surveillance/Control programmes system*: *Salmonella* in breeding flocks of *Gallus gallus*

1. Monitoring/Surveillance/Control programmes system^(a)

In Germany, control of *Salmonella* in breeding flocks of *Gallus gallus* is based on Reg. (EC) No. 2160/2003 and Reg. (EU) No. 200/2010.

2. Measures in place^(b)

Measures in place are according to the respective European legislation

3. Notification system in place to the national competent authority^(c)

Positive results of investigations carried out by the food business operators in the framework of quality control have to be reported to the county level.

4. Results of investigations and national evaluation of the situation, the trends^(d) and sources of infection^(e)

A total of 767 breeding flocks of *Gallus gallus* were examined by the food business operators or the competent authority in 2018. In 5 herds (0.7 %) *Salmonella* was detected. Among those, 2 herds (0.3 % of all herds) harboured *S. Enteritidis*, *S. Typhimurium* and the other notifiable serovars were not reported. 256 flocks were tested during rearing, none of which were positive.

*** For all combinations of zoonotic agents and matrix (Food, Feed and Animals) for 'Prevalence' and 'Disease Status': one text form reported per each combination of matrix/zoonoses or zoonotic agent**

(a): Sampling scheme (sampling strategy, frequency of the sampling, type of specimen taken, methods of sampling (description of sampling techniques) + testing scheme (case definition, diagnostic/analytical methods used, diagnostic flow (parallel testing, serial testing) to assign and define cases. If programme approved by the EC, please provide link to the specific programme in the Commission's website.

(b): The control program/strategies in place, including vaccination if relevant. If applicable a description of how eradication measures are/were implemented, measures in case of the positive findings or single cases; any specific action decided in the Member State or suggested for the European Union as a whole on the basis of the recent/current situation, if applicable. If programme approved by the EC, please provide link to the specific programme in the Commission's website.

(c): Mandatory: Yes/No.

(d): Minimum five years.

(e): Relevance of the findings in animals to findings in foodstuffs and for human cases (as a source of infection).

Description of Monitoring/Surveillance/Control programmes system*: *Salmonella* in laying hens

1. Monitoring/Surveillance/Control programmes system^(a)

In Germany, control of *Salmonella* in laying hens of *Gallus gallus* is based on Reg. (EC) No. 2160/2003 and Reg. (EU) No. 517/2011.

2. Measures in place^(b)

Measures in place are according to the respective European legislation.

3. Notification system in place to the national competent authority^(c)

Positive findings in examinations carried out on behalf of the food business operator need to be reported to the competent authority.

4. Results of investigations and national evaluation of the situation, the trends^(d) and sources of infection^(e)

In 2018, 6039 adult laying hen flocks were examined for *Salmonella*. *Salmonella* was detected in 87 flocks (1.4 %). In 73 (1.2 %) flocks, *S. Enteritidis* (42 flocks) or *S. Typhimurium* (31 flocks) were detected. 662 flocks were tested during the rearing period, none of which were positive.

*** For all combinations of zoonotic agents and matrix (Food, Feed and Animals) for 'Prevalence' and 'Disease Status': one text form reported per each combination of matrix/zoonoses or zoonotic agent**

(a): Sampling scheme (sampling strategy, frequency of the sampling, type of specimen taken, methods of sampling (description of sampling techniques) + testing scheme (case definition, diagnostic/analytical methods used, diagnostic flow (parallel testing, serial testing) to assign and define cases. If programme approved by the EC, please provide link to the specific programme in the Commission's website.

(b): The control program/strategies in place, including vaccination if relevant. If applicable a description of how eradication measures are/were implemented, measures in case of the positive findings or single cases; any specific action decided in the Member State or suggested for the European Union as a whole on the basis of the recent/current situation, if applicable. If programme approved by the EC, please provide link to the specific programme in the Commission's website.

(c): Mandatory: Yes/No.

(d): Minimum five years.

(e): Relevance of the findings in animals to findings in foodstuffs and for human cases (as a source of infection).

Description of Monitoring/Surveillance/Control programmes system*: *Salmonella* in broilers

1. Monitoring/Surveillance/Control programmes system^(a)

In Germany, control of *Salmonella* in broilers is based on Reg. (EC) No. 2160/2003 and Reg. (EU) No. 200/2012.

2. Measures in place^(b)

Measures in place are according to the respective European legislation

3. Notification system in place to the national competent authority^(c)

Positive findings in examinations carried out on behalf of the food business operator need to be reported to the competent authority.

4. Results of investigations and national evaluation of the situation, the trends^(d) and sources of infection^(e)

In 2018, 21,277 broiler flocks were tested for *Salmonella* by the food business operator or the competent authority.
Of those, 578 (2.7 %) were positive for *Salmonella*. 27 herds (0.13 %) were positive for *S. Enteritidis* (14 flocks) or *S. Typhimurium* (13 flocks).

*** For all combinations of zoonotic agents and matrix (Food, Feed and Animals) for 'Prevalence' and 'Disease Status': one text form reported per each combination of matrix/zoonoses or zoonotic agent**

(a): Sampling scheme (sampling strategy, frequency of the sampling, type of specimen taken, methods of sampling (description of sampling techniques) + testing scheme (case definition, diagnostic/analytical methods used, diagnostic flow (parallel testing, serial testing) to assign and define cases. If programme approved by the EC, please provide link to the specific programme in the Commission's website.

(b): The control program/strategies in place, including vaccination if relevant. If applicable a description of how eradication measures are/were implemented, measures in case of the positive findings or single cases; any specific action decided in the Member State or suggested for the European Union as a whole on the basis of the recent/current situation, if applicable. If programme approved by the EC, please provide link to the specific programme in the Commission's website.

(c): Mandatory: Yes/No.

(d): Minimum five years.

(e): Relevance of the findings in animals to findings in foodstuffs and for human cases (as a source of infection).

Description of Monitoring/Surveillance/Control programmes system*: *Salmonella* in turkeys

1. Monitoring/Surveillance/Control programmes system^(a)

In Germany, control of *Salmonella* in turkey flocks is based on Reg. (EC) No. 2160/2003 and Reg. (EU) No. 1190/2012.

2. Measures in place^(b)

Measures in place are according to the respective European legislation.

3. Notification system in place to the national competent authority^(c)

Positive results of investigations carried out by the food business operators in the framework of quality control have to be reported to the county level.

4. Results of investigations and national evaluation of the situation, the trends^(d) and sources of infection^(e)

92 adult breeding flocks were tested during the production period. One flock was positive (1.1 %, *S. Typhimurium*). Of 49 flocks tested during the rearing period, one was positive for *Salmonella*, however not for the relevant serovars.
4643 fattening flocks of turkeys were tested for *Salmonella*. Of those, 33 were positive for *Salmonella* (0.7 %). Among the positive flocks 16 harboured *S. Typhimurium* and one harboured *S. Enteritidis*.

*** For all combinations of zoonotic agents and matrix (Food, Feed and Animals) for 'Prevalence' and 'Disease Status': one text form reported per each combination of matrix/zoonoses or zoonotic agent**

- (a): Sampling scheme (sampling strategy, frequency of the sampling, type of specimen taken, methods of sampling (description of sampling techniques) + testing scheme (case definition, diagnostic/analytical methods used, diagnostic flow (parallel testing, serial testing) to assign and define cases. If programme approved by the EC, please provide link to the specific programme in the Commission's website.
- (b): The control program/strategies in place, including vaccination if relevant. If applicable a description of how eradication measures are/were implemented, measures in case of the positive findings or single cases; any specific action decided in the Member State or suggested for the European Union as a whole on the basis of the recent/current situation, if applicable. If programme approved by the EC, please provide link to the specific programme in the Commission's website.
- (c): Mandatory: Yes/No.
- (d): Minimum five years.
- (e): Relevance of the findings in animals to findings in foodstuffs and for human cases (as a source of infection).

Description of Monitoring/Surveillance/Control programmes system*: *Salmonella* in meat

1. Monitoring/Surveillance/Control programmes system^(a)

Investigations into the presence of *Salmonella* in meat are carried out in the framework of official food control. Surveillance is risk based and carried out on the county level (see under general description). Specific monitoring programs in 2018 using random sampling were carried out for minced meat from pigs and meat from turkeys and broilers.

2. Measures in place^(b)

Measures in place are according to the respective European legislation.

3. Notification system in place to the national competent authority^(c)

Positive results of investigations carried out by the food business operators in the framework of quality control have to be reported to the competent authority.

4. Results of investigations and national evaluation of the situation, the trends^(d) and sources of infection^(e)

Salmonella spp. was detected in 1.3 % of minced pork, which is higher than in 2017 but. Minced pork is also eaten raw in Germany, which poses a substantial risk to consumers. In meat from broilers and turkeys *Salmonella* spp. were detected in 5.6 and 4.0 % of samples. However, at slaughter 7.6 and 22.7 % of turkey carcasses were contaminated with *Salmonella* spp.

In fermented sausages from poultry meat, only one positive sample of *Salmonella* was detected (0.2 %).

*** For all combinations of zoonotic agents and matrix (Food, Feed and Animals) for 'Prevalence' and 'Disease Status': one text form reported per each combination of matrix/zoonoses or zoonotic agent**

(a): Sampling scheme (sampling strategy, frequency of the sampling, type of specimen taken, methods of sampling (description of sampling techniques) + testing scheme (case definition, diagnostic/analytical methods used, diagnostic flow (parallel testing, serial testing) to assign and define cases. If programme approved by the EC, please provide link to the specific programme in the Commission's website.

(b): The control program/strategies in place, including vaccination if relevant. If applicable a description of how eradication measures are/were implemented, measures in case of the positive findings or single cases; any specific action decided in the Member State or suggested for the European Union as a whole on the basis of the recent/current situation, if applicable. If programme approved by the EC, please provide link to the specific programme in the Commission's website.

(c): Mandatory: Yes/No.

(d): Minimum five years.

(e): Relevance of the findings in animals to findings in foodstuffs and for human cases (as a source of infection).

Description of Monitoring/Surveillance/Control programmes system*: *Salmonella* in pigs

1. Monitoring/Surveillance/Control programmes system^(a)

In pigs monitoring of *Salmonella* is carried out according to the German regulation on control of salmonella in pigs from 13 March 2007. Monitoring is based on serological samples examined for *Salmonella* antibodies at slaughter.

2. Measures in place^(b)

Herds of fattening pigs are categorized (Kat I to III) according to the proportion of serologically positive samples in their slaughter pigs. Kat I herds have less than 20 % serologically positive samples, herds of Kat II between 20 and 40 % and Kat III herds have more than 40 % positive samples. The latter have to take action, i.e. perform epidemiological (risk factors) and bacteriological investigations, and to take measures in order to reduce the prevalence of serologically positive pigs at slaughter (e.g. intensified cleaning and disinfection).

3. Notification system in place to the national competent authority^(c)

The respective regulation in Germany (regulation on control of *Salmonella* in pigs from 13 March 2007) foresees that all holders of fattening pigs have to ensure serological testing of a predefined part of their pigs for *Salmonella*. Results of the testing have to be reported to the competent authority on request. In case of a proportion of more than 40 % pigs (i.e. Kat III, see above), this finding always has to be reported to the competent authority.

*** For all combinations of zoonotic agents and matrix (Food, Feed and Animals) for 'Prevalence' and 'Disease Status': one text form reported per each combination of matrix/zoonoses or zoonotic agent**

(a): Sampling scheme (sampling strategy, frequency of the sampling, type of specimen taken, methods of sampling (description of sampling techniques) + testing scheme (case definition, diagnostic/analytical methods used, diagnostic flow (parallel testing, serial testing) to assign and define cases. If programme approved by the EC, please provide link to the specific programme in the Commission's website.

(b): The control program/strategies in place, including vaccination if relevant. If applicable a description of how eradication measures are/were implemented, measures in case of the positive findings or single cases; any specific action decided in the Member State or suggested for the European Union as a whole on the basis of the recent/current situation, if applicable. If programme approved by the EC, please provide link to the specific programme in the Commission's website.

(c): Mandatory: Yes/No.

(d): Minimum five years.

(e): Relevance of the findings in animals to findings in foodstuffs and for human cases (as a source of infection).

Description of Monitoring/Surveillance/Control programmes system*: *Salmonella* in cattle

1. Monitoring/Surveillance/Control programmes system^(a)

In Germany bovine Salmonellosis is notifiable. However, the number of observed cases is fairly low. No systematic screening policy is in place and outbreaks on farms are typically detected through the investigation of clinical disease in cattle.
Likewise, other examinations of cattle are mainly clinical investigations

2. Measures in place^(b)

Bovine herds with clinical Salmonellosis are put under quarantine and a test and removal procedure is applied until herds are certified as negative again

3. Notification system in place to the national competent authority^(c)

The notification system is laid down in the regulation on control of *Salmonella* in cattle from 14 November 1991. Cases have to be notified if a minimum of three faecal samples collected within 8 to 15 days proved positive for *Salmonella* by cultural examination or if clinical signs indicative of Salmonellosis are confirmed by bacteriological testing.

4. Results of investigations and national evaluation of the situation, the trends^(d) and sources of infection^(e)

In 2018, 98 cases of bovine Salmonellosis were reported to the Friedrich Loeffler Institute, which is a slight decrease compared to 2017 (108 cases), but a more substantial increase compared to 2015 (66 cases). However, during the last 20 years the number of reported cases always ranged between 66 (2015) and 123 cases (2008).

5. Additional information

As no systematic testing program is in place, prevalence data on *Salmonella* in cattle cannot be provided. However, as the number of recorded outbreaks of Salmonellosis in cattle is limited the prevalence of *Salmonella* in cattle is estimated to be low.

*** For all combinations of zoonotic agents and matrix (Food, Feed and Animals) for 'Prevalence' and 'Disease Status': one text form reported per each combination of matrix/zoonoses or zoonotic agent**

(a): Sampling scheme (sampling strategy, frequency of the sampling, type of specimen taken, methods of sampling (description of sampling techniques) + testing scheme (case definition, diagnostic/analytical methods used, diagnostic flow (parallel testing, serial testing) to assign and define cases. If programme approved by the EC, please provide link to the specific programme in the Commission's website.

(b): The control program/strategies in place, including vaccination if relevant. If applicable a description of how eradication measures are/were implemented, measures in case of the positive findings or single cases; any specific action decided in the Member State or suggested for the European Union as a whole on the basis of the recent/current situation, if applicable. If programme approved by the EC, please provide link to the specific programme in the Commission's website.

(c): Mandatory: Yes/No.

(d): Minimum five years.

(e): Relevance of the findings in animals to findings in foodstuffs and for human cases (as a source of infection).

Description of Monitoring/Surveillance/Control programmes system*:

Campylobacter in other animals

1. Monitoring/Surveillance/Control programmes system^(a)

There is no routine systematic screening procedure in place for *Campylobacter* in animals in Germany.

2. Measures in place^(b)

There are no specific measures to control *Campylobacter* in animals in place.

4. Results of investigations and national evaluation of the situation, the trends ^(d) and sources of infection^(e)

In 2018 no specific monitoring programs on *Campylobacter* in animals other than poultry were carried out.

*** For all combinations of zoonotic agents and matrix (Food, Feed and Animals) for 'Prevalence' and 'Disease Status': one text form reported per each combination of matrix/zoonoses or zoonotic agent**

(a): Sampling scheme (sampling strategy, frequency of the sampling, type of specimen taken, methods of sampling (description of sampling techniques) + testing scheme (case definition, diagnostic/analytical methods used, diagnostic flow (parallel testing, serial testing) to assign and define cases. If programme approved by the EC, please provide link to the specific programme in the Commission's website.

(b): The control program/strategies in place, including vaccination if relevant. If applicable a description of how eradication measures are/were implemented, measures in case of the positive findings or single cases; any specific action decided in the Member State or suggested for the European Union as a whole on the basis of the recent/current situation, if applicable. If programme approved by the EC, please provide link to the specific programme in the Commission's website.

(c): Mandatory: Yes/No.

(d): Minimum five years.

(e): Relevance of the findings in animals to findings in foodstuffs and for human cases (as a source of infection).

Description of Monitoring/Surveillance/Control programmes system*: *Campylobacter* in meat

1. Monitoring/Surveillance/Control programmes system^(a)

Meat is tested for *Campylobacter* based on routine surveillance according to Reg. (EC) 882/2004 and in specific monitoring programs. In 2018 specific monitoring was carried out for the detection and quantification of *Campylobacter* in neck skin from broiler carcasses at slaughter and fresh skinned chicken meat at retail. Moreover *Campylobacter* was investigated in neck skin samples from turkeys at slaughter and in turkey meat at retail.

4. Results of investigations and national evaluation of the situation, the trends ^(d) and sources of infection^(e)

As in previous years, fresh skinned broiler meat at retail was frequently contaminated with *Campylobacter* (46.3 %). However, colony counts were substantially lower than in neck skin samples at slaughter. As in the previous year, 22.6 % of neck skin samples from carcasses at slaughter contained more than 1000 CFU/g.

Turkey meat was likewise frequently contaminated with *Campylobacter* (19.4 %). One of 203 samples of sausages from raw poultry meat also contained *Campylobacter* (0.5 %).

*** For all combinations of zoonotic agents and matrix (Food, Feed and Animals) for 'Prevalence' and 'Disease Status': one text form reported per each combination of matrix/zoonoses or zoonotic agent**

(a): Sampling scheme (sampling strategy, frequency of the sampling, type of specimen taken, methods of sampling (description of sampling techniques) + testing scheme (case definition, diagnostic/analytical methods used, diagnostic flow (parallel testing, serial testing) to assign and define cases. If programme approved by the EC, please provide link to the specific programme in the Commission's website.

(b): The control program/strategies in place, including vaccination if relevant. If applicable a description of how eradication measures are/were implemented, measures in case of the positive findings or single cases; any specific action decided in the Member State or suggested for the European Union as a whole on the basis of the recent/current situation, if applicable. If programme approved by the EC, please provide link to the specific programme in the Commission's website.

(c): Mandatory: Yes/No.

(d): Minimum five years.

(e): Relevance of the findings in animals to findings in foodstuffs and for human cases (as a source of infection).

**Description of Monitoring/Surveillance/Control programmes system*:
Verotoxigenic *E. coli* in animals**

1. Monitoring/Surveillance/Control programmes system^(a)

There is no routine systematic screening procedure in place for VTEC in animals in Germany. Investigations are mostly carried out in the framework of diagnostic investigations.

3. Notification system in place to the national competent authority^(c)

None.

5. Additional information

Investigations into the presence of VTEC in faeces are carried out according to different methods. Although all examinations are carried out in accredited laboratories and with validated methods, differences in methods may have impacted the results. In general, pre-enrichment is carried out according to ISO/TS 13136:2012 and subsequent detection/isolation is based on realtime PCR according to ISO/TS 13136:2012 or in house methods.

*** For all combinations of zoonotic agents and matrix (Food, Feed and Animals) for 'Prevalence' and 'Disease Status': one text form reported per each combination of matrix/zoonoses or zoonotic agent**

- (a): Sampling scheme (sampling strategy, frequency of the sampling, type of specimen taken, methods of sampling (description of sampling techniques) + testing scheme (case definition, diagnostic/analytical methods used, diagnostic flow (parallel testing, serial testing) to assign and define cases. If programme approved by the EC, please provide link to the specific programme in the Commission's website.
- (b): The control program/strategies in place, including vaccination if relevant. If applicable a description of how eradication measures are/were implemented, measures in case of the positive findings or single cases; any specific action decided in the Member State or suggested for the European Union as a whole on the basis of the recent/current situation, if applicable. If programme approved by the EC, please provide link to the specific programme in the Commission's website.
- (c): Mandatory: Yes/No.
- (d): Minimum five years.
- (e): Relevance of the findings in animals to findings in foodstuffs and for human cases (as a source of infection).

Description of Monitoring/Surveillance/Control programmes system*: Shigatoxin-producing *E. coli* in meat

1. Monitoring/Surveillance/Control programmes system^(a)

Examinations of meat are carried out in the frame work of food control (see general description).

3. Notification system in place to the national competent authority^(c)

None.

*** For all combinations of zoonotic agents and matrix (Food, Feed and Animals) for 'Prevalence' and 'Disease Status': one text form reported per each combination of matrix/zoonoses or zoonotic agent**

- (a): Sampling scheme (sampling strategy, frequency of the sampling, type of specimen taken, methods of sampling (description of sampling techniques) + testing scheme (case definition, diagnostic/analytical methods used, diagnostic flow (parallel testing, serial testing) to assign and define cases. If programme approved by the EC, please provide link to the specific programme in the Commission's website.
- (b): The control program/strategies in place, including vaccination if relevant. If applicable a description of how eradication measures are/were implemented, measures in case of the positive findings or single cases; any specific action decided in the Member State or suggested for the European Union as a whole on the basis of the recent/current situation, if applicable. If programme approved by the EC, please provide link to the specific programme in the Commission's website.
- (c): Mandatory: Yes/No.
- (d): Minimum five years.
- (e): Relevance of the findings in animals to findings in foodstuffs and for human cases (as a source of infection).

Description of Monitoring/Surveillance/Control programmes system*: **Listeria in food**

1. Monitoring/Surveillance/Control programmes system^(a)

Listeria monocytogenes in food is investigated in the framework of food control (see general chapter). Qualitative and quantitative investigations are carried out. In 2018 specific monitoring programs were carried out in fresh chicken meat at retail and in raw sausages from poultry meat and vegetarian sausages. Samples were distributed across the provinces based on the regional population.

2. Measures in place^(b)

According to Reg. (EC) No. 2073/2005.

3. Notification system in place to the national competent authority^(c)

Positive results in own checks of the food business operator need to be reported to the competent authority on county level.

4. Results of investigations and national evaluation of the situation, the trends^(d) and sources of infection^(e)

In the monitoring programs chicken meat was positive for *L. monocytogenes* in 15.4 % of samples. Sausages from poultry meat less frequently harboured *Listeria monocytogenes* (3.4 % of samples) but below the detection limit of the quantitative method. In vegetarian sausages no *Listeria* was detected.

*** For all combinations of zoonotic agents and matrix (Food, Feed and Animals) for 'Prevalence' and 'Disease Status': one text form reported per each combination of matrix/zoonoses or zoonotic agent**

(a): Sampling scheme (sampling strategy, frequency of the sampling, type of specimen taken, methods of sampling (description of sampling techniques) + testing scheme (case definition, diagnostic/analytical methods used, diagnostic flow (parallel testing, serial testing) to assign and define cases. If programme approved by the EC, please provide link to the specific programme in the Commission's website.

(b): The control program/strategies in place, including vaccination if relevant. If applicable a description of how eradication measures are/were implemented, measures in case of the positive findings or single cases; any specific action decided in the Member State or suggested for the European Union as a whole on the basis of the recent/current situation, if applicable. If programme approved by the EC, please provide link to the specific programme in the Commission's website.

(c): Mandatory: Yes/No.

(d): Minimum five years.

(e): Relevance of the findings in animals to findings in foodstuffs and for human cases (as a source of infection).

Food-borne Outbreaks

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

In Germany, information on food-borne outbreaks is reported via two parallel systems. The public health authorities in the German Federal States (Länder) are reporting to the Robert Koch Institute (RKI), while the food and veterinary authorities of the Länder are reporting to the Federal Office of Consumer Protection and Food Safety (BVL). The surveillance of infectious diseases in humans is regulated by the „Protection against Infection Act“ (Infektionsschutzgesetz). It assigns the task to compile, evaluate and analyse notification data on human infections at the national level to the RKI. Laboratories are required to report acute infections caused by notifiable pathogens to the local public health office, and physicians are required to report suspected or verified cases of notifiable communicable diseases. Outbreak reporting is integrated into the notification system. In addition to the infectious disease reporting system of the RKI, a reporting system collecting detailed information on food-borne outbreaks is provided by BVL, which covers food-borne outbreaks caused by bacteria, viruses, parasites and toxins. Through this reporting system information from the local food and veterinary authorities, which cooperate with the local public health offices is forwarded directly or via the Länder authorities to BVL following the outbreak investigation. The information on food-borne outbreaks gathered by the two national systems is combined and reported to EFSA.

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

For infectious disease surveillance, an outbreak is defined as two or more epidemiologically linked cases that meet the reference definition. General and household-related outbreaks are reported. All causative agents listed in the Zoonoses Directive (Directive 2003/99/EC, Annex I) are monitored. Information on place of exposure is routinely collected allowing categorization of the type of outbreak. The system collecting data on food-borne outbreaks, which is provided by BVL also covers outbreaks caused by bacterial toxins and other causative agents (e.g. histamine). Outbreaks are categorized as food-borne with weak evidence, if the local public health office investigating the outbreak provided information on suspected foodstuffs in the electronic outbreak reporting system or indicated that a meal was suspected, but the individual food vehicle was indeterminable. For the purpose of this report, evidence was considered as strong, if the causative agent had been detected in a food vehicle or its component, or in the food chain or its environment, or if a food vehicle had been incriminated by convincing descriptive evidence, or an analytical epidemiological study.

3. National evaluation of the reported outbreaks in the country^(a)

a. Trends in numbers of outbreaks and numbers of human cases involved

In 2018, 416 outbreaks were reported, 38 of which were outbreaks with strong evidence (2017: 389 outbreaks; 49 with strong evidence). The 38 strong evidence outbreaks involved at least 867 cases (2017: 987 cases). In 2018 at least 1,598 cases were reported in weak evidence outbreaks (2017: 1,290 cases).

b. Relevance of the different causative agents, food categories and the

agent/food category combinations

In 10 of the 38 strong evidence outbreaks *Campylobacter* was reported as causative agent. In 9 of these 10 outbreaks *C. jejuni* was detected. The other outbreaks were caused by *Bacillus cereus* [8 (once *B. cereus* was detected together with another agent)], *Salmonella* (8) [*S. Enteritidis* (5), *S. Typhimurium* (2), *Salmonella* group D (1)], *Clostridium botulinum* (2), hepatitis A (2), norovirus (2), *Clostridium perfringens* (1), *Staphylococcus aureus* (1), VTEC (1), *Fusarium* toxin (1, *Staphylococcus aureus* was detected as a second agent), histamine (1), *Listeria monocytogenes* (1). In 10 of the 38 strong evidence outbreaks “milk” was identified as the food category. In all of these outbreaks the identified food vehicle was raw milk. In the other outbreaks „cereal products including rice and seeds/pulses (nuts, almonds)” (6), „buffet meals” (3), „eggs and egg products” (3), „pig meat and products thereof” (3), „mixed food” (3), „other foods” (2), „fruit, berries and juices and other products thereof” (2), „broiler meat (*Gallus gallus*) and products thereof” (2), „bakery products” (1), „fish and fish products” (1), „meat and meat products” (1), and „vegetables and juices and other products thereof” (1) were reported as food category. The most frequent combination of causative agent and food vehicle was raw milk and *Campylobacter*. This combination occurred in 24% of all reported strong evidence outbreaks (9/38). Four outbreaks (11%) with strong evidence were caused by the combination „cooked rice” as food vehicle and *Bacillus cereus* as causative agent. Each of the combinations „potato salad” as food vehicle and *Salmonella* as causative agent and „eggs” as food vehicle and *Salmonella Enteritidis* as causative agent were identified in two of the 38 strong evidence outbreaks (5% each).

c. Relevance of the different types of places of food production and preparation in outbreaks

In the 38 strong evidence outbreaks the following „places of origin of problem” were identified: „restaurant or café or pub or bar or hotel or catering” (9), „household” (10), „canteen or workplace catering” (3), „school or kindergarten” (3), „take-away or fast-food outlet” (3), „farm” (2) or „processing plant” (2). „Retail” was reported once as place of origin of the problem. In seven outbreaks „unknown” was reported. For the 10 strong evidence outbreaks related to **raw cow's milk** various „places of origin of problem” were reported: „household” (4) or „restaurant or café or pub or bar or hotel or catering service” (1) were reported when consumers had consumed raw milk unheated, despite a mandatory warning sign placed at the farm. „Unknown” (3) or „farm” (2) were reported when no such warning sign was present or information regarding the presence of a warning sign was missing.

As „place of exposure”: „household” (10), „school or kindergarten” (10), „restaurant or café or pub or bar or hotel or catering service” (5), „take-away or fast-food outlet” (3), „canteen or workplace catering” (2), „multiple places of exposure in one country” (2), „farm” (1), „residential institution (nursing home or prison or boarding school)” (1) and „other” (1) were reported. In three outbreaks the place of exposure remained

unknown. In nine *Campylobacter* outbreaks related to raw milk „household“ (3), „school or kindergarten“ (3) and „farm“ (1) were reported as „place of exposure“. For two raw milk related *Campylobacter* outbreaks the place of exposure remained unknown.

d. Evaluation of the severity and clinical picture of the human cases

In 2018, the number of cases was known for all of 38 strong evidence outbreaks (total: 867 cases). At least 178 (21%) of the cases were hospitalized (2017: 17%). The number of cases which were hospitalized was unknown for two of the 38 strong evidence outbreaks. A total of eight deaths were reported in strong evidence outbreaks. The *Campylobacter* outbreaks with strong evidence (n=10) caused, on average, 9 cases (median: 5; range: 2-21) and 0.4 hospitalizations (median: 0; range: 0-3). The *Bacillus cereus* outbreaks with strong outbreaks (n=8) caused, on average, at least 29 cases (median: 19; range: 3-119) and 0.25 hospitalisations (median: 0; range: 0-1). Strong evidence *Salmonella* outbreaks (n=8) caused, on average, 39 cases (median: 13; range: 3-218) and 11 hospitalizations (median: 3; range: 0-70).

The reported foodborne outbreaks with weak evidence (n=378; at least 1.598 cases in total) caused at least 146 hospitalizations (9% of cases) and three deaths.

4. Descriptions of single outbreaks of special interest

The following descriptions of single outbreaks of special interest refer to outbreaks with strong evidence. The largest outbreak included 218 cases, 70 hospitalizations and one death and was caused by *Salmonella* Enteritidis (complex type 1734). The outbreak was associated with the consumption of eggs and products that contained eggs. Based on the results of core genome multilocus sequence typing (cgMLST) of human isolates, several smaller *S. Enteritidis* clusters in different parts of Germany could be identified as part of this large outbreak.

A listeriosis outbreak with at least 33 cases, 29 hospitalizations and 5 deaths reported in 2018 was associated with consumption of a certain type of cold cuts. Cases were identified as being part of the outbreak by whole genome sequencing of the *Listeria* isolates. The causative agent could be identified in the meat product (cold cuts) as well.

A hepatitis A outbreak with 23 cases and 17 hospitalizations was caused by dates that had been consumed by travelers in Morocco and by consumption of dates that travelers brought to Germany from Morocco, thereby affecting non-travelers as well.

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

In DE food-borne outbreaks should be investigated by the local public health authority in collaboration with the local food safety authority. In case of widespread epidemics, investigations are supported by the state health and state food and veterinary authorities or the federal institutions RKI, BVL and BfR.

Additionally, RKI and the state health authorities offer training for local public health officers on epidemiological methods required for the investigation of food-borne outbreaks. Support for outbreak investigations by fellows involved in the two-year Postgraduate Training for Applied Epidemiology (PAE) which is hosted at RKI is also available upon request. Since 2009, several national monitoring programmes on zoonotic agents along the food chain have been implemented. Furthermore, Germany operates risk based national coordinated control programmes included in the Federal control plan. In these programmes, standardised collection of data provides a better insight into the situation of food safety.

Institutions and laboratories involved in antimicrobial resistance monitoring and reporting

The monitoring of antimicrobial resistance in zoonotic bacteria and commensal bacteria in the food chain in Germany is carried out as a cooperation of the National Reference Laboratory for Antimicrobial Resistance (NRL-AR) at the BfR with the Federal Office of Consumer Protection and Food Safety (BVL) and the institutions of the Laender, i.e. the competent authorities and the regional state laboratories. All resistance testing with the broth microdilution method according to Commission Implementing Decision 2013/652/EU is currently carried out at the BfR, i.e. in the NRL-AR and the NRL for *Campylobacter* that closely cooperates with the NRL-AR. Further NRLs involved in testing and typing are the NRL for coagulase-positive Staphylococci incl. *S. aureus*, the NRL for *Salmonella* and the NRL for *E. coli*.

The primary isolation of the bacteria to be tested, including the selective isolation of ESBL/AmpC or Carbapenemase-forming *E. coli* and the selective isolation of methicillin-resistant *S. aureus* are carried out by the regional laboratories in the Laender. Isolated bacteria are then sent to the NRLs for confirmation, typing and resistance testing.

The BVL is mainly involved in data handling, i.e. collection of the results of the primary isolation cultures from the Laender and writing of a report on the national monitoring program that includes most of the AMR investigations in the framework of the Commission Implementing Decision 2013/652/EU.

Short description of the institutions and laboratories involved in data collection and reporting

General Antimicrobial Resistance Evaluation

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

Resistance to the highest priority critically important antimicrobials is investigated in *Salmonella*, *E. coli* and *S. aureus*. Overall resistance in commensal *E. coli* and *Salmonella* to 3rd Generation cephalosporins was low. Highest values were obtained in broilers and veal calves, but these have decreased in recent years.

Conversely, resistance to the fluoroquinolone ciprofloxacin is high in isolates from the broiler and turkey food chain and so far has not decreased substantially.

Resistance to colistin differs between animal populations with highest levels in *E. coli* from poultry. It is mostly associated with the presence of transferable resistance genes (predominantly *mcr1*). Concerning resistance to colistin, there is currently no clear trend.

Resistance to macrolides in *E. coli* and *Salmonella* is only tested as resistance to azithromycin which is infrequent.

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

AMR in bacteria from food animals and food are considered a constant threat to public health. However, the quantification of foodborne bacteria to the overall burden of AMR in humans is currently not possible. It likely differs between zoonotic enteric pathogens such as *Salmonella* and *Campylobacter* that may cause disease in humans and indicator bacteria that as such do not necessarily cause disease but may transport resistance mechanisms from animals to humans that may consequently be transmitted to other, pathogenic bacteria by horizontal gene transfer.

Livestock associated MRSA, according to current knowledge is mostly transferred to humans through direct contact with farm animals, while food does not play a major role in the transmission despite the frequent isolation of MRSA from meat.

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

In 2014 there was a major amendment of the German Drug Act that requires keepers of fattening pigs, fattening calves, broilers and of turkeys to document any antimicrobial treatment in a national data base. Based on the treatment data a farm-specific treatment frequency per animal of one of 6 respective populations is calculated. The populations are:

pigs <30 kg body weight,
fattening pigs >30 kg body weight,
broilers,
turkeys,
calves between 2 weeks and 8 months of age, and
beef cattle >8 months of age.

Based on the reported data the median and the third quartile of the farm specific treatment frequency are calculated and published. Farms with a treatment frequency above the median are asked to discuss with their veterinarian on opportunities for reduction. Farmers with treatment frequencies above the third quartile need to present a report to the competent authority analysing the reason of the high treatment frequency and delivering a plan for the reduction of the high treatment frequency.

In 2018 additionally the Veterinary Pharmacy Regulation was updated requesting additional documentation from veterinarians and declaring susceptibility testing mandatory before using 3rd or 4th generation cephalosporins and fluoroquinolones.

(a): The CIAs depends on the bacterial species considered and the harmonised set of substances tested within the framework of the harmonised monitoring:

- For *Campylobacter* spp., macrolides (erythromycin) and fluoroquinolones (ciprofloxacin);
- For *Salmonella* and *E. coli*, 3rd and 4th generation cephalosporins (cefotaxime) and fluoroquinolones (ciprofloxacin) and colistin (polymyxin);

General Description of Antimicrobial Resistance Monitoring*;
1. General description of sampling design and strategy^(a)
Within the framework of the resistance monitoring samples are collected in national active monitoring programs that are decided on annually. These include those programs prescribed by Commission Implementing Decision 2013/652/EU.
2. Stratification procedure per animal population and food category
Stratification of sampling is done according to Commission Implementing Decision 2013/652/EU. Samples are assigned to the Laender according to their respective animal population (for samples collected at farm), slaughter capacity (based on the actual slaughter figures of the year prior to the program design) or consumer population for food samples collected at retail.
4. Analytical method used for detection and confirmation^(b)
Samples are analysed as prescribed by Commission Implementing Decision 2013/652/EU.
5. Laboratory methodology used for detection of antimicrobial resistance^(c)
Samples are analysed as prescribed by Commission Implementing Decision 2013/652/EU and other relevant documents from the EURL-AR or EFSA.
6. Results of investigation
In 2018 the focus was on the poultry food chains. For results see specific chapters.
<p>* to be filled in per combination of bacterial species/matrix</p> <p>(a): Method of sampling (description of sampling technique: stage of sampling, type of sample, sampler), Frequency of sampling, Procedure of selection of isolates for susceptibility testing, Method used for collecting data.</p> <p>(b): Analytical method used for detection and confirmation: according to the legislation, the protocols developed by the EURL-AR should be used and reported here. In the case of the voluntary specific monitoring on Carbapenemase-producers, the selective media used (commercial plates, 'in house' media) should be also reported here. In general, any variation with regard to the EURL-AR protocols should be stated here, number of isolates isolated per sample, in particular for <i>Campylobacter</i> spp..</p> <p>(c): Antimicrobials included, Cut-off values</p>

General Description of Antimicrobial Resistance Monitoring*; **Selective isolation of carbapenem resistant *E. coli*.**

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

Within the framework of the resistance monitoring samples are collected in national active monitoring programs that are decided on annually. These include programs prescribed by Commission Implementing Decision 2013/652/EU. Selective isolation for carbapenem-resistant *E. coli* was performed in caecal samples from broilers and turkeys at slaughter, and in broiler carcasses at slaughter.

2. Stratification procedure per animal population and food category

Stratification of sampling is done according to Commission Implementing Decision 2013/652/EU. Samples are assigned to the Laender according to their respective animal population (for samples collected at farm), slaughter capacity (based on the actual slaughter figures of the year prior to the program design) or consumer population for samples collected at retail.

3. Randomisation procedure per animal population and food category

Only one suspicious isolate per sample was tested

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

Samples are analysed as prescribed by Commission Implementing Decision 2013/652/EU.

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

Samples are analysed as prescribed by Commission Implementing Decision 2013/652/EU or relevant documents from the EURL-AR or EFSA.

6. Results of investigation

Within the framework of the selective isolation for the carbapenem-resistant *E.coli*, no positive sample was confirmed by the German NRL for antimicrobial resistance which is in line with the results in 2016.

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

- (a): Method of sampling (description of sampling technique: stage of sampling, type of sample, sampler), Frequency of sampling, Procedure of selection of isolates for susceptibility testing, Method used for collecting data.
 (b): Analytical method used for detection and confirmation: according to the legislation, the protocols developed by the EURL-AR should be used and reported here. In the case of the voluntary specific monitoring on Carbapenemase-producers, the selective media used (commercial plates, 'in house' media) should be also reported here. In general, any variation with regard to the EURL-AR protocols should be stated here, number of isolates isolated per sample, in particular for *Campylobacter* spp..
 (c): Antimicrobials included, Cut-off values

General Description of Antimicrobial Resistance Monitoring*; *Campylobacter* in caecal samples of broilers

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

Prospective sampling was carried out based on a national sampling assigning the samples to be collected proportionally to the Laender.

2. Stratification procedure per animal population and food category

Samples are assigned to the Laender according to their respective animal population (for samples collected at farm), slaughter capacity (based on the actual slaughter figures of the year prior to the program design), i.e. figures from 2016 form the basis of the sampling in 2018.

3. Randomisation procedure per animal population and food category

Only one isolate per sample per species was included in the testing.

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

Samples are analysed according to ISO 10272-1:2006. *Campylobacter* species identity was confirmed at the NRL for *Campylobacter*.

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

Samples are analysed as prescribed by Commission Implementing Decision 2013/652/EU

6. Results of investigation

Overall, 175 isolates of *Campylobacter jejuni* from broilers were tested. Of those, 17.7 % were susceptible to all antimicrobials tested (2016: 27.7 %). As in 2016, highest resistance in 2018 was observed to ciprofloxacin and nalidixic acid (80.6 and 77.7 %) followed by tetracycline (64.0 %). Resistance to other antimicrobials was sporadic.

Of the 53 isolates of *C. coli*, 94.3 % were resistant to ciprofloxacin and nalidixic acid. Resistance to tetracyclin was also found in most isolates. Resistance to erythromycin and streptomycin was 9.7 and 13.0 %. No resistance was observed to gentamicin. Only one isolate (1.9 %) was fully susceptible (2016: 2.6 %).

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

- (a): Method of sampling (description of sampling technique: stage of sampling, type of sample, sampler), Frequency of sampling, Procedure of selection of isolates for susceptibility testing, Method used for collecting data.
 (b): Analytical method used for detection and confirmation: according to the legislation, the protocols developed by the EURL-AR should be used and reported here. In the case of the voluntary specific monitoring on Carbapenemase-producers, the selective media used (commercial plates, 'in house' media) should be also reported here. In general, any variation with regard to the EURL-AR protocols should be stated here, number of isolates isolated per sample, in particular for *Campylobacter* spp..
 (c): Antimicrobials included, Cut-off values

General Description of Antimicrobial Resistance Monitoring*; *Campylobacter* in broiler meat at retail

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

Prospective sampling was carried out based on a national sampling assigning the samples to be collected proportionally to the Laender.

2. Stratification procedure per animal population and food category

Samples are assigned to the Laender according to their respective human population

3. Randomisation procedure per animal population and food category

Only one isolate per sample per species was included in the testing.

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

Samples are analysed according to ISO 10272-1:2006. *Campylobacter* species identity was confirmed at the NRL for *Campylobacter*.

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

Samples are analysed as prescribed by Commission Implementing Decision 2013/652/EU

6. Results of investigation

Overall, 172 isolates of *Campylobacter jejuni* from broiler meat were tested. Of those, 22.1 % were susceptible to all antimicrobials tested (2016: 26.7%). As in 2016, highest resistance in 2018 was observed to ciprofloxacin and nalidixic acid (74.4 and 72.1%, respectively) followed by tetracycline (59.3 %). Resistance to streptomycin was rare (1.2 %) and resistance to erythromycin and gentamicin were absent.

All 34 isolates of *C. coli* were resistant to at least one of the antimicrobials (2016:93 %). Resistance was highest to tetracycline (85 % followed by ciprofloxacin and nalidixic acid (79 % each) Resistance to erythromycin and streptomycin was 9 and 15 %, respectively. No resistance was observed to gentamicin.

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

- (a): Method of sampling (description of sampling technique: stage of sampling, type of sample, sampler), Frequency of sampling, Procedure of selection of isolates for susceptibility testing, Method used for collecting data.
 (b): Analytical method used for detection and confirmation: according to the legislation, the protocols developed by the EURL-AR should be used and reported here. In the case of the voluntary specific monitoring on Carbapenemase-producers, the selective media used (commercial plates, 'in house' media) should be also reported here. In general, any variation with regard to the EURL-AR protocols should be stated here, number of isolates isolated per sample, in particular for *Campylobacter* spp..
 (c): Antimicrobials included, Cut-off values

General Description of Antimicrobial Resistance Monitoring*; *Campylobacter* in broiler carcasses at slaughter

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

Prospective sampling was carried out based on a national sampling assigning the samples to be collected proportionally to the Laender.

2. Stratification procedure per animal population and food category

Samples are assigned to the Laender according to their respective human population

3. Randomisation procedure per animal population and food category

Only one isolate per sample per species was included in the testing.

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

Samples are analysed according to ISO 10272-1:2006. *Campylobacter* species identity was confirmed at the NRL for *Campylobacter*.

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

Samples are analysed as prescribed by Commission Implementing Decision 2013/652/EU

6. Results of investigation

Overall, 85 isolates of *Campylobacter jejuni* from broilers were tested. Of those, 14.1 % were susceptible to all antimicrobials tested (2016: 22.5 %). As in 2016, highest resistance in 2018 was observed to ciprofloxacin and nalidixic acid (83.5 and 77.6 %, respectively) followed by tetracycline (55.3 %). Resistance to streptomycin was rare (3.5 %). Resistance to erythromycin and gentamicin was absent.

Only one of the 16 isolates of *C. coli* was susceptible to all antimicrobials (2016: 6.7 %). Resistance was highest to ciprofloxacin and nalidixic acid (81 % each) and tetracycline (75 %). Resistance to erythromycin and streptomycin was found in one isolate (6 %) each. No resistance was observed to gentamicin.

7. Additional information

In 2018 one Land with a substantial slaughter capacity did not provide isolates from carcasses.

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

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

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

(c): Antimicrobials included, Cut-off values

General Description of Antimicrobial Resistance Monitoring*; *Campylobacter* in

caecal samples of turkeys

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

Prospective sampling was carried out based on a national sampling assigning the samples to be collected proportionally to the Laender.

2. Stratification procedure per animal population and food category

Samples are assigned to the Laender according to their respective animal population (for samples collected at farm), slaughter capacity (based on the actual slaughter figures of the year prior to the program design), i.e. figures from 2016 form the basis of the sampling in 2018.

3. Randomisation procedure per animal population and food category

Only one isolate per sample per species was included in the testing.

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

Samples are analysed according to ISO 10272-1:2006. *Campylobacter* species identity was confirmed at the NRL for *Campylobacter*.

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

Samples are analysed as prescribed by Commission Implementing Decision 2013/652/EU

6. Results of investigation

Overall, 120 isolates of *Campylobacter jejuni* from turkey caeca were tested. Of those, 25.8 % were susceptible to all antimicrobials tested (2016: 18.4 %). As in 2016, highest resistance in 2018 was observed to ciprofloxacin and nalidixic acid (67.5 and 62.5 %) followed by tetracycline (50.0 %). Resistance to streptomycin was rare (2.5 %). Resistance to erythromycin and gentamicin was absent.

Of the 184 isolates of *C. coli*, 87.5 % were resistant to ciprofloxacin and nalidixic acid. Resistance to tetracycline was also found in most isolates (92.4 %). Resistance to erythromycin was high 24.5 % compared to 2016, while resistance to streptomycin was 11.4 %. Only one isolate was resistant to gentamicin. Five isolates (2.7 %) were fully susceptible (2016: 2.4 %).

7. Additional information

In 2018, *C. coli* was far more frequent in turkey caeca than *C. jejuni* resulting in a lack of sufficient *C. jejuni* isolates for testing (i.e. less than 170).

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

- (a): Method of sampling (description of sampling technique: stage of sampling, type of sample, sampler), Frequency of sampling, Procedure of selection of isolates for susceptibility testing, Method used for collecting data.
 (b): Analytical method used for detection and confirmation: according to the legislation, the protocols developed by the EURL-AR should be used and reported here. In the case of the voluntary specific monitoring on Carbapenemase-producers, the selective media used (commercial plates, 'in house' media) should be also reported here. In general, any variation with regard to the EURL-AR protocols should be stated here, number of isolates isolated per sample, in particular for *Campylobacter* spp..
 (c): Antimicrobials included, Cut-off values

General Description of Antimicrobial Resistance Monitoring*; *Campylobacter* in

turkey meat at retail

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

Prospective sampling was carried out based on a national sampling assigning the samples to be collected proportionally to the Laender.

2. Stratification procedure per animal population and food category

Samples are assigned to the Laender according to their respective animal population (for samples collected at farm), slaughter capacity (based on the actual slaughter figures of the year prior to the program design), i.e. figures from 2016 form the basis of the sampling in 2018.

3. Randomisation procedure per animal population and food category

Only one isolate per sample per species was included in the testing.

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

Samples are analysed according to ISO 10272-1:2006. *Campylobacter* species identity was confirmed at the NRL for *Campylobacter*.

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

Samples are analysed as prescribed by Commission Implementing Decision 2013/652/EU

6. Results of investigation

Overall, 70 isolates of *Campylobacter jejuni* from turkey meat were tested. Of those, 20.0 % were susceptible to all antimicrobials tested (2016: 23.9). As in 2016, highest resistance in 2018 was observed to ciprofloxacin and nalidixic acid (77.1 and 68.6 %) followed by tetracycline (54.3 %). Resistance to streptomycin was rare (2.9 %). Resistance to erythromycin and gentamicin was absent.

Of the 22 isolates of *C. coli*, 82 % were resistant to ciprofloxacin, nalidixic acid and to tetracycline respectively. 3 isolates were resistant to erythromycin (14 %), four to streptomycin (18 %). No resistance was observed to gentamicin. Two isolates (4.8 %) were fully susceptible (2016: 0 %).

7. Additional information

In 2018, turkey meat samples were only derived from conventional (i.e. non organic production) as organic meat was tested in a separate sampling frame.

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

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

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

(c): Antimicrobials included, Cut-off values

General Description of Antimicrobial Resistance Monitoring*; Commensal *E. coli* in meat from broilers at retail

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

Prospective sampling was carried out based on a national sampling assigning the samples to be collected proportionally to the Laender.

2. Stratification procedure per animal population and food category

Samples are assigned to the Laender according to their respective animal population (for samples collected at farm), slaughter capacity (based on the actual slaughter figures of the year prior to the program design), i.e. figures from 2015 form the basis of the sampling in 2017.

3. Randomisation procedure per animal population and food category

Only one isolate per epidemiological unit was tested.

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

No specifications were made for the method of detection of *E. coli* as prevalence could be assumed to be 100 %. Isolates were confirmed by the NRL-AR using MALDI-TOF.

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

Samples are analysed as prescribed by Commission Implementing Decision 2013/652/EU.

6. Results of investigation

Overall, 181 isolates of commensal *E. coli* from meat from broilers at retail were tested. Of those 24.3 % were susceptible to all antimicrobials tested which is slightly more than in 2016 (19.8 %). Highest resistance rates were observed to ampicillin, ciprofloxacin, nalidixic acid and sulfamethoxazole. For most substances, resistance rates were numerically slightly lower than in 2016.

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

- (a): Method of sampling (description of sampling technique: stage of sampling, type of sample, sampler), Frequency of sampling, Procedure of selection of isolates for susceptibility testing, Method used for collecting data.
 (b): Analytical method used for detection and confirmation: according to the legislation, the protocols developed by the EURL-AR should be used and reported here. In the case of the voluntary specific monitoring on Carbapenemase-producers, the selective media used (commercial plates, 'in house' media) should be also reported here. In general, any variation with regard to the EURL-AR protocols should be stated here, number of isolates isolated per sample, in particular for *Campylobacter* spp..
 (c): Antimicrobials included, Cut-off values

General Description of Antimicrobial Resistance Monitoring*; Commensal *E. coli* in caecal samples of turkeys

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

Prospective sampling was carried out based on a national sampling assigning the samples to be collected proportionally to the Laender.

2. Stratification procedure per animal population and food category

Samples are assigned to the Laender according to their respective animal population (for samples collected at farm), slaughter capacity (based on the actual slaughter figures of the year prior to the program design), i.e. figures from 2016 form the basis of the sampling in 2018.

3. Randomisation procedure per animal population and food category

Only one isolate per epidemiological unit was tested.

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

No specifications were made for the method of detection of *E. coli* as prevalence of *E. coli* could be assumed to be 100 %. Isolates were confirmed by the NRL-AR using MALDI-TOF.

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

Samples are analysed as prescribed by Commission Implementing Decision 2013/652/EU.

6. Results of investigation

Overall, 199 Isolates of commensal *E. coli* from caeca of turkeys at slaughter were tested. About one quarter (26.1 %) of them were susceptible to all antimicrobials tested which was similar to 2016 (24.5 %). Highest resistance rates were observed to ampicillin, tetracycline and sulfamethoxazole. While resistance to ampicillin decreased slightly, resistance to tetracycline and sulfamethoxazole increased compared to 2016. No major differences were observed for the other antimicrobials.

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

- (a): Method of sampling (description of sampling technique: stage of sampling, type of sample, sampler), Frequency of sampling, Procedure of selection of isolates for susceptibility testing, Method used for collecting data.
 (b): Analytical method used for detection and confirmation: according to the legislation, the protocols developed by the EURL-AR should be used and reported here. In the case of the voluntary specific monitoring on Carbapenemase-producers, the selective media used (commercial plates, 'in house' media) should be also reported here. In general, any variation with regard to the EURL-AR protocols should be stated here, number of isolates isolated per sample, in particular for *Campylobacter* spp..
 (c): Antimicrobials included, Cut-off values

General Description of Antimicrobial Resistance Monitoring*; Commensal *E. coli* in meat from turkeys

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

Prospective sampling was carried out based on a national sampling assigning the samples to be collected proportionally to the Laender.

2. Stratification procedure per animal population and food category

Samples are assigned to the Laender according to their respective animal population (for samples collected at farm), slaughter capacity (based on the actual slaughter figures of the year prior to the program design), i.e. figures from 2016 form the basis of the sampling in 2018.

3. Randomisation procedure per animal population and food category

Only one isolate per epidemiological unit was tested.

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

No specifications were made for the method of detection of *E. coli* as prevalence of *E. coli* could be assumed to be 100 %. Isolates were confirmed by the NRL-AR using MALDI-TOF.

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

Samples are analysed as prescribed by Commission Implementing Decision 2013/652/EU.

6. Results of investigation

Overall, 196 Isolates of commensal *E. coli* from turkey meat at retail were tested. About 20 % of them were susceptible to all antimicrobials tested which was similar to 2016 (24.5 %). Highest resistance rates were observed to ampicillin, tetracycline and sulfamethoxazole. Resistance was similar to isolates from caeca at slaughter and did not differ substantially from data gathered in 2016.

7. Additional information

In 2018 separate sampling frames were used for collecting isolates from organically and conventionally produced turkey meat. Reported results only refer to the conventional turkey meat.

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

- (a): Method of sampling (description of sampling technique: stage of sampling, type of sample, sampler), Frequency of sampling, Procedure of selection of isolates for susceptibility testing, Method used for collecting data.
 (b): Analytical method used for detection and confirmation: according to the legislation, the protocols developed by the EURL-AR should be used and reported here. In the case of the voluntary specific monitoring on Carbapenemase-producers, the selective media used (commercial plates, 'in house' media) should be also reported here. In general, any variation with regard to the EURL-AR protocols should be stated here, number of isolates isolated per sample, in particular for *Campylobacter* spp..
 (c): Antimicrobials included, Cut-off values

General Description of Antimicrobial Resistance Monitoring*; *Salmonella* in pigs

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

In 2018, according to CID 2013/652/EU no data on AMR in pigs were reported.

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

- (a): Method of sampling (description of sampling technique: stage of sampling, type of sample, sampler), Frequency of sampling, Procedure of selection of isolates for susceptibility testing, Method used for collecting data.
- (b): Analytical method used for detection and confirmation: according to the legislation, the protocols developed by the EURL-AR should be used and reported here. In the case of the voluntary specific monitoring on Carbapenemase-producers, the selective media used (commercial plates, 'in house' media) should be also reported here. In general, any variation with regard to the EURL-AR protocols should be stated here, number of isolates isolated per sample, in particular for *Campylobacter* spp..
- (c): Antimicrobials included, Cut-off values

General Description of Antimicrobial Resistance Monitoring*; ESBL/AmpC forming *E. coli* in caecal samples of pigs

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

In 2018, according to CID 2013/652/EU no data on AMR in pigs were reported.

General Description of Antimicrobial Resistance Monitoring*; ESBL/AmpC forming *E. coli* in turkeys at slaughter

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

Prospective sampling was carried out based on a national sampling assigning the samples to be collected proportionally to the Laender.

2. Stratification procedure per animal population and food category

Samples are assigned to the Laender according to their respective animal population (for samples collected at farm), slaughter capacity (based on the actual slaughter figures of the year prior to the program design), i.e. figures from 2016 form the basis of the sampling in 2018.

3. Randomisation procedure per animal population and food category

Only one isolate per epidemiological unit was tested.

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

ESBL/AmpC forming *E. coli* were isolated as prescribed by the EURL-AR.

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

Samples are analysed as prescribed by Commission Implementing Decision 2013/652/EU.

6. Results of investigation

ESBL/AmpC suspicious *E. coli* were identified in 48.6 % of the caecal samples from turkeys at slaughter (2016: 36.5 %).

General Description of Antimicrobial Resistance Monitoring*; **ESBL/AmpC forming *E. coli* in broilers at slaughter**

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

Prospective sampling was carried out based on a national sampling assigning the samples to be collected proportionally to the Laender.

2. Stratification procedure per animal population and food category

Samples are assigned to the Laender according to their respective animal population (for samples collected at farm), slaughter capacity (based on the actual slaughter figures of the year prior to the program design), i.e. figures from 2016 form the basis of the sampling in 2018.

3. Randomisation procedure per animal population and food category

Only one isolate per epidemiological unit was tested.

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

ESBL/AmpC forming *E. coli* were isolated as prescribed by the EURL-AR.

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

Samples are analysed as prescribed by Commission Implementing Decision 2013/652/EU.

6. Results of investigation

ESBL/AmpC suspicious *E. coli* were identified in 46.8 % of the caecal samples from broilers at slaughter.

7. Additional information

Prevalence was lower than in 2016 (52.6 %) and in samples collected at farm in 2013 (64.9 %).

General Description of Antimicrobial Resistance Monitoring*; ESBL/AmpC forming *E. coli* in meat from broilers

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

Prospective sampling was carried out based on a national sampling assigning the samples to be collected proportionally to the Laender.

2. Stratification procedure per animal population and food category

Samples are assigned to the Laender according to their respective human population.

3. Randomisation procedure per animal population and food category

Only one isolate per epidemiological unit was tested.

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

ESBL/AmpC forming *E. coli* were isolated as prescribed by the EURL-AR.

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

Samples are analysed as prescribed by Commission Implementing Decision 2013/652/EU.

6. Results of investigation

ESBL/AmpC *E. coli* were identified in 35.4 % of the broiler meat samples at retail.

7. Additional information

Prevalence was substantially lower than in 2016 (49.8 %) and 2013 (66.0 %)

General Description of Antimicrobial Resistance Monitoring*; ESBL/AmpC forming *E. coli* in meat from turkeys

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

Prospective sampling was carried out based on a national sampling assigning the samples to be collected proportionally to the Laender.

2. Stratification procedure per animal population and food category

Samples are assigned to the Laender according to their respective human population.

3. Randomisation procedure per animal population and food category

Only one isolate per epidemiological unit was tested.

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

ESBL/AmpC forming *E. coli* were isolated as prescribed by the EURL-AR.

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

Samples are analysed as prescribed by Commission Implementing Decision 2013/652/EU.

6. Results of investigation

ESBL/AmpC *E. coli* were identified in 37.6 % of the turkey meat samples at retail (2016: 38.8 %).

General Description of Antimicrobial Resistance Monitoring*; *Enterococcus (E.) faecalis* and *E. faecium* in caecal samples of broilers

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

Prospective sampling was carried out based on a national sampling assigning the samples to be collected proportionally to the Laender.

2. Stratification procedure per animal population and food category

Samples are assigned to the Laender according to their respective animal population (for samples collected at farm), slaughter capacity (based on the actual slaughter figures of the year prior to the program design), i.e. figures from 2015 form the basis of the sampling in 2017.

3. Randomisation procedure per animal population and food category

Only one isolate per epidemiological unit was tested.

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

Enterococci were isolated by regional labs according to their established procedures.

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

Samples are analysed as prescribed by Commission Implementing Decision 2013/652/EU.

6. Results of investigation

145 isolates of *E. faecalis* and 155 isolates of *E. faecium* were tested for AMR. Resistance was highest to erythromycin both species: in *E. faecium* (66.5 %) and in *E. faecalis* (71.7 %). Few isolates were susceptible to all antimicrobials (20.6 and 10.3 % for the two species). Resistance to vancomycin was not observed in isolates of both species in broilers.

General Description of Antimicrobial Resistance Monitoring*; *Enterococcus (E.) faecalis* and *E. faecium* in caecal samples of turkeys

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

Prospective sampling was carried out based on a national sampling assigning the samples to be collected proportionally to the Laender.

2. Stratification procedure per animal population and food category

Samples are assigned to the Laender according to their respective animal population (for samples collected at farm), slaughter capacity (based on the actual slaughter figures of the year prior to the program design), i.e. figures from 2016 form the basis of the sampling in 2018.

3. Randomisation procedure per animal population and food category

Only one isolate per epidemiological unit was tested.

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

Enterococci were isolated by regional labs according to their established procedures.

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

Samples are analysed as prescribed by Commission Implementing Decision 2013/652/EU.

6. Results of investigation

134 isolates of *E. faecium* and 191 isolates of *E. faecalis* were tested for AMR. 17.2 and 12.6 % of isolates were susceptible to all tested antimicrobials. Resistance was highest to tetracycline in *E. faecalis* (80.6 %) and *E. faecium* (59.0 %). Resistance to erythromycin was also high, in *E. faecium* (57.5 %) and *E. faecalis* (49.7 %). Resistance to vancomycin was not observed in isolates of *E. faecium* and of *E. faecalis* from turkeys.