

ITALY

The Report referred to in Article 9 of Directive 2003/99/EC

TRENDS AND SOURCES OF ZOONOSSES AND ZOOTIC AGENTS IN HUMANS, FOODSTUFFS, ANIMALS AND FEEDSTUFFS

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

IN 2009

INFORMATION ON THE REPORTING AND MONITORING SYSTEM

Country: Italy

Reporting Year:

Laboratory name	Description	Contribution
Ministry of Health, Viale Giorgio Ribotta n.5 00144 - Roma phone. 0039-06.5994.1	Department of veterinary public health, feeding and food safety	collection of FBO and rabies data
Regional veterinary services	Public veterinary services of the regions	each regional veterinary service collects zoonoses data from its own territory
Istituto Zooprofilattico Sperimentale dell'Abruzzo e del Molise "G.Caporale", Campo Boario - 64100 Teramo	National Reference Centre for Epidemiology, programming, Information and risk analysis - COVEPI	zoonoses data collection, analysis and submission
Istituto Zooprofilattico Sperimentale delle Regioni Lazio e Toscana, Via Appia Nuova 1411, 00178 Rome, Italy National Reference Laboratory for Antimicrobial Resistance	National Reference Laboratory for Antimicrobial Resistance in bacteria of animal origin (animal pathogens, zoonotic pathogens, indicator bacteria in animals, food of animal origin, feedstuffs)	Production and interpretation of data on bacterial isolates collected in control programs, European harmonised monitoring schemes, national monitoring programs, passive laboratory surveillance
Istituto zooprofilattico delle Venezie, Viale dell'Università n.10 - 35020 Legnaro (PD)	National Reference Centre for salmonellosis	Collection of national data on typing of Salmonella spp.

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 Italy during the year 2009 .

The information covers the occurrence of these diseases and agents in humans, animals, foodstuffs and in some cases also in feedingstuffs. In addition the report includes data on antimicrobial resistance in some zoonotic agents and commensal 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 Community 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 Community 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 Community Summary Report on zoonoses that is published each year by EFSA.

* 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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1. ANIMAL POPULATIONS

The relevance of the findings on zoonoses and zoonotic agents has to be related to the size and nature of the animal population in the country.

Table Susceptible animal populations

* Only if different than current reporting year

Animal species	Category of animals	Number of herds or flocks		Number of slaughtered animals		Livestock numbers (live animals)		Number of holdings	
		Data	Year*	Data	Year*	Data	Year*	Data	Year*
Cattle (bovine animals)	meat production animals	100744		1876775		2447376		97732	
	mixed herds	22679		155008		595754		21980	
	dairy cows and heifers	38547		459193		2766916		37752	
	calves (under 1 year)	181		89559		73106		178	
	- in total	162151		2580535		5883152		157642	
Ducks	mixed flocks/holdings	1						1	
	meat production flocks	424						423	
	breeding flocks, unspecified - in total	52						51	
	- in total	477						475	
Gallus gallus (fowl)	breeding flocks, unspecified - in total	982						970	
	breeding flocks for egg production line - in total	281						277	
	broilers	4955						4763	
	laying hens	3169						3039	

Table Susceptible animal populations

Animal species	Category of animals	Number of herds or flocks		Number of slaughtered animals		Livestock numbers (live animals)		Number of holdings	
		Data	Year*	Data	Year*	Data	Year*	Data	Year*
Gallus gallus (fowl)	breeding flocks for meat production line - in total	701						693	
	- in total	9106						8772	
Geese	breeding flocks, unspecified - in total	27						27	
	mixed flocks/holdings	1						1	
	meat production flocks	341						337	
	- in total	369						365	
Goats	mixed herds	29257				440875		27460	
	meat production animals	23599				268950		23040	
	milk goats	5301				249754		5043	
	- in total	58157				959579		55543	
Pigs	breeding animals	15398				4088749		15032	
	fattening pigs	18270				4683417			
	mixed herds	88510				122122		84796	
	- in total	122178				8894288		117628	

Table Susceptible animal populations

Animal species	Category of animals	Number of herds or flocks		Number of slaughtered animals		Livestock numbers (live animals)		Number of holdings	
		Data	Year*	Data	Year*	Data	Year*	Data	Year*
Sheep	mixed herds	53088				2840216		50619	
	milk ewes	16180				3592919		14208	
	meat production animals	34031				936952		33273	
	- in total	103299				7370087		98100	
Solipeds, domestic	horses - in total	88369						83926	
Turkeys	breeding flocks, unspecified - in total	65						64	
	meat production flocks	1069						1022	
	mixed flocks/holdings	1						1	
	- in total	1135						1087	
Water buffalos	farmed - in total	2909		39336		362068		2711	

2. INFORMATION ON SPECIFIC ZOO NOSES AND ZOONOTIC AGENTS

Zoonoses are diseases or infections, which are naturally transmissible directly or indirectly between animals and humans. Foodstuffs serve often as vehicles of zoonotic infections. Zoonotic agents cover viruses, bacteria, fungi, parasites or other biological entities that are likely to cause zoonoses.

2.1 SALMONELLOSIS

2.1.1 General evaluation of the national situation

A. General evaluation

National evaluation of the recent situation, the trends and sources of infection

In conclusion, monitoring of antimicrobial resistance in primary productions in Italy in 2009 shows the presence of multi-resistant *Salmonella* isolates provided through the national control plans in broilers and laying hens, along with significant resistance rates for some classes of Critically Important Antimicrobials (e. g. fluoroquinolone and third generation cephalosporins resistance in *Salmonella* from broilers). Monitoring of zoonotic *Campylobacter* (*C. jejuni* and *C. coli*) was performed in 2009 only in cattle at slaughter: fluoroquinolone and macrolide resistance is a feature present also in *C. jejuni* and *C. coli* of bovine origin.

As far as passive surveillance is concerned, resistance rates may be influenced by sampling bias and small sample sizes, although it is well known that for some production chains are the only kind of information available, especially for food of animal origin.

As a general principle, the resistance rates for different antimicrobial classes, as well as the multi-resistance patterns observed, are probably caused by a selection pressure exerted by the use of antibiotic drugs within the holdings and other possible risk factors that are still to be evaluated (e. g. attitudes and practices in intensive animal farming). Pig and poultry primary productions are likely to be more exposed to higher amounts of certain antimicrobial drugs than cattle, and this feature may influence the differences in resistance rates observed in zoonotic pathogens of poultry, swine, and bovine origin. In this respect, surveillance of antimicrobial resistance in primary productions in Italy would be improved if prevalence of resistance and trends could be analysed together with independent, and representative data on the use of antimicrobials in different farm animals productions. The availability of such data in the future would allow the production of more complete information, useful for risk management purposes and possible public health action.

2.1.2 Salmonella in foodstuffs

Table Salmonella in poultry meat and products thereof

	Source of information	Sampling unit	Sample weight	Units tested	Total units positive for Salmonella	S. Enteritidis	S. Typhimurium	Salmonella spp., unspecified	S. Brandenburg	S. Bredeney	S. Derby
Meat from broilers (Gallus gallus) - Surveillance - HACCP and own checks		Batch		2366	0						
Meat from broilers (Gallus gallus) - Surveillance - official controls ¹⁾		Single		319	45	1					10
Meat from broilers (Gallus gallus) - Survey - national survey		Single		50	16			16			
Meat from broilers (Gallus gallus) - meat preparation - Surveillance - HACCP and own checks		Single		1263	0						
Meat from broilers (Gallus gallus) - meat preparation - Surveillance - official controls		Single		79	6					1	
Meat from broilers (Gallus gallus) - meat products - Surveillance - HACCP and own checks		Single		270	0						
Meat from broilers (Gallus gallus) - meat products - Surveillance - official controls ²⁾		Single		33	3		1				
Meat from broilers (Gallus gallus) - mechanically separated meat (MSM) - Surveillance - HACCP and own checks		Batch		30	0						
Meat from poultry, unspecified - fresh - Control and eradication programmes - official sampling - objective sampling		Batch		32	0						
Meat from poultry, unspecified - fresh - Surveillance - official controls		Single		71	0						

Table Salmonella in poultry meat and products thereof

	Source of information	Sampling unit	Sample weight	Units tested	Total units positive for Salmonella	S. Enteritidis	S. Typhimurium	Salmonella spp., unspecified	S. Brandenburg	S. Bredeney	S. Derby
Meat from poultry, unspecified - offal - Control and eradication programmes - official sampling - objective sampling		Batch		28	0						
Meat from poultry, unspecified - offal - Surveillance - official controls - objective sampling		Batch		28	0						
Meat from turkey - fresh - Surveillance - HACCP and own checks		Single		148	0						
Meat from turkey - fresh - Surveillance - official controls ³⁾		Single		86	26				1		3
Meat from turkey - meat preparation - Surveillance - HACCP and own checks		Single		402	0						
Meat from turkey - meat preparation - Surveillance - official controls		Single		68	3						
Meat from turkey - meat products - Surveillance - HACCP and own checks		Single		55	0						
Meat from turkey - minced meat - Surveillance - official controls		Single		51	1						1
	S. Hadar	S. Infantis	S. Kedougou	S. Muenchen	S. Newport	S. Orion	S. Rissen	S. Saintpaul	S. Senftenberg	S. Thompson	S. Virchow
Meat from broilers (Gallus gallus) - Surveillance - HACCP and own checks											
Meat from broilers (Gallus gallus) - Surveillance - official controls ¹⁾	11	18		6	2	3		4		3	1

Table Salmonella in poultry meat and products thereof

	S. Hadar	S. Infantis	S. Kedougou	S. Muenchen	S. Newport	S. Orion	S. Rissen	S. Saintpaul	S. Senftenberg	S. Thompson	S. Virchow
Meat from broilers (Gallus gallus) - Survey - national survey											
Meat from broilers (Gallus gallus) - meat preparation - Surveillance - HACCP and own checks											
Meat from broilers (Gallus gallus) - meat preparation - Surveillance - official controls	5										
Meat from broilers (Gallus gallus) - meat products - Surveillance - HACCP and own checks											
Meat from broilers (Gallus gallus) - meat products - Surveillance - official controls ²⁾	2							2			
Meat from broilers (Gallus gallus) - mechanically separated meat (MSM) - Surveillance - HACCP and own checks											
Meat from poultry, unspecified - fresh - Control and eradication programmes - official sampling - objective sampling											
Meat from poultry, unspecified - fresh - Surveillance - official controls											
Meat from poultry, unspecified - offal - Control and eradication programmes - official sampling - objective sampling											
Meat from poultry, unspecified - offal - Surveillance - official controls - objective sampling											
Meat from turkey - fresh - Surveillance - HACCP and own checks											

Table Salmonella in poultry meat and products thereof

	S. Hadar	S. Infantis	S. Kedougou	S. Muenchen	S. Newport	S. Orion	S. Rissen	S. Saintpaul	S. Senftenberg	S. Thompson	S. Virchow
Meat from turkey - fresh - Surveillance - official controls ³⁾	3		1		17			10	1		
Meat from turkey - meat preparation - Surveillance - HACCP and own checks											
Meat from turkey - meat preparation - Surveillance - official controls					1		1	1			
Meat from turkey - meat products - Surveillance - HACCP and own checks											
Meat from turkey - minced meat - Surveillance - official controls											

Comments:

- ¹⁾ the same sample was positive for more than one serotype of salmonella
²⁾ the same sample was positive for more than one serotype of salmonella
³⁾ the same sample was positive for more than one serotype of salmonella

Table Salmonella in red meat and products thereof

	Source of information	Sampling unit	Sample weight	Units tested	Total units positive for Salmonella	S. Enteritidis	S. Typhimurium	Salmonella spp., unspecified	S. 1,4,12:d:-	S. Anatum	S. Derby
Meat from bovine animals - fresh - Surveillance - HACCP and own checks		Single		545	1			1			
Meat from bovine animals - fresh - Surveillance - official controls		Single		456	1						
Meat from bovine animals - fresh - Surveillance - official controls - objective sampling		Batch		64	1			1			
Meat from bovine animals - meat preparation - Surveillance - HACCP and own checks		Single		209	1			1			
Meat from bovine animals - meat preparation - Surveillance - official controls		Single		26	0						
Meat from bovine animals - meat products - Surveillance - HACCP and own checks		Single		62	0						
Meat from bovine animals - meat products - Surveillance - official controls		Single		32	0						
Meat from bovine animals - minced meat - Surveillance - HACCP and own checks		Batch		335	0						
Meat from bovine animals - minced meat - Surveillance - official controls		Single		279	0						
Meat from bovine animals - offal - Surveillance - official controls		Single		41	0						
Meat from horse - fresh - Surveillance - official controls		Single		45	0						
Meat from other animal species or not specified - fresh - Surveillance - official controls		Single		655	18			18			
Meat from pig - fresh - Surveillance - HACCP and own checks		Single		1033	4			4			

Table Salmonella in red meat and products thereof

	Source of information	Sampling unit	Sample weight	Units tested	Total units positive for Salmonella	S. Enteritidis	S. Typhimurium	Salmonella spp., unspecified	S. 1,4,12:d:-	S. Anatum	S. Derby
Meat from pig - fresh - Surveillance - official controls		Single		1056	26		2	17	2		3
Meat from pig - fresh - Survey - national survey		Single		29	0						
Meat from pig - meat preparation - Surveillance - HACCP and own checks		Single		790	1			1			
Meat from pig - meat preparation - Surveillance - official controls		Single		46	2		1				1
Meat from pig - meat products - Surveillance - HACCP and own checks		Single		4005	15			15			
Meat from pig - meat products - Surveillance - official controls		Single		2227	46		3	15		2	13
Meat from pig - meat products - Surveillance - official controls - objective sampling		Batch		80	3		1	2			
Meat from pig - meat products - Survey - national survey		Single		102	2			1			
Meat from pig - minced meat - Surveillance - HACCP and own checks		Single		411	3			3			
Meat from pig - minced meat - Surveillance - official controls		Single		74	3			1			
Meat from pig - offal - Surveillance - official controls - objective sampling		Batch		113	0						
Meat from sheep - fresh - Surveillance - HACCP and own checks		Single		46	0						
Meat from wild boar - fresh - Surveillance - HACCP and own checks		Batch		36	0						

Table Salmonella in red meat and products thereof

	Source of information	Sampling unit	Sample weight	Units tested	Total units positive for Salmonella	S. Enteritidis	S. Typhimurium	Salmonella spp., unspecified	S. 1,4,12:d:-	S. Anatum	S. Derby
Meat from wild game - land mammals - meat products - Surveillance - HACCP and own checks		Batch		78	0						
	S. Goldcoast	S. Infantis	S. Kedougou	S. Kimuenza	S. Livingstone	S. London	S. Manhattan	S. Rissen	S. enterica subsp. enterica		
Meat from bovine animals - fresh - Surveillance - HACCP and own checks											
Meat from bovine animals - fresh - Surveillance - official controls								1			
Meat from bovine animals - fresh - Surveillance - official controls - objective sampling											
Meat from bovine animals - meat preparation - Surveillance - HACCP and own checks											
Meat from bovine animals - meat preparation - Surveillance - official controls											
Meat from bovine animals - meat products - Surveillance - HACCP and own checks											
Meat from bovine animals - meat products - Surveillance - official controls											
Meat from bovine animals - minced meat - Surveillance - HACCP and own checks											
Meat from bovine animals - minced meat - Surveillance - official controls											

Table Salmonella in red meat and products thereof

	S. Goldcoast	S. Infantis	S. Kedougou	S. Kimuenza	S. Livingstone	S. London	S. Manhattan	S. Rissen	S. enterica subsp. enterica
Meat from bovine animals - offal - Surveillance - official controls									
Meat from horse - fresh - Surveillance - official controls									
Meat from other animal species or not specified - fresh - Surveillance - official controls									
Meat from pig - fresh - Surveillance - HACCP and own checks									
Meat from pig - fresh - Surveillance - official controls								2	
Meat from pig - fresh - Survey - national survey									
Meat from pig - meat preparation - Surveillance - HACCP and own checks									
Meat from pig - meat preparation - Surveillance - official controls									
Meat from pig - meat products - Surveillance - HACCP and own checks									
Meat from pig - meat products - Surveillance - official controls	1	2				1	3	5	1
Meat from pig - meat products - Surveillance - official controls - objective sampling									
Meat from pig - meat products - Survey - national survey				1					
Meat from pig - minced meat - Surveillance - HACCP and own checks									

Table Salmonella in red meat and products thereof

	S. Goldcoast	S. Infantis	S. Kedougou	S. Kimuenza	S. Livingstone	S. London	S. Manhattan	S. Rissen	S. enterica subsp. enterica
Meat from pig - minced meat - Surveillance - official controls			1		1				
Meat from pig - offal - Surveillance - official controls - objective sampling									
Meat from sheep - fresh - Surveillance - HACCP and own checks									
Meat from wild boar - fresh - Surveillance - HACCP and own checks									
Meat from wild game - land mammals - meat products - Surveillance - HACCP and own checks									

Table Salmonella in other food

	Source of information	Sampling unit	Sample weight	Units tested	Total units positive for Salmonella	S. Enteritidis	S. Typhimurium	Salmonella spp., unspecified	S. 1,4,12:d:-	S. Amherstiana	S. Anatum
Crustaceans - unspecified - Surveillance - HACCP and own checks		Single		205	0						
Crustaceans - unspecified - Surveillance - official controls		Single		42	0						
Egg products - Surveillance - official controls		Batch		228	0						
Egg products - Survey - national survey		Batch		19	0						
Eggs - Surveillance - official controls		Batch		858	21	1	2	17			
Eggs - raw material (liquid egg) for egg products - Surveillance - official controls		Single		72	0						
Fish - unspecified - Surveillance - HACCP and own checks		Batch		180	0						
Fishery products, unspecified - Control and eradication programmes - official sampling		Single		73	6			5			
Fishery products, unspecified - Control and eradication programmes - official sampling - objective sampling		Single		37	0						
Fishery products, unspecified - Surveillance - HACCP and own checks		Batch		581	0						
Fishery products, unspecified - Surveillance - official controls		Single		1429	9		2	2			
Fishery products, unspecified - Survey - national survey		Single		127	0						
Meat from other animal species or not specified - Surveillance - official controls		Single		728	17	1	1	1			2

Table Salmonella in other food

	Source of information	Sampling unit	Sample weight	Units tested	Total units positive for Salmonella	S. Enteritidis	S. Typhimurium	Salmonella spp., unspecified	S. 1,4,12:d:-	S. Amherstiana	S. Anatum
Meat from other animal species or not specified - fresh - Control and eradication programmes - official sampling - objective sampling		Single		37	3			2			
Meat from other animal species or not specified - fresh - Surveillance - HACCP and own checks		Single		1376	2						
Meat from other animal species or not specified - fresh - Surveillance - official controls		Single		522	5		1	3			
Meat from other animal species or not specified - fresh - Surveillance - official controls - objective sampling		Batch		61	0						
Meat from other animal species or not specified - fresh - Survey - national survey		Batch		203	4			1			
Meat from other animal species or not specified - meat preparation - Surveillance - HACCP and own checks		Single		822	0						
Meat from other animal species or not specified - meat preparation - Surveillance - official controls ¹⁾		Single		1523	71		10	5	4	1	1
Meat from other animal species or not specified - meat preparation - Surveillance - official controls - objective sampling		Single		206	0						
Meat from other animal species or not specified - meat products - Clinical investigations		Single		58	0						
Meat from other animal species or not specified - meat products - Surveillance - HACCP and own checks		Single		1305	15		3	6			
Meat from other animal species or not specified - meat products - Surveillance - official controls ²⁾		Single		2392	88	1	13	17	3		2

Table Salmonella in other food

	Source of information	Sampling unit	Sample weight	Units tested	Total units positive for Salmonella	S. Enteritidis	S. Typhimurium	Salmonella spp., unspecified	S. 1,4,12:d:-	S. Amherstiana	S. Anatum
Meat from other animal species or not specified - meat products - Surveillance - official controls - suspect sampling		Single		31	0						
Meat from other animal species or not specified - meat products - Survey - national survey		Single		79	0						
Meat from other animal species or not specified - minced meat - Surveillance - HACCP and own checks		Single		503	1						
Meat from other animal species or not specified - minced meat - Surveillance - official controls		Single		459	9	1		3			
Meat from other animal species or not specified - minced meat - Survey - national survey		Batch		34	0						
Meat from other animal species or not specified - offal - Surveillance - HACCP and own checks		Single		97	0						
Meat from other animal species or not specified - offal - Surveillance - official controls - objective sampling		Single		1146	1			1			
Meat from other animal species or not specified - offal - Survey - national survey		Single		123	1			1			
Molluscan shellfish - Surveillance - official controls		Single		3608	35	2	7	13	3		
Other food - Surveillance - official controls		Single		318	2		2				
Other food - Surveillance - official controls - objective sampling		Single		60	0						
Other processed food products and prepared dishes - pasta - Surveillance - HACCP and own checks		Single		53	0						

Table Salmonella in other food

	Source of information	Sampling unit	Sample weight	Units tested	Total units positive for Salmonella	S. Enteritidis	S. Typhimurium	Salmonella spp., unspecified	S. 1,4,12:d:-	S. Amherstiana	S. Anatum
Other processed food products and prepared dishes - unspecified - Control and eradication programmes - official sampling - objective sampling		Single		71	0						
Other processed food products and prepared dishes - unspecified - Surveillance - HACCP and own checks		Single		2385	0						
Other processed food products and prepared dishes ³⁾ - unspecified - Surveillance - official controls		Single		1080	8	1	1	2			
Other processed food products and prepared dishes - unspecified - Survey - national survey		Single		30	2			2			
Sauce and dressings - Surveillance - official controls		Single		52	0						
Sweets - Surveillance - official controls		Single		186	0						
Vegetables - Surveillance - HACCP and own checks		Single		159	0						
Vegetables - Surveillance - official controls		Single		141	1						
Vegetables - Surveillance - official controls - suspect sampling		Single		67	0						
Vegetables - Survey - national survey		Single		49	0						
Vegetables - products - Surveillance - HACCP and own checks		Single		37	0						
Vegetables - products - Surveillance - official controls		Single		46	1						

Table Salmonella in other food

	S. Blockley	S. Braenderup	S. Brandenburg	S. Bredeney	S. Chester	S. Corvallis	S. Cotham	S. Derby	S. Farsta	S. Give	S. Goldcoast
Crustaceans - unspecified - Surveillance - HACCP and own checks											
Crustaceans - unspecified - Surveillance - official controls											
Egg products - Surveillance - official controls											
Egg products - Survey - national survey											
Eggs - Surveillance - official controls											
Eggs - raw material (liquid egg) for egg products - Surveillance - official controls											
Fish - unspecified - Surveillance - HACCP and own checks											
Fishery products, unspecified - Control and eradication programmes - official sampling											
Fishery products, unspecified - Control and eradication programmes - official sampling - objective sampling											
Fishery products, unspecified - Surveillance - HACCP and own checks											
Fishery products, unspecified - Surveillance - official controls								1			
Fishery products, unspecified - Survey - national survey											
Meat from other animal species or not specified - Surveillance - official controls		1		1			2				

Table Salmonella in other food

	S. Blockley	S. Braenderup	S. Brandenburg	S. Bredeney	S. Chester	S. Corvallis	S. Cotham	S. Derby	S. Farsta	S. Give	S. Goldcoast
Meat from other animal species or not specified - fresh - Control and eradication programmes - official sampling - objective sampling											
Meat from other animal species or not specified - fresh - Surveillance - HACCP and own checks								2			
Meat from other animal species or not specified - fresh - Surveillance - official controls											
Meat from other animal species or not specified - fresh - Surveillance - official controls - objective sampling											
Meat from other animal species or not specified - fresh - Survey - national survey								1	1		
Meat from other animal species or not specified - meat preparation - Surveillance - HACCP and own checks											
Meat from other animal species or not specified - meat preparation - Surveillance - official controls ¹⁾	1			2		1		12	1	3	
Meat from other animal species or not specified - meat preparation - Surveillance - official controls - objective sampling											
Meat from other animal species or not specified - meat products - Clinical investigations											
Meat from other animal species or not specified - meat products - Surveillance - HACCP and own checks								2			
Meat from other animal species or not specified - meat products - Surveillance - official controls ²⁾	1		2	2	1			23	1	1	2

Table Salmonella in other food

	S. Blockley	S. Braenderup	S. Brandenburg	S. Bredeney	S. Chester	S. Corvallis	S. Cotham	S. Derby	S. Farsta	S. Give	S. Goldcoast
Meat from other animal species or not specified - meat products - Surveillance - official controls - suspect sampling											
Meat from other animal species or not specified - meat products - Survey - national survey											
Meat from other animal species or not specified - minced meat - Surveillance - HACCP and own checks											
Meat from other animal species or not specified - minced meat - Surveillance - official controls											
Meat from other animal species or not specified - minced meat - Survey - national survey											
Meat from other animal species or not specified - offal - Surveillance - HACCP and own checks											
Meat from other animal species or not specified - offal - Surveillance - official controls - objective sampling											
Meat from other animal species or not specified - offal - Survey - national survey											
Molluscan shellfish - Surveillance - official controls		1						6			
Other food - Surveillance - official controls											
Other food - Surveillance - official controls - objective sampling											
Other processed food products and prepared dishes - pasta - Surveillance - HACCP and own checks											

Table Salmonella in other food

	S. Blockley	S. Braenderup	S. Brandenburg	S. Bredeney	S. Chester	S. Corvallis	S. Cotham	S. Derby	S. Farsta	S. Give	S. Goldcoast
Other processed food products and prepared dishes - unspecified - Control and eradication programmes - official sampling - objective sampling											
Other processed food products and prepared dishes - unspecified - Surveillance - HACCP and own checks											
Other processed food products and prepared dishes ³⁾ - unspecified - Surveillance - official controls				3							
Other processed food products and prepared dishes - unspecified - Survey - national survey											
Sauce and dressings - Surveillance - official controls											
Sweets - Surveillance - official controls											
Vegetables - Surveillance - HACCP and own checks											
Vegetables - Surveillance - official controls											
Vegetables - Surveillance - official controls - suspect sampling											
Vegetables - Survey - national survey											
Vegetables - products - Surveillance - HACCP and own checks											
Vegetables - products - Surveillance - official controls											

Table Salmonella in other food

	S. Hadar	S. Havana	S. Infantis	S. Jerusalem	S. Johannesburg	S. Kapemba	S. Kimuenza	S. Lagos	S. Leith	S. London	S. Manhattan
Crustaceans - unspecified - Surveillance - HACCP and own checks											
Crustaceans - unspecified - Surveillance - official controls											
Egg products - Surveillance - official controls											
Egg products - Survey - national survey											
Eggs - Surveillance - official controls											
Eggs - raw material (liquid egg) for egg products - Surveillance - official controls											
Fish - unspecified - Surveillance - HACCP and own checks											
Fishery products, unspecified - Control and eradication programmes - official sampling											
Fishery products, unspecified - Control and eradication programmes - official sampling - objective sampling											
Fishery products, unspecified - Surveillance - HACCP and own checks											
Fishery products, unspecified - Surveillance - official controls			1								
Fishery products, unspecified - Survey - national survey											
Meat from other animal species or not specified - Surveillance - official controls			1								

Table Salmonella in other food

	S. Hadar	S. Havana	S. Infantis	S. Jerusalem	S. Johannesburg	S. Kapemba	S. Kimuenza	S. Lagos	S. Leith	S. London	S. Manhattan
Meat from other animal species or not specified - fresh - Control and eradication programmes - official sampling - objective sampling											
Meat from other animal species or not specified - fresh - Surveillance - HACCP and own checks											
Meat from other animal species or not specified - fresh - Surveillance - official controls										1	
Meat from other animal species or not specified - fresh - Surveillance - official controls - objective sampling											
Meat from other animal species or not specified - fresh - Survey - national survey			1								
Meat from other animal species or not specified - meat preparation - Surveillance - HACCP and own checks											
Meat from other animal species or not specified - meat preparation - Surveillance - official controls ¹⁾	7		6			1	1	1		2	1
Meat from other animal species or not specified - meat preparation - Surveillance - official controls - objective sampling											
Meat from other animal species or not specified - meat products - Clinical investigations											
Meat from other animal species or not specified - meat products - Surveillance - HACCP and own checks										3	
Meat from other animal species or not specified - meat products - Surveillance - official controls ²⁾		1	1	1					1	7	1

Table Salmonella in other food

	S. Hadar	S. Havana	S. Infantis	S. Jerusalem	S. Johannesburg	S. Kapemba	S. Kimuenza	S. Lagos	S. Leith	S. London	S. Manhattan
Meat from other animal species or not specified - meat products - Surveillance - official controls - suspect sampling											
Meat from other animal species or not specified - meat products - Survey - national survey											
Meat from other animal species or not specified - minced meat - Surveillance - HACCP and own checks											
Meat from other animal species or not specified - minced meat - Surveillance - official controls											
Meat from other animal species or not specified - minced meat - Survey - national survey											
Meat from other animal species or not specified - offal - Surveillance - HACCP and own checks											
Meat from other animal species or not specified - offal - Surveillance - official controls - objective sampling											
Meat from other animal species or not specified - offal - Survey - national survey											
Molluscan shellfish - Surveillance - official controls					1						
Other food - Surveillance - official controls											
Other food - Surveillance - official controls - objective sampling											
Other processed food products and prepared dishes - pasta - Surveillance - HACCP and own checks											

Table Salmonella in other food

	S. Hadar	S. Havana	S. Infantis	S. Jerusalem	S. Johannesburg	S. Kapemba	S. Kimuenza	S. Lagos	S. Leith	S. London	S. Manhattan
Other processed food products and prepared dishes - unspecified - Control and eradication programmes - official sampling - objective sampling											
Other processed food products and prepared dishes - unspecified - Surveillance - HACCP and own checks											
Other processed food products and prepared dishes ³⁾ - unspecified - Surveillance - official controls							1				
Other processed food products and prepared dishes - unspecified - Survey - national survey											
Sauce and dressings - Surveillance - official controls											
Sweets - Surveillance - official controls											
Vegetables - Surveillance - HACCP and own checks											
Vegetables - Surveillance - official controls											
Vegetables - Surveillance - official controls - suspect sampling											
Vegetables - Survey - national survey											
Vegetables - products - Surveillance - HACCP and own checks											
Vegetables - products - Surveillance - official controls	1										

Table Salmonella in other food

	S. Montevideo	S. Muenchen	S. Napoli	S. Newport	S. Nottingham	S. Panama	S. Rissen	S. Saintpaul	S. Schwarzengr und	S. Senftenberg	S. Thompson
Crustaceans - unspecified - Surveillance - HACCP and own checks											
Crustaceans - unspecified - Surveillance - official controls											
Egg products - Surveillance - official controls											
Egg products - Survey - national survey											
Eggs - Surveillance - official controls											1
Eggs - raw material (liquid egg) for egg products - Surveillance - official controls											
Fish - unspecified - Surveillance - HACCP and own checks											
Fishery products, unspecified - Control and eradication programmes - official sampling					1						
Fishery products, unspecified - Control and eradication programmes - official sampling - objective sampling											
Fishery products, unspecified - Surveillance - HACCP and own checks											
Fishery products, unspecified - Surveillance - official controls					1					1	
Fishery products, unspecified - Survey - national survey											
Meat from other animal species or not specified - Surveillance - official controls		1					1			1	2

Table Salmonella in other food

	S. Montevideo	S. Muenchen	S. Napoli	S. Newport	S. Nottingham	S. Panama	S. Rissen	S. Saintpaul	S. Schwarzengr und	S. Senftenberg	S. Thompson
Meat from other animal species or not specified - fresh - Control and eradication programmes - official sampling - objective sampling						1					
Meat from other animal species or not specified - fresh - Surveillance - HACCP and own checks											
Meat from other animal species or not specified - fresh - Surveillance - official controls											
Meat from other animal species or not specified - fresh - Surveillance - official controls - objective sampling											
Meat from other animal species or not specified - fresh - Survey - national survey											
Meat from other animal species or not specified - meat preparation - Surveillance - HACCP and own checks											
Meat from other animal species or not specified - meat preparation - Surveillance - official controls ¹⁾	1	2	1	1			1	6			
Meat from other animal species or not specified - meat preparation - Surveillance - official controls - objective sampling											
Meat from other animal species or not specified - meat products - Clinical investigations											
Meat from other animal species or not specified - meat products - Surveillance - HACCP and own checks											
Meat from other animal species or not specified - meat products - Surveillance - official controls ²⁾				3			2	4	1		

Table Salmonella in other food

	S. Montevideo	S. Muenchen	S. Napoli	S. Newport	S. Nottingham	S. Panama	S. Rissen	S. Saintpaul	S. Schwarzengr und	S. Senftenberg	S. Thompson
Meat from other animal species or not specified - meat products - Surveillance - official controls - suspect sampling											
Meat from other animal species or not specified - meat products - Survey - national survey											
Meat from other animal species or not specified - minced meat - Surveillance - HACCP and own checks				1							
Meat from other animal species or not specified - minced meat - Surveillance - official controls								4			
Meat from other animal species or not specified - minced meat - Survey - national survey											
Meat from other animal species or not specified - offal - Surveillance - HACCP and own checks											
Meat from other animal species or not specified - offal - Surveillance - official controls - objective sampling											
Meat from other animal species or not specified - offal - Survey - national survey											
Molluscan shellfish - Surveillance - official controls				2							
Other food - Surveillance - official controls											
Other food - Surveillance - official controls - objective sampling											
Other processed food products and prepared dishes - pasta - Surveillance - HACCP and own checks											

Table Salmonella in other food

	S. Montevideo	S. Muenchen	S. Napoli	S. Newport	S. Nottingham	S. Panama	S. Rissen	S. Saintpaul	S. Schwarzengr und	S. Senftenberg	S. Thompson
Other processed food products and prepared dishes - unspecified - Control and eradication programmes - official sampling - objective sampling											
Other processed food products and prepared dishes - unspecified - Surveillance - HACCP and own checks											
Other processed food products and prepared dishes ³⁾ - unspecified - Surveillance - official controls				3							
Other processed food products and prepared dishes - unspecified - Survey - national survey											
Sauce and dressings - Surveillance - official controls											
Sweets - Surveillance - official controls											
Vegetables - Surveillance - HACCP and own checks											
Vegetables - Surveillance - official controls			1								
Vegetables - Surveillance - official controls - suspect sampling											
Vegetables - Survey - national survey											
Vegetables - products - Surveillance - HACCP and own checks											
Vegetables - products - Surveillance - official controls											

Table Salmonella in other food

	S. Weltevreden	S. Zaiman	S. enterica subsp. diarizonae	S. enterica subsp. enterica	S. enterica subsp. salamae
Crustaceans - unspecified - Surveillance - HACCP and own checks					
Crustaceans - unspecified - Surveillance - official controls					
Egg products - Surveillance - official controls					
Egg products - Survey - national survey					
Eggs - Surveillance - official controls					
Eggs - raw material (liquid egg) for egg products - Surveillance - official controls					
Fish - unspecified - Surveillance - HACCP and own checks					
Fishery products, unspecified - Control and eradication programmes - official sampling					
Fishery products, unspecified - Control and eradication programmes - official sampling - objective sampling					
Fishery products, unspecified - Surveillance - HACCP and own checks					
Fishery products, unspecified - Surveillance - official controls	1				
Fishery products, unspecified - Survey - national survey					
Meat from other animal species or not specified - Surveillance - official controls				1	1

Table Salmonella in other food

	S. Weltevreden	S. Zaiman	S. enterica subsp. diarizonae	S. enterica subsp. enterica	S. enterica subsp. salamae
Meat from other animal species or not specified - fresh - Control and eradication programmes - official sampling - objective sampling					
Meat from other animal species or not specified - fresh - Surveillance - HACCP and own checks					
Meat from other animal species or not specified - fresh - Surveillance - official controls					
Meat from other animal species or not specified - fresh - Surveillance - official controls - objective sampling					
Meat from other animal species or not specified - fresh - Survey - national survey					
Meat from other animal species or not specified - meat preparation - Surveillance - HACCP and own checks					
Meat from other animal species or not specified - meat preparation - Surveillance - official controls ¹⁾				1	
Meat from other animal species or not specified - meat preparation - Surveillance - official controls - objective sampling					
Meat from other animal species or not specified - meat products - Clinical investigations					
Meat from other animal species or not specified - meat products - Surveillance - HACCP and own checks				1	
Meat from other animal species or not specified - meat products - Surveillance - official controls ²⁾		1		2	

Table Salmonella in other food

	S. Weltevreden	S. Zaiman	S. enterica subsp. diarizonae	S. enterica subsp. enterica	S. enterica subsp. salamae
Meat from other animal species or not specified - meat products - Surveillance - official controls - suspect sampling					
Meat from other animal species or not specified - meat products - Survey - national survey					
Meat from other animal species or not specified - minced meat - Surveillance - HACCP and own checks					
Meat from other animal species or not specified - minced meat - Surveillance - official controls			1		
Meat from other animal species or not specified - minced meat - Survey - national survey					
Meat from other animal species or not specified - offal - Surveillance - HACCP and own checks					
Meat from other animal species or not specified - offal - Surveillance - official controls - objective sampling					
Meat from other animal species or not specified - offal - Survey - national survey					
Molluscan shellfish - Surveillance - official controls					
Other food - Surveillance - official controls					
Other food - Surveillance - official controls - objective sampling					
Other processed food products and prepared dishes - pasta - Surveillance - HACCP and own checks					

Table Salmonella in other food

	S. Weltevreden	S. Zaiman	S. enterica subsp. diarizonae	S. enterica subsp. enterica	S. enterica subsp. salamae
Other processed food products and prepared dishes - unspecified - Control and eradication programmes - official sampling - objective sampling					
Other processed food products and prepared dishes - unspecified - Surveillance - HACCP and own checks					
Other processed food products and prepared dishes ³⁾ - unspecified - Surveillance - official controls					
Other processed food products and prepared dishes - unspecified - Survey - national survey					
Sauce and dressings - Surveillance - official controls					
Sweets - Surveillance - official controls					
Vegetables - Surveillance - HACCP and own checks					
Vegetables - Surveillance - official controls					
Vegetables - Surveillance - official controls - suspect sampling					
Vegetables - Survey - national survey					
Vegetables - products - Surveillance - HACCP and own checks					
Vegetables - products - Surveillance - official controls					

Table Salmonella in other food

- 1) the same sample was positive for more than one serotype of salmonella
- 2) the same sample was positive for more than one serotype of salmonella
- 3) the same sample was positive for more than one serotype of salmonella

Table Salmonella in milk and dairy products

	Source of information	Sampling unit	Sample weight	Units tested	Total units positive for Salmonella	S. Enteritidis	S. Typhimurium	Salmonella spp., unspecified	S. Dublin	S. Goldcoast	S. Muenster
Cheeses made from cows' milk - Surveillance - HACCP and own checks		Batch		1410	0						
Cheeses made from cows' milk - Surveillance - official controls		Single		450	0						
Cheeses made from cows' milk - Surveillance - official controls - objective sampling		Batch		56	0						
Cheeses, made from unspecified milk or other animal milk - Surveillance - official controls		Single		1879	2						
Dairy products (excluding cheeses) - Surveillance - HACCP and own checks		Single		69	0						
Dairy products (excluding cheeses) - Surveillance - HACCP and own checks (from cows' milk - including cheese)		Batch		26	0						
Dairy products (excluding cheeses) - Surveillance - official controls		Single		97	0						
Dairy products (excluding cheeses) - butter - Surveillance - HACCP and own checks (from sheep's milk)		Single		28							
Dairy products (excluding cheeses) - butter - Surveillance - official controls		Single		183	0						
Dairy products (excluding cheeses) - dairy products, not specified - Surveillance - official controls		Single		70	0						
Milk from other animal species or unspecified - Clinical investigations		Single		127	0						
Milk from other animal species or unspecified - Surveillance - HACCP and own checks		Single		351	0						

Table Salmonella in milk and dairy products

	Source of information	Sampling unit	Sample weight	Units tested	Total units positive for Salmonella	S. Enteritidis	S. Typhimurium	Salmonella spp., unspecified	S. Dublin	S. Goldcoast	S. Muenster
Milk from other animal species or unspecified - Surveillance - official controls		Single		5799	5		1		1		1
Milk from other animal species or unspecified - Surveillance - official controls - objective sampling		Single		91	0						
Milk from other animal species or unspecified - Survey - national survey		Single		89	0						
Milk, cows' - Surveillance - HACCP and own checks		Single		107	0						
Milk, cows' - Surveillance - official controls		Single		854	2			1		1	
Milk, cows' - Surveillance - official controls - objective sampling		Single		74	1			1			
Other processed food products and prepared dishes - ices and similar frozen desserts - Surveillance - HACCP and own checks		Single		432	0						
Other processed food products and prepared dishes - ices and similar frozen desserts - Surveillance - official controls		Single		476	0						
	S. Veneziana	S. enterica subsp. diarizonae	S. enterica subsp. enterica								
Cheeses made from cows' milk - Surveillance - HACCP and own checks											
Cheeses made from cows' milk - Surveillance - official controls											

Table Salmonella in milk and dairy products

	S. Veneziana	S. enterica subsp. diarizonae	S. enterica subsp. enterica
Cheeses made from cows' milk - Surveillance - official controls - objective sampling			
Cheeses, made from unspecified milk or other animal milk - Surveillance - official controls	1	1	
Dairy products (excluding cheeses) - Surveillance - HACCP and own checks			
Dairy products (excluding cheeses) - Surveillance - HACCP and own checks (from cows' milk - including cheese)			
Dairy products (excluding cheeses) - Surveillance - official controls			
Dairy products (excluding cheeses) - butter - Surveillance - HACCP and own checks (from sheep's milk)			
Dairy products (excluding cheeses) - butter - Surveillance - official controls			
Dairy products (excluding cheeses) - dairy products, not specified - Surveillance - official controls			
Milk from other animal species or unspecified - Clinical investigations			
Milk from other animal species or unspecified - Surveillance - HACCP and own checks			
Milk from other animal species or unspecified - Surveillance - official controls		1	1
Milk from other animal species or unspecified - Surveillance - official controls - objective sampling			

Table Salmonella in milk and dairy products

	S. Veneziana	S. enterica subsp. diarizonae	S. enterica subsp. enterica
Milk from other animal species or unspecified - Survey - national survey			
Milk, cows' - Surveillance - HACCP and own checks			
Milk, cows' - Surveillance - official controls			
Milk, cows' - Surveillance - official controls - objective sampling			
Other processed food products and prepared dishes - ices and similar frozen desserts - Surveillance - HACCP and own checks			
Other processed food products and prepared dishes - ices and similar frozen desserts - Surveillance - official controls			

2.1.3 Salmonella in animals

Table Salmonella in breeding flocks of Gallus gallus

	Number of existing flocks	Source of information	Sampling unit	Units tested	Total units positive for Salmonella	S. Enteritidis	S. Hadar	S. Infantis	S. Typhimurium	S. Virchow	Salmonella spp., unspecified
Gallus gallus (fowl) - breeding flocks, unspecified - Surveillance - HACCP and own checks	1000	Regions	Flock	130	0	0	0	0	0	0	0
Gallus gallus (fowl) - breeding flocks, unspecified - Surveillance - official controls	1000	Regions	Flock	31	0	0	0	0	0	0	0
Gallus gallus (fowl) - breeding flocks, unspecified - adult - Control and eradication programmes - official sampling - objective sampling ¹⁾	628	Regions	Flock	512	34	2	2	1	2	1	0
Gallus gallus (fowl) - breeding flocks, unspecified - day-old chicks - Control and eradication programmes - official sampling - objective sampling ²⁾	39	Regions	Flock	39	7	0	0	0	0	0	0
Gallus gallus (fowl) - elite breeding flocks for broiler production line - Surveillance - HACCP and own checks		Regions	Flock	184	5	0	0	0	0	0	5

	Other serotypes
Gallus gallus (fowl) - breeding flocks, unspecified - Surveillance - HACCP and own checks	
Gallus gallus (fowl) - breeding flocks, unspecified - Surveillance - official controls	0

Table Salmonella in breeding flocks of Gallus gallus

	Other serotypes
Gallus gallus (fowl) - breeding flocks, unspecified - adult - Control and eradication programmes - official sampling - objective sampling ¹⁾	26
Gallus gallus (fowl) - breeding flocks, unspecified - day-old chicks - Control and eradication programmes - official sampling - objective sampling ²⁾	7
Gallus gallus (fowl) - elite breeding flocks for broiler production line - Surveillance - HACCP and own checks	0

Comments:

¹⁾ null²⁾ null

Footnote:

Gallus gallus breeding flocks-unspecified: results specifically for each production line (broiler and egg)are not available

Table Salmonella in other poultry

	Number of existing flocks	Source of information	Sampling unit	Units tested	Total units positive for Salmonella	S. Enteritidis	S. Typhimurium	Salmonella spp., unspecified	Not typeable	Other serotypes	S. Braenderup
Ducks - Surveillance - official controls	450	Regions	Animal	65	4	0		2			
Gallus gallus (fowl) - broilers - unspecified - Clinical investigations	13047	Regions	Flock	96	4	0	1	1		1	
Gallus gallus (fowl) - broilers - unspecified - Control and eradication programmes - official sampling - objective sampling	13047	Regions	Flock	2072	397	14	7	0		376	
Gallus gallus (fowl) - broilers - unspecified - Surveillance - HACCP and own checks	13047	Regions	Flock	1075	8	0				3	
Gallus gallus (fowl) - broilers - unspecified - Surveillance - official controls	13047	Regions	Flock	221	10	0	1				
Gallus gallus (fowl) - laying hens - Clinical investigations	1813	Regions	Flock	119	7	1		2			
Gallus gallus (fowl) - laying hens - Surveillance - HACCP and own checks	1813	Regions	Animal	588	56	0		56			
Gallus gallus (fowl) - laying hens - Surveillance - official controls	1813	Regions	Flock	1146	10	0		7	1		1
Gallus gallus (fowl) - laying hens - adult - Control and eradication programmes - official sampling	1813	Regions	Flock	921	165	48	4	0	0	113	0
Gallus gallus (fowl) - unspecified - Clinical investigations	10073	Regions	Flock	137	13	0		13			
Gallus gallus (fowl) - unspecified - Survey - national survey	10073	Regions	Animal	246	26	0		24			
Geese - Surveillance - official controls	364	Regions	Animal	41	0	0					
Other poultry - Surveillance - HACCP and own checks	373	Regions	Animal	192	4	0		4			

Table Salmonella in other poultry

	Number of existing flocks	Source of information	Sampling unit	Units tested	Total units positive for Salmonella	S. Enteritidis	S. Typhimurium	Salmonella spp., unspecified	Not typeable	Other serotypes	S. Braenderup
Other poultry - Surveillance - official controls	373	Regions	Animal	70	2	0		2			
Poultry, unspecified - Surveillance - official controls	373	Regions	Animal	215	8	0	2				
Poultry, unspecified - Survey - national survey	373	Regions	Animal	52	1	0					
Turkeys - unspecified - Surveillance - HACCP and own checks	1159	Regions	Animal	289	2			2			
Turkeys - unspecified - Surveillance - official controls ¹⁾	1159	Regions	Animal	231	9		2				

	S. Bredeney	S. Corvallis	S. Galiema	S. Gallinarum	S. Hadar	S. Hessarek	S. II 1,4,12:-:-	S. Livingstone	S. Mbandaka	S. Menston	S. Montevideo
Ducks - Surveillance - official controls											
Gallus gallus (fowl) - broilers - unspecified - Clinical investigations											
Gallus gallus (fowl) - broilers - unspecified - Control and eradication programmes - official sampling - objective sampling											
Gallus gallus (fowl) - broilers - unspecified - Surveillance - HACCP and own checks					3			1			
Gallus gallus (fowl) - broilers - unspecified - Surveillance - official controls		1	1								
Gallus gallus (fowl) - laying hens - Clinical investigations				1					2		1

Table Salmonella in other poultry

	S. Bredeney	S. Corvallis	S. Galiema	S. Gallinarum	S. Hadar	S. Hessarek	S. II 1,4,12:-:-	S. Livingstone	S. Mbandaka	S. Menston	S. Montevideo
Gallus gallus (fowl) - laying hens - Surveillance - HACCP and own checks											
Gallus gallus (fowl) - laying hens - Surveillance - official controls	1										
Gallus gallus (fowl) - laying hens - adult - Control and eradication programmes - official sampling	0	0	0	0	0	0	0	0	0	0	0
Gallus gallus (fowl) - unspecified - Clinical investigations											
Gallus gallus (fowl) - unspecified - Survey - national survey											2
Geese - Surveillance - official controls											
Other poultry - Surveillance - HACCP and own checks											
Other poultry - Surveillance - official controls											
Poultry, unspecified - Surveillance - official controls					1						
Poultry, unspecified - Survey - national survey										1	
Turkeys - unspecified - Surveillance - HACCP and own checks											
Turkeys - unspecified - Surveillance - official controls ¹⁾							1				

Table Salmonella in other poultry

	S. Muenchen	S. Newport	S. Rissen	S. Senftenberg	S. Singapore	S. Species	S. Thompson	S. Veneziana	S. Zaiman
Ducks - Surveillance - official controls			1					1	
Gallus gallus (fowl) - broilers - unspecified - Clinical investigations						1			
Gallus gallus (fowl) - broilers - unspecified - Control and eradication programmes - official sampling - objective sampling									
Gallus gallus (fowl) - broilers - unspecified - Surveillance - HACCP and own checks				1					
Gallus gallus (fowl) - broilers - unspecified - Surveillance - official controls	5	1			1				
Gallus gallus (fowl) - laying hens - Clinical investigations									
Gallus gallus (fowl) - laying hens - Surveillance - HACCP and own checks									
Gallus gallus (fowl) - laying hens - Surveillance - official controls									
Gallus gallus (fowl) - laying hens - adult - Control and eradication programmes - official sampling	0	0	0	0	0	0	0	0	0
Gallus gallus (fowl) - unspecified - Clinical investigations									
Gallus gallus (fowl) - unspecified - Survey - national survey									
Geese - Surveillance - official controls									
Other poultry - Surveillance - HACCP and own checks									
Other poultry - Surveillance - official controls									

Table Salmonella in other poultry

	S. Muenchen	S. Newport	S. Rissen	S. Senftenberg	S. Singapore	S. Species	S. Thompson	S. Veneziana	S. Zaiman
Poultry, unspecified - Surveillance - official controls							4		1
Poultry, unspecified - Survey - national survey									
Turkeys - unspecified - Surveillance - HACCP and own checks									
Turkeys - unspecified - Surveillance - official controls ¹⁾		7							

Comments:

¹⁾ the same sample results positive for more than one serotype

Footnote:

1. Gallus gallus, broilers - unspecified - control or eradication programmes: data for broilers before slaughter - "official and industry sampling" are not available.
2. Gallus gallus, laying hens - adult - Control and eradication programmes - official sampling: data for different indicators are not available. No data are available for HACCP and own checks.

Table Salmonella in other animals

	Source of information	Sampling unit	Units tested	Total units positive for Salmonella	S. Enteritidis	S. Typhimurium	Salmonella spp., unspecified	Other serotypes	S. 4,5,12:i:-	S. Abortusovis	S. Agama
All animals - Surveillance - official controls		Animal	77	1							
Cats - pet animals - Clinical investigations		Animal	87	4		1	2				
Cattle (bovine animals) - Clinical investigations		Animal	318	14		1	10			1	
Cattle (bovine animals) - Surveillance - HACCP and own checks		Animal	89	1			1				
Cattle (bovine animals) - Surveillance - official controls		Animal	1438	14	1	7	1				
Cattle (bovine animals) - Surveillance - official controls - suspect sampling		Animal	36	0							
Cattle (bovine animals) - Survey - national survey		Animal	133	2			2				
Cattle (bovine animals) - adult cattle over 2 years - Clinical investigations		Animal	113	0							
Cattle (bovine animals) - breeding bulls - Clinical investigations		Animal	55	0							
Cattle (bovine animals) - breeding bulls - Surveillance - HACCP and own checks		Animal	101	0							
Deer - wild - red deer - Surveillance - official controls		Animal	111	2		2					
Deer - wild - roe deer - Survey - national survey		Animal	34	0							
Dogs - pet animals - Clinical investigations		Animal	215	4	1		1				
Dogs - pet animals - Surveillance - official controls		Animal	120	20		1					
Fish - Surveillance - official controls		Animal	45	0							

Table Salmonella in other animals

	Source of information	Sampling unit	Units tested	Total units positive for Salmonella	S. Enteritidis	S. Typhimurium	Salmonella spp., unspecified	Other serotypes	S. 4,5,12:i:-	S. Abortusovis	S. Agama
Fish - farmed - Survey - national survey		Animal	64	0			0				
Foxes - wild - Surveillance - official controls		Animal	182	15	1	4					
Goats - Clinical investigations		Herd	144	11			10				
Hares - wild - Clinical investigations		Animal	29	0							
Monkeys - zoo animal - Clinical investigations		Animal	25	0							
Other animals - unspecified - Clinical investigations		Animal	40	10							
Other animals - unspecified - Surveillance - official controls		Animal	26	0							
Pigs - Clinical investigations		Animal	49	4		2					
Pigs - Surveillance - official controls		Animal	44	3			1				
Pigs - Survey - national survey		Animal	453	9		2					
Pigs - fattening pigs - Clinical investigations		Animal	51	4					2		
Pigs - fattening pigs - Surveillance - HACCP and own checks		Animal	29	0							
Rabbits - Clinical investigations		Animal	263	2		1	1				
Rabbits - Surveillance - HACCP and own checks		Animal	84	0							
Rabbits - Survey - national survey		Animal	40	0							
Sheep - Clinical investigations		Herd	657	194			184	1		3	1
Sheep - Surveillance - official controls		Herd	31	1						1	
Sheep - Survey - national survey		Animal	168	0							

Table Salmonella in other animals

	Source of information	Sampling unit	Units tested	Total units positive for Salmonella	S. Enteritidis	S. Typhimurium	Salmonella spp., unspecified	Other serotypes	S. 4,5,12:i:-	S. Abortusovis	S. Agama
Sheep and goats - Surveillance - HACCP and own checks		Animal	156	4			4				
Solipeds, domestic - horses - Clinical investigations		Animal	132	22			20				
Solipeds, domestic - horses - Survey - national survey		Animal	31	0							
Turtles - pet animals - Surveillance - official controls		Animal	29	3							
Turtles - pet animals - Survey - national survey		Animal	64	7			7				
Water buffalos - Clinical investigations		Animal	30	0							
Water buffalos - Survey - national survey		Animal	235	52			35				
Wild animals - Clinical investigations		Animal	42	0							
Wild boars - Surveillance - official controls		Animal	770	148	6	8					
Zoo animals, all - Clinical investigations		Animal	61	10							

	S. Agona	S. Anatum	S. Ball	S. Berta	S. Blockley	S. Choleraesuis	S. Coeln	S. Concord	S. Derby	S. Dublin	S. Give
All animals - Surveillance - official controls											
Cats - pet animals - Clinical investigations						1					
Cattle (bovine animals) - Clinical investigations										1	
Cattle (bovine animals) - Surveillance - HACCP and own checks											

Table Salmonella in other animals

	S. Agona	S. Anatum	S. Ball	S. Berta	S. Blockley	S. Choleraesuis	S. Coeln	S. Concord	S. Derby	S. Dublin	S. Give
Cattle (bovine animals) - Surveillance - official controls	1							1	1		
Cattle (bovine animals) - Surveillance - official controls - suspect sampling											
Cattle (bovine animals) - Survey - national survey											
Cattle (bovine animals) - adult cattle over 2 years - Clinical investigations											
Cattle (bovine animals) - breeding bulls - Clinical investigations											
Cattle (bovine animals) - breeding bulls - Surveillance - HACCP and own checks											
Deer - wild - red deer - Surveillance - official controls											
Deer - wild - roe deer - Survey - national survey											
Dogs - pet animals - Clinical investigations							1				
Dogs - pet animals - Surveillance - official controls						1					
Fish - Surveillance - official controls											
Fish - farmed - Survey - national survey											
Foxes - wild - Surveillance - official controls		1							1		
Goats - Clinical investigations											
Hares - wild - Clinical investigations											
Monkeys - zoo animal - Clinical investigations											

Table Salmonella in other animals

	S. Agona	S. Anatum	S. Ball	S. Berta	S. Blockley	S. Choleraesuis	S. Coeln	S. Concord	S. Derby	S. Dublin	S. Give
Other animals - unspecified - Clinical investigations											
Other animals - unspecified - Surveillance - official controls											
Pigs - Clinical investigations						1					1
Pigs - Surveillance - official controls											
Pigs - Survey - national survey				1					1		
Pigs - fattening pigs - Clinical investigations		2									
Pigs - fattening pigs - Surveillance - HACCP and own checks											
Rabbits - Clinical investigations											
Rabbits - Surveillance - HACCP and own checks											
Rabbits - Survey - national survey											
Sheep - Clinical investigations											
Sheep - Surveillance - official controls											
Sheep - Survey - national survey											
Sheep and goats - Surveillance - HACCP and own checks											
Solipeds, domestic - horses - Clinical investigations											
Solipeds, domestic - horses - Survey - national survey											

Table Salmonella in other animals

	S. Agona	S. Anatum	S. Ball	S. Berta	S. Blockley	S. Choleraesuis	S. Coeln	S. Concord	S. Derby	S. Dublin	S. Give
Turtles - pet animals - Surveillance - official controls											
Turtles - pet animals - Survey - national survey											
Water buffalos - Clinical investigations											
Water buffalos - Survey - national survey											1
Wild animals - Clinical investigations											
Wild boars - Surveillance - official controls			3			1	22		2		
Zoo animals, all - Clinical investigations					1		1				

	S. Haardt	S. Hadar	S. Hessarek	S. Il 1,4,12:-:-	S. Infantis	S. Kottbus	S. Livingstone	S. Llobregat	S. London	S. Manhattan	S. Mbandaka
All animals - Surveillance - official controls											1
Cats - pet animals - Clinical investigations											
Cattle (bovine animals) - Clinical investigations											
Cattle (bovine animals) - Surveillance - HACCP and own checks											
Cattle (bovine animals) - Surveillance - official controls				2							
Cattle (bovine animals) - Surveillance - official controls - suspect sampling											
Cattle (bovine animals) - Survey - national survey											

Table Salmonella in other animals

	S. Haardt	S. Hadar	S. Hessarek	S. II 1,4,12:-:-	S. Infantis	S. Kottbus	S. Livingstone	S. Llobregat	S. London	S. Manhattan	S. Mbandaka
Cattle (bovine animals) - adult cattle over 2 years - Clinical investigations											
Cattle (bovine animals) - breeding bulls - Clinical investigations											
Cattle (bovine animals) - breeding bulls - Surveillance - HACCP and own checks											
Deer - wild - red deer - Surveillance - official controls											
Deer - wild - roe deer - Survey - national survey											
Dogs - pet animals - Clinical investigations											
Dogs - pet animals - Surveillance - official controls				14	4						
Fish - Surveillance - official controls											
Fish - farmed - Survey - national survey											
Foxes - wild - Surveillance - official controls											
Goats - Clinical investigations							1				
Hares - wild - Clinical investigations											
Monkeys - zoo animal - Clinical investigations											
Other animals - unspecified - Clinical investigations			5								
Other animals - unspecified - Surveillance - official controls											
Pigs - Clinical investigations											

Table Salmonella in other animals

	S. Haardt	S. Hadar	S. Hessarek	S. II 1,4,12:-:-	S. Infantis	S. Kottbus	S. Livingstone	S. Llobregat	S. London	S. Manhattan	S. Mbandaka
Pigs - Surveillance - official controls				1	1						
Pigs - Survey - national survey		1									
Pigs - fattening pigs - Clinical investigations											
Pigs - fattening pigs - Surveillance - HACCP and own checks											
Rabbits - Clinical investigations											
Rabbits - Surveillance - HACCP and own checks											
Rabbits - Survey - national survey											
Sheep - Clinical investigations											
Sheep - Surveillance - official controls											
Sheep - Survey - national survey											
Sheep and goats - Surveillance - HACCP and own checks											
Solipeds, domestic - horses - Clinical investigations											
Solipeds, domestic - horses - Survey - national survey											
Turtles - pet animals - Surveillance - official controls											
Turtles - pet animals - Survey - national survey											
Water buffalos - Clinical investigations											
Water buffalos - Survey - national survey					1				4		

Table Salmonella in other animals

	S. Haardt	S. Hadar	S. Hessarek	S. II 1,4,12:-:-	S. Infantis	S. Kottbus	S. Livingstone	S. Llobregat	S. London	S. Manhattan	S. Mbandaka
Wild animals - Clinical investigations											
Wild boars - Surveillance - official controls		1			6			1		4	
Zoo animals, all - Clinical investigations	1	1				1					

	S. Montevideo	S. Muenchen	S. Muenster	S. Napoli	S. Newport	S. Nigeria	S. Norton	S. Ohio	S. Oranienburg	S. Paratyphi B	S. Pomona
All animals - Surveillance - official controls											
Cats - pet animals - Clinical investigations											
Cattle (bovine animals) - Clinical investigations			1								
Cattle (bovine animals) - Surveillance - HACCP and own checks											
Cattle (bovine animals) - Surveillance - official controls											
Cattle (bovine animals) - Surveillance - official controls - suspect sampling											
Cattle (bovine animals) - Survey - national survey											
Cattle (bovine animals) - adult cattle over 2 years - Clinical investigations											
Cattle (bovine animals) - breeding bulls - Clinical investigations											
Cattle (bovine animals) - breeding bulls - Surveillance - HACCP and own checks											

Table Salmonella in other animals

	S. Montevideo	S. Muenchen	S. Muenster	S. Napoli	S. Newport	S. Nigeria	S. Norton	S. Ohio	S. Oranienburg	S. Paratyphi B	S. Pomona
Deer - wild - red deer - Surveillance - official controls											
Deer - wild - roe deer - Survey - national survey											
Dogs - pet animals - Clinical investigations											
Dogs - pet animals - Surveillance - official controls											
Fish - Surveillance - official controls											
Fish - farmed - Survey - national survey											
Foxes - wild - Surveillance - official controls		1		1				1			
Goats - Clinical investigations											
Hares - wild - Clinical investigations											
Monkeys - zoo animal - Clinical investigations											
Other animals - unspecified - Clinical investigations					2						
Other animals - unspecified - Surveillance - official controls											
Pigs - Clinical investigations											
Pigs - Surveillance - official controls											
Pigs - Survey - national survey		1					1				
Pigs - fattening pigs - Clinical investigations											
Pigs - fattening pigs - Surveillance - HACCP and own checks											

Table Salmonella in other animals

	S. Montevideo	S. Muenchen	S. Muenster	S. Napoli	S. Newport	S. Nigeria	S. Norton	S. Ohio	S. Oranienburg	S. Paratyphi B	S. Pomona
Rabbits - Clinical investigations											
Rabbits - Surveillance - HACCP and own checks											
Rabbits - Survey - national survey											
Sheep - Clinical investigations											
Sheep - Surveillance - official controls											
Sheep - Survey - national survey											
Sheep and goats - Surveillance - HACCP and own checks											
Solipeds, domestic - horses - Clinical investigations			2								
Solipeds, domestic - horses - Survey - national survey											
Turtles - pet animals - Surveillance - official controls									1	1	1
Turtles - pet animals - Survey - national survey											
Water buffalos - Clinical investigations											
Water buffalos - Survey - national survey			2								
Wild animals - Clinical investigations											
Wild boars - Surveillance - official controls		5		12							
Zoo animals, all - Clinical investigations	1					1					

Table Salmonella in other animals

	S. Rissen	S. Saintpaul	S. Species	S. Thompson	S. Vejle	S. Veneziana	S. enterica subsp. diarizonae	S. enterica subsp. enterica
All animals - Surveillance - official controls								
Cats - pet animals - Clinical investigations								
Cattle (bovine animals) - Clinical investigations								
Cattle (bovine animals) - Surveillance - HACCP and own checks								
Cattle (bovine animals) - Surveillance - official controls								
Cattle (bovine animals) - Surveillance - official controls - suspect sampling								
Cattle (bovine animals) - Survey - national survey								
Cattle (bovine animals) - adult cattle over 2 years - Clinical investigations								
Cattle (bovine animals) - breeding bulls - Clinical investigations								
Cattle (bovine animals) - breeding bulls - Surveillance - HACCP and own checks								
Deer - wild - red deer - Surveillance - official controls								
Deer - wild - roe deer - Survey - national survey								
Dogs - pet animals - Clinical investigations		1						
Dogs - pet animals - Surveillance - official controls								
Fish - Surveillance - official controls								

Table Salmonella in other animals

	S. Rissen	S. Saintpaul	S. Species	S. Thompson	S. Vejle	S. Veneziana	S. enterica subsp. diarizonae	S. enterica subsp. enterica
Fish - farmed - Survey - national survey								
Foxes - wild - Surveillance - official controls				1		1	1	2
Goats - Clinical investigations								
Hares - wild - Clinical investigations								
Monkeys - zoo animal - Clinical investigations								
Other animals - unspecified - Clinical investigations								3
Other animals - unspecified - Surveillance - official controls								
Pigs - Clinical investigations								
Pigs - Surveillance - official controls								
Pigs - Survey - national survey	1							1
Pigs - fattening pigs - Clinical investigations								
Pigs - fattening pigs - Surveillance - HACCP and own checks								
Rabbits - Clinical investigations								
Rabbits - Surveillance - HACCP and own checks								
Rabbits - Survey - national survey								
Sheep - Clinical investigations								5
Sheep - Surveillance - official controls								
Sheep - Survey - national survey								

Table Salmonella in other animals

	S. Rissen	S. Saintpaul	S. Species	S. Thompson	S. Vejle	S. Veneziana	S. enterica subsp. diarizonae	S. enterica subsp. enterica
Sheep and goats - Surveillance - HACCP and own checks								
Solipeds, domestic - horses - Clinical investigations								
Solipeds, domestic - horses - Survey - national survey								
Turtles - pet animals - Surveillance - official controls								
Turtles - pet animals - Survey - national survey								
Water buffalos - Clinical investigations								
Water buffalos - Survey - national survey			9					
Wild animals - Clinical investigations								
Wild boars - Surveillance - official controls				12		11		54
Zoo animals, all - Clinical investigations							3	

Table Salmonella in other birds

	Source of information	Sampling unit	Units tested	Total units positive for Salmonella	S. Enteritidis	S. Typhimurium	Salmonella spp., unspecified	S. Anatum	S. Blockley	S. Coeln	S. Haardt
Birds - wild - Clinical investigations		Animal	638	33		2	5	1		1	
Birds - wild - Surveillance - HACCP and own checks		Animal	76	0							
Birds - wild - Surveillance - official controls		Animal	123	9		2	2				
Birds - wild - Survey - national survey		Animal	1273	43			43				
Canary - Clinical investigations		Animal	51	2		1	1				
Guinea fowl - Surveillance - official controls		Animal	79	0							
Pheasants - Surveillance - official controls		Animal	45	0							
Pigeons - Clinical investigations		Animal	2505	23		10	2				
Pigeons - Surveillance - official controls		Animal	392	13		11	1				

	S. Hadar	S. Hessarek	S. Kottbus	S. Nigeria	S. Rissen	S. Saintpaul	S. Typhimurium var. Copenhagen	S. Veneziana	S. group B
Birds - wild - Clinical investigations	1	21				2			
Birds - wild - Surveillance - HACCP and own checks									
Birds - wild - Surveillance - official controls	1	4							
Birds - wild - Survey - national survey									
Canary - Clinical investigations									
Guinea fowl - Surveillance - official controls									

Table Salmonella in other birds

	S. Hadar	S. Hessarek	S. Kottbus	S. Nigeria	S. Rissen	S. Saintpaul	S. Typhimurium var. Copenhagen	S. Veneziana	S. group B
Pheasants - Surveillance - official controls									
Pigeons - Clinical investigations							10		1
Pigeons - Surveillance - official controls		1							

2.1.4 Salmonella in feedingstuffs

Table Salmonella in compound feedingstuffs

	Source of information	Sampling unit	Sample weight	Units tested	Total units positive for Salmonella	S. Enteritidis	S. Typhimurium	Salmonella spp., unspecified	Not typeable	Other serotypes	S. Agona
Complementary feedingstuffs - Surveillance - official controls - convenience sampling		Single	50g	191	0						
Complementary feedingstuffs - Surveillance - official controls - objective sampling		Single		69	0						
Compound feedingstuffs for poultry - broilers - Surveillance - official controls		Batch		48	0						
Compound feedingstuffs for poultry - broilers - Surveillance - official controls - objective sampling		Batch		56	5	1		1	3		
Compound feedingstuffs, not specified - Surveillance - official controls		Batch		276	1						
Other feed material - Surveillance - HACCP and own checks ¹⁾		Single		1328	0						
Other feed material - Surveillance - official controls ²⁾		Batch	50g	383	4			1		2	
Other feed material - Surveillance - official controls - objective sampling ³⁾		Single		146	6			2			1
Other feed material - Survey - national survey ⁴⁾		Single		100	7			7			

Table Salmonella in compound feedingstuffs

	S. Kedougou	S. Llandoff	S. Tennessee
Complementary feedingstuffs - Surveillance - official controls - convenience sampling			
Complementary feedingstuffs - Surveillance - official controls - objective sampling			
Compound feedingstuffs for poultry - broilers - Surveillance - official controls			
Compound feedingstuffs for poultry - broilers - Surveillance - official controls - objective sampling			
Compound feedingstuffs, not specified - Surveillance - official controls			1
Other feed material - Surveillance - HACCP and own checks ¹⁾			
Other feed material - Surveillance - official controls ²⁾			1
Other feed material - Surveillance - official controls - objective sampling ³⁾	1	2	
Other feed material - Survey - national survey ⁴⁾			

Comments:

- ¹⁾ complete feedingstuff
²⁾ complete feedingstuff
³⁾ complete feedingstuff
⁴⁾ complete feedingstuff

Table Salmonella in other feed matter

	Source of information	Sampling unit	Sample weight	Units tested	Total units positive for Salmonella	S. Enteritidis	S. Typhimurium	Salmonella spp., unspecified	S. Agona	S. Gabon	S. Infantis
Feed material of cereal grain origin - Surveillance - official controls		Batch	50g	113	0						
Feed material of oil seed or fruit origin - Surveillance - official controls		Batch		47	2			1	1		
Feed material of oil seed or fruit origin - Surveillance - official controls - objective sampling ¹⁾		Batch		72	7			1			1
Other feed material - Surveillance - official controls		Batch		589	14		1	3		1	
Other feed material - Surveillance - official controls - objective sampling		Single		265	9			3			2
Other feed material - Survey - national survey		Single		44	2		1				

	S. Isangi	S. Kalumburu	S. Kedougou	S. Lexington var. 15	S. Llandoff	S. Montevideo	S. Muenster	S. Newport	S. Rissen	S. Schwarzengrund	S. Tennessee
Feed material of cereal grain origin - Surveillance - official controls											
Feed material of oil seed or fruit origin - Surveillance - official controls											
Feed material of oil seed or fruit origin - Surveillance - official controls - objective sampling ¹⁾	1		1		1	3					
Other feed material - Surveillance - official controls	1	1	1			2	2	1			

Table Salmonella in other feed matter

	S. Isangi	S. Kalumburu	S. Kedougou	S. Lexington var. 15	S. Llandoff	S. Montevideo	S. Muenster	S. Newport	S. Rissen	S. Schwarzengr und	S. Tennessee
Other feed material - Surveillance - official controls - objective sampling				1		1			1	1	
Other feed material - Survey - national survey											1

	S. enterica subsp. enterica
Feed material of cereal grain origin - Surveillance - official controls	
Feed material of oil seed or fruit origin - Surveillance - official controls	
Feed material of oil seed or fruit origin - Surveillance - official controls - objective sampling ¹⁾	
Other feed material - Surveillance - official controls	1
Other feed material - Surveillance - official controls - objective sampling	
Other feed material - Survey - national survey	

Comments:

¹⁾ same sample with different serotypes of salmonella

Table Salmonella in feed material of animal origin

	Source of information	Sampling unit	Sample weight	Units tested	Total units positive for Salmonella	S. Enteritidis	S. Typhimurium	Salmonella spp., unspecified	S. Infantis	S. Liverpool	S. Senftenberg
Feed material of land animal origin - Surveillance - official controls		Batch		39	0						
Feed material of land animal origin - Surveillance - official controls - objective sampling		Batch		158	5				1	1	3
Feed material of land animal origin - Survey - national survey		Batch		160	20			20			

2.1.5 Salmonella serovars and phagetype distribution

The methods of collecting, isolating and testing of the Salmonella isolates are described in the chapters above respectively for each animal species, foodstuffs and humans. The serotype and phagetype distributions can be used to investigate the sources of the Salmonella infections in humans. Findings of same serovars and phagetypes in human cases and in foodstuffs or animals may indicate that the food category or animal species in question serves as a source of human infections. However as information is not available from all potential sources of infections, conclusions have to be drawn with caution.

Table Salmonella serovars in animals

Serovar	Cattle (bovine animals)		Pigs		Gallus gallus (fowl)		Other poultry		Ducks		Pigeons		Poultry, unspecified
	Monitoring	Clinical	Monitoring	Clinical	Monitoring	Clinical	Monitoring	Clinical	Monitoring	Clinical	Monitoring	Clinical	Monitoring
Sources of isolates													
Number of isolates in the laboratory		69		304						10		40	
Number of isolates serotyped	0	69	0	304	0	0	0	0	0	10	0	40	0
Number of isolates per serovar													
Other serotypes		12		31						2		3	
S. Agona													
S. Anatum				2									
S. Braenderup													
S. Bredeney				5									
S. Choleraesuis		2		63									

Table Salmonella serovars in animals

Serovar	Cattle (bovine animals)		Pigs		Gallus gallus (fowl)		Other poultry		Ducks		Pigeons		Poultry, unspecified
Sources of isolates	Monitoring	Clinical	Monitoring	Clinical	Monitoring	Clinical	Monitoring	Clinical	Monitoring	Clinical	Monitoring	Clinical	Monitoring
Number of isolates in the laboratory		69		304						10		40	
Number of isolates serotyped	0	69	0	304	0	0	0	0	0	10	0	40	0
Number of isolates per serovar													
S. Coeln													
S. Derby		2		22									
S. Enteritidis		2								1			
S. Hadar													
S. Heidelberg													
S. Infantis		2		10									
S. Kentucky													
S. Kottbus													
S. Livingstone		1		6									
S. London				7									
S. Mbandaka													
S. Montevideo		1											

Table Salmonella serovars in animals

Serovar	Cattle (bovine animals)		Pigs		Gallus gallus (fowl)		Other poultry		Ducks		Pigeons		Poultry, unspecified
Sources of isolates	Monitoring	Clinical	Monitoring	Clinical	Monitoring	Clinical	Monitoring	Clinical	Monitoring	Clinical	Monitoring	Clinical	Monitoring
Number of isolates in the laboratory		69		304						10		40	
Number of isolates serotyped	0	69	0	304	0	0	0	0	0	10	0	40	0
Number of isolates per serovar													
S. Muenchen		1		4									
S. Muenster		4											
S. Newport		1											
S. Senftenberg		1											
S. Thompson				1									
S. Typhimurium		20		47						5		37	
S. Veneziana		2		1						1			
S. group B		18		105						1			

Table Salmonella serovars in animals

Serovar	Poultry, unspecified	Quails		Rabbits		Sheep		Turkeys - unspecified		Water buffalos	
Sources of isolates	Clinical	Monitoring	Clinical	Monitoring	Clinical	Monitoring	Clinical	Monitoring	Clinical	Monitoring	Clinical
Number of isolates in the laboratory	1479		20		13		21		64		31
Number of isolates serotyped	1479	0	20	0	13	0	21	0	64	0	31
Number of isolates per serovar											
Other serotypes	191		2				10		16		7
S. Agona	25										
S. Anatum	14										1
S. Braenderup	29										
S. Bredeney	74		1						3		
S. Choleraesuis	0										
S. Coeln	12										
S. Derby	1		1				1				
S. Enteritidis	192						1				
S. Hadar	121						1		2		
S. Heidelberg	37										
S. Infantis	34										1

Table Salmonella serovars in animals

Serovar	Poultry, unspecified	Quails		Rabbits		Sheep		Turkeys - unspecified		Water buffalos	
Sources of isolates	Clinical	Monitoring	Clinical	Monitoring	Clinical	Monitoring	Clinical	Monitoring	Clinical	Monitoring	Clinical
Number of isolates in the laboratory	1479		20		13		21		64		31
Number of isolates serotyped	1479	0	20	0	13	0	21	0	64	0	31
Number of isolates per serovar											
S. Kentucky	69								1		
S. Kottbus	6								15		
S. Livingstone	230		1						3		
S. London	2		9								5
S. Mbandaka	68										
S. Montevideo	48										
S. Muenchen	104										
S. Muenster	4										7
S. Newport	4								22		1
S. Senftenberg	22								1		1
S. Thompson	140										
S. Typhimurium	33		5		13		7		1		7

Table Salmonella serovars in animals

Serovar	Poultry, unspecified	Quails		Rabbits		Sheep		Turkeys - unspecified		Water buffalos	
	Clinical	Monitoring	Clinical	Monitoring	Clinical	Monitoring	Clinical	Monitoring	Clinical	Monitoring	Clinical
	1479		20		13		21		64		31
	1479	0	20	0	13	0	21	0	64	0	31
S. Veneziana	6						1				
S. group B	13		1								1

Table Salmonella serovars in food

Serovar	Meat from bovine animals	Meat from pig	Meat from broilers (Gallus gallus)	Meat from other poultry species	Other products of animal origin	Meat from horse	Meat from rabbit	Meat from sheep	Meat from turkey	Molluscan shellfish	Other food
Sources of isolates	Monitoring	Monitoring	Monitoring	Monitoring	Monitoring	Monitoring	Monitoring	Monitoring	Monitoring	Monitoring	Monitoring
Number of isolates in the laboratory	57	389	174	0	0	10	4	9	74	63	396
Number of isolates serotyped	57	389	174	0	0	10	4	9	74	63	396
Number of isolates per serovar											
Other serotypes	6	23	14					2	10	18	71
S. Anatum	3	9	3						1		1
S. Brandenburg	1	10							1		2
S. Bredeney	2	5	18						14		11
S. Coeln			16								9
S. Derby	3	97	6			9		2	3	7	37
S. Enteritidis	5	1	25						2	1	9
S. Give	3	4									6
S. Goldcoast		5								2	3
S. Hadar			29						4		23
S. Heidelberg			4						4	1	2

Table Salmonella serovars in food

Serovar	Meat from bovine animals	Meat from pig	Meat from broilers (Gallus gallus)	Meat from other poultry species	Other products of animal origin	Meat from horse	Meat from rabbit	Meat from sheep	Meat from turkey	Molluscan shellfish	Other food
Sources of isolates	Monitoring	Monitoring	Monitoring	Monitoring	Monitoring	Monitoring	Monitoring	Monitoring	Monitoring	Monitoring	Monitoring
Number of isolates in the laboratory	57	389	174	0	0	10	4	9	74	63	396
Number of isolates serotyped	57	389	174	0	0	10	4	9	74	63	396
Number of isolates per serovar											
S. Infantis	5	11	12					2			19
S. Kedougou		2	1						1	1	15
S. Livingstone		2	9								18
S. London	3	30								1	9
S. Manhattan		13									1
S. Mbandaka		1								1	8
S. Meleagridis											11
S. Montevideo			1						1		14
S. Muenchen	1	1	7								14
S. Newport	1	2	6						10	2	5
S. Rissen	3	35							1	1	20
S. Saintpaul		4	7					1	15		6

Table Salmonella serovars in food

Serovar	Meat from bovine animals	Meat from pig	Meat from broilers (Gallus gallus)	Meat from other poultry species	Other products of animal origin	Meat from horse	Meat from rabbit	Meat from sheep	Meat from turkey	Molluscan shellfish	Other food
Sources of isolates	Monitoring	Monitoring	Monitoring	Monitoring	Monitoring	Monitoring	Monitoring	Monitoring	Monitoring	Monitoring	Monitoring
Number of isolates in the laboratory	57	389	174	0	0	10	4	9	74	63	396
Number of isolates serotyped	57	389	174	0	0	10	4	9	74	63	396
Number of isolates per serovar											
S. Senftenberg	1		2						1	2	17
S. Thompson	1		7								11
S. Typhimurium	12	64	5			1	4	2	6	19	31
S. group B H-	7	70	2							7	23

Table Salmonella Enteritidis phagetypes in animals

Phagetype	Cattle (bovine animals)		Pigs		Gallus gallus (fowl)		Other poultry		Ducks		Other animals - unspecified		Poultry, unspecified
	Monitoring	Clinical	Monitoring	Clinical	Monitoring	Clinical	Monitoring	Clinical	Monitoring	Clinical	Monitoring	Clinical	Monitoring
		2								1		3	
	0	2	0	0	0	0	0	0	0	1	0	5	0
Not typeable												2	
Other													
PT 1										1			
PT 13a													
PT 14b													
PT 1b													
PT 2												1	
PT 3													
PT 4		2										1	
PT 4a													
PT 4b													

Table Salmonella Enteritidis phagetypes in animals

Phagetype	Cattle (bovine animals)		Pigs		Gallus gallus (fowl)		Other poultry		Ducks		Other animals - unspecified		Poultry, unspecified
	Monitoring	Clinical	Monitoring	Clinical	Monitoring	Clinical	Monitoring	Clinical	Monitoring	Clinical	Monitoring	Clinical	Monitoring
		2								1		3	
	0	2	0	0	0	0	0	0	0	1	0	5	0
PT 59													
PT 6													
PT 6a													
PT 6b													
PT 6c													
PT 7													
PT 8												1	
RDNC													

Table Salmonella Enteritidis phagetypes in animals

Phagetype	Poultry, unspecified
	Clinical
	29
	192
Not typeable	28
Other	15
PT 1	11
PT 13a	1
PT 14b	17
PT 1b	2
PT 2	2
PT 3	8
PT 4	76
PT 4a	3
PT 4b	3
PT 59	2

Table Salmonella Enteritidis phagetypes in animals

Phagetype	Poultry, unspecified
	Clinical
	29
	192
PT 6	5
PT 6a	2
PT 6b	1
PT 6c	1
PT 7	3
PT 8	11
RDNC	1

Table Salmonella Typhimurium phagetypes in animals

Phagetype	Cattle (bovine animals)		Pigs		Gallus gallus (fowl)		Other poultry		Pigeons		Poultry, unspecified		Rabbits
	Monitoring	Clinical	Monitoring	Clinical	Monitoring	Clinical	Monitoring	Clinical	Monitoring	Clinical	Monitoring	Clinical	Monitoring
		20		47						37		33	
	0	20	0	47	0	0	0	0	0	37	0	33	0
DT 104		4		5								3	
DT 110				1									
DT 120		1		2								5	
DT 160												5	
DT 193				5								1	
DT 195													
DT 2										8			
DT 208				1									
DT 29				1									
DT 3												1	
DT 30				1						1			
DT 7				2									

Table Salmonella Typhimurium phagetypes in animals

Phagetype	Cattle (bovine animals)		Pigs		Gallus gallus (fowl)		Other poultry		Pigeons		Poultry, unspecified		Rabbits
	Monitoring	Clinical	Monitoring	Clinical	Monitoring	Clinical	Monitoring	Clinical	Monitoring	Clinical	Monitoring	Clinical	Monitoring
		20		47						37		33	
	0	20	0	47	0	0	0	0	0	37	0	33	0
DT 8												1	
DT 9												1	
DT 99										14		2	
Not typeable		9		15						10		6	
Other		4		5								3	
RDNC				3						4		4	
U 302		2		5								1	
U 311				1									

Table Salmonella Typhimurium phagetypes in animals

Phagetype	Rabbits
	Clinical
	13
	13
DT 104	1
DT 110	
DT 120	
DT 160	
DT 193	3
DT 195	1
DT 2	
DT 208	
DT 29	
DT 3	
DT 30	
DT 7	

Table Salmonella Typhimurium phagetypes in animals

Phagetype	Rabbits
	Clinical
	13
	13
DT 8	
DT 9	
DT 99	1
Not typeable	2
Other	4
RDNC	
U 302	1
U 311	

Table Salmonella Enteritidis phagetypes in food

Phagetype	Meat from bovine animals	Meat from pig	Meat from broilers (Gallus gallus)	Meat from other poultry species	Other products of animal origin	Meat from turkey	Molluscan shellfish	Other food
	Monitoring	Monitoring	Monitoring	Monitoring	Monitoring	Monitoring	Monitoring	Monitoring
	5	1	25	0	0	2	1	9
	5	1	25	0	0	2	1	9
Not typeable	4	1	15			2	1	6
PT 1			3					1
PT 13a			1					
PT 14b			1					1
PT 4			1					1
PT 6	1		3					
PT 8			1					

Table Salmonella Typhimurium phagetypes in food

Phagetype	Meat from bovine animals	Meat from pig	Meat from broilers (Gallus gallus)	Meat from other poultry species	Other products of animal origin	Meat from horse	Meat from rabbit	Meat from sheep	Meat from turkey	Molluscan shellfish
	Monitoring	Monitoring	Monitoring	Monitoring	Monitoring	Monitoring	Monitoring	Monitoring	Monitoring	Monitoring
	12	62	5	0	25	1	4	2	5	19
	12	62	5	0	25	1	4	2	5	19
DT 104		3			1				2	1
DT 110					2					
DT 120		3			5					
DT 160			1							
DT 193		8	1		1					
DT 2									1	4
DT 20		1			1					
DT 208		1								
DT 29	2									
DT 30		1								
DT 7			1							

Table Salmonella Typhimurium phagetypes in food

Phagetype	Meat from bovine animals	Meat from pig	Meat from broilers (Gallus gallus)	Meat from other poultry species	Other products of animal origin	Meat from horse	Meat from rabbit	Meat from sheep	Meat from turkey	Molluscan shellfish
	Monitoring	Monitoring	Monitoring	Monitoring	Monitoring	Monitoring	Monitoring	Monitoring	Monitoring	Monitoring
	12	62	5	0	25	1	4	2	5	19
	12	62	5	0	25	1	4	2	5	19
DT 99					3					
Not typeable	7	26	2		3		4	2		7
Other	1	8				1			1	3
RDNC	1	5			1				1	3
U 302		2			4					1
U 311	1	4			4					

2.1.6 Antimicrobial resistance in Salmonella isolates

A. Antimicrobial resistance in Salmonella in cattle

Sampling strategy used in monitoring

Procedures for the selection of isolates for antimicrobial testing

Passive Surveillance

Laboratory used for detection for resistance

Antimicrobials included in monitoring

MIC testing at NRL-AR. Antimicrobials included according to EFSA guidelines and Comm. Dec. 2007/407/EC.

Cut-off values used in testing

EUCAST epidemiological cut-off values used (according to Comm. Dec. 2007/407/EC).

National evaluation of the recent situation, the trends and sources of infection

In 2009, n=22 Salmonella isolates (all serovars) from cattle were sent for susceptibility testing at NRL-AR. Resistance rates appeared lower than those observed in poultry primary productions and none of isolates showed resistance to FQs and third generation cephalosporins; nevertheless, 40.9% isolates were multi-resistant (nR=4+).

In 2008, a low number of Salmonella from cattle (n=16) and meat from bovine animals (n=15) was available from passive laboratory surveillance, and this was probably the consequence of the low prevalence of Salmonella in the Italian bovine primary productions. In 2/16, 12.5% isolates from bovine animals low resistance to fluoroquinolones was observed. No isolate showed resistance to third generation cephalosporins, with only one STM isolate showing a pattern of S, Su, Te, plus low CIP resistance (0.125 mg/L) from meat of bovine origin.

B. Antimicrobial resistance in Salmonella in foodstuff derived from cattle

Sampling strategy used in monitoring

Procedures for the selection of isolates for antimicrobial testing

Passive Surveillance

Laboratory used for detection for resistance

Antimicrobials included in monitoring

MIC testing at NRL-AR. Antimicrobials included according to EFSA guidelines and Comm. Dec. 2007/407/EC.

Cut-off values used in testing

EUCAST epidemiological cut-off values used (according to Comm. Dec. 2007/407/EC).

National evaluation of the recent situation, the trends and sources of infection

In 2009, n=10 Salmonella isolates (all serovars) from cattle were sent for susceptibility testing at NRL-AR. Resistance rates appeared lower than those observed in poultry meat, with 20% multiresistant (nR=4+) isolates, and none resistant to FQs and third generation cephalosporins.

In 2008, a low number of Salmonella from cattle (n=16) and meat from bovine animals (n=15) was available from passive laboratory surveillance, and this was probably the consequence of the low prevalence of Salmonella in the Italian bovine primary productions. In 2/16, 12.5% isolates from bovine animals low resistance to fluoroquinolones was observed. No isolate showed resistance to third generation cephalosporins, with only one STM isolate showing a pattern of S, Su, Te, plus low CIP resistance (0.125 mg/L) from meat of bovine origin.

C. Antimicrobial resistance in Salmonella in foodstuff derived from pigs

Sampling strategy used in monitoring

Procedures for the selection of isolates for antimicrobial testing

Passive Surveillance (sampling stage: in total)

Laboratory used for detection for resistance

Antimicrobials included in monitoring

MIC testing at NRL-AR. Antimicrobials included according to EFSA guidelines and Comm. Dec. 2007/407/EC.

Cut-off values used in testing

EUCAST epidemiological cut-off values used (according to Comm. Dec. 2007/407/EC).

National evaluation of the recent situation, the trends and sources of infection

In the year 2009, among n=42 isolates (all serovars) available and tested, resistance rates to Critical Important Antimicrobials (e. g. 0% R to third generation cephalosporins and 2,4% R to FQs) and multi-resistance (23.8%) rates appeared lower than those found in Salmonella isolated from pigs.

In the year 2008, on 124 isolates tested from passive laboratory surveillance, 1.6% were resistant to third generation cephalosporins and 8.9% to fluoroquinolones (with only one isolate of undetermined serovar with MIC 16 mg/L, mode 0.25 mg/L, n=6). During the year 2007 a similar condition was found as FQs are concerned, with 9/129 (7%) isolates from pork meat and products thereof resistant to FQs, and none of the isolates with MICs >0.5 mg/L. No isolates were found resistant to third generation cephalosporins.

D. Antimicrobial resistance in Salmonella in foodstuff derived from poultry

Sampling strategy used in monitoring

Procedures for the selection of isolates for antimicrobial testing

Passive Laboratory Surveillance

Laboratory used for detection for resistance

Antimicrobials included in monitoring

MIC testing at NRL-AR. Antimicrobials included according to EFSA guidelines and Comm. Dec. 2007/407/EC.

Cut-off values used in testing

EUCAST epidemiological cut-off values used (according to Comm. Dec. 2007/407/EC).

National evaluation of the recent situation, the trends and sources of infection

In 2009, among the 18 isolates available for susceptibility testing, FQ-resistance was 38.9%, beta-lactam (AMP) resistance was present in 50% of Salmonella (all serovars) tested, and the proportion of multi-resistant (R=4+) isolates reached 61.1% (multi-resistant S. Hadar, S. Infantis, S. Newport S. Saintpaul). In the year 2008, 37 Salmonella isolates from poultry meat had been available for antimicrobial susceptibility testing (passive laboratory surveillance data). Among these, 32.4% showed low resistance to fluoroquinolones, and 2.7% to third generation cephalosporins.

Low fluoroquinolone resistance had been also reported in 2007 in poultry meat isolates (7/25, 28%), with 8% isolates resistant to third generation cephalosporins.

E. Antimicrobial resistance in Salmonella in pigs

Sampling strategy used in monitoring

Procedures for the selection of isolates for antimicrobial testing

Passive Laboratory Surveillance

Laboratory used for detection for resistance

Antimicrobials included in monitoring

MIC testing at NRL-AR. Antimicrobials included according to EFSA guidelines and Comm. Dec. 2007/407/EC.

Cut-off values used in testing

EUCAST epidemiological cut-off values used (according to Comm. Dec. 2007/407/EC).

National evaluation of the recent situation, the trends and sources of infection

In 2009, passive surveillance provided n=76 *Salmonella* isolates (all serovars). FQ-resistance was 19% and beta-lactam (AMP) resistance reached 64.5%, although no third generation cephalosporin resistance was observed. Amphenicol resistance was present in 21.1% for chloramphenicol and 15.8% for florfenicol. The majority of isolates tested were resistant to first-generation aminoglycosides (streptomycin) and tetracycline. High multi-resistance rates were observed (68.4% isolates with R=4+, with serovars Typhimurium and *Salmonella* 4,[5],12:i: accounting for 13/76 and 21/76 multi-resistances)

In the year 2008, on 125 isolates tested from passive laboratory surveillance, 3.2% had been found resistant to third generation cephalosporins and 15.2% to fluoroquinolones (CIP) (with only one isolate with MIC 2 mg/L, mode 0.25 mg/L, n=9). More than two thirds of isolates (all serovars) were resistant to 4+ antimicrobials.

Interestingly, 4/20 (20%) *S. Choleraesuis* isolates showed low resistance to CIP (≤ 0.5 mg/L).

During the year 2007, 7/90 (7.8%) isolates from pig samples collected at slaughter (Harmonised monitoring scheme, Dec. Comm. 668/2006/EC) were resistant to FQs, with none of the isolates with MICs > 0.5 mg/L. One out of 90 isolates were resistant to third generation cephalosporins.

Multiresistant *Salmonella* 4,5,12:i:- (n=3) and *S. London* (n=1) were found also resistant to third generation cephalosporins AND fluoroquinolones (CTX+CIP).

F. Antimicrobial resistance in Salmonella in poultry

Sampling strategy used in monitoring

Procedures for the selection of isolates for antimicrobial testing

Isolates available from National Control Plans in *Gallus gallus* (i. e. Breeding flocks, laying hens, broilers).
Additional Data from Passive Laboratory surveillance (Laying hens, Fowl)

Laboratory used for detection for resistance

Antimicrobials included in monitoring

MIC testing at NRL-AR. Antimicrobials included according to EFSA guidelines and Comm. Dec. 2007/407/EC.

Cut-off values used in testing

EUCAST epidemiological cut-off values used (according to Comm. Dec. 2007/407/EC).

National evaluation of the recent situation, the trends and sources of infection

Sampling context: National Control Plans in *Gallus gallus*

a. Broilers

The national control Plan provided 140 viable isolates sent for antimicrobial susceptibility testing to the NRL-AR.

Resistance to third generation cephalosporins (Cefotaxime, CTX and Ceftazidime, CAZ) was found in 6.4% (9/140) of all isolates tested, in serovars Anatum, Blockley, Bredeney, Heidelberg, Livingstone, Thompson. Two-thirds of all CTX and CAZ resistant isolates were resistant to 4+ antimicrobials (i. e. multiresistant), and 4/9 also resistant to fluoroquinolones (FQs).

Multiresistance was widespread among *Salmonella* isolates from broilers (36.4%, 51/140 of all isolates tested), with 15% of all isolates tested that are multi-resistant (nR = 4+) *S. Hadar*.

Salmonella beta-lactam resistance (ampicillin, AMP) was observed in 35.7% (50/140) isolates.

Streptomycin and tetracycline resistance were a common feature, present in more than 30% isolates.

Amphenicol resistance were found in 3.6% (chloramphenicol, CHL) and 1.4% (florfenicol, FFL) isolates. Fluoroquinolone resistance (Ciprofloxacin, CIP-R), was observed in 29.3% (41/140) of isolates available (Resistance range 0.25-1, mode 0.25, mg/L).

In 2008, only 24 isolates from survey according to Comm. Dec. 516/2007/EC had been available for testing, and this may have overestimated some resistance rates observed (e. g. CTX and CIP) in 2008.

Note. In 2009, isolates available among "top five serovars": *S. Typhimurium*: n=3; *S. Enteritidis*: n=7; *S. Hadar*: n=22; *S. Infantis*: n=2; *S. Virchow*: n=1

b. Laying hens

From the activities of the national *Salmonella* control program in laying hens, 99 isolates were available for susceptibility testing at the NRL-AR. Among these, 21.2% (n=21) showed low resistance to fluoroquinolones (serovars *Enteritidis*, *Hadar*, *Heidelberg*, *Kentucky*, *Montevideo*, *Typhimurium* and *Salmonella enterica* spp. isolates), with 38% (8/21) of CIP-R isolates that were also multi-resistant ones. None of the isolates available was resistant to third generation cephalosporins. This figure is consistent with the picture observed in the previous year, although only 23 isolates were available in 2008. No *S. Enteritidis* showed multi-resistance.

In holdings of laying hens, resistance rates for other antimicrobial classes appeared to be lower than observed in broilers, although 13% (n=13) isolates were classified as multi-resistant (R=4+).

Note. In 2009, isolates available among "top five serovars": *S. Typhimurium*: n=3; *S. Enteritidis*: n=26; *S. Hadar*: n=5; *S. Infantis*: n=0; *S. Virchow*: n=2

c. Breeders

In the year 2009, 11 isolates from breeding holdings of *Gallus gallus* were available for testing at the NRL-AR.

None of the isolates available was resistant to third generation cephalosporins, and FQ resistance was 18.2% (n=2). Although the number of isolates is about ten times lower, the general picture for all the antimicrobial classes considered is similar to what observed in laying hens, as far as resistance rates and distributions are concerned.

Note. In 2009, isolates available among "top five serovars": *S. Typhimurium*: n=2; *S. Enteritidis*: n=1; *S. Hadar*: n=0; *S. Infantis*: n=0; *S. Virchow*: n=0.

Sampling context: Passive Laboratory surveillance:

Fowl (*Gallus gallus*)

Passive Laboratory surveillance provided n=124 *Salmonella* (all serovars) isolates from *Gallus gallus* for sensitivity testing. Resistance to FQs was 25% and beta-lactam resistance (AMP) was 22.6%. The proportion of multi-resistant (R=4+) isolates reached 28.2%.

Breeding flocks

On 21 *Salmonella* (all serovars) available, 1 was resistant to third generation cephalosporins (a multiresistant strain).

In 2008, the survey according to Comm. Dec. 516/2007/EC had provided 24 viable isolates for antimicrobial susceptibility testing. On 8/24 (33.3%) isolates (3 *S. Thompson*; 2 *S. Mbandaka*; 1 *S. Virchow*; 1 *S. Stockholm*; 1 *S. Hadar*) resistance to third generation cephalosporins (Cefotaxime, CTX and Ceftazidime, CAZ) was found, with 11/24 (45.8%) isolates resistant to fluoroquinolones (Ciprofloxacin, CIP).

All CIP resistant isolates had indeed to be classified as low resistant, with 9 isolates with MICs 0.25 mg/L and none of them with MICs >1 mg/L.

Multiresistant *S. Hadar* (resistant to eight antimicrobials) and *S. Virchow* (resistant to five antimicrobials) had a common pattern of resistance AMP-CTX(CAZ)-CIP(NAL).

The features observed in the harmonised monitoring scheme seemed to be consistent with the data collected by means of passive laboratory surveillance in 2008 with CIP resistance not greater than 1 mg/L, and at lower rates (27/97 isolates, 27.8%). Multiresistant *S. Virchow* (1 isolate), *S. Livingstone* (5 isolates) and *S. Bredeney* (1 isolate) all showed a minimum common pattern CTX(CAZ)-CIP(NAL). Additionally, low resistance to fluoroquinolones was observed in 3 out of 8 *S. Enteritidis* isolates. Low fluoroquinolone resistance had been also reported in 2007 in poultry meat isolates (7/25, 28%), with 8% isolates resistant to third generation cephalosporins (passive laboratory surveillance data).

In the year 2007, a similar condition was observed for fluoroquinolone resistance, as on 80 isolates collected by means of passive laboratory surveillance, 25 (31.2%) were resistant to CIP, with none of the isolate with MICs >1 mg/L (mode 0.25 mg/L, n=19). Two isolates (2.5%) were resistant to third generation cephalosporins.

G. Antimicrobial resistance of *Salmonella* spp. in animal - Turkeys - Surveillance

Sampling strategy used in monitoring

Procedures for the selection of isolates for antimicrobial testing

Passive Surveillance

Laboratory used for detection for resistance

Antimicrobials included in monitoring

MIC testing at NRL-AR. Antimicrobials included according to EFSA guidelines and Comm. Dec. 2007/407/EC.

Cut-off values used in testing

EUCAST epidemiological cut-off values used (according to Comm. Dec. 2007/407/EC).

National evaluation of the recent situation, the trends and sources of infection

Only 12 *Salmonella* isolates were available from passive surveillance in turkeys: FQ-resistance was 16.7% and the proportion of multi-resistant isolates (R=4+) was 25%.

H. Antimicrobial resistance of *Salmonella* spp. in animal - *Gallus gallus* (fowl) - laying hens - Control and eradication programmes (Comm. Reg. 1168/2006/EC)

Sampling strategy used in monitoring

Procedures for the selection of isolates for antimicrobial testing

Isolates available from the National Control Plan in laying hens

Laboratory used for detection for resistance

Antimicrobials included in monitoring

MIC testing at NRL-AR. Antimicrobials included according to EFSA guidelines and Comm. Dec. 2007/407/EC.

Cut-off values used in testing

EUCAST epidemiological cut-off values used (according to Comm. Dec. 2007/407/EC).

National evaluation of the recent situation, the trends and sources of infection

In 2009, from the activities of the national *Salmonella* control program in laying hens, 99 isolates were available for susceptibility testing at the NRL-AR. Among these, 21.2% (n=21) showed low resistance to fluoroquinolones (serovars Enteritidis, Hadar, Heidelberg, Kentucky, Montevideo, Typhimurium and *Salmonella enterica* spp. isolates), with 38% (8/21) of CIP-R isolates that were also multi-resistant ones. None of the isolates available was resistant to third generation cephalosporins. This figure is consistent with the picture observed in the previous year, although only 23 isolates were available in 2008. No *S. Enteritidis* showed multi-resistance.

In holdings of laying hens, resistance rates for other antimicrobial classes appeared to be lower than observed in broilers, although 13% (n=13) isolates were classified as multi-resistant (R=4+).

Note. In 2009, isolates available among "top five serovars": *S. Typhimurium*: n=3; *S. Enteritidis*: n=26; *S. Hadar*: n=5; *S. Infantis*: n=0; *S. Virchow*: n=2.

In the year 2008, from the activities of the National *Salmonella* control program in laying hens (Comm. Reg. 1168/2006), 23 isolates were available for susceptibility testing. Among these, 21.7% showed low resistance to fluoroquinolones (2 *S. Hadar*, and 3 *S. Enteritidis* isolates). None of the isolates available were resistant to third generation cephalosporins.

A total 13% of such isolates were multiresistant (i. e. resistant to 4+ antimicrobials). One pentaresistant *S. Typhimurium* was detected.

Table Antimicrobial susceptibility testing of *S. Senftenberg* in Turkeys - at farm - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Senftenberg	Turkeys - at farm - Surveillance																								
	1																								
Antimicrobials:	Cut-off value	N	n	≤0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest
Amphenicols - Chloramphenicol	16	1	0		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0		
Amphenicols - Florfenicol	16	1	0		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0		
Tetracyclines - Tetracycline	8	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0		
Fluoroquinolones - Ciprofloxacin	0.06	1	1		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Quinolones - Nalidixic acid	16	1	1		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0		
Trimethoprim	2	1	0		0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0		
Aminoglycosides - Streptomycin	32	1	0		0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0		
Aminoglycosides - Gentamicin	2	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Aminoglycosides - Kanamycin	8	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0		
Penicillins - Ampicillin	4	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0		
Cephalosporins - Cefotaxim	0.5	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Sulfonamides	256	1	0		0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0		
Cephalosporins - Ceftazidim	2	1	0		0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0		
Polymyxins - Colistin	4	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0		

Table Antimicrobial susceptibility testing of *S. Senftenberg* in *Gallus gallus* (fowl) - laying hens - at farm - Control and eradication programmes - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Senftenberg Isolates out of a monitoring program (yes/no) Number of isolates available in the laboratory		Gallus gallus (fowl) - laying hens - at farm - Control and eradication programmes																									
		1																									
Antimicrobials:	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest		
Amphenicols - Chloramphenicol	16	1	0		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0				
Amphenicols - Florfenicol	16	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0				
Tetracyclines - Tetracycline	8	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Fluoroquinolones - Ciprofloxacin	0.06	1	0		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Quinolones - Nalidixic acid	16	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Trimethoprim	2	1	0		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Streptomycin	32	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Gentamicin	2	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Kanamycin	8	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Penicillins - Ampicillin	4	1	0		0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Cefotaxim	0.5	1	0		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Sulfonamides	256	1	0		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0				
Cephalosporins - Ceftazidim	2	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Polymyxins - Colistin	4	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0				

Table Antimicrobial susceptibility testing of *S. Senftenberg* in *Gallus gallus* (fowl) - laying hens - at farm - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Senftenberg	Gallus gallus (fowl) - laying hens - at farm - Surveillance																									
	Isolates out of a monitoring program (yes/no)																									
	Number of isolates available in the laboratory																									
	1																									
Antimicrobials:	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Amphenicols - Chloramphenicol	16	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0			
Amphenicols - Florfenicol	16	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0			
Tetracyclines - Tetracycline	8	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0			
Fluoroquinolones - Ciprofloxacin	0.06	1	0		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Quinolones - Nalidixic acid	16	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0			
Trimethoprim	2	1	0		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Streptomycin	32	1	0		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Gentamicin	2	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Kanamycin	8	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0			
Penicillins - Ampicillin	4	1	0		0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0			
Cephalosporins - Cefotaxim	0.5	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Sulfonamides	256	1	0		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0			
Cephalosporins - Ceftazidim	2	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Polymyxins - Colistin	4	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0			

Table Antimicrobial susceptibility testing of *S. Senftenberg* in Compound feedingstuffs for poultry (non specified) - at farm - feed sample - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Senftenberg Isolates out of a monitoring program (yes/no) Number of isolates available in the laboratory		Compound feedingstuffs for poultry (non specified) - at farm - feed sample - Surveillance																									
		2																									
		Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Antimicrobials:	16	2	0		0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0				
Amphenicols - Chloramphenicol	16	2	0		0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0				
Amphenicols - Florfenicol	8	2	1		0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0				
Tetracyclines - Tetracycline	0.06	2	0		0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Fluoroquinolones - Ciprofloxacin	16	2	0		0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0				
Quinolones - Nalidixic acid	2	2	0		0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Trimethoprim	32	2	1		0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0				
Aminoglycosides - Streptomycin	2	2	0		0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Gentamicin	8	2	0		0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Kanamycin	4	2	1		0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0				
Penicillins - Ampicillin	0.5	2	0		0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Cefotaxim	256	2	1		0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0				
Sulfonamides	2	2	0		0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Ceftazidim	4	2	0		0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0				
Polymyxins - Colistin																											

Table Antimicrobial susceptibility testing of *S. Senftenberg* in *Gallus gallus* (fowl) - at farm - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Senftenberg Isolates out of a monitoring program (yes/no) Number of isolates available in the laboratory		Gallus gallus (fowl) - at farm - Surveillance																									
		1																									
		Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Antimicrobials:	16	1	0		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0				
Amphenicols - Chloramphenicol	16	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0				
Amphenicols - Florfenicol	8	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Tetracyclines - Tetracycline	0.06	1	0		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Fluoroquinolones - Ciprofloxacin	16	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Quinolones - Nalidixic acid	2	1	0		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Trimethoprim	32	1	0		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Streptomycin	2	1	0		0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Gentamicin	8	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Kanamycin	4	1	0		0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0				
Penicillins - Ampicillin	0.5	1	0		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Cefotaxim	256	1	0		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0				
Sulfonamides	2	1	0		0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Ceftazidim	4	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Polymyxins - Colistin																											

Table Antimicrobial susceptibility testing of *S. Senftenberg* in *Gallus gallus* (fowl) - broilers - at farm - Control and eradication programmes - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Senftenberg	Gallus gallus (fowl) - broilers - at farm - Control and eradication programmes																									
	Isolates out of a monitoring program (yes/no)																									
	Number of isolates available in the laboratory																									
	1																									
Antimicrobials:	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Amphenicols - Chloramphenicol	16	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0			
Amphenicols - Florfenicol	16	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0			
Tetracyclines - Tetracycline	8	1	0		0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0			
Fluoroquinolones - Ciprofloxacin	0.06	1	0		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Quinolones - Nalidixic acid	16	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0			
Trimethoprim	2	1	0		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Streptomycin	32	1	0		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Gentamicin	2	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Kanamycin	8	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0			
Penicillins - Ampicillin	4	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0			
Cephalosporins - Cefotaxim	0.5	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Sulfonamides	256	1	0		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0			
Cephalosporins - Ceftazidim	2	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Polymyxins - Colistin	4	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0			

Table Antimicrobial susceptibility testing of *S. Kentucky* in *Gallus gallus* (fowl) - laying hens - at farm - Control and eradication programmes - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Kentucky	Gallus gallus (fowl) - laying hens - at farm - Control and eradication programmes																									
	Isolates out of a monitoring program (yes/no)																									
	Number of isolates available in the laboratory																									
	6																									
Antimicrobials:	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Amphenicols - Chloramphenicol	16	6	0		0	0	0	0	0	0	0	0	4	2	0	0	0	0	0	0	0	0	0			
Amphenicols - Florfenicol	16	6	0		0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0			
Tetracyclines - Tetracycline	8	6	3		0	0	0	0	0	1	0	2	0	0	0	0	0	3	0	0	0	0	0			
Fluoroquinolones - Ciprofloxacin	0.06	6	3		2	1	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Quinolones - Nalidixic acid	16	6	3		0	0	0	0	0	0	0	3	0	0	0	0	0	3	0	0	0	0	0			
Trimethoprim	2	6	0		0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Streptomycin	32	6	3		0	0	0	0	0	0	0	0	0	3	0	0	2	1	0	0	0	0	0			
Aminoglycosides - Gentamicin	2	6	0		0	0	0	5	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Kanamycin	8	6	0		0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0			
Penicillins - Ampicillin	4	6	1		0	0	0	0	0	0	5	0	0	0	0	0	1	0	0	0	0	0	0			
Cephalosporins - Cefotaxim	0.5	6	0		0	4	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Sulfonamides	256	6	2		0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	2	0			
Cephalosporins - Ceftazidim	2	6	0		0	0	0	5	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0			
Polymyxins - Colistin	4	6	0		0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0			

Table Antimicrobial susceptibility testing of *S. Kentucky* in *Gallus gallus* (fowl) - broilers - at farm - Control and eradication programmes - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Kentucky Isolates out of a monitoring program (yes/no) Number of isolates available in the laboratory		Gallus gallus (fowl) - broilers - at farm - Control and eradication programmes																									
		1																									
		Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Amphenicols - Chloramphenicol	16	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0				
Amphenicols - Florfenicol	16	1	0		0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0				
Tetracyclines - Tetracycline	8	1	1		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0				
Fluoroquinolones - Ciprofloxacin	0.06	1	0		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Quinolones - Nalidixic acid	16	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Trimethoprim	2	1	0		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Streptomycin	32	1	1		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0				
Aminoglycosides - Gentamicin	2	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Kanamycin	8	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Penicillins - Ampicillin	4	1	0		0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Cefotaxim	0.5	1	0		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Sulfonamides	256	1	0		0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0				
Cephalosporins - Ceftazidim	2	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Polymyxins - Colistin	4	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0				

Table Antimicrobial susceptibility testing of *S. Give* in Pigs - at farm - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Give	Pigs - at farm - Surveillance																								
	2																								
Antimicrobials:	Cut-off value	N	n	≤0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest
Amphenicols - Chloramphenicol	16	2	0		0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0		
Amphenicols - Florfenicol	16	2	0		0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0		
Tetracyclines - Tetracycline	8	2	2		0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0		
Fluoroquinolones - Ciprofloxacin	0.06	2	0		2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Quinolones - Nalidixic acid	16	2	0		0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0		
Trimethoprim	2	2	0		0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Aminoglycosides - Streptomycin	32	2	0		0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0		
Aminoglycosides - Gentamicin	2	2	0		0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Aminoglycosides - Kanamycin	8	2	0		0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0		
Penicillins - Ampicillin	4	2	0		0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0		
Cephalosporins - Cefotaxim	0.5	2	0		0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Sulfonamides	256	2	0		0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0		
Cephalosporins - Ceftazidim	2	2	0		0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Polymyxins - Colistin	4	2	0		0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0		

Table Antimicrobial susceptibility testing of *S. Coeln* in *Gallus gallus* (fowl) - laying hens - at farm - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Coeln	Gallus gallus (fowl) - laying hens - at farm - Surveillance																									
	Isolates out of a monitoring program (yes/no)																									
	Number of isolates available in the laboratory																									
	2																									
Antimicrobials:	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Amphenicols - Chloramphenicol	16	2	1		0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0			
Amphenicols - Florfenicol	16	2	0		0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0			
Tetracyclines - Tetracycline	8	2	0		0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0			
Fluoroquinolones - Ciprofloxacin	0.06	2	0		0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Quinolones - Nalidixic acid	16	2	0		0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0			
Trimethoprim	2	2	0		0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Streptomycin	32	2	0		0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0			
Aminoglycosides - Gentamicin	2	2	0		0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Kanamycin	8	2	0		0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0			
Penicillins - Ampicillin	4	2	0		0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0			
Cephalosporins - Cefotaxim	0.5	2	0		0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Sulfonamides	256	2	1		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0			
Cephalosporins - Ceftazidim	2	2	0		0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Polymyxins - Colistin	4	2	0		0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0			

Table Antimicrobial susceptibility testing of *S. Coeln* in Meat from broilers (*Gallus gallus*) - at retail - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Coeln	Meat from broilers (Gallus gallus) - at retail - Surveillance																									
	Isolates out of a monitoring program (yes/no)																									
	Number of isolates available in the laboratory																									
	1																									
Antimicrobials:	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Amphenicols - Chloramphenicol	16	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0			
Amphenicols - Florfenicol	16	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0			
Tetracyclines - Tetracycline	8	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0			
Fluoroquinolones - Ciprofloxacin	0.06	1	0		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Quinolones - Nalidixic acid	16	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0			
Trimethoprim	2	1	1		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0			
Aminoglycosides - Streptomycin	32	1	0		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Gentamicin	2	1	0		0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Kanamycin	8	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0			
Penicillins - Ampicillin	4	1	1		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0			
Cephalosporins - Cefotaxim	0.5	1	0		0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Sulfonamides	256	1	1		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0			
Cephalosporins - Ceftazidim	2	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Polymyxins - Colistin	4	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0			

Table Antimicrobial susceptibility testing of S. Coeln in Gallus gallus (fowl) - breeding flocks, unspecified - at farm - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to																											
S. Coeln	Gallus gallus (fowl) - breeding flocks, unspecified - at farm - Surveillance																										
	Isolates out of a monitoring program (yes/no)																										
	Number of isolates available in the laboratory																										
	1																										
Antimicrobials:	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest		
Amphenicols - Chloramphenicol	16	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0				
Amphenicols - Florfenicol	16	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0				
Tetracyclines - Tetracycline	8	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Fluoroquinolones - Ciprofloxacin	0.06	1	0		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Quinolones - Nalidixic acid	16	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Trimethoprim	2	1	1		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0				
Aminoglycosides - Streptomycin	32	1	0		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Gentamicin	2	1	0		0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Kanamycin	8	1	0		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0				
Penicillins - Ampicillin	4	1	1		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0				
Cephalosporins - Cefotaxim	0.5	1	0		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Sulfonamides	256	1	0		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0				
Cephalosporins - Ceftazidim	2	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Polymyxins - Colistin	4	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0				

Table Antimicrobial susceptibility testing of S. Coeln in Gallus gallus (fowl) - broilers - at farm - Control and eradication programmes - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Coeln Isolates out of a monitoring program (yes/no) Number of isolates available in the laboratory		Gallus gallus (fowl) - broilers - at farm - Control and eradication programmes																									
		1																									
Antimicrobials:	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest		
Amphenicols - Chloramphenicol	16	1	1		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0				
Amphenicols - Florfenicol	16	1	1		0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0				
Tetracyclines - Tetracycline	8	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Fluoroquinolones - Ciprofloxacin	0.06	1	0		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Quinolones - Nalidixic acid	16	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Trimethoprim	2	1	0		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Streptomycin	32	1	1		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0				
Aminoglycosides - Gentamicin	2	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Kanamycin	8	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Penicillins - Ampicillin	4	1	1		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0				
Cephalosporins - Cefotaxim	0.5	1	0		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Sulfonamides	256	1	1		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0				
Cephalosporins - Ceftazidim	2	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Polymyxins - Colistin	4	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0				

Table Antimicrobial susceptibility testing of *S. London* in Meat from pig - in total - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. London	Meat from pig - in total - Surveillance																								
	4																								
Antimicrobials:	Cut-off value	N	n	≤0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest
Amphenicols - Chloramphenicol	16	4	0		0	0	0	0	0	0	0	0	1	3	0	0	0	0	0	0	0	0	0		
Amphenicols - Florfenicol	16	4	0		0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0		
Tetracyclines - Tetracycline	8	4	0		0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0		
Fluoroquinolones - Ciprofloxacin	0.06	4	0		2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Quinolones - Nalidixic acid	16	4	0		0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0		
Trimethoprim	2	4	0		0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Aminoglycosides - Streptomycin	32	4	0		0	0	0	0	0	0	0	0	0	1	3	0	0	0	0	0	0	0	0		
Aminoglycosides - Gentamicin	2	4	0		0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0		
Aminoglycosides - Kanamycin	8	4	0		0	0	0	0	0	0	0	3	0	1	0	0	0	0	0	0	0	0	0		
Penicillins - Ampicillin	4	4	0		0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0		
Cephalosporins - Cefotaxim	0.5	4	0		0	3	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Sulfonamides	256	4	0		0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0		
Cephalosporins - Ceftazidim	2	4	0		0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Polymyxins - Colistin	4	4	0		0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0		

Table Antimicrobial susceptibility testing of *S. London* in *Gallus gallus* (fowl) - broilers - at farm - Control and eradication programmes - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. London Isolates out of a monitoring program (yes/no) Number of isolates available in the laboratory		Gallus gallus (fowl) - broilers - at farm - Control and eradication programmes																									
		1																									
		Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Amphenicols - Chloramphenicol	16	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0					
Amphenicols - Florfenicol	16	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0					
Tetracyclines - Tetracycline	8	1	0		0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0					
Fluoroquinolones - Ciprofloxacin	0.06	1	0		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
Quinolones - Nalidixic acid	16	1	0		0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0					
Trimethoprim	2	1	0		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0					
Aminoglycosides - Streptomycin	32	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0					
Aminoglycosides - Gentamicin	2	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
Aminoglycosides - Kanamycin	8	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0					
Penicillins - Ampicillin	4	1	0		0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0					
Cephalosporins - Cefotaxim	0.5	1	0		0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
Sulfonamides	256	1	0		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0					
Cephalosporins - Ceftazidim	2	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
Polymyxins - Colistin	4	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0					

Table Antimicrobial susceptibility testing of S. Hadar in Gallus gallus (fowl) - laying hens - at farm - Control and eradication programmes - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Hadar	Gallus gallus (fowl) - laying hens - at farm - Control and eradication programmes																									
	Isolates out of a monitoring program (yes/no)																									
	Number of isolates available in the laboratory																									
	5																									
Antimicrobials:	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Amphenicols - Chloramphenicol	16	5	0		0	0	0	0	0	0	0	0	1	4	0	0	0	0	0	0	0	0	0			
Amphenicols - Florfenicol	16	5	0		0	0	0	0	0	0	0	0	4	0	1	0	0	0	0	0	0	0	0			
Tetracyclines - Tetracycline	8	5	3		0	0	0	0	0	1	0	1	0	0	1	0	1	1	0	0	0	0	0			
Fluoroquinolones - Ciprofloxacin	0.06	5	5		0	0	0	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0			
Quinolones - Nalidixic acid	16	5	5		0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0			
Trimethoprim	2	5	1		0	0	0	0	4	0	0	0	0	0	0	0	1	0	0	0	0	0	0			
Aminoglycosides - Streptomycin	32	5	2		0	0	0	0	0	0	0	0	0	3	0	0	2	0	0	0	0	0	0			
Aminoglycosides - Gentamicin	2	5	0		0	0	0	3	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Kanamycin	8	5	0		0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0			
Penicillins - Ampicillin	4	5	3		0	0	0	0	0	0	2	0	0	0	0	0	3	0	0	0	0	0	0			
Cephalosporins - Cefotaxim	0.5	5	0		0	2	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Sulfonamides	256	5	1		0	0	0	0	0	0	0	0	0	0	0	1	3	0	0	0	0	1	0			
Cephalosporins - Ceftazidim	2	5	0		0	0	0	4	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0			
Polymyxins - Colistin	4	5	0		0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0			

Table Antimicrobial susceptibility testing of *S. Hadar* in Meat from broilers (*Gallus gallus*) - at retail - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Hadar Isolates out of a monitoring program (yes/no) Number of isolates available in the laboratory		Meat from broilers (Gallus gallus) - at retail - Surveillance																									
		5																									
		Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Antimicrobials:	16	5	0		0	0	0	0	0	0	1	0	3	1	0	0	0	0	0	0	0	0	0				
Amphenicols - Chloramphenicol	16	5	0		0	0	0	0	0	0	1	0	3	1	0	0	0	0	0	0	0	0	0				
Amphenicols - Florfenicol	8	5	5		0	0	0	0	0	0	0	0	0	0	0	1	3	1	0	0	0	0	0				
Tetracyclines - Tetracycline	0.06	5	3		0	1	1	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Fluoroquinolones - Ciprofloxacin	16	5	4		0	0	0	0	0	0	0	1	0	0	0	0	0	4	0	0	0	0	0				
Quinolones - Nalidixic acid	2	5	1		0	0	0	0	4	0	0	0	0	0	0	0	1	0	0	0	0	0	0				
Trimethoprim	32	5	4		0	0	0	0	0	0	0	0	0	0	1	0	2	2	0	0	0	0	0				
Aminoglycosides - Streptomycin	2	5	0		0	0	0	2	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Gentamicin	8	5	0		0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Kanamycin	4	5	4		0	0	0	0	0	0	0	1	0	0	0	0	4	0	0	0	0	0	0				
Penicillins - Ampicillin	0.5	5	0		0	1	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Cefotaxim	256	5	1		0	0	0	0	0	0	0	0	0	0	1	0	3	0	0	0	0	1	0				
Sulfonamides	2	5	0		0	0	0	4	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Ceftazidim	4	5	0		0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0				
Polymyxins - Colistin																											

Table Antimicrobial susceptibility testing of *S. Hadar* in Meat from turkey - in total - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Hadar	Meat from turkey - in total - Surveillance																								
	1																								
Antimicrobials:	Cut-off value	N	n	≤0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest
Amphenicols - Chloramphenicol	16	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0		
Amphenicols - Florfenicol	16	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0		
Tetracyclines - Tetracycline	8	1	1		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0		
Fluoroquinolones - Ciprofloxacin	0.06	1	1		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Quinolones - Nalidixic acid	16	1	1		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0		
Trimethoprim	2	1	0		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Aminoglycosides - Streptomycin	32	1	1		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0		
Aminoglycosides - Gentamicin	2	1	0		0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0		
Aminoglycosides - Kanamycin	8	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0		
Penicillins - Ampicillin	4	1	0		0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0		
Cephalosporins - Cefotaxim	0.5	1	0		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Sulfonamides	256	1	0		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0		
Cephalosporins - Ceftazidim	2	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Polymyxins - Colistin	4	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0		

Table Antimicrobial susceptibility testing of S. Hadar in Compound feedingstuffs for poultry (non specified) - at farm - feed sample - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Hadar Isolates out of a monitoring program (yes/no) Number of isolates available in the laboratory		Compound feedingstuffs for poultry (non specified) - at farm - feed sample - Surveillance																									
		7																									
		Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Antimicrobials:	16	7	0		0	0	0	0	0	0	0	0	5	2	0	0	0	0	0	0	0	0	0				
Amphenicols - Chloramphenicol	16	7	0		0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0				
Amphenicols - Florfenicol	8	7	6		0	0	0	0	0	0	0	1	0	0	0	0	6	0	0	0	0	0	0				
Tetracyclines - Tetracycline	0.06	7	7		0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Fluoroquinolones - Ciprofloxacin	16	7	7		0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0				
Quinolones - Nalidixic acid	2	7	0		0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Trimethoprim	32	7	6		0	0	0	0	0	0	0	0	0	0	1	6	0	0	0	0	0	0	0				
Aminoglycosides - Streptomycin	2	7	0		0	0	0	3	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Gentamicin	8	7	0		0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Kanamycin	4	7	7		0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0				
Penicillins - Ampicillin	0.5	7	0		0	3	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Cefotaxim	256	7	0		0	0	0	0	0	0	0	0	1	0	1	1	4	0	0	0	0	0	0				
Sulfonamides	2	7	0		0	0	0	4	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Ceftazidim	4	7	0		0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0				
Polymyxins - Colistin																											

Table Antimicrobial susceptibility testing of S. Hadar in Gallus gallus (fowl) - breeding flocks, unspecified - at farm - Control and eradication programmes - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Hadar Isolates out of a monitoring program (yes/no) Number of isolates available in the laboratory		Gallus gallus (fowl) - breeding flocks, unspecified - at farm - Control and eradication programmes																									
		1																									
Antimicrobials:	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest		
Amphenicols - Chloramphenicol	16	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0				
Amphenicols - Florfenicol	16	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0				
Tetracyclines - Tetracycline	8	1	1		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0				
Fluoroquinolones - Ciprofloxacin	0.06	1	1		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Quinolones - Nalidixic acid	16	1	1		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0				
Trimethoprim	2	1	0		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Streptomycin	32	1	1		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0				
Aminoglycosides - Gentamicin	2	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Kanamycin	8	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Penicillins - Ampicillin	4	1	1		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0				
Cephalosporins - Cefotaxim	0.5	1	0		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Sulfonamides	256	1	0		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0				
Cephalosporins - Ceftazidim	2	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Polymyxins - Colistin	4	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0				

Table Antimicrobial susceptibility testing of *S. Hadar* in *Gallus gallus* (fowl) - at farm - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Hadar Isolates out of a monitoring program (yes/no) Number of isolates available in the laboratory		Gallus gallus (fowl) - at farm - Surveillance																									
		6																									
		Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Antimicrobials:	16	6	0		0	0	0	0	0	0	0	5	1	0	0	0	0	0	0	0	0	0	0				
Amphenicols - Chloramphenicol	16	6	0		0	0	0	0	0	0	1	0	5	0	0	0	0	0	0	0	0	0	0				
Amphenicols - Florfenicol	8	6	4		0	0	0	0	0	1	0	1	0	0	0	3	1	0	0	0	0	0	0				
Tetracyclines - Tetracycline	0.06	6	6		0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Fluoroquinolones - Ciprofloxacin	16	6	6		0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0				
Quinolones - Nalidixic acid	2	6	0		0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Trimethoprim	32	6	5		0	0	0	0	0	0	0	0	0	0	1	0	3	1	1	0	0	0	0				
Aminoglycosides - Streptomycin	2	6	0		0	0	0	1	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Gentamicin	8	6	0		0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Kanamycin	4	6	6		0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0				
Penicillins - Ampicillin	0.5	6	0		0	1	0	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Cefotaxim	256	6	0		0	0	0	0	0	0	0	0	0	0	2	2	1	1	0	0	0	0	0				
Sulfonamides	2	6	0		0	0	0	1	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Ceftazidim	4	6	0		0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0				
Polymyxins - Colistin																											

Table Antimicrobial susceptibility testing of S. Hadar in Gallus gallus (fowl) - broilers - at farm - Control and eradication programmes - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Hadar	Gallus gallus (fowl) - broilers - at farm - Control and eradication programmes																									
	Isolates out of a monitoring program (yes/no)																									
	Number of isolates available in the laboratory																									
	22																									
Antimicrobials:	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Amphenicols - Chloramphenicol	16	22	0		0	0	0	0	0	0	0	0	12	9	1	0	0	0	0	0	0	0	0			
Amphenicols - Florfenicol	16	22	0		0	0	0	0	0	0	2	2	17	0	1	0	0	0	0	0	0	0	0			
Tetracyclines - Tetracycline	8	22	20		0	0	0	0	0	1	0	0	1	0	0	0	14	6	0	0	0	0	0			
Fluoroquinolones - Ciprofloxacin	0.06	22	22		0	0	0	2	19	1	0	0	0	0	0	0	0	0	0	0	0	0	0			
Quinolones - Nalidixic acid	16	22	22		0	0	0	0	0	0	0	0	0	0	0	0	0	22	0	0	0	0	0			
Trimethoprim	2	22	3		0	0	0	0	19	0	0	0	0	0	0	0	3	0	0	0	0	0	0			
Aminoglycosides - Streptomycin	32	22	18		0	0	0	0	0	0	0	0	0	0	1	3	11	6	1	0	0	0	0			
Aminoglycosides - Gentamicin	2	22	0		0	0	0	9	2	10	0	1	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Kanamycin	8	22	0		0	0	0	0	0	0	0	21	1	0	0	0	0	0	0	0	0	0	0			
Penicillins - Ampicillin	4	22	20		0	0	0	0	0	0	1	1	0	0	0	0	20	0	0	0	0	0	0			
Cephalosporins - Cefotaxim	0.5	22	0		0	3	0	17	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Sulfonamides	256	22	3		0	0	0	0	0	0	0	0	0	0	0	6	10	3	0	0	0	3	0			
Cephalosporins - Ceftazidim	2	22	0		0	0	0	10	1	10	1	0	0	0	0	0	0	0	0	0	0	0	0			
Polymyxins - Colistin	4	22	1		0	0	0	0	0	0	0	0	21	1	0	0	0	0	0	0	0	0	0			

Table Antimicrobial susceptibility testing of S. 4,5,12:i:- in Meat from pig - in total - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. 4,5,12:i:- Isolates out of a monitoring program (yes/no) Number of isolates available in the laboratory	Meat from pig - in total - Surveillance																								
	1																								
	Cut-off value	N	n	≤0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest
Amphenicols - Chloramphenicol	16	1	0		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0		
Amphenicols - Florfenicol	16	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0		
Tetracyclines - Tetracycline	8	1	1		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0		
Fluoroquinolones - Ciprofloxacin	0.06	1	0		0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Quinolones - Nalidixic acid	16	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0		
Trimethoprim	2	1	0		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Aminoglycosides - Streptomycin	32	1	1		0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0		
Aminoglycosides - Gentamicin	2	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Aminoglycosides - Kanamycin	8	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0		
Penicillins - Ampicillin	4	1	1		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0		
Cephalosporins - Cefotaxim	0.5	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Sulfonamides	256	1	1		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0		
Cephalosporins - Ceftazidim	2	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Polymyxins - Colistin	4	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0		

Table Antimicrobial susceptibility testing of S. Muenster in Gallus gallus (fowl) - laying hens - at farm - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Muenster	Gallus gallus (fowl) - laying hens - at farm - Surveillance																									
	Isolates out of a monitoring program (yes/no)																									
	Number of isolates available in the laboratory																									
	1																									
Antimicrobials:	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Amphenicols - Chloramphenicol	16	1	0		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0			
Amphenicols - Florfenicol	16	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0			
Tetracyclines - Tetracycline	8	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0			
Fluoroquinolones - Ciprofloxacin	0.06	1	0		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Quinolones - Nalidixic acid	16	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0			
Trimethoprim	2	1	0		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Streptomycin	32	1	0		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Gentamicin	2	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Kanamycin	8	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0			
Penicillins - Ampicillin	4	1	0		0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0			
Cephalosporins - Cefotaxim	0.5	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Sulfonamides	256	1	0		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0			
Cephalosporins - Ceftazidim	2	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Polymyxins - Colistin	4	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0			

Table Antimicrobial susceptibility testing of S. Muenster in Gallus gallus (fowl) - at farm - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to																											
S. Muenster	Gallus gallus (fowl) - at farm - Surveillance																										
	1																										
	Cut-off value	N	n	≤0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest		
Amphenicols - Chloramphenicol	16	1	0		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0				
Amphenicols - Florfenicol	16	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0				
Tetracyclines - Tetracycline	8	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Fluoroquinolones - Ciprofloxacin	0.06	1	0		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Quinolones - Nalidixic acid	16	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Trimethoprim	2	1	0		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Streptomycin	32	1	0		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Gentamicin	2	1	0		0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Kanamycin	8	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Penicillins - Ampicillin	4	1	0		0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Cefotaxim	0.5	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Sulfonamides	256	1	0		0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0				
Cephalosporins - Ceftazidim	2	1	0		0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0				
Polymyxins - Colistin	4	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0				

Table Antimicrobial susceptibility testing of S. Gallinarum biovar Pullorum in Gallus gallus (fowl) - at farm - Surveillance - quantitative data
[Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Gallinarum biovar Pullorum	Gallus gallus (fowl) - at farm - Surveillance																									
	Isolates out of a monitoring program (yes/no)																									
	Number of isolates available in the laboratory																									
	1																									
Antimicrobials:	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Amphenicols - Chloramphenicol	16	1	0		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0			
Amphenicols - Florfenicol	16	1	0		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0			
Tetracyclines - Tetracycline	8	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0			
Fluoroquinolones - Ciprofloxacin	0.06	1	0		0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Quinolones - Nalidixic acid	16	1	0		0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0			
Trimethoprim	2	1	0		0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Streptomycin	32	1	0		0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0			
Aminoglycosides - Gentamicin	2	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Kanamycin	8	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0			
Penicillins - Ampicillin	4	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0			
Cephalosporins - Cefotaxim	0.5	1	0		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Sulfonamides	256	1	0		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0			
Cephalosporins - Ceftazidim	2	1	0		0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0			
Polymyxins - Colistin	4	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0			

Table Antimicrobial susceptibility testing of *S. Newport* in Turkeys - at farm - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Newport	Turkeys - at farm - Surveillance																								
	2																								
Antimicrobials:	Cut-off value	N	n	≤0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest
Amphenicols - Chloramphenicol	16	2	0		0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0		
Amphenicols - Florfenicol	16	2	0		0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0		
Tetracyclines - Tetracycline	8	2	1		0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0		
Fluoroquinolones - Ciprofloxacin	0.06	2	0		1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Quinolones - Nalidixic acid	16	2	0		0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0		
Trimethoprim	2	2	1		0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0		
Aminoglycosides - Streptomycin	32	2	0		0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0		
Aminoglycosides - Gentamicin	2	2	0		0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0		
Aminoglycosides - Kanamycin	8	2	0		0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0		
Penicillins - Ampicillin	4	2	1		0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0		
Cephalosporins - Cefotaxim	0.5	2	0		0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Sulfonamides	256	2	1		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0		
Cephalosporins - Ceftazidim	2	2	0		0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Polymyxins - Colistin	4	2	0		0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0		

Table Antimicrobial susceptibility testing of S. Newport in Meat from broilers (Gallus gallus) - at retail - Surveillance - quantitative data [Dilution method]

S. Newport Isolates out of a monitoring program (yes/no) Number of isolates available in the laboratory Antimicrobials:		Concentration (µg/ml), number of isolates with a concentration of inhibition equal to																									
		Meat from broilers (Gallus gallus) - at retail - Surveillance																									
		2																									
Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest			
Amphenicols - Chloramphenicol	16	2	0		0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0					
Amphenicols - Florfenicol	16	2	0		0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0					
Tetracyclines - Tetracycline	8	2	2		0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0					
Fluoroquinolones - Ciprofloxacin	0.06	2	0		0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
Quinolones - Nalidixic acid	16	2	0		0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0					
Trimethoprim	2	2	2		0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0					
Aminoglycosides - Streptomycin	32	2	0		0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0					
Aminoglycosides - Gentamicin	2	2	0		0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0					
Aminoglycosides - Kanamycin	8	2	0		0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0					
Penicillins - Ampicillin	4	2	2		0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0					
Cephalosporins - Cefotaxim	0.5	2	0		0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
Sulfonamides	256	2	2		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0					
Cephalosporins - Ceftazidim	2	2	0		0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
Polymyxins - Colistin	4	2	0		0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0					

Table Antimicrobial susceptibility testing of *S. Newport* in Meat from turkey - in total - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Newport Isolates out of a monitoring program (yes/no) Number of isolates available in the laboratory		Meat from turkey - in total - Surveillance																									
		1																									
		Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Antimicrobials:	16	1	0		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0				
Amphenicols - Chloramphenicol	16	1	0		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0				
Amphenicols - Florfenicol	8	1	1		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0				
Tetracyclines - Tetracycline	0.06	1	0		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Fluoroquinolones - Ciprofloxacin	16	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Quinolones - Nalidixic acid	2	1	1		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0				
Trimethoprim	32	1	0		0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0				
Aminoglycosides - Streptomycin	2	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Gentamicin	8	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Kanamycin	4	1	1		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0				
Penicillins - Ampicillin	0.5	1	0		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Cefotaxim	256	1	1		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0				
Sulfonamides	2	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Ceftazidim	4	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0				
Polymyxins - Colistin																											

Table Antimicrobial susceptibility testing of S. Newport in Cattle (bovine animals) - at farm - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to																											
S. Newport	Cattle (bovine animals) - at farm - Surveillance																										
	Isolates out of a monitoring program (yes/no)																										
	Number of isolates available in the laboratory																										
	1																										
Antimicrobials:	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest		
Amphenicols - Chloramphenicol	16	1	0		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0				
Amphenicols - Florfenicol	16	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0				
Tetracyclines - Tetracycline	8	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Fluoroquinolones - Ciprofloxacin	0.06	1	0		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Quinolones - Nalidixic acid	16	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Trimethoprim	2	1	0		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Streptomycin	32	1	0		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Gentamicin	2	1	0		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Kanamycin	8	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Penicillins - Ampicillin	4	1	0		0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Cefotaxim	0.5	1	0		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Sulfonamides	256	1	0		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0				
Cephalosporins - Ceftazidim	2	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Polymyxins - Colistin	4	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0				

Table Antimicrobial susceptibility testing of *S. Newport* in *Gallus gallus* (fowl) - broilers - at farm - Control and eradication programmes - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Newport	Gallus gallus (fowl) - broilers - at farm - Control and eradication programmes																									
	Isolates out of a monitoring program (yes/no)																									
	Number of isolates available in the laboratory																									
	2																									
Antimicrobials:	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Amphenicols - Chloramphenicol	16	2	0		0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0			
Amphenicols - Florfenicol	16	2	0		0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0			
Tetracyclines - Tetracycline	8	2	2		0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0			
Fluoroquinolones - Ciprofloxacin	0.06	2	1		0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0			
Quinolones - Nalidixic acid	16	2	0		0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0			
Trimethoprim	2	2	2		0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0			
Aminoglycosides - Streptomycin	32	2	0		0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0			
Aminoglycosides - Gentamicin	2	2	0		0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Kanamycin	8	2	0		0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0			
Penicillins - Ampicillin	4	2	2		0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0			
Cephalosporins - Cefotaxim	0.5	2	0		0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Sulfonamides	256	2	2		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0			
Cephalosporins - Ceftazidim	2	2	0		0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Polymyxins - Colistin	4	2	0		0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0			

Table Antimicrobial susceptibility testing of S. Agona in Gallus gallus (fowl) - laying hens - at farm - Control and eradication programmes - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Agona	Gallus gallus (fowl) - laying hens - at farm - Control and eradication programmes																									
	Isolates out of a monitoring program (yes/no)																									
	Number of isolates available in the laboratory																									
	6																									
Antimicrobials:	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Amphenicols - Chloramphenicol	16	6	0		0	0	0	0	0	0	0	0	0	4	2	0	0	0	0	0	0	0	0			
Amphenicols - Florfenicol	16	6	0		0	0	0	0	0	0	0	0	1	4	1	0	0	0	0	0	0	0	0			
Tetracyclines - Tetracycline	8	6	0		0	0	0	0	0	0	0	2	2	2	0	0	0	0	0	0	0	0	0			
Fluoroquinolones - Ciprofloxacin	0.06	6	0		2	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Quinolones - Nalidixic acid	16	6	0		0	0	0	0	0	0	0	4	0	2	0	0	0	0	0	0	0	0	0			
Trimethoprim	2	6	0		0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Streptomycin	32	6	0		0	0	0	0	0	0	0	0	0	3	2	1	0	0	0	0	0	0	0			
Aminoglycosides - Gentamicin	2	6	0		0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Kanamycin	8	6	0		0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0			
Penicillins - Ampicillin	4	6	0		0	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0			
Cephalosporins - Cefotaxim	0.5	6	0		0	0	0	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Sulfonamides	256	6	0		0	0	0	0	0	0	0	0	0	0	0	0	1	5	0	0	0	0	0			
Cephalosporins - Ceftazidim	2	6	0		0	0	0	1	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0			
Polymyxins - Colistin	4	6	0		0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0			

Table Antimicrobial susceptibility testing of *S. Agona* in *Gallus gallus* (fowl) - laying hens - at farm - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Agona	Gallus gallus (fowl) - laying hens - at farm - Surveillance																									
	Isolates out of a monitoring program (yes/no)																									
	Number of isolates available in the laboratory																									
	2																									
Antimicrobials:	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Amphenicols - Chloramphenicol	16	2	0		0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0			
Amphenicols - Florfenicol	16	2	0		0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0			
Tetracyclines - Tetracycline	8	2	0		0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0			
Fluoroquinolones - Ciprofloxacin	0.06	2	0		2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Quinolones - Nalidixic acid	16	2	0		0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0			
Trimethoprim	2	2	0		0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Streptomycin	32	2	0		0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0			
Aminoglycosides - Gentamicin	2	2	0		0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Kanamycin	8	2	0		0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0			
Penicillins - Ampicillin	4	2	0		0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0			
Cephalosporins - Cefotaxim	0.5	2	0		0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Sulfonamides	256	2	0		0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0			
Cephalosporins - Ceftazidim	2	2	0		0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0			
Polymyxins - Colistin	4	2	0		0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0			

Table Antimicrobial susceptibility testing of *S. Agona* in Compound feedingstuffs for poultry (non specified) - at farm - feed sample - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Agona Isolates out of a monitoring program (yes/no) Number of isolates available in the laboratory		Compound feedingstuffs for poultry (non specified) - at farm - feed sample - Surveillance																									
		2																									
Antimicrobials:	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest		
Amphenicols - Chloramphenicol	16	2	0		0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0				
Amphenicols - Florfenicol	16	2	0		0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0				
Tetracyclines - Tetracycline	8	2	1		0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0				
Fluoroquinolones - Ciprofloxacin	0.06	2	0		1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Quinolones - Nalidixic acid	16	2	0		0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0				
Trimethoprim	2	2	1		0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0				
Aminoglycosides - Streptomycin	32	2	0		0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0				
Aminoglycosides - Gentamicin	2	2	0		0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Kanamycin	8	2	1		0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0				
Penicillins - Ampicillin	4	2	1		0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0				
Cephalosporins - Cefotaxim	0.5	2	0		0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Sulfonamides	256	2	1		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0				
Cephalosporins - Ceftazidim	2	2	0		0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0				
Polymyxins - Colistin	4	2	0		0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0				

Table Antimicrobial susceptibility testing of S. Agona in Gallus gallus (fowl) - breeding flocks, unspecified - at farm - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Agona	Gallus gallus (fowl) - breeding flocks, unspecified - at farm - Surveillance																									
	Isolates out of a monitoring program (yes/no)																									
	Number of isolates available in the laboratory																									
	1																									
Antimicrobials:	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Amphenicols - Chloramphenicol	16	1	0		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0			
Amphenicols - Florfenicol	16	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0			
Tetracyclines - Tetracycline	8	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0			
Fluoroquinolones - Ciprofloxacin	0.06	1	0		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Quinolones - Nalidixic acid	16	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0			
Trimethoprim	2	1	0		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Streptomycin	32	1	0		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Gentamicin	2	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Kanamycin	8	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0			
Penicillins - Ampicillin	4	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0			
Cephalosporins - Cefotaxim	0.5	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Sulfonamides	256	1	0		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0			
Cephalosporins - Ceftazidim	2	1	0		0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0			
Polymyxins - Colistin	4	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0			

Table Antimicrobial susceptibility testing of *S. Agona* in *Gallus gallus* (fowl) - at farm - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Agona	Gallus gallus (fowl) - at farm - Surveillance																									
	Isolates out of a monitoring program (yes/no)																									
	Number of isolates available in the laboratory																									
	3																									
Antimicrobials:	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Amphenicols - Chloramphenicol	16	3	0		0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0			
Amphenicols - Florfenicol	16	3	0		0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0			
Tetracyclines - Tetracycline	8	3	0		0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0			
Fluoroquinolones - Ciprofloxacin	0.06	3	0		1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Quinolones - Nalidixic acid	16	3	0		0	0	0	0	0	0	0	2	0	1	0	0	0	0	0	0	0	0	0			
Trimethoprim	2	3	0		0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Streptomycin	32	3	0		0	0	0	0	0	0	0	0	0	2	0	1	0	0	0	0	0	0	0			
Aminoglycosides - Gentamicin	2	3	0		0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Kanamycin	8	3	0		0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0			
Penicillins - Ampicillin	4	3	1		0	0	0	0	0	0	0	2	0	0	0	0	1	0	0	0	0	0	0			
Cephalosporins - Cefotaxim	0.5	3	0		0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Sulfonamides	256	3	0		0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0			
Cephalosporins - Ceftazidim	2	3	0		0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0			
Polymyxins - Colistin	4	3	0		0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0			

Table Antimicrobial susceptibility testing of *S. Agona* in *Gallus gallus* (fowl) - broilers - at farm - Control and eradication programmes - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Agona	Gallus gallus (fowl) - broilers - at farm - Control and eradication programmes																									
	Isolates out of a monitoring program (yes/no)																									
	Number of isolates available in the laboratory																									
	2																									
Antimicrobials:	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Amphenicols - Chloramphenicol	16	2	0		0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0			
Amphenicols - Florfenicol	16	2	0		0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0			
Tetracyclines - Tetracycline	8	2	0		0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0			
Fluoroquinolones - Ciprofloxacin	0.06	2	0		1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Quinolones - Nalidixic acid	16	2	0		0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0			
Trimethoprim	2	2	0		0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Streptomycin	32	2	0		0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0			
Aminoglycosides - Gentamicin	2	2	0		0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Kanamycin	8	2	0		0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0			
Penicillins - Ampicillin	4	2	1		0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0			
Cephalosporins - Cefotaxim	0.5	2	0		0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Sulfonamides	256	2	0		0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0			
Cephalosporins - Ceftazidim	2	2	0		0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0			
Polymyxins - Colistin	4	2	0		0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0			

Table Antimicrobial susceptibility testing of *S. Anatum* in Meat from pig - in total - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Anatum	Meat from pig - in total - Surveillance																								
	1																								
Antimicrobials:	Cut-off value	N	n	≤0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest
Amphenicols - Chloramphenicol	16	1	0		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0		
Amphenicols - Florfenicol	16	1	0		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0		
Tetracyclines - Tetracycline	8	1	1		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0		
Fluoroquinolones - Ciprofloxacin	0.06	1	0		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Quinolones - Nalidixic acid	16	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0		
Trimethoprim	2	1	0		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Aminoglycosides - Streptomycin	32	1	0		0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0		
Aminoglycosides - Gentamicin	2	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Aminoglycosides - Kanamycin	8	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0		
Penicillins - Ampicillin	4	1	1		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0		
Cephalosporins - Cefotaxim	0.5	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Sulfonamides	256	1	0		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0		
Cephalosporins - Ceftazidim	2	1	0		0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0		
Polymyxins - Colistin	4	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0		

Table Antimicrobial susceptibility testing of S. Anatum in Meat from bovine animals - at retail - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to																											
S. Anatum	Meat from bovine animals - at retail - Surveillance																										
	Isolates out of a monitoring program (yes/no)																										
	Number of isolates available in the laboratory																										
	1																										
Antimicrobials:	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest		
Amphenicols - Chloramphenicol	16	1	0		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0				
Amphenicols - Florfenicol	16	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0				
Tetracyclines - Tetracycline	8	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Fluoroquinolones - Ciprofloxacin	0.06	1	0		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Quinolones - Nalidixic acid	16	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Trimethoprim	2	1	0		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Streptomycin	32	1	0		0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0				
Aminoglycosides - Gentamicin	2	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Kanamycin	8	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Penicillins - Ampicillin	4	1	0		0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Cefotaxim	0.5	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Sulfonamides	256	1	0		0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0				
Cephalosporins - Ceftazidim	2	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Polymyxins - Colistin	4	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0				

Table Antimicrobial susceptibility testing of *S. Anatum* in Cattle (bovine animals) - at farm - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Anatum Isolates out of a monitoring program (yes/no) Number of isolates available in the laboratory Antimicrobials:				Cattle (bovine animals) - at farm - Surveillance																							
				2																							
				Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest
Amphenicols - Chloramphenicol	16	2	0		0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0				
Amphenicols - Florfenicol	16	2	0		0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0				
Tetracyclines - Tetracycline	8	2	1		0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0				
Fluoroquinolones - Ciprofloxacin	0.06	2	0		2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Quinolones - Nalidixic acid	16	2	0		0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0				
Trimethoprim	2	2	0		0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Streptomycin	32	2	1		0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0				
Aminoglycosides - Gentamicin	2	2	0		0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Kanamycin	8	2	0		0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0				
Penicillins - Ampicillin	4	2	2		0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0				
Cephalosporins - Cefotaxim	0.5	2	0		0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Sulfonamides	256	2	2		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0				
Cephalosporins - Ceftazidim	2	2	0		0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0				
Polymyxins - Colistin	4	2	0		0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0				

Table Antimicrobial susceptibility testing of *S. Anatum* in *Gallus gallus* (fowl) - broilers - at farm - Control and eradication programmes - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Anatum	Gallus gallus (fowl) - broilers - at farm - Control and eradication programmes																									
	Isolates out of a monitoring program (yes/no)																									
	Number of isolates available in the laboratory																									
	8																									
Antimicrobials:	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Amphenicols - Chloramphenicol	16	8	0		0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0			
Amphenicols - Florfenicol	16	8	0		0	0	0	0	0	0	0	1	6	1	0	0	0	0	0	0	0	0	0			
Tetracyclines - Tetracycline	8	8	0		0	0	0	0	0	0	0	7	0	1	0	0	0	0	0	0	0	0	0			
Fluoroquinolones - Ciprofloxacin	0.06	8	0		5	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Quinolones - Nalidixic acid	16	8	0		0	0	0	0	0	0	0	7	0	1	0	0	0	0	0	0	0	0	0			
Trimethoprim	2	8	1		0	0	0	0	7	0	0	0	0	0	0	0	1	0	0	0	0	0	0			
Aminoglycosides - Streptomycin	32	8	0		0	0	0	0	0	0	0	0	0	2	5	1	0	0	0	0	0	0	0			
Aminoglycosides - Gentamicin	2	8	0		1	0	0	6	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Kanamycin	8	8	0		0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0			
Penicillins - Ampicillin	4	8	4		0	0	0	0	0	0	4	0	0	0	0	0	4	0	0	0	0	0	0			
Cephalosporins - Cefotaxim	0.5	8	2		1	0	0	4	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0			
Sulfonamides	256	8	2		0	0	0	0	0	0	0	0	0	0	0	0	2	4	0	0	0	2	0			
Cephalosporins - Ceftazidim	2	8	2		0	0	0	4	0	2	0	0	0	0	0	2	0	0	0	0	0	0	0			
Polymyxins - Colistin	4	8	0		0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0			

Table Antimicrobial susceptibility testing of S. 4,12:i:- in Meat from pig - in total - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. 4,12:i:- Isolates out of a monitoring program (yes/no) Number of isolates available in the laboratory	Meat from pig - in total - Surveillance																								
	2																								
Antimicrobials:	Cut-off value	N	n	≤0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest
Amphenicols - Chloramphenicol	16	2	0		0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0		
Amphenicols - Florfenicol	16	2	0		0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0		
Tetracyclines - Tetracycline	8	2	2		0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0		
Fluoroquinolones - Ciprofloxacin	0.06	2	0		1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Quinolones - Nalidixic acid	16	2	0		0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0		
Trimethoprim	2	2	0		0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Aminoglycosides - Streptomycin	32	2	2		0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0		
Aminoglycosides - Gentamicin	2	2	0		0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0		
Aminoglycosides - Kanamycin	8	2	0		0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0		
Penicillins - Ampicillin	4	2	2		0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0		
Cephalosporins - Cefotaxim	0.5	2	0		0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Sulfonamides	256	2	2		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0		
Cephalosporins - Ceftazidim	2	2	0		0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Polymyxins - Colistin	4	2	0		0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0		

Table Antimicrobial susceptibility testing of S. 4,12:i:- in Meat from bovine animals - at retail - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. 4,12:i:- Isolates out of a monitoring program (yes/no) Number of isolates available in the laboratory Antimicrobials:	Meat from bovine animals - at retail - Surveillance																									
	2																									
	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Amphenicols - Chloramphenicol	16	2	0		0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0				
Amphenicols - Florfenicol	16	2	0		0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0				
Tetracyclines - Tetracycline	8	2	2		0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0				
Fluoroquinolones - Ciprofloxacin	0.06	2	0		0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Quinolones - Nalidixic acid	16	2	0		0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0				
Trimethoprim	2	2	0		0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Streptomycin	32	2	1		0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0				
Aminoglycosides - Gentamicin	2	2	0		0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Kanamycin	8	2	0		0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0				
Penicillins - Ampicillin	4	2	1		0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0				
Cephalosporins - Cefotaxim	0.5	2	0		0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Sulfonamides	256	2	1		0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0			
Cephalosporins - Ceftazidim	2	2	0		0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0				
Polymyxins - Colistin	4	2	0		0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0				

Table Antimicrobial susceptibility testing of S. 4,12:i:- in Gallus gallus (fowl) - breeding flocks, unspecified - at farm - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. 4,12:i:- Isolates out of a monitoring program (yes/no) Number of isolates available in the laboratory Antimicrobials:	Gallus gallus (fowl) - breeding flocks, unspecified - at farm - Surveillance																									
	1																									
	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Amphenicols - Chloramphenicol	16	1	0		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0			
Amphenicols - Florfenicol	16	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0			
Tetracyclines - Tetracycline	8	1	1		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0			
Fluoroquinolones - Ciprofloxacin	0.06	1	0		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Quinolones - Nalidixic acid	16	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0			
Trimethoprim	2	1	0		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Streptomycin	32	1	1		0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0			
Aminoglycosides - Gentamicin	2	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Kanamycin	8	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0			
Penicillins - Ampicillin	4	1	1		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0			
Cephalosporins - Cefotaxim	0.5	1	0		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Sulfonamides	256	1	1		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0			
Cephalosporins - Ceftazidim	2	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Polymyxins - Colistin	4	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0			

Table Antimicrobial susceptibility testing of S. 4,12:i:- in Cattle (bovine animals) - at farm - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. 4,12:i:- Isolates out of a monitoring program (yes/no) Number of isolates available in the laboratory Antimicrobials:	Cattle (bovine animals) - at farm - Surveillance																									
	5																									
	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Amphenicols - Chloramphenicol	16	5	0		0	0	0	0	0	0	0	1	4	0	0	0	0	0	0	0	0	0				
Amphenicols - Florfenicol	16	5	0		0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0				
Tetracyclines - Tetracycline	8	5	4		0	0	0	0	0	0	1	0	0	0	0	0	4	0	0	0	0	0				
Fluoroquinolones - Ciprofloxacin	0.06	5	0		0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Quinolones - Nalidixic acid	16	5	0		0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0				
Trimethoprim	2	5	0		0	0	0	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Streptomycin	32	5	4		0	0	0	0	0	0	0	0	1	0	0	0	0	4	0	0	0	0				
Aminoglycosides - Gentamicin	2	5	0		0	0	0	2	0	3	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Kanamycin	8	5	0		0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0				
Penicillins - Ampicillin	4	5	2		0	0	0	0	0	1	2	0	0	0	0	2	0	0	0	0	0	0				
Cephalosporins - Cefotaxim	0.5	5	0		0	2	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Sulfonamides	256	5	4		0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	4	0				
Cephalosporins - Ceftazidim	2	5	0		0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Polymyxins - Colistin	4	5	0		0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0				

Table Antimicrobial susceptibility testing of S. 4,12:i:- in Pigs - at farm - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. 4,12:i:- Isolates out of a monitoring program (yes/no) Number of isolates available in the laboratory	Pigs - at farm - Surveillance																								
	24																								
	Cut-off value	N	n	≤0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest
Amphenicols - Chloramphenicol	16	24	6		0	0	0	0	0	0	0	0	4	12	2	0	0	6	0	0	0	0	0		
Amphenicols - Florfenicol	16	24	5		0	0	0	0	0	0	0	0	8	8	3	1	0	4	0	0	0	0	0		
Tetracyclines - Tetracycline	8	24	23		0	0	0	0	0	0	0	1	0	0	0	0	0	23	0	0	0	0	0		
Fluoroquinolones - Ciprofloxacin	0.06	24	12		2	6	4	2	4	6	0	0	0	0	0	0	0	0	0	0	0	0	0		
Quinolones - Nalidixic acid	16	24	10		0	0	0	0	0	0	0	9	0	2	3	0	0	10	0	0	0	0	0		
Trimethoprim	2	24	5		0	0	0	0	17	1	1	0	0	0	0	0	5	0	0	0	0	0	0		
Aminoglycosides - Streptomycin	32	24	20		0	0	0	0	0	0	0	0	0	2	1	1	0	1	19	0	0	0	0		
Aminoglycosides - Gentamicin	2	24	4		0	0	0	14	0	5	1	0	0	0	0	2	2	0	0	0	0	0	0		
Aminoglycosides - Kanamycin	8	24	6		0	0	0	0	0	0	0	16	0	2	0	1	0	0	5	0	0	0	0		
Penicillins - Ampicillin	4	24	22		0	0	0	0	0	0	0	2	0	1	0	0	21	0	0	0	0	0	0		
Cephalosporins - Cefotaxim	0.5	24	0		0	5	0	11	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Sulfonamides	256	24	20		0	0	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0	20	0		
Cephalosporins - Ceftazidim	2	24	0		0	0	0	9	1	10	4	0	0	0	0	0	0	0	0	0	0	0	0		
Polymyxins - Colistin	4	24	1		0	0	0	0	0	0	0	0	23	0	0	1	0	0	0	0	0	0	0		

Table Antimicrobial susceptibility testing of S. 4,12:i:- in Gallus gallus (fowl) - at farm - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. 4,12:i:- Isolates out of a monitoring program (yes/no) Number of isolates available in the laboratory Antimicrobials:	Gallus gallus (fowl) - at farm - Surveillance																									
	1																									
	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Amphenicols - Chloramphenicol	16	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0			
Amphenicols - Florfenicol	16	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0			
Tetracyclines - Tetracycline	8	1	1		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0			
Fluoroquinolones - Ciprofloxacin	0.06	1	0		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Quinolones - Nalidixic acid	16	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0			
Trimethoprim	2	1	0		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Streptomycin	32	1	1		0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0			
Aminoglycosides - Gentamicin	2	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Kanamycin	8	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0			
Penicillins - Ampicillin	4	1	1		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0			
Cephalosporins - Cefotaxim	0.5	1	0		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Sulfonamides	256	1	1		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0			
Cephalosporins - Ceftazidim	2	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Polymyxins - Colistin	4	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0			

Table Antimicrobial susceptibility testing of *S. Blockley* in *Gallus gallus* (fowl) - at farm - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Blockley Isolates out of a monitoring program (yes/no) Number of isolates available in the laboratory		Gallus gallus (fowl) - at farm - Surveillance																									
		2																									
Antimicrobials:	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest		
Amphenicols - Chloramphenicol	16	2	1		0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0				
Amphenicols - Florfenicol	16	2	0		0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0				
Tetracyclines - Tetracycline	8	2	2		0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0				
Fluoroquinolones - Ciprofloxacin	0.06	2	1		0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Quinolones - Nalidixic acid	16	2	1		0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0				
Trimethoprim	2	2	0		0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Streptomycin	32	2	1		0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0				
Aminoglycosides - Gentamicin	2	2	0		0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Kanamycin	8	2	2		0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0				
Penicillins - Ampicillin	4	2	1		0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0				
Cephalosporins - Cefotaxim	0.5	2	0		0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Sulfonamides	256	2	1		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0				
Cephalosporins - Ceftazidim	2	2	0		0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0				
Polymyxins - Colistin	4	2	0		0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0				

Table Antimicrobial susceptibility testing of *S. Blockley* in *Gallus gallus* (fowl) - broilers - at farm - Control and eradication programmes - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Blockley Isolates out of a monitoring program (yes/no) Number of isolates available in the laboratory		Gallus gallus (fowl) - broilers - at farm - Control and eradication programmes																									
		5																									
Antimicrobials:	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest		
Amphenicols - Chloramphenicol	16	5	1		0	0	0	0	0	0	0	0	1	3	0	0	0	1	0	0	0	0	0				
Amphenicols - Florfenicol	16	5	0		0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0				
Tetracyclines - Tetracycline	8	5	5		0	0	0	0	0	0	0	0	0	0	0	0	2	3	0	0	0	0	0				
Fluoroquinolones - Ciprofloxacin	0.06	5	5		0	0	0	3	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0				
Quinolones - Nalidixic acid	16	5	5		0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0				
Trimethoprim	2	5	0		0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Streptomycin	32	5	5		0	0	0	0	0	0	0	0	0	0	0	0	4	1	0	0	0	0	0				
Aminoglycosides - Gentamicin	2	5	0		0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Kanamycin	8	5	5		0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0				
Penicillins - Ampicillin	4	5	1		0	0	0	0	0	0	2	1	1	0	0	0	1	0	0	0	0	0	0				
Cephalosporins - Cefotaxim	0.5	5	1		0	2	0	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0				
Sulfonamides	256	5	0		0	0	0	0	0	0	0	0	0	0	0	0	2	3	0	0	0	0	0				
Cephalosporins - Ceftazidim	2	5	1		0	0	0	3	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0				
Polymyxins - Colistin	4	5	0		0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0				

Table Antimicrobial susceptibility testing of *S. Bredeney* in Meat from pig - in total - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Bredeney	Meat from pig - in total - Surveillance																								
	1																								
Antimicrobials:	Cut-off value	N	n	≤0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest
Amphenicols - Chloramphenicol	16	1	0		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0		
Amphenicols - Florfenicol	16	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0		
Tetracyclines - Tetracycline	8	1	1		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0		
Fluoroquinolones - Ciprofloxacin	0.06	1	0		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Quinolones - Nalidixic acid	16	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0		
Trimethoprim	2	1	0		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Aminoglycosides - Streptomycin	32	1	1		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0		
Aminoglycosides - Gentamicin	2	1	0		0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0		
Aminoglycosides - Kanamycin	8	1	1		0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0		
Penicillins - Ampicillin	4	1	0		0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0		
Cephalosporins - Cefotaxim	0.5	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Sulfonamides	256	1	1		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0		
Cephalosporins - Ceftazidim	2	1	0		0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0		
Polymyxins - Colistin	4	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0		

Table Antimicrobial susceptibility testing of S. Bredeney in Gallus gallus (fowl) - laying hens - at farm - Control and eradication programmes - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Bredeney	Gallus gallus (fowl) - laying hens - at farm - Control and eradication programmes																									
	Isolates out of a monitoring program (yes/no)																									
	Number of isolates available in the laboratory																									
	2																									
Antimicrobials:	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Amphenicols - Chloramphenicol	16	2	0		0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0			
Amphenicols - Florfenicol	16	2	0		0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0			
Tetracyclines - Tetracycline	8	2	2		0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0			
Fluoroquinolones - Ciprofloxacin	0.06	2	0		1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Quinolones - Nalidixic acid	16	2	0		0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0			
Trimethoprim	2	2	0		0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Streptomycin	32	2	2		0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0			
Aminoglycosides - Gentamicin	2	2	0		0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Kanamycin	8	2	2		0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0			
Penicillins - Ampicillin	4	2	1		0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0			
Cephalosporins - Cefotaxim	0.5	2	0		0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Sulfonamides	256	2	2		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0			
Cephalosporins - Ceftazidim	2	2	0		0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Polymyxins - Colistin	4	2	0		0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0			

Table Antimicrobial susceptibility testing of *S. Bredeney* in *Gallus gallus* (fowl) - laying hens - at farm - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Bredeney Isolates out of a monitoring program (yes/no) Number of isolates available in the laboratory		Gallus gallus (fowl) - laying hens - at farm - Surveillance																									
		2																									
		Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Antimicrobials:	16	2	0		0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0				
Amphenicols - Chloramphenicol	16	2	0		0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0				
Amphenicols - Florfenicol	8	2	1		0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0				
Tetracyclines - Tetracycline	0.06	2	0		2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Fluoroquinolones - Ciprofloxacin	16	2	0		0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0				
Quinolones - Nalidixic acid	2	2	0		0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Trimethoprim	32	2	1		0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0				
Aminoglycosides - Streptomycin	2	2	0		0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Gentamicin	8	2	1		0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0				
Aminoglycosides - Kanamycin	4	2	0		0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0				
Penicillins - Ampicillin	0.5	2	0		0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Cefotaxim	256	2	1		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0				
Sulfonamides	2	2	0		0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Ceftazidim	4	2	0		0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0				
Polymyxins - Colistin																											

Table Antimicrobial susceptibility testing of *S. Bredeney* in Meat from turkey - in total - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Bredeney	Meat from turkey - in total - Surveillance																									
	Isolates out of a monitoring program (yes/no)																									
	Number of isolates available in the laboratory																									
	2																									
Antimicrobials:	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Amphenicols - Chloramphenicol	16	2	0		0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0			
Amphenicols - Florfenicol	16	2	0		0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0			
Tetracyclines - Tetracycline	8	2	2		0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0			
Fluoroquinolones - Ciprofloxacin	0.06	2	1		1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Quinolones - Nalidixic acid	16	2	1		0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0			
Trimethoprim	2	2	0		0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Streptomycin	32	2	1		0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0			
Aminoglycosides - Gentamicin	2	2	0		0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Kanamycin	8	2	2		0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0			
Penicillins - Ampicillin	4	2	1		0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0			
Cephalosporins - Cefotaxim	0.5	2	0		0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Sulfonamides	256	2	2		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0			
Cephalosporins - Ceftazidim	2	2	0		0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0			
Polymyxins - Colistin	4	2	0		0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0			

Table Antimicrobial susceptibility testing of *S. Bredeney* in Pigs - at farm - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Bredeney	Pigs - at farm - Surveillance																								
	Isolates out of a monitoring program (yes/no)																								
	Number of isolates available in the laboratory																								
Antimicrobials:	Cut-off value	N	n	≤0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest
Amphenicols - Chloramphenicol	16	4	0		0	0	0	0	0	0	0	0	3	1	0	0	0	0	0	0	0	0	0		
Amphenicols - Florfenicol	16	4	0		0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0		
Tetracyclines - Tetracycline	8	4	4		0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0		
Fluoroquinolones - Ciprofloxacin	0.06	4	0		1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Quinolones - Nalidixic acid	16	4	0		0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0		
Trimethoprim	2	4	0		0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Aminoglycosides - Streptomycin	32	4	4		0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0		
Aminoglycosides - Gentamicin	2	4	0		0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0		
Aminoglycosides - Kanamycin	8	4	4		0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0		
Penicillins - Ampicillin	4	4	1		0	0	0	0	0	0	2	1	0	0	0	0	1	0	0	0	0	0	0		
Cephalosporins - Cefotaxim	0.5	4	0		0	1	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Sulfonamides	256	4	4		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0		
Cephalosporins - Ceftazidim	2	4	0		0	0	0	3	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0		
Polymyxins - Colistin	4	4	0		0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0		

Table Antimicrobial susceptibility testing of S. Bredeney in Gallus gallus (fowl) - at farm - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to																											
S. Bredeney	Gallus gallus (fowl) - at farm - Surveillance																										
	Isolates out of a monitoring program (yes/no)																										
	Number of isolates available in the laboratory																										
	13																										
Antimicrobials:	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest		
Amphenicols - Chloramphenicol	16	13	0		0	0	0	0	0	0	0	0	3	10	0	0	0	0	0	0	0	0	0				
Amphenicols - Florfenicol	16	13	0		0	0	0	0	0	0	0	0	13	0	0	0	0	0	0	0	0	0	0				
Tetracyclines - Tetracycline	8	13	13		0	0	0	0	0	0	0	0	0	0	0	0	0	13	0	0	0	0	0				
Fluoroquinolones - Ciprofloxacin	0.06	13	0		10	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Quinolones - Nalidixic acid	16	13	0		0	0	0	0	0	0	0	13	0	0	0	0	0	0	0	0	0	0	0				
Trimethoprim	2	13	0		0	0	0	0	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Streptomycin	32	13	12		0	0	0	0	0	0	0	0	0	0	0	1	9	2	1	0	0	0	0				
Aminoglycosides - Gentamicin	2	13	0		0	0	0	3	0	8	1	1	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Kanamycin	8	13	13		0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	0	0	0	0				
Penicillins - Ampicillin	4	13	1		0	0	0	0	0	0	5	6	1	0	0	0	1	0	0	0	0	0	0				
Cephalosporins - Cefotaxim	0.5	13	0		0	4	0	8	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Sulfonamides	256	13	13		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	0				
Cephalosporins - Ceftazidim	2	13	0		0	0	0	11	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0				
Polymyxins - Colistin	4	13	0		0	0	0	0	0	0	0	0	13	0	0	0	0	0	0	0	0	0	0				

Table Antimicrobial susceptibility testing of *S. Bredeney* in *Gallus gallus* (fowl) - broilers - at farm - Control and eradication programmes - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Bredeney	Gallus gallus (fowl) - broilers - at farm - Control and eradication programmes																									
	Isolates out of a monitoring program (yes/no)																									
	Number of isolates available in the laboratory																									
	9																									
Antimicrobials:	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Amphenicols - Chloramphenicol	16	9	0		0	0	0	0	0	0	0	0	1	8	0	0	0	0	0	0	0	0	0			
Amphenicols - Florfenicol	16	9	0		0	0	0	0	0	0	0	0	5	4	0	0	0	0	0	0	0	0	0			
Tetracyclines - Tetracycline	8	9	9		0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0			
Fluoroquinolones - Ciprofloxacin	0.06	9	0		7	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Quinolones - Nalidixic acid	16	9	0		0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0			
Trimethoprim	2	9	0		0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Streptomycin	32	9	9		0	0	0	0	0	0	0	0	0	0	0	0	7	0	2	0	0	0	0			
Aminoglycosides - Gentamicin	2	9	0		0	0	0	3	0	5	1	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Kanamycin	8	9	9		0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0			
Penicillins - Ampicillin	4	9	4		0	0	0	0	1	0	1	3	0	0	0	0	4	0	0	0	0	0	0			
Cephalosporins - Cefotaxim	0.5	9	1		0	0	0	4	4	0	0	0	0	1	0	0	0	0	0	0	0	0	0			
Sulfonamides	256	9	9		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0			
Cephalosporins - Ceftazidim	2	9	1		1	0	0	2	0	5	0	0	0	1	0	0	0	0	0	0	0	0	0			
Polymyxins - Colistin	4	9	0		0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0			

Table Antimicrobial susceptibility testing of *S. Rissen* in Meat from pig - in total - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Rissen	Meat from pig - in total - Surveillance																								
	5																								
Antimicrobials:	Cut-off value	N	n	≤0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest
Amphenicols - Chloramphenicol	16	5	0		0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0		
Amphenicols - Florfenicol	16	5	0		0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0		
Tetracyclines - Tetracycline	8	5	4		0	0	0	0	0	0	0	1	0	0	0	0	0	4	0	0	0	0	0		
Fluoroquinolones - Ciprofloxacin	0.06	5	0		3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Quinolones - Nalidixic acid	16	5	0		0	0	0	0	0	0	0	4	0	1	0	0	0	0	0	0	0	0	0		
Trimethoprim	2	5	3		0	0	0	0	2	0	0	0	0	0	0	0	3	0	0	0	0	0	0		
Aminoglycosides - Streptomycin	32	5	0		0	0	0	0	0	0	0	0	0	2	2	1	0	0	0	0	0	0	0		
Aminoglycosides - Gentamicin	2	5	0		0	0	0	2	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0		
Aminoglycosides - Kanamycin	8	5	0		0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0		
Penicillins - Ampicillin	4	5	0		0	0	0	0	0	0	4	1	0	0	0	0	0	0	0	0	0	0	0		
Cephalosporins - Cefotaxim	0.5	5	0		0	0	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Sulfonamides	256	5	3		0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	3	0		
Cephalosporins - Ceftazidim	2	5	0		0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0		
Polymyxins - Colistin	4	5	0		0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0		

Table Antimicrobial susceptibility testing of *S. Rissen* in *Gallus gallus* (fowl) - laying hens - at farm - Control and eradication programmes - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Rissen Isolates out of a monitoring program (yes/no) Number of isolates available in the laboratory		Gallus gallus (fowl) - laying hens - at farm - Control and eradication programmes																									
		1																									
Antimicrobials:	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest		
Amphenicols - Chloramphenicol	16	1	0		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0				
Amphenicols - Florfenicol	16	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0				
Tetracyclines - Tetracycline	8	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Fluoroquinolones - Ciprofloxacin	0.06	1	0		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Quinolones - Nalidixic acid	16	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Trimethoprim	2	1	0		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Streptomycin	32	1	0		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Gentamicin	2	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Kanamycin	8	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Penicillins - Ampicillin	4	1	0		0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Cefotaxim	0.5	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Sulfonamides	256	1	0		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0				
Cephalosporins - Ceftazidim	2	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Polymyxins - Colistin	4	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0				

Table Antimicrobial susceptibility testing of *S. Rissen* in Meat from bovine animals - at retail - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Rissen Isolates out of a monitoring program (yes/no) Number of isolates available in the laboratory		Meat from bovine animals - at retail - Surveillance																									
		2																									
		Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Antimicrobials:	16	2	0		0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0				
Amphenicols - Chloramphenicol	16	2	0		0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0				
Amphenicols - Florfenicol	8	2	0		0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0				
Tetracyclines - Tetracycline	0.06	2	0		2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Fluoroquinolones - Ciprofloxacin	16	2	0		0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0				
Quinolones - Nalidixic acid	2	2	0		0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Trimethoprim	32	2	0		0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Streptomycin	2	2	0		0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Gentamicin	8	2	0		0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Kanamycin	4	2	0		0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0				
Penicillins - Ampicillin	0.5	2	0		0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Cefotaxim	256	2	0		0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0				
Sulfonamides	2	2	0		0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Ceftazidim	4	2	0		0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0				
Polymyxins - Colistin																											

Table Antimicrobial susceptibility testing of *S. Rissen* in *Gallus gallus* (fowl) - breeding flocks, unspecified - at farm - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Rissen Isolates out of a monitoring program (yes/no) Number of isolates available in the laboratory		Gallus gallus (fowl) - breeding flocks, unspecified - at farm - Surveillance																									
		1																									
		Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Antimicrobials:	16	1	0		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0				
Amphenicols - Chloramphenicol	16	1	0		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0				
Amphenicols - Florfenicol	8	1	1		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0				
Tetracyclines - Tetracycline	0.06	1	0		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Fluoroquinolones - Ciprofloxacin	16	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Quinolones - Nalidixic acid	2	1	0		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Trimethoprim	32	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Streptomycin	2	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Gentamicin	8	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Kanamycin	4	1	0		0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0				
Penicillins - Ampicillin	0.5	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Cefotaxim	256	1	0		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0				
Sulfonamides	2	1	0		0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Ceftazidim	4	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Polymyxins - Colistin																											

Table Antimicrobial susceptibility testing of *S. Rissen* in Cattle (bovine animals) - at farm - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Rissen Isolates out of a monitoring program (yes/no) Number of isolates available in the laboratory		Cattle (bovine animals) - at farm - Surveillance																									
		1																									
		Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Antimicrobials:	16	1	0		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0				
Amphenicols - Chloramphenicol	16	1	0		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0				
Amphenicols - Florfenicol	8	1	1		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0				
Tetracyclines - Tetracycline	0.06	1	0		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Fluoroquinolones - Ciprofloxacin	16	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Quinolones - Nalidixic acid	2	1	0		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Trimethoprim	32	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Streptomycin	2	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Gentamicin	8	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Kanamycin	4	1	0		0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0				
Penicillins - Ampicillin	0.5	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Cefotaxim	256	1	0		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0				
Sulfonamides	2	1	0		0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Ceftazidim	4	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Polymyxins - Colistin																											

Table Antimicrobial susceptibility testing of *S. Rissen* in Pigs - at farm - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Rissen	Pigs - at farm - Surveillance																								
	Isolates out of a monitoring program (yes/no)																								
	Number of isolates available in the laboratory																								
Antimicrobials:	Cut-off value	N	n	≤0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest
Amphenicols - Chloramphenicol	16	3	0		0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0		
Amphenicols - Florfenicol	16	3	0		0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0		
Tetracyclines - Tetracycline	8	3	3		0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0		
Fluoroquinolones - Ciprofloxacin	0.06	3	0		2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Quinolones - Nalidixic acid	16	3	0		0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0		
Trimethoprim	2	3	0		0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Aminoglycosides - Streptomycin	32	3	0		0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0		
Aminoglycosides - Gentamicin	2	3	0		0	0	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0		
Aminoglycosides - Kanamycin	8	3	0		0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0		
Penicillins - Ampicillin	4	3	1		0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0	0	0	0		
Cephalosporins - Cefotaxim	0.5	3	0		0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Sulfonamides	256	3	0		0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0		
Cephalosporins - Ceftazidim	2	3	0		0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0		
Polymyxins - Colistin	4	3	0		0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0		

Table Antimicrobial susceptibility testing of *S. Rissen* in *Gallus gallus* (fowl) - at farm - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Rissen Isolates out of a monitoring program (yes/no) Number of isolates available in the laboratory Antimicrobials:				Gallus gallus (fowl) - at farm - Surveillance																							
				2																							
				Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest
Amphenicols - Chloramphenicol	16	2	0		0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0				
Amphenicols - Florfenicol	16	2	0		0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0				
Tetracyclines - Tetracycline	8	2	0		0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0				
Fluoroquinolones - Ciprofloxacin	0.06	2	0		0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Quinolones - Nalidixic acid	16	2	0		0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0				
Trimethoprim	2	2	0		0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Streptomycin	32	2	0		0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Gentamicin	2	2	0		0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Kanamycin	8	2	0		0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0				
Penicillins - Ampicillin	4	2	0		0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Cefotaxim	0.5	2	0		0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Sulfonamides	256	2	0		0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0				
Cephalosporins - Ceftazidim	2	2	0		0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0				
Polymyxins - Colistin	4	2	0		0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0				

Table Antimicrobial susceptibility testing of *S. enterica* subsp. *salamae* in Meat from turkey - in total - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. enterica subsp. salamae	Meat from turkey - in total - Surveillance																									
	Isolates out of a monitoring program (yes/no)																									
	Number of isolates available in the laboratory																									
	1																									
Antimicrobials:	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Amphenicols - Chloramphenicol	16	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0			
Amphenicols - Florfenicol	16	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0			
Tetracyclines - Tetracycline	8	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0			
Fluoroquinolones - Ciprofloxacin	0.06	1	1		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Quinolones - Nalidixic acid	16	1	1		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0			
Trimethoprim	2	1	0		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Streptomycin	32	1	0		0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Gentamicin	2	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Kanamycin	8	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0			
Penicillins - Ampicillin	4	1	0		0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0			
Cephalosporins - Cefotaxim	0.5	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Sulfonamides	256	1	0		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0			
Cephalosporins - Ceftazidim	2	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Polymyxins - Colistin	4	1	1		0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0			

Table Antimicrobial susceptibility testing of *S. Derby* in Meat from pig - in total - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Derby	Meat from pig - in total - Surveillance																								
	12																								
Antimicrobials:	Cut-off value	N	n	≤0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest
Amphenicols - Chloramphenicol	16	12	0		0	0	0	0	0	0	1	0	0	10	1	0	0	0	0	0	0	0	0		
Amphenicols - Florfenicol	16	12	0		0	0	0	0	0	0	1	0	2	9	0	0	0	0	0	0	0	0	0		
Tetracyclines - Tetracycline	8	12	7		0	0	0	0	0	0	0	5	0	0	0	1	0	6	0	0	0	0	0		
Fluoroquinolones - Ciprofloxacin	0.06	12	1		9	2	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Quinolones - Nalidixic acid	16	12	1		0	0	0	0	0	0	0	11	0	0	0	0	0	1	0	0	0	0	0		
Trimethoprim	2	12	1		0	0	0	0	10	1	0	0	0	0	0	0	1	0	0	0	0	0	0		
Aminoglycosides - Streptomycin	32	12	7		0	0	0	0	0	0	0	0	0	3	1	1	0	5	2	0	0	0	0		
Aminoglycosides - Gentamicin	2	12	0		0	0	0	6	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0		
Aminoglycosides - Kanamycin	8	12	0		0	0	0	0	0	0	0	11	0	1	0	0	0	0	0	0	0	0	0		
Penicillins - Ampicillin	4	12	2		0	0	0	0	0	0	7	3	0	1	0	0	1	0	0	0	0	0	0		
Cephalosporins - Cefotaxim	0.5	12	0		0	1	0	10	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Sulfonamides	256	12	7		0	0	0	0	0	0	0	0	0	0	0	1	2	2	0	0	0	7	0		
Cephalosporins - Ceftazidim	2	12	0		0	0	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0		
Polymyxins - Colistin	4	12	0		0	0	0	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0	0		

Table Antimicrobial susceptibility testing of *S. Derby* in Cattle (bovine animals) - at farm - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Derby	Cattle (bovine animals) - at farm - Surveillance																									
	2																									
	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Amphenicols - Chloramphenicol	16	2	0		0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0			
Amphenicols - Florfenicol	16	2	0		0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0			
Tetracyclines - Tetracycline	8	2	2		0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0			
Fluoroquinolones - Ciprofloxacin	0.06	2	0		0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Quinolones - Nalidixic acid	16	2	0		0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0			
Trimethoprim	2	2	0		0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Streptomycin	32	2	0		0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0			
Aminoglycosides - Gentamicin	2	2	0		0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Kanamycin	8	2	0		0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0			
Penicillins - Ampicillin	4	2	0		0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0			
Cephalosporins - Cefotaxim	0.5	2	0		0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Sulfonamides	256	2	0		0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0			
Cephalosporins - Ceftazidim	2	2	0		0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0			
Polymyxins - Colistin	4	2	0		0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0			

Table Antimicrobial susceptibility testing of *S. Derby* in Pigs - at farm - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Derby	Pigs - at farm - Surveillance																								
	13																								
Antimicrobials:	Cut-off value	N	n	≤0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest
Amphenicols - Chloramphenicol	16	13	0		0	0	0	0	0	0	0	0	0	13	0	0	0	0	0	0	0	0	0		
Amphenicols - Florfenicol	16	13	0		0	0	0	0	0	0	0	0	9	4	0	0	0	0	0	0	0	0	0		
Tetracyclines - Tetracycline	8	13	9		0	0	0	0	0	0	0	3	1	0	0	0	1	8	0	0	0	0	0		
Fluoroquinolones - Ciprofloxacin	0.06	13	0		11	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Quinolones - Nalidixic acid	16	13	0		0	0	0	0	0	0	0	13	0	0	0	0	0	0	0	0	0	0	0		
Trimethoprim	2	13	0		0	0	0	0	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Aminoglycosides - Streptomycin	32	13	8		0	0	0	0	0	0	0	0	0	3	2	0	0	7	1	0	0	0	0		
Aminoglycosides - Gentamicin	2	13	0		0	0	0	4	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0		
Aminoglycosides - Kanamycin	8	13	0		0	0	0	0	0	0	0	12	0	1	0	0	0	0	0	0	0	0	0		
Penicillins - Ampicillin	4	13	0		0	0	0	0	0	0	11	2	0	0	0	0	0	0	0	0	0	0	0		
Cephalosporins - Cefotaxim	0.5	13	0		0	0	0	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Sulfonamides	256	13	8		0	0	0	0	0	0	0	0	0	0	0	2	2	1	0	0	0	8	0		
Cephalosporins - Ceftazidim	2	13	0		0	0	0	1	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0		
Polymyxins - Colistin	4	13	0		0	0	0	0	0	0	0	0	13	0	0	0	0	0	0	0	0	0	0		

Table Antimicrobial susceptibility testing of *S. Mbandaka* in *Gallus gallus* (fowl) - laying hens - at farm - Control and eradication programmes - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Mbandaka	Gallus gallus (fowl) - laying hens - at farm - Control and eradication programmes																										
	Isolates out of a monitoring program (yes/no)																										
	Number of isolates available in the laboratory																										
	2																										
Antimicrobials:	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest		
Amphenicols - Chloramphenicol	16	2	0		0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0				
Amphenicols - Florfenicol	16	2	0		0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0				
Tetracyclines - Tetracycline	8	2	0		0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0				
Fluoroquinolones - Ciprofloxacin	0.06	2	0		2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Quinolones - Nalidixic acid	16	2	1		0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0				
Trimethoprim	2	2	0		0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Streptomycin	32	2	0		0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0				
Aminoglycosides - Gentamicin	2	2	0		0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Kanamycin	8	2	0		0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0				
Penicillins - Ampicillin	4	2	0		0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Cefotaxim	0.5	2	0		0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Sulfonamides	256	2	0		0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0				
Cephalosporins - Ceftazidim	2	2	0		0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0				
Polymyxins - Colistin	4	2	0		0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0				

Table Antimicrobial susceptibility testing of S. Mbandaka in Gallus gallus (fowl) - laying hens - at farm - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Mbandaka	Gallus gallus (fowl) - laying hens - at farm - Surveillance																									
	Isolates out of a monitoring program (yes/no)																									
	Number of isolates available in the laboratory																									
	1																									
Antimicrobials:	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Amphenicols - Chloramphenicol	16	1	0		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0			
Amphenicols - Florfenicol	16	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0			
Tetracyclines - Tetracycline	8	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0			
Fluoroquinolones - Ciprofloxacin	0.06	1	0		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Quinolones - Nalidixic acid	16	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0			
Trimethoprim	2	1	0		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Streptomycin	32	1	0		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Gentamicin	2	1	0		0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Kanamycin	8	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0			
Penicillins - Ampicillin	4	1	0		0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0			
Cephalosporins - Cefotaxim	0.5	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Sulfonamides	256	1	0		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0			
Cephalosporins - Ceftazidim	2	1	0		0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0			
Polymyxins - Colistin	4	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0			

Table Antimicrobial susceptibility testing of *S. Mbandaka* in Compound feedingstuffs for poultry (non specified) - at farm - feed sample - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Mbandaka Isolates out of a monitoring program (yes/no) Number of isolates available in the laboratory		Compound feedingstuffs for poultry (non specified) - at farm - feed sample - Surveillance																									
		5																									
		Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Antimicrobials:	16	5	0		0	0	0	0	0	0	0	0	4	1	0	0	0	0	0	0	0	0	0				
Amphenicols - Chloramphenicol	16	5	0		0	0	0	0	0	0	0	0	2	2	1	0	0	0	0	0	0	0	0				
Amphenicols - Florfenicol	8	5	1		0	0	0	0	0	0	0	3	1	0	0	0	0	1	0	0	0	0	0				
Tetracyclines - Tetracycline	0.06	5	0		3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Fluoroquinolones - Ciprofloxacin	16	5	0		0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0				
Quinolones - Nalidixic acid	2	5	1		0	0	0	0	4	0	0	0	0	1	0	0	0	0	0	0	0	0	0				
Trimethoprim	32	5	1		0	0	0	0	0	0	0	0	0	3	0	1	0	1	0	0	0	0	0				
Aminoglycosides - Streptomycin	2	5	1		0	0	0	1	0	3	0	0	1	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Gentamicin	8	5	1		0	0	0	0	0	0	0	3	0	1	0	0	0	0	1	0	0	0	0				
Aminoglycosides - Kanamycin	4	5	0		0	0	0	0	0	0	2	2	1	0	0	0	0	0	0	0	0	0	0				
Penicillins - Ampicillin	0.5	5	0		0	0	0	3	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Cefotaxim	256	5	1		0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	1	0				
Sulfonamides	2	5	0		0	0	0	0	1	3	1	0	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Ceftazidim	4	5	2		0	0	0	0	0	0	0	0	3	0	2	0	0	0	0	0	0	0	0				
Polymyxins - Colistin																											

Table Antimicrobial susceptibility testing of *S. Mbandaka* in *Gallus gallus* (fowl) - breeding flocks, unspecified - at farm - Control and eradication programmes - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Mbandaka Isolates out of a monitoring program (yes/no) Number of isolates available in the laboratory		Gallus gallus (fowl) - breeding flocks, unspecified - at farm - Control and eradication programmes																									
		1																									
		Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Antimicrobials:																											
Amphenicols - Chloramphenicol	16	1	0		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0				
Amphenicols - Florfenicol	16	1	0		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0				
Tetracyclines - Tetracycline	8	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Fluoroquinolones - Ciprofloxacin	0.06	1	0		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Quinolones - Nalidixic acid	16	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Trimethoprim	2	1	0		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Streptomycin	32	1	0		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Gentamicin	2	1	0		0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Kanamycin	8	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Penicillins - Ampicillin	4	1	0		0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Cefotaxim	0.5	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Sulfonamides	256	1	0		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0				
Cephalosporins - Ceftazidim	2	1	0		0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0				
Polymyxins - Colistin	4	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0				

Table Antimicrobial susceptibility testing of *S. Mbandaka* in *Gallus gallus* (fowl) - at farm - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Mbandaka	Gallus gallus (fowl) - at farm - Surveillance																									
	Isolates out of a monitoring program (yes/no)																									
	Number of isolates available in the laboratory																									
	8																									
Antimicrobials:	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Amphenicols - Chloramphenicol	16	8	0		0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0			
Amphenicols - Florfenicol	16	8	0		0	0	0	0	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0			
Tetracyclines - Tetracycline	8	8	4		0	0	0	0	0	0	0	4	0	0	0	0	1	3	0	0	0	0	0			
Fluoroquinolones - Ciprofloxacin	0.06	8	0		8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Quinolones - Nalidixic acid	16	8	1		0	0	0	0	0	0	0	7	0	0	0	0	1	0	0	0	0	0	0			
Trimethoprim	2	8	1		0	0	0	0	7	0	0	0	0	0	0	0	1	0	0	0	0	0	0			
Aminoglycosides - Streptomycin	32	8	1		0	0	0	0	0	0	0	0	0	6	0	1	1	0	0	0	0	0	0			
Aminoglycosides - Gentamicin	2	8	0		0	0	0	6	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Kanamycin	8	8	1		0	0	0	0	0	0	0	7	0	0	0	0	0	0	1	0	0	0	0			
Penicillins - Ampicillin	4	8	2		0	0	0	0	0	0	5	1	0	0	1	0	1	0	0	0	0	0	0			
Cephalosporins - Cefotaxim	0.5	8	0		0	0	0	7	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0			
Sulfonamides	256	8	1		0	0	0	0	0	0	0	0	0	0	0	0	5	2	0	0	0	1	0			
Cephalosporins - Ceftazidim	2	8	0		0	0	0	0	0	7	1	0	0	0	0	0	0	0	0	0	0	0	0			
Polymyxins - Colistin	4	8	0		0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0			

Table Antimicrobial susceptibility testing of *S. Mbandaka* in *Gallus gallus* (fowl) - broilers - at farm - Control and eradication programmes - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Mbandaka	Gallus gallus (fowl) - broilers - at farm - Control and eradication programmes																										
	Isolates out of a monitoring program (yes/no)																										
	Number of isolates available in the laboratory																										
	5																										
Antimicrobials:	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest		
Amphenicols - Chloramphenicol	16	5	0		0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0				
Amphenicols - Florfenicol	16	5	0		0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0				
Tetracyclines - Tetracycline	8	5	0		0	0	0	0	0	0	0	3	2	0	0	0	0	0	0	0	0	0	0				
Fluoroquinolones - Ciprofloxacin	0.06	5	0		4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Quinolones - Nalidixic acid	16	5	0		0	0	0	0	0	0	0	4	0	1	0	0	0	0	0	0	0	0	0				
Trimethoprim	2	5	0		0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Streptomycin	32	5	1		0	0	0	0	0	0	0	0	0	1	3	0	1	0	0	0	0	0	0				
Aminoglycosides - Gentamicin	2	5	1		0	0	0	0	0	4	0	0	0	1	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Kanamycin	8	5	0		0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0				
Penicillins - Ampicillin	4	5	1		0	0	0	0	0	0	3	1	0	0	0	0	1	0	0	0	0	0	0				
Cephalosporins - Cefotaxim	0.5	5	0		0	0	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Sulfonamides	256	5	1		0	0	0	0	0	0	0	0	0	0	0	0	1	2	1	0	0	1	0				
Cephalosporins - Ceftazidim	2	5	0		0	0	0	1	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0				
Polymyxins - Colistin	4	5	0		0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0				

Table Antimicrobial susceptibility testing of S. Thompson in Gallus gallus (fowl) - laying hens - at farm - Control and eradication programmes - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Thompson	Gallus gallus (fowl) - laying hens - at farm - Control and eradication programmes																									
	Isolates out of a monitoring program (yes/no)																									
	Number of isolates available in the laboratory																									
	1																									
Antimicrobials:	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Amphenicols - Chloramphenicol	16	1	0		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0			
Amphenicols - Florfenicol	16	1	0		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0			
Tetracyclines - Tetracycline	8	1	1		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0			
Fluoroquinolones - Ciprofloxacin	0.06	1	0		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Quinolones - Nalidixic acid	16	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0			
Trimethoprim	2	1	0		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Streptomycin	32	1	1		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0			
Aminoglycosides - Gentamicin	2	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Kanamycin	8	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0			
Penicillins - Ampicillin	4	1	1		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0			
Cephalosporins - Cefotaxim	0.5	1	0		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Sulfonamides	256	1	1		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0			
Cephalosporins - Ceftazidim	2	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Polymyxins - Colistin	4	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0			

Table Antimicrobial susceptibility testing of S. Thompson in Gallus gallus (fowl) - laying hens - at farm - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Thompson	Gallus gallus (fowl) - laying hens - at farm - Surveillance																									
	Isolates out of a monitoring program (yes/no)																									
	Number of isolates available in the laboratory																									
	3																									
Antimicrobials:	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Amphenicols - Chloramphenicol	16	3	0		0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0			
Amphenicols - Florfenicol	16	3	0		0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0			
Tetracyclines - Tetracycline	8	3	0		0	0	0	0	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0			
Fluoroquinolones - Ciprofloxacin	0.06	3	0		1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Quinolones - Nalidixic acid	16	3	0		0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0			
Trimethoprim	2	3	0		0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Streptomycin	32	3	0		0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Gentamicin	2	3	0		0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Kanamycin	8	3	0		0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0			
Penicillins - Ampicillin	4	3	0		0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0			
Cephalosporins - Cefotaxim	0.5	3	0		0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Sulfonamides	256	3	0		0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0			
Cephalosporins - Ceftazidim	2	3	0		0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Polymyxins - Colistin	4	3	0		0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0			

Table Antimicrobial susceptibility testing of S. Thompson in Meat from broilers (Gallus gallus) - at retail - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Thompson Isolates out of a monitoring program (yes/no) Number of isolates available in the laboratory			Meat from broilers (Gallus gallus) - at retail - Surveillance																								
			1																								
			Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest
Antimicrobials:	Amphenicols - Chloramphenicol	16	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0				
Amphenicols - Florfenicol	16	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0				
Tetracyclines - Tetracycline	8	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Fluoroquinolones - Ciprofloxacin	0.06	1	0		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Quinolones - Nalidixic acid	16	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Trimethoprim	2	1	0		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Streptomycin	32	1	0		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Gentamicin	2	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Kanamycin	8	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Penicillins - Ampicillin	4	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Cefotaxim	0.5	1	0		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Sulfonamides	256	1	0		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0				
Cephalosporins - Ceftazidim	2	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Polymyxins - Colistin	4	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0				

Table Antimicrobial susceptibility testing of *S. Thompson* in *Gallus gallus* (fowl) - breeding flocks, unspecified - at farm - Control and eradication programmes - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Thompson Isolates out of a monitoring program (yes/no) Number of isolates available in the laboratory		Gallus gallus (fowl) - breeding flocks, unspecified - at farm - Control and eradication programmes																									
		1																									
		Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Amphenicols - Chloramphenicol	16	1	0		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0				
Amphenicols - Florfenicol	16	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0				
Tetracyclines - Tetracycline	8	1	1		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0				
Fluoroquinolones - Ciprofloxacin	0.06	1	1		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Quinolones - Nalidixic acid	16	1	1		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0				
Trimethoprim	2	1	0		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Streptomycin	32	1	1		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0				
Aminoglycosides - Gentamicin	2	1	0		0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Kanamycin	8	1	1		0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0				
Penicillins - Ampicillin	4	1	0		0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Cefotaxim	0.5	1	0		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Sulfonamides	256	1	0		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0				
Cephalosporins - Ceftazidim	2	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Polymyxins - Colistin	4	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0				

Table Antimicrobial susceptibility testing of *S. Thompson* in *Gallus gallus* (fowl) - at farm - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Thompson Isolates out of a monitoring program (yes/no) Number of isolates available in the laboratory		Gallus gallus (fowl) - at farm - Surveillance																									
		2																									
		Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Antimicrobials:	16	2	0		0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0				
Amphenicols - Chloramphenicol	16	2	0		0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0				
Amphenicols - Florfenicol	8	2	1		0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0				
Tetracyclines - Tetracycline	0.06	2	0		1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Fluoroquinolones - Ciprofloxacin	16	2	0		0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0				
Quinolones - Nalidixic acid	2	2	1		0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0				
Trimethoprim	32	2	1		0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0				
Aminoglycosides - Streptomycin	2	2	0		0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Gentamicin	8	2	0		0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Kanamycin	4	2	1		0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0				
Penicillins - Ampicillin	0.5	2	0		0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Cefotaxim	256	2	1		0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0				
Sulfonamides	2	2	0		0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Ceftazidim	4	2	0		0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0				
Polymyxins - Colistin																											

Table Antimicrobial susceptibility testing of *S. Thompson* in *Gallus gallus* (fowl) - broilers - at farm - Control and eradication programmes - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Thompson Isolates out of a monitoring program (yes/no) Number of isolates available in the laboratory		Gallus gallus (fowl) - broilers - at farm - Control and eradication programmes																									
		33																									
		Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Amphenicols - Chloramphenicol	16	33	1		0	0	0	0	0	0	0	3	28	1	0	0	1	0	0	0	0	0					
Amphenicols - Florfenicol	16	33	0		0	0	0	0	0	0	2	26	4	1	0	0	0	0	0	0	0	0					
Tetracyclines - Tetracycline	8	33	1		0	0	0	0	1	0	21	7	3	0	0	1	0	0	0	0	0	0					
Fluoroquinolones - Ciprofloxacin	0.06	33	1		9	21	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0					
Quinolones - Nalidixic acid	16	33	1		0	0	0	0	0	0	28	0	4	0	0	0	1	0	0	0	0	0					
Trimethoprim	2	33	0		0	0	0	0	33	0	0	0	0	0	0	0	0	0	0	0	0	0					
Aminoglycosides - Streptomycin	32	33	0		0	0	0	0	0	0	0	1	19	10	3	0	0	0	0	0	0	0					
Aminoglycosides - Gentamicin	2	33	0		0	0	0	24	3	5	0	1	0	0	0	0	0	0	0	0	0	0					
Aminoglycosides - Kanamycin	8	33	0		0	0	0	0	0	0	32	1	0	0	0	0	0	0	0	0	0	0					
Penicillins - Ampicillin	4	33	3		0	0	0	0	0	21	8	1	0	0	0	3	0	0	0	0	0	0					
Cephalosporins - Cefotaxim	0.5	33	2		0	22	1	7	1	0	0	0	2	0	0	0	0	0	0	0	0	0					
Sulfonamides	256	33	1		0	0	0	0	0	0	0	0	0	0	3	20	7	2	0	0	1	0					
Cephalosporins - Ceftazidim	2	33	2		0	0	0	29	1	1	0	0	1	0	1	0	0	0	0	0	0	0					
Polymyxins - Colistin	4	33	1		0	0	0	0	0	0	0	32	1	0	0	0	0	0	0	0	0	0					

Table Antimicrobial susceptibility testing of *S. Typhimurium* in Meat from pig - in total - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Typhimurium Isolates out of a monitoring program (yes/no) Number of isolates available in the laboratory Antimicrobials:				Meat from pig - in total - Surveillance																							
				5																							
				Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest
Amphenicols - Chloramphenicol	16	5	2		0	0	0	0	0	0	0	0	1	2	0	0	0	2	0	0	0	0	0				
Amphenicols - Florfenicol	16	5	2		0	0	0	0	0	0	0	0	2	1	0	0	0	2	0	0	0	0	0				
Tetracyclines - Tetracycline	8	5	4		0	0	0	0	0	0	0	1	0	0	0	1	0	3	0	0	0	0	0				
Fluoroquinolones - Ciprofloxacin	0.06	5	0		2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Quinolones - Nalidixic acid	16	5	0		0	0	0	0	0	0	0	4	0	1	0	0	0	0	0	0	0	0	0				
Trimethoprim	2	5	0		0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Streptomycin	32	5	5		0	0	0	0	0	0	0	0	0	0	0	0	2	2	1	0	0	0	0				
Aminoglycosides - Gentamicin	2	5	1		0	0	0	3	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Kanamycin	8	5	1		0	0	0	0	0	0	0	4	0	0	0	0	0	0	1	0	0	0	0				
Penicillins - Ampicillin	4	5	4		0	0	0	0	0	0	0	1	0	0	0	0	4	0	0	0	0	0	0				
Cephalosporins - Cefotaxim	0.5	5	0		0	0	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Sulfonamides	256	5	5		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0				
Cephalosporins - Ceftazidim	2	5	0		0	0	0	3	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0				
Polymyxins - Colistin	4	5	0		0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0				

Table Antimicrobial susceptibility testing of *S. Typhimurium* in Rabbits - at farm - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Typhimurium	Rabbits - at farm - Surveillance																								
	2																								
Antimicrobials:	Cut-off value	N	n	≤0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest
Amphenicols - Chloramphenicol	16	2	0		0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0		
Amphenicols - Florfenicol	16	2	0		0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0		
Tetracyclines - Tetracycline	8	2	2		0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0		
Fluoroquinolones - Ciprofloxacin	0.06	2	0		0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Quinolones - Nalidixic acid	16	2	0		0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0		
Trimethoprim	2	2	0		0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Aminoglycosides - Streptomycin	32	2	2		0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0		
Aminoglycosides - Gentamicin	2	2	2		0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0		
Aminoglycosides - Kanamycin	8	2	0		0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0		
Penicillins - Ampicillin	4	2	0		0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0		
Cephalosporins - Cefotaxim	0.5	2	0		0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Sulfonamides	256	2	2		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0		
Cephalosporins - Ceftazidim	2	2	0		0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Polymyxins - Colistin	4	2	0		0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0		

Table Antimicrobial susceptibility testing of *S. Typhimurium* in *Gallus gallus* (fowl) - laying hens - at farm - Control and eradication programmes - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Typhimurium Isolates out of a monitoring program (yes/no) Number of isolates available in the laboratory		Gallus gallus (fowl) - laying hens - at farm - Control and eradication programmes																									
		3																									
		Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Antimicrobials:	16	3	1		0	0	0	0	0	0	0	2	0	0	0	0	1	0	0	0	0	0	0				
Amphenicols - Chloramphenicol	16	3	1		0	0	0	0	0	0	0	2	0	0	0	1	0	0	0	0	0	0	0				
Amphenicols - Florfenicol	8	3	1		0	0	0	0	0	1	0	1	0	0	0	1	0	0	0	0	0	0	0				
Tetracyclines - Tetracycline	0.06	3	2		0	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Fluoroquinolones - Ciprofloxacin	16	3	2		0	0	0	0	0	0	0	1	0	0	0	0	2	0	0	0	0	0	0				
Quinolones - Nalidixic acid	2	3	0		0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Trimethoprim	32	3	1		0	0	0	0	0	0	0	0	2	0	0	1	0	0	0	0	0	0	0				
Aminoglycosides - Streptomycin	2	3	0		0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Gentamicin	8	3	0		0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Kanamycin	4	3	1		0	0	0	0	0	0	2	0	0	0	0	1	0	0	0	0	0	0	0				
Penicillins - Ampicillin	0.5	3	0		0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Cefotaxim	256	3	1		0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	1	0					
Sulfonamides	2	3	0		0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Ceftazidim	4	3	0		0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0				
Polymyxins - Colistin																											

Table Antimicrobial susceptibility testing of *S. Typhimurium* in Meat from turkey - in total - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Typhimurium Isolates out of a monitoring program (yes/no) Number of isolates available in the laboratory		Meat from turkey - in total - Surveillance																									
		2																									
		Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Antimicrobials:	16	2	1		0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0				
Amphenicols - Chloramphenicol	16	2	1		0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0				
Amphenicols - Florfenicol	8	2	2		0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0				
Tetracyclines - Tetracycline	0.06	2	1		1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Fluoroquinolones - Ciprofloxacin	16	2	1		0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0				
Quinolones - Nalidixic acid	2	2	0		0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Trimethoprim	32	2	1		0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0				
Aminoglycosides - Streptomycin	2	2	0		0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Gentamicin	8	2	1		0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0				
Aminoglycosides - Kanamycin	4	2	1		0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0				
Penicillins - Ampicillin	0.5	2	0		0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Cefotaxim	256	2	1		0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0				
Sulfonamides	2	2	0		0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Ceftazidim	4	2	0		0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0				
Polymyxins - Colistin																											

Table Antimicrobial susceptibility testing of S. Typhimurium in Meat from bovine animals - at retail - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Typhimurium	Meat from bovine animals - at retail - Surveillance																									
	Isolates out of a monitoring program (yes/no)																									
	Number of isolates available in the laboratory																									
	1																									
Antimicrobials:	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Amphenicols - Chloramphenicol	16	1	0		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0			
Amphenicols - Florfenicol	16	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0			
Tetracyclines - Tetracycline	8	1	1		0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0			
Fluoroquinolones - Ciprofloxacin	0.06	1	0		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Quinolones - Nalidixic acid	16	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0			
Trimethoprim	2	1	0		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Streptomycin	32	1	0		0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0			
Aminoglycosides - Gentamicin	2	1	0		0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Kanamycin	8	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0			
Penicillins - Ampicillin	4	1	0		0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0			
Cephalosporins - Cefotaxim	0.5	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Sulfonamides	256	1	0		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0			
Cephalosporins - Ceftazidim	2	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Polymyxins - Colistin	4	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0			

Table Antimicrobial susceptibility testing of *S. Typhimurium* in Compound feedingstuffs for poultry (non specified) - at farm - feed sample - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Typhimurium Isolates out of a monitoring program (yes/no) Number of isolates available in the laboratory		Compound feedingstuffs for poultry (non specified) - at farm - feed sample - Surveillance																									
		2																									
		Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Antimicrobials:	16	2	2		0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0				
Amphenicols - Chloramphenicol	16	2	2		0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0				
Amphenicols - Florfenicol	8	2	2		0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0				
Tetracyclines - Tetracycline	0.06	2	0		2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Fluoroquinolones - Ciprofloxacin	16	2	0		0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0				
Quinolones - Nalidixic acid	2	2	0		0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Trimethoprim	32	2	2		0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0				
Aminoglycosides - Streptomycin	2	2	0		0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Gentamicin	8	2	0		0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Kanamycin	4	2	2		0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0				
Penicillins - Ampicillin	0.5	2	0		0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Cefotaxim	256	2	2		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0				
Sulfonamides	2	2	0		0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Ceftazidim	4	2	0		0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0				
Polymyxins - Colistin																											

Table Antimicrobial susceptibility testing of *S. Typhimurium* in *Gallus gallus* (fowl) - breeding flocks, unspecified - at farm - Control and eradication programmes - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Typhimurium Isolates out of a monitoring program (yes/no) Number of isolates available in the laboratory		Gallus gallus (fowl) - breeding flocks, unspecified - at farm - Control and eradication programmes																									
		2																									
		Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Antimicrobials:	16	2	0		0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0				
Amphenicols - Chloramphenicol	16	2	0		0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0				
Amphenicols - Florfenicol	8	2	0		0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0				
Tetracyclines - Tetracycline	0.06	2	0		2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Fluoroquinolones - Ciprofloxacin	16	2	0		0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0				
Quinolones - Nalidixic acid	2	2	0		0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Trimethoprim	32	2	0		0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0				
Aminoglycosides - Streptomycin	2	2	0		0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Gentamicin	8	2	0		0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Kanamycin	4	2	0		0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0				
Penicillins - Ampicillin	0.5	2	0		0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Cefotaxim	256	2	0		0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0				
Sulfonamides	2	2	0		0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Ceftazidim	4	2	0		0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0				
Polymyxins - Colistin																											

Table Antimicrobial susceptibility testing of *S. Typhimurium* in Cattle (bovine animals) - at farm - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Typhimurium Isolates out of a monitoring program (yes/no) Number of isolates available in the laboratory		Cattle (bovine animals) - at farm - Surveillance																									
		7																									
		Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Antimicrobials:	16	7	4		0	0	0	0	0	0	0	0	1	2	0	0	0	4	0	0	0	0	0				
Amphenicols - Chloramphenicol	16	7	3		0	0	0	0	0	0	0	0	1	2	1	1	1	1	0	0	0	0	0				
Amphenicols - Florfenicol	8	7	6		0	0	0	0	0	0	0	1	0	0	0	1	1	4	0	0	0	0	0				
Tetracyclines - Tetracycline	0.06	7	1		1	5	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Fluoroquinolones - Ciprofloxacin	16	7	1		0	0	0	0	0	0	0	6	0	0	0	0	0	1	0	0	0	0	0				
Quinolones - Nalidixic acid	2	7	2		0	0	0	0	5	0	0	0	0	0	0	0	2	0	0	0	0	0	0				
Trimethoprim	32	7	6		0	0	0	0	0	0	0	0	0	0	1	0	1	1	4	0	0	0	0				
Aminoglycosides - Streptomycin	2	7	1		0	0	0	2	0	4	0	0	0	1	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Gentamicin	8	7	0		0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Kanamycin	4	7	6		0	0	0	0	0	0	0	1	0	0	0	0	6	0	0	0	0	0	0				
Penicillins - Ampicillin	0.5	7	0		0	1	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Cefotaxim	256	7	6		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	6	0				
Sulfonamides	2	7	0		0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Ceftazidim	4	7	0		0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0				
Polymyxins - Colistin																											

Table Antimicrobial susceptibility testing of *S. Typhimurium* in Pigs - at farm - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Typhimurium	Pigs - at farm - Surveillance																								
	Isolates out of a monitoring program (yes/no)																								
	Number of isolates available in the laboratory																								
Antimicrobials:	Cut-off value	N	n	≤0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest
Amphenicols - Chloramphenicol	16	13	6		0	0	0	0	0	0	0	0	3	4	0	0	1	5	0	0	0	0	0		
Amphenicols - Florfenicol	16	13	5		0	0	0	0	0	0	0	0	6	1	1	4	0	1	0	0	0	0	0		
Tetracyclines - Tetracycline	8	13	13		0	0	0	0	0	0	0	0	0	0	0	2	2	9	0	0	0	0	0		
Fluoroquinolones - Ciprofloxacin	0.06	13	0		3	9	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Quinolones - Nalidixic acid	16	13	0		0	0	0	0	0	0	0	11	0	2	0	0	0	0	0	0	0	0	0		
Trimethoprim	2	13	2		0	0	0	0	11	0	0	0	0	0	0	0	2	0	0	0	0	0	0		
Aminoglycosides - Streptomycin	32	13	13		0	0	0	0	0	0	0	0	0	0	0	0	4	1	8	0	0	0	0		
Aminoglycosides - Gentamicin	2	13	0		0	0	0	5	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0		
Aminoglycosides - Kanamycin	8	13	0		0	0	0	0	0	0	0	13	0	0	0	0	0	0	0	0	0	0	0		
Penicillins - Ampicillin	4	13	13		0	0	0	0	0	0	0	0	0	0	0	0	13	0	0	0	0	0	0		
Cephalosporins - Cefotaxim	0.5	13	0		0	9	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Sulfonamides	256	13	13		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	0		
Cephalosporins - Ceftazidim	2	13	0		0	0	0	10	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0		
Polymyxins - Colistin	4	13	0		0	0	0	0	0	0	0	0	13	0	0	0	0	0	0	0	0	0	0		

Table Antimicrobial susceptibility testing of S. Typhimurium in Gallus gallus (fowl) - at farm - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to																											
S. Typhimurium	Gallus gallus (fowl) - at farm - Surveillance																										
	Isolates out of a monitoring program (yes/no)																										
	Number of isolates available in the laboratory																										
	4																										
Antimicrobials:	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest		
Amphenicols - Chloramphenicol	16	4	0		0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0				
Amphenicols - Florfenicol	16	4	0		0	0	0	0	0	0	0	0	3	1	0	0	0	0	0	0	0	0	0				
Tetracyclines - Tetracycline	8	4	2		0	0	0	0	0	0	0	2	0	0	0	0	0	2	0	0	0	0	0				
Fluoroquinolones - Ciprofloxacin	0.06	4	0		1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Quinolones - Nalidixic acid	16	4	0		0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0				
Trimethoprim	2	4	0		0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Streptomycin	32	4	2		0	0	0	0	0	0	0	0	0	1	1	0	0	1	1	0	0	0	0				
Aminoglycosides - Gentamicin	2	4	0		0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Kanamycin	8	4	0		0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0				
Penicillins - Ampicillin	4	4	2		0	0	0	0	0	0	2	0	0	0	0	0	2	0	0	0	0	0	0				
Cephalosporins - Cefotaxim	0.5	4	0		0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Sulfonamides	256	4	2		0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	2	0				
Cephalosporins - Ceftazidim	2	4	0		0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Polymyxins - Colistin	4	4	0		0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0				

Table Antimicrobial susceptibility testing of *S. Typhimurium* in *Gallus gallus* (fowl) - broilers - at farm - Control and eradication programmes - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Typhimurium	Gallus gallus (fowl) - broilers - at farm - Control and eradication programmes																									
	Isolates out of a monitoring program (yes/no)																									
	Number of isolates available in the laboratory																									
	3																									
Antimicrobials:	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Amphenicols - Chloramphenicol	16	3	1		0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	0	0	0	0			
Amphenicols - Florfenicol	16	3	1		0	0	0	0	0	0	0	0	2	0	0	0	1	0	0	0	0	0	0			
Tetracyclines - Tetracycline	8	3	1		0	0	0	0	0	0	0	2	0	0	0	0	1	0	0	0	0	0	0			
Fluoroquinolones - Ciprofloxacin	0.06	3	0		3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Quinolones - Nalidixic acid	16	3	0		0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0			
Trimethoprim	2	3	0		0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Streptomycin	32	3	1		0	0	0	0	0	0	0	0	0	2	0	0	1	0	0	0	0	0	0			
Aminoglycosides - Gentamicin	2	3	0		0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Kanamycin	8	3	0		0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0			
Penicillins - Ampicillin	4	3	1		0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0	0	0	0			
Cephalosporins - Cefotaxim	0.5	3	0		0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Sulfonamides	256	3	1		0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	1	0			
Cephalosporins - Ceftazidim	2	3	0		0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Polymyxins - Colistin	4	3	0		0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0			

Table Antimicrobial susceptibility testing of *S. Kottbus* in *Gallus gallus* (fowl) - breeding flocks, unspecified - at farm - Control and eradication programmes - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Kottbus	Gallus gallus (fowl) - breeding flocks, unspecified - at farm - Control and eradication programmes																									
	Isolates out of a monitoring program (yes/no)																									
	Number of isolates available in the laboratory																									
	1																									
Antimicrobials:	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Amphenicols - Chloramphenicol	16	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0			
Amphenicols - Florfenicol	16	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0			
Tetracyclines - Tetracycline	8	1	1		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0			
Fluoroquinolones - Ciprofloxacin	0.06	1	0		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Quinolones - Nalidixic acid	16	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0			
Trimethoprim	2	1	1		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0			
Aminoglycosides - Streptomycin	32	1	0		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Gentamicin	2	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Kanamycin	8	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0			
Penicillins - Ampicillin	4	1	1		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0			
Cephalosporins - Cefotaxim	0.5	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Sulfonamides	256	1	1		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0			
Cephalosporins - Ceftazidim	2	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Polymyxins - Colistin	4	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0			

Table Antimicrobial susceptibility testing of *S. Havana* in *Gallus gallus* (fowl) - broilers - at farm - Control and eradication programmes - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Havana Isolates out of a monitoring program (yes/no) Number of isolates available in the laboratory		Gallus gallus (fowl) - broilers - at farm - Control and eradication programmes																									
		1																									
		Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Antimicrobials:	16	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0				
Amphenicols - Chloramphenicol	16	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0				
Amphenicols - Florfenicol	8	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Tetracyclines - Tetracycline	0.06	1	1		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Fluoroquinolones - Ciprofloxacin	16	1	1		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0				
Quinolones - Nalidixic acid	2	1	0		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Trimethoprim	32	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Streptomycin	2	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Gentamicin	8	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Kanamycin	4	1	0		0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0				
Penicillins - Ampicillin	0.5	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Cefotaxim	256	1	0		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0				
Sulfonamides	2	1	0		0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Ceftazidim	4	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Polymyxins - Colistin																											

Table Antimicrobial susceptibility testing of *S. Manhattan* in Meat from pig - in total - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Manhattan	Meat from pig - in total - Surveillance																								
	4																								
Antimicrobials:	Cut-off value	N	n	≤0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest
Amphenicols - Chloramphenicol	16	4	0		0	0	0	0	0	0	0	0	1	2	1	0	0	0	0	0	0	0	0		
Amphenicols - Florfenicol	16	4	0		0	0	0	0	0	0	0	0	3	1	0	0	0	0	0	0	0	0	0		
Tetracyclines - Tetracycline	8	4	1		0	0	0	0	0	0	0	2	1	0	0	0	1	0	0	0	0	0	0		
Fluoroquinolones - Ciprofloxacin	0.06	4	0		3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Quinolones - Nalidixic acid	16	4	1		0	0	0	0	0	0	0	3	0	0	0	0	0	1	0	0	0	0	0		
Trimethoprim	2	4	0		0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Aminoglycosides - Streptomycin	32	4	1		0	0	0	0	0	0	0	0	0	2	1	0	0	1	0	0	0	0	0		
Aminoglycosides - Gentamicin	2	4	0		0	0	0	3	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0		
Aminoglycosides - Kanamycin	8	4	0		0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0		
Penicillins - Ampicillin	4	4	1		0	0	0	0	0	0	2	1	0	0	0	0	1	0	0	0	0	0	0		
Cephalosporins - Cefotaxim	0.5	4	0		0	3	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Sulfonamides	256	4	1		0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	0	0	1	0		
Cephalosporins - Ceftazidim	2	4	0		0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Polymyxins - Colistin	4	4	0		0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0		

Table Antimicrobial susceptibility testing of S. Manhattan in Meat from broilers (Gallus gallus) - at retail - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Manhattan Isolates out of a monitoring program (yes/no) Number of isolates available in the laboratory			Meat from broilers (Gallus gallus) - at retail - Surveillance																								
			1																								
			Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest
Antimicrobials:	Amphenicols - Chloramphenicol	16	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0				
Amphenicols - Florfenicol	16	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0				
Tetracyclines - Tetracycline	8	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Fluoroquinolones - Ciprofloxacin	0.06	1	0		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Quinolones - Nalidixic acid	16	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Trimethoprim	2	1	0		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Streptomycin	32	1	0		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Gentamicin	2	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Kanamycin	8	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Penicillins - Ampicillin	4	1	0		0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Cefotaxim	0.5	1	0		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Sulfonamides	256	1	0		0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0				
Cephalosporins - Ceftazidim	2	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Polymyxins - Colistin	4	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0				

Table Antimicrobial susceptibility testing of *S. Manhattan* in Pigs - at farm - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Manhattan	Pigs - at farm - Surveillance																								
	2																								
Antimicrobials:	Cut-off value	N	n	≤0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest
Amphenicols - Chloramphenicol	16	2	1		0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0		
Amphenicols - Florfenicol	16	2	1		0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0		
Tetracyclines - Tetracycline	8	2	1		0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0		
Fluoroquinolones - Ciprofloxacin	0.06	2	1		1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Quinolones - Nalidixic acid	16	2	1		0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0		
Trimethoprim	2	2	1		0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0		
Aminoglycosides - Streptomycin	32	2	2		0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0		
Aminoglycosides - Gentamicin	2	2	1		0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0		
Aminoglycosides - Kanamycin	8	2	0		0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0		
Penicillins - Ampicillin	4	2	1		0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0		
Cephalosporins - Cefotaxim	0.5	2	0		0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Sulfonamides	256	2	2		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0		
Cephalosporins - Ceftazidim	2	2	0		0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Polymyxins - Colistin	4	2	0		0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0		

Table Antimicrobial susceptibility testing of *S. Virchow* in *Gallus gallus* (fowl) - laying hens - at farm - Control and eradication programmes - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Virchow	Gallus gallus (fowl) - laying hens - at farm - Control and eradication programmes																									
	Isolates out of a monitoring program (yes/no)																									
	Number of isolates available in the laboratory																									
	2																									
Antimicrobials:	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Amphenicols - Chloramphenicol	16	2	0		0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0			
Amphenicols - Florfenicol	16	2	0		0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0			
Tetracyclines - Tetracycline	8	2	0		0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0			
Fluoroquinolones - Ciprofloxacin	0.06	2	0		0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Quinolones - Nalidixic acid	16	2	0		0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0			
Trimethoprim	2	2	0		0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Streptomycin	32	2	0		0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0			
Aminoglycosides - Gentamicin	2	2	0		0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Kanamycin	8	2	0		0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0			
Penicillins - Ampicillin	4	2	0		0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0			
Cephalosporins - Cefotaxim	0.5	2	0		0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Sulfonamides	256	2	0		0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0			
Cephalosporins - Ceftazidim	2	2	0		0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Polymyxins - Colistin	4	2	0		0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0			

Table Antimicrobial susceptibility testing of *S. Virchow* in *Gallus gallus* (fowl) - at farm - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Virchow	Gallus gallus (fowl) - at farm - Surveillance																									
	Isolates out of a monitoring program (yes/no)																									
	Number of isolates available in the laboratory																									
	1																									
Antimicrobials:	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Amphenicols - Chloramphenicol	16	1	0		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0			
Amphenicols - Florfenicol	16	1	0		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0			
Tetracyclines - Tetracycline	8	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0			
Fluoroquinolones - Ciprofloxacin	0.06	1	0		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Quinolones - Nalidixic acid	16	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0			
Trimethoprim	2	1	0		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Streptomycin	32	1	0		0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0			
Aminoglycosides - Gentamicin	2	1	0		0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Kanamycin	8	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0			
Penicillins - Ampicillin	4	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0			
Cephalosporins - Cefotaxim	0.5	1	0		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Sulfonamides	256	1	0		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0			
Cephalosporins - Ceftazidim	2	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Polymyxins - Colistin	4	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0			

Table Antimicrobial susceptibility testing of *S. Virchow* in *Gallus gallus* (fowl) - broilers - at farm - Control and eradication programmes - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Virchow	Gallus gallus (fowl) - broilers - at farm - Control and eradication programmes																									
	Isolates out of a monitoring program (yes/no)																									
	Number of isolates available in the laboratory																									
	1																									
Antimicrobials:	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Amphenicols - Chloramphenicol	16	1	0		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0			
Amphenicols - Florfenicol	16	1	0		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0			
Tetracyclines - Tetracycline	8	1	1		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0			
Fluoroquinolones - Ciprofloxacin	0.06	1	1		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Quinolones - Nalidixic acid	16	1	1		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0			
Trimethoprim	2	1	0		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Streptomycin	32	1	0		0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0			
Aminoglycosides - Gentamicin	2	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Kanamycin	8	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0			
Penicillins - Ampicillin	4	1	1		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0			
Cephalosporins - Cefotaxim	0.5	1	0		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Sulfonamides	256	1	0		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0			
Cephalosporins - Ceftazidim	2	1	0		0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0			
Polymyxins - Colistin	4	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0			

Table Antimicrobial susceptibility testing of *S. Livingstone* in Turkeys - at farm - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Livingstone	Turkeys - at farm - Surveillance																								
	2																								
Antimicrobials:	Cut-off value	N	n	≤0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest
Amphenicols - Chloramphenicol	16	2	0		0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0		
Amphenicols - Florfenicol	16	2	0		0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0		
Tetracyclines - Tetracycline	8	2	1		0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0		
Fluoroquinolones - Ciprofloxacin	0.06	2	0		2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Quinolones - Nalidixic acid	16	2	0		0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0		
Trimethoprim	2	2	0		0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0		
Aminoglycosides - Streptomycin	32	2	0		0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0		
Aminoglycosides - Gentamicin	2	2	0		0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Aminoglycosides - Kanamycin	8	2	1		0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0		
Penicillins - Ampicillin	4	2	0		0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0		
Cephalosporins - Cefotaxim	0.5	2	0		0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Sulfonamides	256	2	0		0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0		
Cephalosporins - Ceftazidim	2	2	0		0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Polymyxins - Colistin	4	2	0		0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0		

Table Antimicrobial susceptibility testing of *S. Livingstone* in Meat from pig - in total - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Livingstone Isolates out of a monitoring program (yes/no) Number of isolates available in the laboratory		Meat from pig - in total - Surveillance																									
		1																									
		Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Antimicrobials:	16	1	0		0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0				
Amphenicols - Chloramphenicol	16	1	0		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0				
Amphenicols - Florfenicol	8	1	1		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0				
Tetracyclines - Tetracycline	0.06	1	1		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Fluoroquinolones - Ciprofloxacin	16	1	1		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0				
Quinolones - Nalidixic acid	2	1	0		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Trimethoprim	32	1	1		0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0				
Aminoglycosides - Streptomycin	2	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Gentamicin	8	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Kanamycin	4	1	1		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0				
Penicillins - Ampicillin	0.5	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Cefotaxim	256	1	0		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0				
Sulfonamides	2	1	0		0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Ceftazidim	4	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Polymyxins - Colistin																											

Table Antimicrobial susceptibility testing of *S. Livingstone* in *Gallus gallus* (fowl) - laying hens - at farm - Control and eradication programmes - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Livingstone Isolates out of a monitoring program (yes/no) Number of isolates available in the laboratory		Gallus gallus (fowl) - laying hens - at farm - Control and eradication programmes																									
		6																									
		Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Antimicrobials:	16	6	0		0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0				
Amphenicols - Chloramphenicol	16	6	0		0	0	0	0	0	0	0	0	4	2	0	0	0	0	0	0	0	0	0				
Amphenicols - Florfenicol	8	6	0		0	0	0	0	0	1	0	5	0	0	0	0	0	0	0	0	0	0	0				
Tetracyclines - Tetracycline	0.06	6	0		4	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Fluoroquinolones - Ciprofloxacin	16	6	0		0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0				
Quinolones - Nalidixic acid	2	6	0		0	0	0	0	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0				
Trimethoprim	32	6	0		0	0	0	0	0	0	0	0	4	2	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Streptomycin	2	6	0		0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Gentamicin	8	6	0		0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Kanamycin	4	6	0		0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0				
Penicillins - Ampicillin	0.5	6	0		0	5	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Cefotaxim	256	6	0		0	0	0	0	0	0	0	0	0	0	0	0	5	1	0	0	0	0	0				
Sulfonamides	2	6	0		0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Ceftazidim	4	6	0		0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0				
Polymyxins - Colistin																											

Table Antimicrobial susceptibility testing of *S. Livingstone* in Compound feedingstuffs for poultry (non specified) - at farm - feed sample - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Livingstone	Compound feedingstuffs for poultry (non specified) - at farm - feed sample - Surveillance																									
	Isolates out of a monitoring program (yes/no)																									
	Number of isolates available in the laboratory																									
	5																									
Antimicrobials:	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Amphenicols - Chloramphenicol	16	5	0		0	0	0	0	0	0	0	0	2	2	1	0	0	0	0	0	0	0	0			
Amphenicols - Florfenicol	16	5	0		0	0	0	0	0	0	0	0	4	1	0	0	0	0	0	0	0	0	0			
Tetracyclines - Tetracycline	8	5	1		0	0	0	0	0	1	0	2	1	0	0	0	1	0	0	0	0	0	0			
Fluoroquinolones - Ciprofloxacin	0.06	5	1		3	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Quinolones - Nalidixic acid	16	5	1		0	0	0	0	0	0	0	4	0	0	0	0	0	1	0	0	0	0	0			
Trimethoprim	2	5	1		0	0	0	0	3	0	1	0	0	1	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Streptomycin	32	5	1		0	0	0	0	0	0	0	0	0	3	1	0	1	0	0	0	0	0	0			
Aminoglycosides - Gentamicin	2	5	0		0	0	0	3	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Kanamycin	8	5	0		0	0	0	0	0	0	0	3	0	2	0	0	0	0	0	0	0	0	0			
Penicillins - Ampicillin	4	5	0		0	0	0	0	0	0	2	3	0	0	0	0	0	0	0	0	0	0	0			
Cephalosporins - Cefotaxim	0.5	5	0		0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Sulfonamides	256	5	1		0	0	0	0	0	0	0	0	0	0	0	2	1	1	0	0	0	1	0			
Cephalosporins - Ceftazidim	2	5	0		0	0	0	1	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0			
Polymyxins - Colistin	4	5	0		0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0			

Table Antimicrobial susceptibility testing of *S. Livingstone* in *Gallus gallus* (fowl) - breeding flocks, unspecified - at farm - Control and eradication programmes - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Livingstone	Gallus gallus (fowl) - breeding flocks, unspecified - at farm - Control and eradication programmes																									
	Isolates out of a monitoring program (yes/no)																									
	Number of isolates available in the laboratory																									
	2																									
Antimicrobials:	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Amphenicols - Chloramphenicol	16	2	0		0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0			
Amphenicols - Florfenicol	16	2	0		0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0			
Tetracyclines - Tetracycline	8	2	0		0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0			
Fluoroquinolones - Ciprofloxacin	0.06	2	0		1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Quinolones - Nalidixic acid	16	2	0		0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0			
Trimethoprim	2	2	0		0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Streptomycin	32	2	0		0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Gentamicin	2	2	0		0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Kanamycin	8	2	0		0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0			
Penicillins - Ampicillin	4	2	0		0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0			
Cephalosporins - Cefotaxim	0.5	2	0		0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Sulfonamides	256	2	0		0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0			
Cephalosporins - Ceftazidim	2	2	0		0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0			
Polymyxins - Colistin	4	2	0		0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0			

Table Antimicrobial susceptibility testing of *S. Livingstone* in *Gallus gallus* (fowl) - breeding flocks, unspecified - at farm - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Livingstone	Gallus gallus (fowl) - breeding flocks, unspecified - at farm - Surveillance																									
	Isolates out of a monitoring program (yes/no)																									
	Number of isolates available in the laboratory																									
	7																									
Antimicrobials:	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Amphenicols - Chloramphenicol	16	7	1		0	0	0	0	0	0	0	0	1	4	1	0	1	0	0	0	0	0	0			
Amphenicols - Florfenicol	16	7	0		0	0	0	0	0	0	0	0	3	4	0	0	0	0	0	0	0	0	0			
Tetracyclines - Tetracycline	8	7	1		0	0	0	0	0	1	0	3	0	2	0	0	0	1	0	0	0	0	0			
Fluoroquinolones - Ciprofloxacin	0.06	7	3		0	3	1	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0			
Quinolones - Nalidixic acid	16	7	3		0	0	0	0	0	0	0	3	0	0	1	0	0	3	0	0	0	0	0			
Trimethoprim	2	7	0		0	0	0	0	5	1	1	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Streptomycin	32	7	1		0	0	0	0	0	0	0	0	0	4	2	0	0	1	0	0	0	0	0			
Aminoglycosides - Gentamicin	2	7	1		0	0	0	3	0	3	0	0	0	0	0	1	0	0	0	0	0	0	0			
Aminoglycosides - Kanamycin	8	7	0		0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0			
Penicillins - Ampicillin	4	7	2		0	0	0	0	0	0	5	0	0	0	1	0	1	0	0	0	0	0	0			
Cephalosporins - Cefotaxim	0.5	7	1		0	0	0	6	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0			
Sulfonamides	256	7	1		0	0	0	0	0	0	0	0	0	0	0	3	3	0	0	0	1	0	0			
Cephalosporins - Ceftazidim	2	7	1		0	0	0	0	0	6	0	0	0	0	0	1	0	0	0	0	0	0	0			
Polymyxins - Colistin	4	7	0		0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0			

Table Antimicrobial susceptibility testing of *S. Livingstone* in *Gallus gallus* (fowl) - at farm - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Livingstone Isolates out of a monitoring program (yes/no) Number of isolates available in the laboratory		Gallus gallus (fowl) - at farm - Surveillance																									
		12																									
		Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Amphenicols - Chloramphenicol	16	12	0		0	0	0	0	0	0	0	7	4	1	0	0	0	0	0	0	0	0	0				
Amphenicols - Florfenicol	16	12	0		0	0	0	0	0	0	0	9	2	1	0	0	0	0	0	0	0	0	0				
Tetracyclines - Tetracycline	8	12	1		0	0	0	0	0	7	0	3	1	0	0	0	0	1	0	0	0	0	0				
Fluoroquinolones - Ciprofloxacin	0.06	12	1		6	4	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Quinolones - Nalidixic acid	16	12	1		0	0	0	0	0	0	0	9	0	2	0	0	0	1	0	0	0	0	0				
Trimethoprim	2	12	0		0	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Streptomycin	32	12	1		0	0	0	0	0	0	0	0	3	7	1	0	0	1	0	0	0	0	0				
Aminoglycosides - Gentamicin	2	12	0		1	0	0	8	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Kanamycin	8	12	0		0	0	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0				
Penicillins - Ampicillin	4	12	2		0	0	0	0	0	0	10	0	0	1	0	0	1	0	0	0	0	0	0				
Cephalosporins - Cefotaxim	0.5	12	0		0	4	0	7	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Sulfonamides	256	12	2		0	0	0	0	0	0	0	0	0	0	1	4	4	1	0	1	0	1	0				
Cephalosporins - Ceftazidim	2	12	0		0	0	0	7	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0				
Polymyxins - Colistin	4	12	0		0	0	0	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0	0				

Table Antimicrobial susceptibility testing of *S. Livingstone* in *Gallus gallus* (fowl) - broilers - at farm - Control and eradication programmes - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Livingstone	Gallus gallus (fowl) - broilers - at farm - Control and eradication programmes																										
	Isolates out of a monitoring program (yes/no)																										
	Number of isolates available in the laboratory																										
	11																										
Antimicrobials:	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest		
Amphenicols - Chloramphenicol	16	11	0		0	0	0	0	0	0	0	0	2	6	3	0	0	0	0	0	0	0	0				
Amphenicols - Florfenicol	16	11	0		0	0	0	0	0	0	0	0	6	4	1	0	0	0	0	0	0	0	0				
Tetracyclines - Tetracycline	8	11	0		0	0	0	0	0	0	0	7	3	1	0	0	0	0	0	0	0	0	0				
Fluoroquinolones - Ciprofloxacin	0.06	11	1		4	4	2	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0				
Quinolones - Nalidixic acid	16	11	1		0	0	0	0	0	0	0	9	0	1	0	0	0	1	0	0	0	0	0				
Trimethoprim	2	11	0		0	0	0	0	10	0	1	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Streptomycin	32	11	2		0	0	0	0	0	0	0	0	0	5	4	0	2	0	0	0	0	0	0				
Aminoglycosides - Gentamicin	2	11	1		0	0	0	4	1	5	0	0	0	0	1	0	0	0	0	0	0	0	0				
Aminoglycosides - Kanamycin	8	11	0		0	0	0	0	0	0	0	10	0	1	0	0	0	0	0	0	0	0	0				
Penicillins - Ampicillin	4	11	2		0	0	0	0	0	0	7	1	1	0	0	0	2	0	0	0	0	0	0				
Cephalosporins - Cefotaxim	0.5	11	1		0	1	0	8	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0				
Sulfonamides	256	11	2		0	0	0	0	0	0	0	0	0	0	0	3	5	1	0	1	0	1	0				
Cephalosporins - Ceftazidim	2	11	1		0	0	0	2	0	8	0	0	0	0	0	1	0	0	0	0	0	0	0				
Polymyxins - Colistin	4	11	0		0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0				

Table Antimicrobial susceptibility testing of *S. Enteritidis* in *Gallus gallus* (fowl) - laying hens - at farm - Control and eradication programmes - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Enteritidis	Gallus gallus (fowl) - laying hens - at farm - Control and eradication programmes																									
	Isolates out of a monitoring program (yes/no)																									
	Number of isolates available in the laboratory																									
	26																									
Antimicrobials:	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Amphenicols - Chloramphenicol	16	26	0		0	0	0	0	0	0	0	0	10	16	0	0	0	0	0	0	0	0	0			
Amphenicols - Florfenicol	16	26	0		0	0	0	0	0	0	2	0	20	4	0	0	0	0	0	0	0	0	0			
Tetracyclines - Tetracycline	8	26	0		0	0	0	0	0	3	0	20	2	1	0	0	0	0	0	0	0	0	0			
Fluoroquinolones - Ciprofloxacin	0.06	26	4		4	18	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Quinolones - Nalidixic acid	16	26	4		0	0	0	0	0	0	0	22	0	0	0	0	0	4	0	0	0	0	0			
Trimethoprim	2	26	0		0	0	0	0	25	0	1	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Streptomycin	32	26	0		0	0	0	0	0	0	11	0	12	3	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Gentamicin	2	26	0		0	0	0	22	0	3	0	1	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Kanamycin	8	26	0		0	0	0	0	0	0	0	24	0	2	0	0	0	0	0	0	0	0	0			
Penicillins - Ampicillin	4	26	0		0	0	0	0	0	0	12	14	0	0	0	0	0	0	0	0	0	0	0			
Cephalosporins - Cefotaxim	0.5	26	0		0	5	0	20	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Sulfonamides	256	26	0		0	0	0	0	0	0	0	0	0	0	0	3	19	4	0	0	0	0	0			
Cephalosporins - Ceftazidim	2	26	0		0	0	0	24	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0			
Polymyxins - Colistin	4	26	5		0	0	0	0	0	0	0	0	21	0	4	1	0	0	0	0	0	0	0			

Table Antimicrobial susceptibility testing of *S. Enteritidis* in *Gallus gallus* (fowl) - laying hens - at farm - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Enteritidis	Gallus gallus (fowl) - laying hens - at farm - Surveillance																									
	Isolates out of a monitoring program (yes/no)																									
	Number of isolates available in the laboratory																									
	2																									
Antimicrobials:	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Amphenicols - Chloramphenicol	16	2	0		0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0			
Amphenicols - Florfenicol	16	2	0		0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0			
Tetracyclines - Tetracycline	8	2	0		0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0			
Fluoroquinolones - Ciprofloxacin	0.06	2	0		1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Quinolones - Nalidixic acid	16	2	0		0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0			
Trimethoprim	2	2	0		0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Streptomycin	32	2	0		0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Gentamicin	2	2	0		0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Kanamycin	8	2	0		0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0			
Penicillins - Ampicillin	4	2	0		0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0			
Cephalosporins - Cefotaxim	0.5	2	0		0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Sulfonamides	256	2	0		0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0			
Cephalosporins - Ceftazidim	2	2	0		0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Polymyxins - Colistin	4	2	1		0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0			

Table Antimicrobial susceptibility testing of *S. Enteritidis* in Meat from broilers (*Gallus gallus*) - at retail - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Enteritidis Isolates out of a monitoring program (yes/no) Number of isolates available in the laboratory		Meat from broilers (Gallus gallus) - at retail - Surveillance																									
		1																									
		Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Antimicrobials:	16	1	0		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0				
Amphenicols - Chloramphenicol	16	1	0		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0				
Amphenicols - Florfenicol	8	1	1		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0				
Tetracyclines - Tetracycline	0.06	1	0		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Fluoroquinolones - Ciprofloxacin	16	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Quinolones - Nalidixic acid	2	1	0		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Trimethoprim	32	1	0		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Streptomycin	2	1	0		0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Gentamicin	8	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Kanamycin	4	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Penicillins - Ampicillin	0.5	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Cefotaxim	256	1	0		0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0				
Sulfonamides	2	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Ceftazidim	4	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0				
Polymyxins - Colistin																											

Table Antimicrobial susceptibility testing of S. Enteritidis in Gallus gallus (fowl) - breeding flocks, unspecified - at farm - Control and eradication programmes - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Enteritidis Isolates out of a monitoring program (yes/no) Number of isolates available in the laboratory			Gallus gallus (fowl) - breeding flocks, unspecified - at farm - Control and eradication programmes																								
			1																								
			Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest
Antimicrobials:	Amphenicols - Chloramphenicol	16	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0				
Amphenicols - Florfenicol	16	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0				
Tetracyclines - Tetracycline	8	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Fluoroquinolones - Ciprofloxacin	0.06	1	0		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Quinolones - Nalidixic acid	16	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Trimethoprim	2	1	0		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Streptomycin	32	1	0		0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Gentamicin	2	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Kanamycin	8	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Penicillins - Ampicillin	4	1	0		0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Cefotaxim	0.5	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Sulfonamides	256	1	0		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0				
Cephalosporins - Ceftazidim	2	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Polymyxins - Colistin	4	1	1		0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0				

Table Antimicrobial susceptibility testing of *S. Enteritidis* in *Gallus gallus* (fowl) - breeding flocks, unspecified - at farm - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Enteritidis	Gallus gallus (fowl) - breeding flocks, unspecified - at farm - Surveillance																									
	Isolates out of a monitoring program (yes/no)																									
	Number of isolates available in the laboratory																									
	1																									
Antimicrobials:	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Amphenicols - Chloramphenicol	16	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0			
Amphenicols - Florfenicol	16	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0			
Tetracyclines - Tetracycline	8	1	0		0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0			
Fluoroquinolones - Ciprofloxacin	0.06	1	0		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Quinolones - Nalidixic acid	16	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0			
Trimethoprim	2	1	0		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Streptomycin	32	1	0		0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Gentamicin	2	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Kanamycin	8	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0			
Penicillins - Ampicillin	4	1	0		0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0			
Cephalosporins - Cefotaxim	0.5	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Sulfonamides	256	1	0		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0			
Cephalosporins - Ceftazidim	2	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Polymyxins - Colistin	4	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0			

Table Antimicrobial susceptibility testing of *S. Enteritidis* in Cattle (bovine animals) - at farm - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Enteritidis Isolates out of a monitoring program (yes/no) Number of isolates available in the laboratory		Cattle (bovine animals) - at farm - Surveillance																									
		1																									
Antimicrobials:	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest		
Amphenicols - Chloramphenicol	16	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0				
Amphenicols - Florfenicol	16	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0				
Tetracyclines - Tetracycline	8	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Fluoroquinolones - Ciprofloxacin	0.06	1	0		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Quinolones - Nalidixic acid	16	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Trimethoprim	2	1	0		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Streptomycin	32	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Gentamicin	2	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Kanamycin	8	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Penicillins - Ampicillin	4	1	0		0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Cefotaxim	0.5	1	0		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Sulfonamides	256	1	0		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0				
Cephalosporins - Ceftazidim	2	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Polymyxins - Colistin	4	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0				

Table Antimicrobial susceptibility testing of *S. Enteritidis* in *Gallus gallus* (fowl) - at farm - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Enteritidis Isolates out of a monitoring program (yes/no) Number of isolates available in the laboratory		Gallus gallus (fowl) - at farm - Surveillance																									
		10																									
		Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Antimicrobials:	16	10	0		0	0	0	0	0	0	0	0	9	1	0	0	0	0	0	0	0	0	0				
Amphenicols - Chloramphenicol	16	10	0		0	0	0	0	0	0	0	0	9	1	0	0	0	0	0	0	0	0	0				
Amphenicols - Florfenicol	8	10	1		0	0	0	0	0	2	0	7	0	0	0	0	0	1	0	0	0	0	0				
Tetracyclines - Tetracycline	0.06	10	0		5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Fluoroquinolones - Ciprofloxacin	16	10	0		0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0				
Quinolones - Nalidixic acid	2	10	0		0	0	0	1	8	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Trimethoprim	32	10	1		0	0	0	0	0	0	5	0	4	0	0	0	0	0	1	0	0	0	0				
Aminoglycosides - Streptomycin	2	10	0		0	0	0	6	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Gentamicin	8	10	0		0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Kanamycin	4	10	2		0	0	0	0	0	0	5	2	1	0	0	0	2	0	0	0	0	0	0				
Penicillins - Ampicillin	0.5	10	0		0	6	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Cefotaxim	256	10	1		0	0	0	0	0	0	0	0	1	0	0	1	4	3	0	0	0	1	0				
Sulfonamides	2	10	0		0	0	0	8	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Ceftazidim	4	10	0		0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0				
Polymyxins - Colistin																											

Table Antimicrobial susceptibility testing of *S. Enteritidis* in *Gallus gallus* (fowl) - broilers - at farm - Control and eradication programmes - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Enteritidis	Gallus gallus (fowl) - broilers - at farm - Control and eradication programmes																									
	Isolates out of a monitoring program (yes/no)																									
	Number of isolates available in the laboratory																									
	7																									
Antimicrobials:	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Amphenicols - Chloramphenicol	16	7	0		0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0			
Amphenicols - Florfenicol	16	7	0		0	0	0	0	0	0	0	0	5	2	0	0	0	0	0	0	0	0	0			
Tetracyclines - Tetracycline	8	7	0		0	0	0	0	0	0	0	5	1	1	0	0	0	0	0	0	0	0	0			
Fluoroquinolones - Ciprofloxacin	0.06	7	1		3	3	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Quinolones - Nalidixic acid	16	7	1		0	0	0	0	0	0	0	6	0	0	0	0	0	1	0	0	0	0	0			
Trimethoprim	2	7	0		0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Streptomycin	32	7	0		0	0	0	0	0	0	2	0	2	1	2	0	0	0	0	0	0	0	0			
Aminoglycosides - Gentamicin	2	7	0		0	0	0	3	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Kanamycin	8	7	0		0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0			
Penicillins - Ampicillin	4	7	1		0	0	0	0	0	0	2	4	0	0	0	0	1	0	0	0	0	0	0			
Cephalosporins - Cefotaxim	0.5	7	0		0	2	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Sulfonamides	256	7	0		0	0	0	0	0	0	0	0	0	0	0	0	3	4	0	0	0	0	0			
Cephalosporins - Ceftazidim	2	7	0		0	0	0	6	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0			
Polymyxins - Colistin	4	7	0		0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0			

Table Antimicrobial susceptibility testing of *S. Kedougou* in Meat from pig - in total - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Kedougou	Meat from pig - in total - Surveillance																								
	1																								
Antimicrobials:	Cut-off value	N	n	≤0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest
Amphenicols - Chloramphenicol	16	1	0		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0		
Amphenicols - Florfenicol	16	1	0		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0		
Tetracyclines - Tetracycline	8	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0		
Fluoroquinolones - Ciprofloxacin	0.06	1	0		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Quinolones - Nalidixic acid	16	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0		
Trimethoprim	2	1	0		0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0		
Aminoglycosides - Streptomycin	32	1	0		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0		
Aminoglycosides - Gentamicin	2	1	0		0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0		
Aminoglycosides - Kanamycin	8	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0		
Penicillins - Ampicillin	4	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0		
Cephalosporins - Cefotaxim	0.5	1	0		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Sulfonamides	256	1	0		0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0		
Cephalosporins - Ceftazidim	2	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Polymyxins - Colistin	4	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0		

Table Antimicrobial susceptibility testing of *S. Kedougou* in *Gallus gallus* (fowl) - at farm - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Kedougou	Gallus gallus (fowl) - at farm - Surveillance																									
	Isolates out of a monitoring program (yes/no)																									
	Number of isolates available in the laboratory																									
	1																									
Antimicrobials:	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Amphenicols - Chloramphenicol	16	1	0		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0			
Amphenicols - Florfenicol	16	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0			
Tetracyclines - Tetracycline	8	1	1		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0			
Fluoroquinolones - Ciprofloxacin	0.06	1	0		0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Quinolones - Nalidixic acid	16	1	1		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0			
Trimethoprim	2	1	0		0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Streptomycin	32	1	0		0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0			
Aminoglycosides - Gentamicin	2	1	0		0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Kanamycin	8	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0			
Penicillins - Ampicillin	4	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0			
Cephalosporins - Cefotaxim	0.5	1	0		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Sulfonamides	256	1	0		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0			
Cephalosporins - Ceftazidim	2	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Polymyxins - Colistin	4	1	1		0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0			

Table Antimicrobial susceptibility testing of *S. Tennessee* in *Gallus gallus* (fowl) - laying hens - at farm - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Tennessee Isolates out of a monitoring program (yes/no) Number of isolates available in the laboratory		Gallus gallus (fowl) - laying hens - at farm - Surveillance																									
		1																									
Antimicrobials:	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest		
Amphenicols - Chloramphenicol	16	1	0		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0				
Amphenicols - Florfenicol	16	1	0		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0				
Tetracyclines - Tetracycline	8	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Fluoroquinolones - Ciprofloxacin	0.06	1	0		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Quinolones - Nalidixic acid	16	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Trimethoprim	2	1	0		0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Streptomycin	32	1	0		0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0				
Aminoglycosides - Gentamicin	2	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Kanamycin	8	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Penicillins - Ampicillin	4	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Cefotaxim	0.5	1	0		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Sulfonamides	256	1	0		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0				
Cephalosporins - Ceftazidim	2	1	0		0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0				
Polymyxins - Colistin	4	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0				

Table Antimicrobial susceptibility testing of *S. Tennessee* in *Gallus gallus* (fowl) - at farm - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Tennessee Isolates out of a monitoring program (yes/no) Number of isolates available in the laboratory			Gallus gallus (fowl) - at farm - Surveillance																								
			1																								
Antimicrobials:	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest		
Amphenicols - Chloramphenicol	16	1	0		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0				
Amphenicols - Florfenicol	16	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0				
Tetracyclines - Tetracycline	8	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Fluoroquinolones - Ciprofloxacin	0.06	1	0		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Quinolones - Nalidixic acid	16	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Trimethoprim	2	1	0		0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Streptomycin	32	1	0		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Gentamicin	2	1	0		0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Kanamycin	8	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Penicillins - Ampicillin	4	1	0		0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Cefotaxim	0.5	1	0		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Sulfonamides	256	1	0		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0				
Cephalosporins - Ceftazidim	2	1	0		0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0				
Polymyxins - Colistin	4	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0				

Table Antimicrobial susceptibility testing of *S. Tennessee* in *Gallus gallus* (fowl) - broilers - at farm - Control and eradication programmes - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Tennessee Isolates out of a monitoring program (yes/no) Number of isolates available in the laboratory		Gallus gallus (fowl) - broilers - at farm - Control and eradication programmes																									
		1																									
		Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Antimicrobials:	16	1	0		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0				
Amphenicols - Chloramphenicol	16	1	0		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0				
Amphenicols - Florfenicol	8	1	1		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0				
Tetracyclines - Tetracycline	0.06	1	0		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Fluoroquinolones - Ciprofloxacin	16	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Quinolones - Nalidixic acid	2	1	1		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0				
Trimethoprim	32	1	1		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0				
Aminoglycosides - Streptomycin	2	1	0		0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Gentamicin	8	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Kanamycin	4	1	1		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0				
Penicillins - Ampicillin	0.5	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Cefotaxim	256	1	1		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0				
Sulfonamides	2	1	0		0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Ceftazidim	4	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Polymyxins - Colistin																											

Table Antimicrobial susceptibility testing of *S. Saintpaul* in Turkeys - at farm - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Saintpaul	Turkeys - at farm - Surveillance																								
	1																								
Antimicrobials:	Cut-off value	N	n	≤0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest
Amphenicols - Chloramphenicol	16	1	0		0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0		
Amphenicols - Florfenicol	16	1	0		0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0		
Tetracyclines - Tetracycline	8	1	1		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0		
Fluoroquinolones - Ciprofloxacin	0.06	1	1		0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0		
Quinolones - Nalidixic acid	16	1	1		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0		
Trimethoprim	2	1	0		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Aminoglycosides - Streptomycin	32	1	0		0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0		
Aminoglycosides - Gentamicin	2	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Aminoglycosides - Kanamycin	8	1	0		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0		
Penicillins - Ampicillin	4	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0		
Cephalosporins - Cefotaxim	0.5	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Sulfonamides	256	1	1		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0		
Cephalosporins - Ceftazidim	2	1	0		0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0		
Polymyxins - Colistin	4	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0		

Table Antimicrobial susceptibility testing of *S. Saintpaul* in Meat from broilers (*Gallus gallus*) - at retail - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Saintpaul Isolates out of a monitoring program (yes/no) Number of isolates available in the laboratory		Meat from broilers (Gallus gallus) - at retail - Surveillance																									
		1																									
		Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Antimicrobials:	16	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0				
Amphenicols - Chloramphenicol	16	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0				
Amphenicols - Florfenicol	8	1	1		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0				
Tetracyclines - Tetracycline	0.06	1	1		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Fluoroquinolones - Ciprofloxacin	16	1	1		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0				
Quinolones - Nalidixic acid	2	1	1		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0				
Trimethoprim	32	1	1		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0				
Aminoglycosides - Streptomycin	2	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Gentamicin	8	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Kanamycin	4	1	1		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0				
Penicillins - Ampicillin	0.5	1	0		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Cefotaxim	256	1	1		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0				
Sulfonamides	2	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Ceftazidim	4	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0				
Polymyxins - Colistin																											

Table Antimicrobial susceptibility testing of *S. Saintpaul* in Meat from turkey - in total - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Saintpaul	Meat from turkey - in total - Surveillance																									
	Isolates out of a monitoring program (yes/no)																									
	Number of isolates available in the laboratory																									
	5																									
Antimicrobials:	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Amphenicols - Chloramphenicol	16	5	1		0	0	0	0	0	0	0	0	1	3	0	0	0	1	0	0	0	0	0			
Amphenicols - Florfenicol	16	5	0		0	0	0	0	0	0	0	0	2	3	0	0	0	0	0	0	0	0	0			
Tetracyclines - Tetracycline	8	5	5		0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0			
Fluoroquinolones - Ciprofloxacin	0.06	5	1		0	4	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Quinolones - Nalidixic acid	16	5	1		0	0	0	0	0	0	0	4	0	0	0	0	0	1	0	0	0	0	0			
Trimethoprim	2	5	3		0	0	0	0	2	0	0	0	0	0	0	0	3	0	0	0	0	0	0			
Aminoglycosides - Streptomycin	32	5	3		0	0	0	0	0	0	0	0	0	1	0	1	0	2	1	0	0	0	0			
Aminoglycosides - Gentamicin	2	5	1		0	0	0	2	0	2	0	0	0	0	0	1	0	0	0	0	0	0	0			
Aminoglycosides - Kanamycin	8	5	0		0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0			
Penicillins - Ampicillin	4	5	4		0	0	0	0	0	0	0	1	0	0	0	0	4	0	0	0	0	0	0			
Cephalosporins - Cefotaxim	0.5	5	0		0	0	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Sulfonamides	256	5	5		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0			
Cephalosporins - Ceftazidim	2	5	0		0	0	0	1	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0			
Polymyxins - Colistin	4	5	0		0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0			

Table Antimicrobial susceptibility testing of *S. enterica* subsp. *enterica* in Meat from pig - in total - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. enterica subsp. enterica	Meat from pig - in total - Surveillance																										
	Isolates out of a monitoring program (yes/no)																										
	Number of isolates available in the laboratory																										
	1																										
Antimicrobials:	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest		
Amphenicols - Chloramphenicol	16	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0				
Amphenicols - Florfenicol	16	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0				
Tetracyclines - Tetracycline	8	1	1		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0				
Fluoroquinolones - Ciprofloxacin	0.06	1	0		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Quinolones - Nalidixic acid	16	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Trimethoprim	2	1	1		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0				
Aminoglycosides - Streptomycin	32	1	0		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Gentamicin	2	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Kanamycin	8	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Penicillins - Ampicillin	4	1	0		0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Cefotaxim	0.5	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Sulfonamides	256	1	1		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0				
Cephalosporins - Ceftazidim	2	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Polymyxins - Colistin	4	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0				

Table Antimicrobial susceptibility testing of *S. enterica* subsp. *enterica* in *Gallus gallus* (fowl) - laying hens - at farm - Control and eradication programmes - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. enterica subsp. enterica	Gallus gallus (fowl) - laying hens - at farm - Control and eradication programmes																									
	Isolates out of a monitoring program (yes/no)																									
	Number of isolates available in the laboratory																									
	4																									
Antimicrobials:	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Amphenicols - Chloramphenicol	16	4	0		0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0			
Amphenicols - Florfenicol	16	4	0		0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0			
Tetracyclines - Tetracycline	8	4	2		0	0	0	0	0	0	0	2	0	0	0	0	0	2	0	0	0	0	0			
Fluoroquinolones - Ciprofloxacin	0.06	4	0		1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Quinolones - Nalidixic acid	16	4	0		0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0			
Trimethoprim	2	4	0		0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Streptomycin	32	4	2		0	0	0	0	0	0	0	0	0	0	1	1	0	1	1	0	0	0	0			
Aminoglycosides - Gentamicin	2	4	0		0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Kanamycin	8	4	0		0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0			
Penicillins - Ampicillin	4	4	2		0	0	0	0	0	0	1	1	0	0	0	0	2	0	0	0	0	0	0			
Cephalosporins - Cefotaxim	0.5	4	0		0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Sulfonamides	256	4	2		0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	0			
Cephalosporins - Ceftazidim	2	4	0		0	0	0	3	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0			
Polymyxins - Colistin	4	4	0		0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0			

Table Antimicrobial susceptibility testing of *S. enterica* subsp. *enterica* in *Gallus gallus* (fowl) - laying hens - at farm - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. enterica subsp. enterica	Gallus gallus (fowl) - laying hens - at farm - Surveillance																									
	Isolates out of a monitoring program (yes/no)																									
	Number of isolates available in the laboratory																									
	2																									
Antimicrobials:	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Amphenicols - Chloramphenicol	16	2	0		0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0			
Amphenicols - Florfenicol	16	2	0		0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0			
Tetracyclines - Tetracycline	8	2	0		0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0			
Fluoroquinolones - Ciprofloxacin	0.06	2	0		1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Quinolones - Nalidixic acid	16	2	0		0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0			
Trimethoprim	2	2	0		0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Streptomycin	32	2	0		0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0			
Aminoglycosides - Gentamicin	2	2	0		0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Kanamycin	8	2	0		0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0			
Penicillins - Ampicillin	4	2	0		0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0			
Cephalosporins - Cefotaxim	0.5	2	0		0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Sulfonamides	256	2	0		0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0			
Cephalosporins - Ceftazidim	2	2	0		0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0			
Polymyxins - Colistin	4	2	0		0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0			

Table Antimicrobial susceptibility testing of *S. enterica* subsp. *enterica* in Pigs - at farm - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. enterica subsp. enterica	Pigs - at farm - Surveillance																										
	Isolates out of a monitoring program (yes/no)																										
	Number of isolates available in the laboratory																										
	1																										
Antimicrobials:	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest		
Amphenicols - Chloramphenicol	16	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0				
Amphenicols - Florfenicol	16	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0				
Tetracyclines - Tetracycline	8	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Fluoroquinolones - Ciprofloxacin	0.06	1	0		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Quinolones - Nalidixic acid	16	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Trimethoprim	2	1	0		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Streptomycin	32	1	0		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Gentamicin	2	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Kanamycin	8	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Penicillins - Ampicillin	4	1	0		0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Cefotaxim	0.5	1	0		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Sulfonamides	256	1	0		0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0				
Cephalosporins - Ceftazidim	2	1	0		0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0				
Polymyxins - Colistin	4	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0				

Table Antimicrobial susceptibility testing of *S. enterica* subsp. *enterica* in *Gallus gallus* (fowl) - broilers - at farm - Control and eradication programmes - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. enterica subsp. enterica	Gallus gallus (fowl) - broilers - at farm - Control and eradication programmes																									
	Isolates out of a monitoring program (yes/no)																									
	Number of isolates available in the laboratory																									
	2																									
Antimicrobials:	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Amphenicols - Chloramphenicol	16	2	0		0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0			
Amphenicols - Florfenicol	16	2	0		0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0			
Tetracyclines - Tetracycline	8	2	0		0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0			
Fluoroquinolones - Ciprofloxacin	0.06	2	1		1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Quinolones - Nalidixic acid	16	2	1		0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0			
Trimethoprim	2	2	0		0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Streptomycin	32	2	0		0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Gentamicin	2	2	1		0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0			
Aminoglycosides - Kanamycin	8	2	0		0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0			
Penicillins - Ampicillin	4	2	1		0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0			
Cephalosporins - Cefotaxim	0.5	2	1		0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0			
Sulfonamides	256	2	0		0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0			
Cephalosporins - Ceftazidim	2	2	1		0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0			
Polymyxins - Colistin	4	2	0		0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0			

Table Antimicrobial susceptibility testing of *S. Choleraesuis* in Pigs - at farm - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Choleraesuis	Pigs - at farm - Surveillance																								
	Isolates out of a monitoring program (yes/no)																								
	Number of isolates available in the laboratory																								
Antimicrobials:	Cut-off value	N	n	≤0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest
Amphenicols - Chloramphenicol	16	9	3		0	0	0	0	0	0	0	0	4	1	1	0	0	3	0	0	0	0	0		
Amphenicols - Florfenicol	16	9	1		0	0	0	0	0	0	1	0	5	0	2	0	0	1	0	0	0	0	0		
Tetracyclines - Tetracycline	8	9	9		0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0		
Fluoroquinolones - Ciprofloxacin	0.06	9	4		0	4	1	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0		
Quinolones - Nalidixic acid	16	9	4		0	0	0	0	0	0	0	4	0	1	0	0	0	4	0	0	0	0	0		
Trimethoprim	2	9	9		0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0		
Aminoglycosides - Streptomycin	32	9	9		0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0		
Aminoglycosides - Gentamicin	2	9	2		0	0	0	0	0	5	2	0	0	2	0	0	0	0	0	0	0	0	0		
Aminoglycosides - Kanamycin	8	9	7		0	0	0	0	0	0	0	2	0	0	0	0	0	0	7	0	0	0	0		
Penicillins - Ampicillin	4	9	8		0	0	0	0	0	0	0	1	0	0	0	0	8	0	0	0	0	0	0		
Cephalosporins - Cefotaxim	0.5	9	0		0	4	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Sulfonamides	256	9	9		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0		
Cephalosporins - Ceftazidim	2	9	0		0	0	0	8	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0		
Polymyxins - Colistin	4	9	0		0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0		

Table Antimicrobial susceptibility testing of *S. Ohio* in *Gallus gallus* (fowl) - laying hens - at farm - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Ohio Isolates out of a monitoring program (yes/no) Number of isolates available in the laboratory		Gallus gallus (fowl) - laying hens - at farm - Surveillance																									
		1																									
Antimicrobials:	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest		
Amphenicols - Chloramphenicol	16	1	0		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0				
Amphenicols - Florfenicol	16	1	0		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0				
Tetracyclines - Tetracycline	8	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Fluoroquinolones - Ciprofloxacin	0.06	1	0		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Quinolones - Nalidixic acid	16	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Trimethoprim	2	1	0		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Streptomycin	32	1	0		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Gentamicin	2	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Kanamycin	8	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Penicillins - Ampicillin	4	1	0		0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Cefotaxim	0.5	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Sulfonamides	256	1	0		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0				
Cephalosporins - Ceftazidim	2	1	0		0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0				
Polymyxins - Colistin	4	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0				

Table Antimicrobial susceptibility testing of *S. Infantis* in Meat from pig - in total - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Infantis	Meat from pig - in total - Surveillance																								
	3																								
Antimicrobials:	Cut-off value	N	n	≤0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest
Amphenicols - Chloramphenicol	16	3	0		0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0		
Amphenicols - Florfenicol	16	3	0		0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0		
Tetracyclines - Tetracycline	8	3	0		0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0		
Fluoroquinolones - Ciprofloxacin	0.06	3	0		0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Quinolones - Nalidixic acid	16	3	0		0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0		
Trimethoprim	2	3	0		0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Aminoglycosides - Streptomycin	32	3	0		0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0		
Aminoglycosides - Gentamicin	2	3	0		0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Aminoglycosides - Kanamycin	8	3	1		0	0	0	0	0	0	0	2	0	0	1	0	0	0	0	0	0	0	0		
Penicillins - Ampicillin	4	3	0		0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0		
Cephalosporins - Cefotaxim	0.5	3	0		0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Sulfonamides	256	3	0		0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0		
Cephalosporins - Ceftazidim	2	3	0		0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0		
Polymyxins - Colistin	4	3	0		0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0		

Table Antimicrobial susceptibility testing of *S. Infantis* in Meat from broilers (*Gallus gallus*) - at retail - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Infantis Isolates out of a monitoring program (yes/no) Number of isolates available in the laboratory		Meat from broilers (Gallus gallus) - at retail - Surveillance																									
		3																									
		Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Antimicrobials:	16	3	0		0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0				
Amphenicols - Chloramphenicol	16	3	0		0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0				
Amphenicols - Florfenicol	8	3	3		0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0				
Tetracyclines - Tetracycline	0.06	3	3		0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0				
Fluoroquinolones - Ciprofloxacin	16	3	3		0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0				
Quinolones - Nalidixic acid	2	3	0		0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Trimethoprim	32	3	0		0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0				
Aminoglycosides - Streptomycin	2	3	0		0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Gentamicin	8	3	0		0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Kanamycin	4	3	0		0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0				
Penicillins - Ampicillin	0.5	3	0		0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Cefotaxim	256	3	3		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0				
Sulfonamides	2	3	0		0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Ceftazidim	4	3	0		0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0				
Polymyxins - Colistin																											

Table Antimicrobial susceptibility testing of *S. Infantis* in Meat from bovine animals - at retail - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Infantis Isolates out of a monitoring program (yes/no) Number of isolates available in the laboratory				Meat from bovine animals - at retail - Surveillance																							
				2																							
Antimicrobials:	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest		
Amphenicols - Chloramphenicol	16	2	0		0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0				
Amphenicols - Florfenicol	16	2	0		0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0				
Tetracyclines - Tetracycline	8	2	0		0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0				
Fluoroquinolones - Ciprofloxacin	0.06	2	0		0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Quinolones - Nalidixic acid	16	2	0		0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0				
Trimethoprim	2	2	0		0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Streptomycin	32	2	0		0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0				
Aminoglycosides - Gentamicin	2	2	0		0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Kanamycin	8	2	0		0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0				
Penicillins - Ampicillin	4	2	0		0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Cefotaxim	0.5	2	0		0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Sulfonamides	256	2	0		0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0				
Cephalosporins - Ceftazidim	2	2	0		0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0				
Polymyxins - Colistin	4	2	0		0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0				

Table Antimicrobial susceptibility testing of *S. Infantis* in *Gallus gallus* (fowl) - breeding flocks, unspecified - at farm - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Infantis Isolates out of a monitoring program (yes/no) Number of isolates available in the laboratory		Gallus gallus (fowl) - breeding flocks, unspecified - at farm - Surveillance																									
		1																									
		Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Antimicrobials:	16	1	1		0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0				
Amphenicols - Chloramphenicol	16	1	0		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0				
Amphenicols - Florfenicol	8	1	1		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0				
Tetracyclines - Tetracycline	0.06	1	0		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Fluoroquinolones - Ciprofloxacin	16	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Quinolones - Nalidixic acid	2	1	0		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Trimethoprim	32	1	1		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0				
Aminoglycosides - Streptomycin	2	1	0		0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Gentamicin	8	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Kanamycin	4	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Penicillins - Ampicillin	0.5	1	0		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Cefotaxim	256	1	1		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0				
Sulfonamides	2	1	0		0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Ceftazidim	4	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0				
Polymyxins - Colistin																											

Table Antimicrobial susceptibility testing of *S. Infantis* in Pigs - at farm - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Infantis	Pigs - at farm - Surveillance																								
	4																								
Antimicrobials:	Cut-off value	N	n	≤0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest
Amphenicols - Chloramphenicol	16	4	0		0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0		
Amphenicols - Florfenicol	16	4	0		0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0		
Tetracyclines - Tetracycline	8	4	4		0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0		
Fluoroquinolones - Ciprofloxacin	0.06	4	2		0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Quinolones - Nalidixic acid	16	4	2		0	0	0	0	0	0	0	1	0	1	0	0	0	2	0	0	0	0	0		
Trimethoprim	2	4	3		0	0	0	0	1	0	0	0	0	0	0	0	3	0	0	0	0	0	0		
Aminoglycosides - Streptomycin	32	4	3		0	0	0	0	0	0	0	0	0	0	0	1	0	0	3	0	0	0	0		
Aminoglycosides - Gentamicin	2	4	0		0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0		
Aminoglycosides - Kanamycin	8	4	3		0	0	0	0	0	0	0	1	0	0	0	0	0	0	3	0	0	0	0		
Penicillins - Ampicillin	4	4	3		0	0	0	0	0	0	0	1	0	0	0	0	3	0	0	0	0	0	0		
Cephalosporins - Cefotaxim	0.5	4	0		0	1	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Sulfonamides	256	4	4		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0		
Cephalosporins - Ceftazidim	2	4	0		0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0		
Polymyxins - Colistin	4	4	0		0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0		

Table Antimicrobial susceptibility testing of *S. Infantis* in *Gallus gallus* (fowl) - at farm - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Infantis Isolates out of a monitoring program (yes/no) Number of isolates available in the laboratory		Gallus gallus (fowl) - at farm - Surveillance																									
		4																									
		Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Antimicrobials:	16	4	0		0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0				
Amphenicols - Chloramphenicol	16	4	0		0	0	0	0	0	0	0	0	3	1	0	0	0	0	0	0	0	0	0				
Amphenicols - Florfenicol	8	4	0		0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0				
Tetracyclines - Tetracycline	0.06	4	0		1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Fluoroquinolones - Ciprofloxacin	16	4	0		0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0				
Quinolones - Nalidixic acid	2	4	0		0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Trimethoprim	32	4	0		0	0	0	0	0	0	0	0	0	3	1	0	0	0	0	0	0	0	0				
Aminoglycosides - Streptomycin	2	4	0		0	0	0	3	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Gentamicin	8	4	0		0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Kanamycin	4	4	0		0	0	0	0	0	0	1	3	0	0	0	0	0	0	0	0	0	0	0				
Penicillins - Ampicillin	0.5	4	0		0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Cefotaxim	256	4	0		0	0	0	0	0	0	0	0	0	0	1	3	0	0	0	0	0	0	0				
Sulfonamides	2	4	0		0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Ceftazidim	4	4	0		0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0				
Polymyxins - Colistin																											

Table Antimicrobial susceptibility testing of *S. Infantis* in *Gallus gallus* (fowl) - broilers - at farm - Control and eradication programmes - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Infantis Isolates out of a monitoring program (yes/no) Number of isolates available in the laboratory		Gallus gallus (fowl) - broilers - at farm - Control and eradication programmes																									
		2																									
		Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Antimicrobials:	16	2	0		0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0				
Amphenicols - Chloramphenicol	16	2	0		0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0				
Amphenicols - Florfenicol	8	2	0		0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0				
Tetracyclines - Tetracycline	0.06	2	0		0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Fluoroquinolones - Ciprofloxacin	16	2	0		0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0				
Quinolones - Nalidixic acid	2	2	0		0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Trimethoprim	32	2	0		0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0				
Aminoglycosides - Streptomycin	2	2	0		0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Gentamicin	8	2	0		0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Kanamycin	4	2	0		0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0				
Penicillins - Ampicillin	0.5	2	0		0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Cefotaxim	256	2	0		0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0				
Sulfonamides	2	2	0		0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Ceftazidim	4	2	0		0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0				
Polymyxins - Colistin																											

Table Antimicrobial susceptibility testing of *S. Muenchen* in *Gallus gallus* (fowl) - laying hens - at farm - Control and eradication programmes - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Muenchen Isolates out of a monitoring program (yes/no) Number of isolates available in the laboratory		Gallus gallus (fowl) - laying hens - at farm - Control and eradication programmes																									
		3																									
		Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Amphenicols - Chloramphenicol	16	3	0		0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0					
Amphenicols - Florfenicol	16	3	0		0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0					
Tetracyclines - Tetracycline	8	3	0		0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0					
Fluoroquinolones - Ciprofloxacin	0.06	3	0		1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
Quinolones - Nalidixic acid	16	3	0		0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0					
Trimethoprim	2	3	0		0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0					
Aminoglycosides - Streptomycin	32	3	0		0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0					
Aminoglycosides - Gentamicin	2	3	0		0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0					
Aminoglycosides - Kanamycin	8	3	0		0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0					
Penicillins - Ampicillin	4	3	0		0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0					
Cephalosporins - Cefotaxim	0.5	3	0		0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
Sulfonamides	256	3	0		0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0					
Cephalosporins - Ceftazidim	2	3	0		0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
Polymyxins - Colistin	4	3	0		0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0					

Table Antimicrobial susceptibility testing of *S. Muenchen* in Meat from broilers (*Gallus gallus*) - at retail - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Muenchen Isolates out of a monitoring program (yes/no) Number of isolates available in the laboratory Antimicrobials:				Meat from broilers (Gallus gallus) - at retail - Surveillance																									
				1																									
				Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Amphenicols - Chloramphenicol	16	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0						
Amphenicols - Florfenicol	16	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0						
Tetracyclines - Tetracycline	8	1	0		0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0						
Fluoroquinolones - Ciprofloxacin	0.06	1	0		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
Quinolones - Nalidixic acid	16	1	0		0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0						
Trimethoprim	2	1	0		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
Aminoglycosides - Streptomycin	32	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0						
Aminoglycosides - Gentamicin	2	1	0		0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0						
Aminoglycosides - Kanamycin	8	1	0		0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0						
Penicillins - Ampicillin	4	1	0		0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0						
Cephalosporins - Cefotaxim	0.5	1	0		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
Sulfonamides	256	1	0		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0						
Cephalosporins - Ceftazidim	2	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
Polymyxins - Colistin	4	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0						

Table Antimicrobial susceptibility testing of S. Muenchen in Meat from bovine animals - at retail - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Muenchen Isolates out of a monitoring program (yes/no) Number of isolates available in the laboratory		Meat from bovine animals - at retail - Surveillance																									
		1																									
		Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Antimicrobials:	16	1	0		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0				
Amphenicols - Chloramphenicol	16	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0				
Amphenicols - Florfenicol	8	1	1		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0				
Tetracyclines - Tetracycline	0.06	1	0		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Fluoroquinolones - Ciprofloxacin	16	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Quinolones - Nalidixic acid	2	1	0		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Trimethoprim	32	1	1		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0				
Aminoglycosides - Streptomycin	2	1	0		0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Gentamicin	8	1	1		0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0				
Aminoglycosides - Kanamycin	4	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Penicillins - Ampicillin	0.5	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Cefotaxim	256	1	1		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0				
Sulfonamides	2	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Ceftazidim	4	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0				
Polymyxins - Colistin																											

Table Antimicrobial susceptibility testing of *S. Muenchen* in Compound feedingstuffs for poultry (non specified) - at farm - feed sample - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Muenchen Isolates out of a monitoring program (yes/no) Number of isolates available in the laboratory		Compound feedingstuffs for poultry (non specified) - at farm - feed sample - Surveillance																									
		6																									
		Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Antimicrobials:	16	6	1		0	0	0	0	0	0	0	0	2	3	0	0	0	1	0	0	0	0	0				
Amphenicols - Chloramphenicol	16	6	0		0	0	0	0	0	0	0	0	5	0	1	0	0	0	0	0	0	0	0				
Amphenicols - Florfenicol	8	6	3		0	0	0	0	0	0	0	3	0	0	0	1	0	2	0	0	0	0	0				
Tetracyclines - Tetracycline	0.06	6	0		1	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Fluoroquinolones - Ciprofloxacin	16	6	1		0	0	0	0	0	0	0	4	0	1	0	1	0	0	0	0	0	0	0				
Quinolones - Nalidixic acid	2	6	0		0	0	0	0	5	0	1	0	0	0	0	0	0	0	0	0	0	0	0				
Trimethoprim	32	6	2		0	0	0	0	0	0	0	0	0	3	0	1	1	1	0	0	0	0	0				
Aminoglycosides - Streptomycin	2	6	1		0	0	0	3	0	2	0	0	1	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Gentamicin	8	6	3		0	0	0	0	0	0	0	3	0	0	0	0	0	0	3	0	0	0	0				
Aminoglycosides - Kanamycin	4	6	2		0	0	0	0	0	0	1	3	0	0	2	0	0	0	0	0	0	0	0				
Penicillins - Ampicillin	0.5	6	0		0	1	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Cefotaxim	256	6	3		0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	3	0				
Sulfonamides	2	6	0		0	0	0	4	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Ceftazidim	4	6	0		0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0				
Polymyxins - Colistin																											

Table Antimicrobial susceptibility testing of S. Muenchen in Gallus gallus (fowl) - breeding flocks, unspecified - at farm - Control and eradication programmes - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Muenchen Isolates out of a monitoring program (yes/no) Number of isolates available in the laboratory			Gallus gallus (fowl) - breeding flocks, unspecified - at farm - Control and eradication programmes																								
			1																								
Antimicrobials:	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest		
Amphenicols - Chloramphenicol	16	1	0		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0				
Amphenicols - Florfenicol	16	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0				
Tetracyclines - Tetracycline	8	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Fluoroquinolones - Ciprofloxacin	0.06	1	0		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Quinolones - Nalidixic acid	16	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Trimethoprim	2	1	0		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Streptomycin	32	1	0		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Gentamicin	2	1	0		0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Kanamycin	8	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Penicillins - Ampicillin	4	1	0		0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Cefotaxim	0.5	1	0		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Sulfonamides	256	1	0		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0				
Cephalosporins - Ceftazidim	2	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Polymyxins - Colistin	4	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0				

Table Antimicrobial susceptibility testing of S. Muenchen in Gallus gallus (fowl) - breeding flocks, unspecified - at farm - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Muenchen	Gallus gallus (fowl) - breeding flocks, unspecified - at farm - Surveillance																									
	Isolates out of a monitoring program (yes/no)																									
	Number of isolates available in the laboratory																									
	4																									
Antimicrobials:	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Amphenicols - Chloramphenicol	16	4	0		0	0	0	0	0	0	0	0	3	1	0	0	0	0	0	0	0	0	0			
Amphenicols - Florfenicol	16	4	0		0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0			
Tetracyclines - Tetracycline	8	4	0		0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0			
Fluoroquinolones - Ciprofloxacin	0.06	4	0		2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Quinolones - Nalidixic acid	16	4	0		0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0			
Trimethoprim	2	4	0		0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Streptomycin	32	4	0		0	0	0	0	0	0	0	0	1	3	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Gentamicin	2	4	0		0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Kanamycin	8	4	0		0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0			
Penicillins - Ampicillin	4	4	0		0	0	0	0	0	0	3	1	0	0	0	0	0	0	0	0	0	0	0			
Cephalosporins - Cefotaxim	0.5	4	0		0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Sulfonamides	256	4	0		0	0	0	0	0	0	0	0	0	0	0	0	1	3	0	0	0	0	0			
Cephalosporins - Ceftazidim	2	4	0		0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Polymyxins - Colistin	4	4	0		0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0			

Table Antimicrobial susceptibility testing of *S. Muenchen* in Cattle (bovine animals) - at farm - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Muenchen Isolates out of a monitoring program (yes/no) Number of isolates available in the laboratory		Cattle (bovine animals) - at farm - Surveillance																									
		1																									
Antimicrobials:	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest		
Amphenicols - Chloramphenicol	16	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0				
Amphenicols - Florfenicol	16	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0				
Tetracyclines - Tetracycline	8	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Fluoroquinolones - Ciprofloxacin	0.06	1	0		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Quinolones - Nalidixic acid	16	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Trimethoprim	2	1	0		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Streptomycin	32	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Gentamicin	2	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Kanamycin	8	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Penicillins - Ampicillin	4	1	0		0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Cefotaxim	0.5	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Sulfonamides	256	1	0		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0				
Cephalosporins - Ceftazidim	2	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Polymyxins - Colistin	4	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0				

Table Antimicrobial susceptibility testing of *S. Muenchen* in Pigs - at farm - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Muenchen	Pigs - at farm - Surveillance																								
	1																								
Antimicrobials:	Cut-off value	N	n	≤0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest
Amphenicols - Chloramphenicol	16	1	0		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0		
Amphenicols - Florfenicol	16	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0		
Tetracyclines - Tetracycline	8	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0		
Fluoroquinolones - Ciprofloxacin	0.06	1	0		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Quinolones - Nalidixic acid	16	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0		
Trimethoprim	2	1	0		0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0		
Aminoglycosides - Streptomycin	32	1	0		0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0		
Aminoglycosides - Gentamicin	2	1	0		0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0		
Aminoglycosides - Kanamycin	8	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0		
Penicillins - Ampicillin	4	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0		
Cephalosporins - Cefotaxim	0.5	1	0		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Sulfonamides	256	1	0		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0		
Cephalosporins - Ceftazidim	2	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Polymyxins - Colistin	4	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0		

Table Antimicrobial susceptibility testing of *S. Muenchen* in *Gallus gallus* (fowl) - at farm - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Muenchen	Gallus gallus (fowl) - at farm - Surveillance																									
	Isolates out of a monitoring program (yes/no)																									
	Number of isolates available in the laboratory																									
	9																									
Antimicrobials:	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Amphenicols - Chloramphenicol	16	9	0		0	0	0	0	0	0	0	0	3	6	0	0	0	0	0	0	0	0	0			
Amphenicols - Florfenicol	16	9	0		0	0	0	0	0	0	0	0	7	2	0	0	0	0	0	0	0	0	0			
Tetracyclines - Tetracycline	8	9	2		0	0	0	0	0	0	0	7	0	0	0	0	0	2	0	0	0	0	0			
Fluoroquinolones - Ciprofloxacin	0.06	9	1		3	5	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Quinolones - Nalidixic acid	16	9	1		0	0	0	0	0	0	0	7	0	1	0	0	0	1	0	0	0	0	0			
Trimethoprim	2	9	0		0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Streptomycin	32	9	2		0	0	0	0	0	0	0	0	1	6	0	0	0	1	1	0	0	0	0			
Aminoglycosides - Gentamicin	2	9	0		0	0	0	6	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Kanamycin	8	9	0		0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0			
Penicillins - Ampicillin	4	9	1		0	0	0	0	0	0	3	5	0	0	0	0	1	0	0	0	0	0	0			
Cephalosporins - Cefotaxim	0.5	9	0		0	5	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Sulfonamides	256	9	2		0	0	0	0	0	0	0	0	0	0	0	1	4	2	0	0	0	2	0			
Cephalosporins - Ceftazidim	2	9	0		0	0	0	6	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0			
Polymyxins - Colistin	4	9	0		0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0			

Table Antimicrobial susceptibility testing of *S. Muenchen* in *Gallus gallus* (fowl) - broilers - at farm - Control and eradication programmes - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Muenchen Isolates out of a monitoring program (yes/no) Number of isolates available in the laboratory		Gallus gallus (fowl) - broilers - at farm - Control and eradication programmes																									
		11																									
		Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Amphenicols - Chloramphenicol	16	11	0		0	0	0	0	0	0	0	3	8	0	0	0	0	0	0	0	0	0	0				
Amphenicols - Florfenicol	16	11	0		0	0	0	0	0	0	1	0	10	0	0	0	0	0	0	0	0	0	0				
Tetracyclines - Tetracycline	8	11	2		0	0	0	0	0	0	0	9	0	0	0	0	1	1	0	0	0	0	0				
Fluoroquinolones - Ciprofloxacin	0.06	11	1		4	6	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Quinolones - Nalidixic acid	16	11	1		0	0	0	0	0	0	0	10	0	0	0	0	0	1	0	0	0	0	0				
Trimethoprim	2	11	2		0	0	0	0	9	0	0	0	0	0	0	1	1	0	0	0	0	0	0				
Aminoglycosides - Streptomycin	32	11	2		0	0	0	0	0	0	0	0	2	3	4	0	1	0	1	0	0	0	0				
Aminoglycosides - Gentamicin	2	11	0		0	0	0	7	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Kanamycin	8	11	0		0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0				
Penicillins - Ampicillin	4	11	3		0	0	0	0	0	0	6	2	0	0	0	0	3	0	0	0	0	0	0				
Cephalosporins - Cefotaxim	0.5	11	0		0	6	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Sulfonamides	256	11	2		0	0	0	0	0	0	0	0	0	0	0	4	5	0	0	0	0	2	0				
Cephalosporins - Ceftazidim	2	11	0		0	0	0	9	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0				
Polymyxins - Colistin	4	11	0		0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0				

Table Antimicrobial susceptibility testing of *Salmonella* spp., unspecified in Turkeys - at farm - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

Salmonella spp., unspecified	Turkeys - at farm - Surveillance																									
	Isolates out of a monitoring program (yes/no)																									
	Number of isolates available in the laboratory																									
	6																									
Antimicrobials:	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Amphenicols - Chloramphenicol	16	6	0		0	0	0	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0			
Amphenicols - Florfenicol	16	6	0		0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0			
Tetracyclines - Tetracycline	8	6	1		0	0	0	0	0	3	0	2	0	0	0	0	0	1	0	0	0	0	0			
Fluoroquinolones - Ciprofloxacin	0.06	6	0		3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Quinolones - Nalidixic acid	16	6	0		0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0			
Trimethoprim	2	6	5		0	0	0	0	1	0	0	0	0	0	0	0	5	0	0	0	0	0	0			
Aminoglycosides - Streptomycin	32	6	0		0	0	0	0	0	0	0	0	0	1	2	3	0	0	0	0	0	0	0			
Aminoglycosides - Gentamicin	2	6	0		0	0	0	2	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Kanamycin	8	6	0		0	0	0	0	0	0	0	5	0	1	0	0	0	0	0	0	0	0	0			
Penicillins - Ampicillin	4	6	4		0	0	0	0	0	0	0	2	0	0	0	0	4	0	0	0	0	0	0			
Cephalosporins - Cefotaxim	0.5	6	0		0	3	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Sulfonamides	256	6	5		0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	5	0			
Cephalosporins - Ceftazidim	2	6	0		0	0	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0			
Polymyxins - Colistin	4	6	0		0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0			

Table Antimicrobial susceptibility testing of Salmonella spp., unspecified in Gallus gallus (fowl) - laying hens - at farm - Control and eradication programmes - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

Salmonella spp., unspecified	Gallus gallus (fowl) - laying hens - at farm - Control and eradication programmes																									
	Isolates out of a monitoring program (yes/no)																									
	Number of isolates available in the laboratory																									
	10																									
Antimicrobials:	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Amphenicols - Chloramphenicol	16	10	0		0	0	0	0	0	0	0	0	1	9	0	0	0	0	0	0	0	0	0			
Amphenicols - Florfenicol	16	10	0		0	0	0	0	0	0	0	0	9	1	0	0	0	0	0	0	0	0	0			
Tetracyclines - Tetracycline	8	10	0		0	0	0	0	0	2	0	8	0	0	0	0	0	0	0	0	0	0	0			
Fluoroquinolones - Ciprofloxacin	0.06	10	2		5	3	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Quinolones - Nalidixic acid	16	10	2		0	0	0	0	0	0	0	8	0	0	0	0	0	2	0	0	0	0	0			
Trimethoprim	2	10	0		0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Streptomycin	32	10	0		0	0	0	0	0	0	0	0	1	7	1	1	0	0	0	0	0	0	0			
Aminoglycosides - Gentamicin	2	10	0		0	0	0	7	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Kanamycin	8	10	0		0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0			
Penicillins - Ampicillin	4	10	0		0	0	0	0	0	0	9	1	0	0	0	0	0	0	0	0	0	0	0			
Cephalosporins - Cefotaxim	0.5	10	0		0	7	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Sulfonamides	256	10	0		0	0	0	0	0	0	0	0	0	0	0	0	3	7	0	0	0	0	0			
Cephalosporins - Ceftazidim	2	10	0		0	0	0	9	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0			
Polymyxins - Colistin	4	10	0		0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0			

Table Antimicrobial susceptibility testing of Salmonella spp., unspecified in Gallus gallus (fowl) - laying hens - at farm - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

Salmonella spp., unspecified	Gallus gallus (fowl) - laying hens - at farm - Surveillance																									
	Isolates out of a monitoring program (yes/no)																									
	Number of isolates available in the laboratory																									
	1																									
Antimicrobials:	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Amphenicols - Chloramphenicol	16	1	0		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0			
Amphenicols - Florfenicol	16	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0			
Tetracyclines - Tetracycline	8	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0			
Fluoroquinolones - Ciprofloxacin	0.06	1	0		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Quinolones - Nalidixic acid	16	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0			
Trimethoprim	2	1	0		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Streptomycin	32	1	0		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Gentamicin	2	1	0		0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Kanamycin	8	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0			
Penicillins - Ampicillin	4	1	0		0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0			
Cephalosporins - Cefotaxim	0.5	1	0		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Sulfonamides	256	1	0		0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0			
Cephalosporins - Ceftazidim	2	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Polymyxins - Colistin	4	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0			

Table Antimicrobial susceptibility testing of *Salmonella* spp., unspecified in Meat from broilers (*Gallus gallus*) - at retail - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

Salmonella spp., unspecified	Meat from broilers (Gallus gallus) - at retail - Surveillance																									
	Isolates out of a monitoring program (yes/no)																									
	Number of isolates available in the laboratory																									
	2																									
Antimicrobials:	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Amphenicols - Chloramphenicol	16	2	1		0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0			
Amphenicols - Florfenicol	16	2	0		0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0			
Tetracyclines - Tetracycline	8	2	1		0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0			
Fluoroquinolones - Ciprofloxacin	0.06	2	0		1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Quinolones - Nalidixic acid	16	2	0		0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0			
Trimethoprim	2	2	0		0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Streptomycin	32	2	1		0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0			
Aminoglycosides - Gentamicin	2	2	0		0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Kanamycin	8	2	0		0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0			
Penicillins - Ampicillin	4	2	1		0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0			
Cephalosporins - Cefotaxim	0.5	2	0		0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Sulfonamides	256	2	1		0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0			
Cephalosporins - Ceftazidim	2	2	0		0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Polymyxins - Colistin	4	2	0		0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0			

Table Antimicrobial susceptibility testing of *Salmonella* spp., unspecified in Meat from turkey - in total - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

Salmonella spp., unspecified	Meat from turkey - in total - Surveillance																									
	Isolates out of a monitoring program (yes/no)																									
	Number of isolates available in the laboratory																									
	4																									
Antimicrobials:	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Amphenicols - Chloramphenicol	16	4	0		0	0	0	0	0	0	0	0	1	3	0	0	0	0	0	0	0	0	0			
Amphenicols - Florfenicol	16	4	0		0	0	0	0	0	0	0	0	3	1	0	0	0	0	0	0	0	0	0			
Tetracyclines - Tetracycline	8	4	2		0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	0	0	0	0			
Fluoroquinolones - Ciprofloxacin	0.06	4	1		1	2	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Quinolones - Nalidixic acid	16	4	1		0	0	0	0	0	0	0	2	0	1	0	0	0	1	0	0	0	0	0			
Trimethoprim	2	4	2		0	0	0	0	2	0	0	0	0	0	0	0	2	0	0	0	0	0	0			
Aminoglycosides - Streptomycin	32	4	2		0	0	0	0	0	0	0	0	0	2	0	0	0	1	1	0	0	0	0			
Aminoglycosides - Gentamicin	2	4	0		0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Kanamycin	8	4	1		0	0	0	0	0	0	0	2	0	1	0	0	0	0	1	0	0	0	0			
Penicillins - Ampicillin	4	4	2		0	0	0	0	0	0	2	0	0	0	0	0	2	0	0	0	0	0	0			
Cephalosporins - Cefotaxim	0.5	4	0		0	1	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Sulfonamides	256	4	3		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	3	0			
Cephalosporins - Ceftazidim	2	4	0		0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Polymyxins - Colistin	4	4	0		0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0			

Table Antimicrobial susceptibility testing of *Salmonella* spp., unspecified in Meat from bovine animals - at retail - Surveillance - quantitative data
[Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

Salmonella spp., unspecified	Meat from bovine animals - at retail - Surveillance																									
	Isolates out of a monitoring program (yes/no)																									
	Number of isolates available in the laboratory																									
	1																									
Antimicrobials:	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Amphenicols - Chloramphenicol	16	1	0		0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0			
Amphenicols - Florfenicol	16	1	0		0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0			
Tetracyclines - Tetracycline	8	1	0		0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0			
Fluoroquinolones - Ciprofloxacin	0.06	1	0		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Quinolones - Nalidixic acid	16	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0			
Trimethoprim	2	1	0		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Streptomycin	32	1	0		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Gentamicin	2	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Kanamycin	8	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0			
Penicillins - Ampicillin	4	1	0		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Cephalosporins - Cefotaxim	0.5	1	0		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Sulfonamides	256	1	0		0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0			
Cephalosporins - Ceftazidim	2	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Polymyxins - Colistin	4	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0			

Table Antimicrobial susceptibility testing of Salmonella spp., unspecified in Compound feedingstuffs for poultry (non specified) - at farm - feed sample - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

Salmonella spp., unspecified	Compound feedingstuffs for poultry (non specified) - at farm - feed sample - Surveillance																									
	Isolates out of a monitoring program (yes/no)																									
	Number of isolates available in the laboratory																									
	3																									
Antimicrobials:	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Amphenicols - Chloramphenicol	16	3	1		0	0	0	0	0	0	0	0	1	1	0	0	0	1	0	0	0	0	0			
Amphenicols - Florfenicol	16	3	1		0	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0	0	0			
Tetracyclines - Tetracycline	8	3	2		0	0	0	0	0	1	0	0	0	0	0	0	1	1	0	0	0	0	0			
Fluoroquinolones - Ciprofloxacin	0.06	3	2		0	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Quinolones - Nalidixic acid	16	3	2		0	0	0	0	0	0	0	0	0	0	1	0	0	2	0	0	0	0	0			
Trimethoprim	2	3	1		0	0	0	0	2	0	0	0	0	0	0	0	1	0	0	0	0	0	0			
Aminoglycosides - Streptomycin	32	3	1		0	0	0	0	0	0	0	0	1	0	0	1	0	0	1	0	0	0	0			
Aminoglycosides - Gentamicin	2	3	1		0	0	0	2	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0			
Aminoglycosides - Kanamycin	8	3	0		0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0			
Penicillins - Ampicillin	4	3	2		0	0	0	0	0	0	1	0	0	0	0	0	2	0	0	0	0	0	0			
Cephalosporins - Cefotaxim	0.5	3	0		0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Sulfonamides	256	3	1		0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	1	0			
Cephalosporins - Ceftazidim	2	3	0		0	0	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0			
Polymyxins - Colistin	4	3	0		0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0			

Table Antimicrobial susceptibility testing of Salmonella spp., unspecified in Gallus gallus (fowl) - breeding flocks, unspecified - at farm - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

Salmonella spp., unspecified	Gallus gallus (fowl) - breeding flocks, unspecified - at farm - Surveillance																									
	Isolates out of a monitoring program (yes/no)																									
	Number of isolates available in the laboratory																									
	1																									
Antimicrobials:	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Amphenicols - Chloramphenicol	16	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0			
Amphenicols - Florfenicol	16	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0			
Tetracyclines - Tetracycline	8	1	1		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0			
Fluoroquinolones - Ciprofloxacin	0.06	1	1		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Quinolones - Nalidixic acid	16	1	1		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0			
Trimethoprim	2	1	0		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Streptomycin	32	1	1		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0			
Aminoglycosides - Gentamicin	2	1	1		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Kanamycin	8	1	1		0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0			
Penicillins - Ampicillin	4	1	1		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0			
Cephalosporins - Cefotaxim	0.5	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Sulfonamides	256	1	1		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0			
Cephalosporins - Ceftazidim	2	1	0		0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0			
Polymyxins - Colistin	4	1	1		0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0			

Table Antimicrobial susceptibility testing of *Salmonella* spp., unspecified in Cattle (bovine animals) - at farm - Surveillance - quantitative data
[Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

Salmonella spp., unspecified	Cattle (bovine animals) - at farm - Surveillance																									
	Isolates out of a monitoring program (yes/no)																									
	Number of isolates available in the laboratory																									
	2																									
Antimicrobials:	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Amphenicols - Chloramphenicol	16	2	0		0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0			
Amphenicols - Florfenicol	16	2	0		0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0			
Tetracyclines - Tetracycline	8	2	0		0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0			
Fluoroquinolones - Ciprofloxacin	0.06	2	0		2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Quinolones - Nalidixic acid	16	2	0		0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0			
Trimethoprim	2	2	0		0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Streptomycin	32	2	0		0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Gentamicin	2	2	0		0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Kanamycin	8	2	0		0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0			
Penicillins - Ampicillin	4	2	0		0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0			
Cephalosporins - Cefotaxim	0.5	2	0		0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Sulfonamides	256	2	0		0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0			
Cephalosporins - Ceftazidim	2	2	0		0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Polymyxins - Colistin	4	2	0		0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0			

Table Antimicrobial susceptibility testing of *Salmonella* spp., unspecified in *Gallus gallus* (fowl) - at farm - Surveillance - quantitative data
[Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

Salmonella spp., unspecified	Gallus gallus (fowl) - at farm - Surveillance																									
	Isolates out of a monitoring program (yes/no)																									
	Number of isolates available in the laboratory																									
	23																									
Antimicrobials:	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Amphenicols - Chloramphenicol	16	23	0		0	0	0	0	0	0	0	0	22	1	0	0	0	0	0	0	0	0	0			
Amphenicols - Florfenicol	16	23	0		0	0	0	0	0	0	2	0	21	0	0	0	0	0	0	0	0	0	0			
Tetracyclines - Tetracycline	8	23	4		0	0	0	0	0	9	0	10	0	0	1	0	0	3	0	0	0	0	0			
Fluoroquinolones - Ciprofloxacin	0.06	23	20		2	1	0	1	18	1	0	0	0	0	0	0	0	0	0	0	0	0	0			
Quinolones - Nalidixic acid	16	23	20		0	0	0	0	0	0	0	3	0	0	0	0	0	20	0	0	0	0	0			
Trimethoprim	2	23	2		0	0	0	2	19	0	0	0	0	0	0	0	2	0	0	0	0	0	0			
Aminoglycosides - Streptomycin	32	23	1		0	0	0	0	0	0	0	0	2	19	1	0	0	1	0	0	0	0	0			
Aminoglycosides - Gentamicin	2	23	0		0	0	0	20	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Kanamycin	8	23	0		0	0	0	0	0	0	0	23	0	0	0	0	0	0	0	0	0	0	0			
Penicillins - Ampicillin	4	23	4		0	0	0	1	0	0	15	3	0	0	0	0	4	0	0	0	0	0	0			
Cephalosporins - Cefotaxim	0.5	23	0		0	16	1	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Sulfonamides	256	23	4		0	0	0	0	0	0	0	0	0	0	0	1	18	0	0	2	0	2	0			
Cephalosporins - Ceftazidim	2	23	0		0	0	0	21	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0			
Polymyxins - Colistin	4	23	0		0	0	0	0	0	0	0	0	23	0	0	0	0	0	0	0	0	0	0			

Table Antimicrobial susceptibility testing of *S. Veneziana* in *Gallus gallus* (fowl) - at farm - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Veneziana Isolates out of a monitoring program (yes/no) Number of isolates available in the laboratory		Gallus gallus (fowl) - at farm - Surveillance																									
		3																									
		Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Antimicrobials:	16	3	0		0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0				
Amphenicols - Chloramphenicol	16	3	0		0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0				
Amphenicols - Florfenicol	8	3	0		0	0	0	0	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0				
Tetracyclines - Tetracycline	0.06	3	1		2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Fluoroquinolones - Ciprofloxacin	16	3	0		0	0	0	0	0	0	0	2	0	1	0	0	0	0	0	0	0	0	0				
Quinolones - Nalidixic acid	2	3	0		0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Trimethoprim	32	3	0		0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Streptomycin	2	3	0		0	0	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Gentamicin	8	3	0		0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Kanamycin	4	3	0		0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0				
Penicillins - Ampicillin	0.5	3	0		0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Cefotaxim	256	3	0		0	0	0	0	0	0	0	0	0	0	2	0	1	0	0	0	0	0	0				
Sulfonamides	2	3	0		0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Ceftazidim	4	3	0		0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0				
Polymyxins - Colistin																											

Table Antimicrobial susceptibility testing of S. Brandenburg in Meat from pig - in total - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Brandenburg Isolates out of a monitoring program (yes/no) Number of isolates available in the laboratory		Meat from pig - in total - Surveillance																									
		1																									
		Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Antimicrobials:	16	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0				
Amphenicols - Chloramphenicol	16	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0				
Amphenicols - Florfenicol	8	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Tetracyclines - Tetracycline	0.06	1	0		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Fluoroquinolones - Ciprofloxacin	16	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Quinolones - Nalidixic acid	2	1	0		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Trimethoprim	32	1	0		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Streptomycin	2	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Gentamicin	8	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Kanamycin	4	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Penicillins - Ampicillin	0.5	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Cefotaxim	256	1	0		0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0				
Sulfonamides	2	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Ceftazidim	4	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0				
Polymyxins - Colistin																											

Table Antimicrobial susceptibility testing of *S. Brandenburg* in *Gallus gallus* (fowl) - at farm - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Brandenburg Isolates out of a monitoring program (yes/no) Number of isolates available in the laboratory		Gallus gallus (fowl) - at farm - Surveillance																									
		1																									
		Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Antimicrobials:	16	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Amphenicols - Chloramphenicol	16	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Amphenicols - Florfenicol	8	1	0		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Tetracyclines - Tetracycline	0.06	1	0		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Fluoroquinolones - Ciprofloxacin	16	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Quinolones - Nalidixic acid	2	1	0		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Trimethoprim	32	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Streptomycin	2	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Gentamicin	8	1	0		0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Kanamycin	4	1	0		0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0				
Penicillins - Ampicillin	0.5	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Cefotaxim	256	1	0		0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0				
Sulfonamides	2	1	0		0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Ceftazidim	4	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Polymyxins - Colistin																											

Table Antimicrobial susceptibility testing of *S. Montevideo* in *Gallus gallus* (fowl) - laying hens - at farm - Control and eradication programmes - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Montevideo	Gallus gallus (fowl) - laying hens - at farm - Control and eradication programmes																									
	Isolates out of a monitoring program (yes/no)																									
	Number of isolates available in the laboratory																									
	3																									
Antimicrobials:	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Amphenicols - Chloramphenicol	16	3	0		0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0			
Amphenicols - Florfenicol	16	3	0		0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0			
Tetracyclines - Tetracycline	8	3	0		0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0			
Fluoroquinolones - Ciprofloxacin	0.06	3	1		1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Quinolones - Nalidixic acid	16	3	1		0	0	0	0	0	0	0	2	0	0	0	1	0	0	0	0	0	0	0			
Trimethoprim	2	3	0		0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Streptomycin	32	3	0		0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Gentamicin	2	3	0		0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Kanamycin	8	3	0		0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0			
Penicillins - Ampicillin	4	3	0		0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0			
Cephalosporins - Cefotaxim	0.5	3	0		0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Sulfonamides	256	3	0		0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0			
Cephalosporins - Ceftazidim	2	3	0		0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Polymyxins - Colistin	4	3	0		0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0			

Table Antimicrobial susceptibility testing of *S. Montevideo* in *Gallus gallus* (fowl) - breeding flocks, unspecified - at farm - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Montevideo Isolates out of a monitoring program (yes/no) Number of isolates available in the laboratory		Gallus gallus (fowl) - breeding flocks, unspecified - at farm - Surveillance																									
		3																									
		Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Amphenicols - Chloramphenicol	16	3	0		0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0				
Amphenicols - Florfenicol	16	3	0		0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0				
Tetracyclines - Tetracycline	8	3	0		0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0				
Fluoroquinolones - Ciprofloxacin	0.06	3	1		1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Quinolones - Nalidixic acid	16	3	0		0	0	0	0	0	0	1	0	0	2	0	0	0	0	0	0	0	0	0				
Trimethoprim	2	3	0		0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Streptomycin	32	3	0		0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Gentamicin	2	3	0		0	0	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Kanamycin	8	3	0		0	0	0	0	0	0	0	2	0	1	0	0	0	0	0	0	0	0	0				
Penicillins - Ampicillin	4	3	0		0	0	0	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Cefotaxim	0.5	3	0		0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Sulfonamides	256	3	0		0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0				
Cephalosporins - Ceftazidim	2	3	0		0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Polymyxins - Colistin	4	3	0		0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0				

Table Antimicrobial susceptibility testing of *S. Montevideo* in *Gallus gallus* (fowl) - at farm - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Montevideo	Gallus gallus (fowl) - at farm - Surveillance																									
	Isolates out of a monitoring program (yes/no)																									
	Number of isolates available in the laboratory																									
	9																									
Antimicrobials:	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Amphenicols - Chloramphenicol	16	9	0		0	0	0	0	0	0	0	0	2	7	0	0	0	0	0	0	0	0	0			
Amphenicols - Florfenicol	16	9	0		0	0	0	0	0	0	0	0	5	4	0	0	0	0	0	0	0	0	0			
Tetracyclines - Tetracycline	8	9	2		0	0	0	0	0	0	0	7	0	0	0	0	2	0	0	0	0	0	0			
Fluoroquinolones - Ciprofloxacin	0.06	9	1		7	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Quinolones - Nalidixic acid	16	9	1		0	0	0	0	0	0	0	7	0	1	0	0	0	1	0	0	0	0	0			
Trimethoprim	2	9	2		0	0	0	0	7	0	0	0	0	0	1	0	1	0	0	0	0	0	0			
Aminoglycosides - Streptomycin	32	9	0		0	0	0	0	0	0	0	0	0	3	6	0	0	0	0	0	0	0	0			
Aminoglycosides - Gentamicin	2	9	0		0	0	0	1	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Kanamycin	8	9	0		0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0			
Penicillins - Ampicillin	4	9	1		0	0	0	0	0	0	5	3	0	0	0	0	1	0	0	0	0	0	0			
Cephalosporins - Cefotaxim	0.5	9	0		0	2	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Sulfonamides	256	9	2		0	0	0	0	0	0	0	0	0	0	0	1	6	0	0	0	0	2	0			
Cephalosporins - Ceftazidim	2	9	0		0	0	0	5	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0			
Polymyxins - Colistin	4	9	0		0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0			

Table Antimicrobial susceptibility testing of *S. Montevideo* in *Gallus gallus* (fowl) - broilers - at farm - Control and eradication programmes - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Montevideo	Gallus gallus (fowl) - broilers - at farm - Control and eradication programmes																									
	Isolates out of a monitoring program (yes/no)																									
	Number of isolates available in the laboratory																									
	5																									
Antimicrobials:	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Amphenicols - Chloramphenicol	16	5	0		0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0			
Amphenicols - Florfenicol	16	5	0		0	0	0	0	0	0	0	0	4	1	0	0	0	0	0	0	0	0	0			
Tetracyclines - Tetracycline	8	5	0		0	0	0	0	0	0	0	3	1	1	0	0	0	0	0	0	0	0	0			
Fluoroquinolones - Ciprofloxacin	0.06	5	5		0	0	0	0	3	1	1	0	0	0	0	0	0	0	0	0	0	0	0			
Quinolones - Nalidixic acid	16	5	1		0	0	0	0	0	0	0	0	0	0	4	0	0	1	0	0	0	0	0			
Trimethoprim	2	5	0		0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Streptomycin	32	5	0		0	0	0	0	0	0	0	0	0	4	1	0	0	0	0	0	0	0	0			
Aminoglycosides - Gentamicin	2	5	0		0	0	0	1	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Kanamycin	8	5	0		0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0			
Penicillins - Ampicillin	4	5	0		0	0	0	0	0	0	4	1	0	0	0	0	0	0	0	0	0	0	0			
Cephalosporins - Cefotaxim	0.5	5	0		0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Sulfonamides	256	5	0		0	0	0	0	0	0	0	0	0	0	0	0	3	2	0	0	0	0	0			
Cephalosporins - Ceftazidim	2	5	0		0	0	0	4	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0			
Polymyxins - Colistin	4	5	0		0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0			

Table Antimicrobial susceptibility testing of *S. Corvallis* in *Gallus gallus* (fowl) - laying hens - at farm - Control and eradication programmes - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Corvallis Isolates out of a monitoring program (yes/no) Number of isolates available in the laboratory		Gallus gallus (fowl) - laying hens - at farm - Control and eradication programmes																									
		3																									
		Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Antimicrobials:	16	3	0		0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0				
Amphenicols - Chloramphenicol	16	3	0		0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0				
Amphenicols - Florfenicol	8	3	0		0	0	0	0	0	1	0	1	0	1	0	0	0	0	0	0	0	0	0				
Tetracyclines - Tetracycline	0.06	3	0		2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Fluoroquinolones - Ciprofloxacin	16	3	0		0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0				
Quinolones - Nalidixic acid	2	3	0		0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Trimethoprim	32	3	0		0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Streptomycin	2	3	0		0	0	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Gentamicin	8	3	0		0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Kanamycin	4	3	1		0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0	0	0	0				
Penicillins - Ampicillin	0.5	3	0		0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Cefotaxim	256	3	0		0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0				
Sulfonamides	2	3	0		0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Ceftazidim	4	3	0		0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0				
Polymyxins - Colistin																											

Table Antimicrobial susceptibility testing of *S. Corvallis* in *Gallus gallus* (fowl) - broilers - at farm - Control and eradication programmes - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Corvallis	Gallus gallus (fowl) - broilers - at farm - Control and eradication programmes																									
	Isolates out of a monitoring program (yes/no)																									
	Number of isolates available in the laboratory																									
	4																									
Antimicrobials:	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Amphenicols - Chloramphenicol	16	4	0		0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0			
Amphenicols - Florfenicol	16	4	0		0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0			
Tetracyclines - Tetracycline	8	4	0		0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0			
Fluoroquinolones - Ciprofloxacin	0.06	4	0		0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Quinolones - Nalidixic acid	16	4	0		0	0	0	0	0	0	0	2	0	1	1	0	0	0	0	0	0	0	0			
Trimethoprim	2	4	0		0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Streptomycin	32	4	0		0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Gentamicin	2	4	0		0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Kanamycin	8	4	0		0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0			
Penicillins - Ampicillin	4	4	2		0	0	0	0	0	0	1	1	0	0	0	0	2	0	0	0	0	0	0			
Cephalosporins - Cefotaxim	0.5	4	0		0	3	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Sulfonamides	256	4	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0			
Cephalosporins - Ceftazidim	2	4	0		0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Polymyxins - Colistin	4	4	0		0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0			

Table Antimicrobial susceptibility testing of *S. Heidelberg* in *Gallus gallus* (fowl) - laying hens - at farm - Control and eradication programmes - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Heidelberg	Gallus gallus (fowl) - laying hens - at farm - Control and eradication programmes																									
	Isolates out of a monitoring program (yes/no)																									
	Number of isolates available in the laboratory																									
	14																									
Antimicrobials:	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Amphenicols - Chloramphenicol	16	14	0		0	0	0	0	0	0	0	0	0	14	0	0	0	0	0	0	0	0	0			
Amphenicols - Florfenicol	16	14	0		0	0	0	0	0	0	0	0	12	2	0	0	0	0	0	0	0	0	0			
Tetracyclines - Tetracycline	8	14	6		0	0	0	0	0	0	0	8	0	0	2	0	1	3	0	0	0	0	0			
Fluoroquinolones - Ciprofloxacin	0.06	14	4		4	6	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Quinolones - Nalidixic acid	16	14	3		0	0	0	0	0	0	0	10	0	1	0	0	0	3	0	0	0	0	0			
Trimethoprim	2	14	0		0	0	0	0	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Streptomycin	32	14	3		0	0	0	0	0	0	0	0	0	3	6	2	1	2	0	0	0	0	0			
Aminoglycosides - Gentamicin	2	14	0		0	0	0	11	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Kanamycin	8	14	0		0	0	0	0	0	0	0	14	0	0	0	0	0	0	0	0	0	0	0			
Penicillins - Ampicillin	4	14	3		0	0	0	0	0	0	8	2	1	0	0	0	3	0	0	0	0	0	0			
Cephalosporins - Cefotaxim	0.5	14	0		0	6	0	6	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Sulfonamides	256	14	2		0	0	0	0	0	0	0	0	0	0	0	9	2	1	0	0	0	2	0			
Cephalosporins - Ceftazidim	2	14	1		0	0	0	10	0	3	0	0	1	0	0	0	0	0	0	0	0	0	0			
Polymyxins - Colistin	4	14	0		0	0	0	0	0	0	0	0	14	0	0	0	0	0	0	0	0	0	0			

Table Antimicrobial susceptibility testing of *S. Heidelberg* in *Gallus gallus* (fowl) - laying hens - at farm - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Heidelberg Isolates out of a monitoring program (yes/no) Number of isolates available in the laboratory		Gallus gallus (fowl) - laying hens - at farm - Surveillance																									
		4																									
		Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Amphenicols - Chloramphenicol	16	4	0		0	0	0	0	0	0	0	1	3	0	0	0	0	0	0	0	0	0	0				
Amphenicols - Florfenicol	16	4	0		0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0				
Tetracyclines - Tetracycline	8	4	0		0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0				
Fluoroquinolones - Ciprofloxacin	0.06	4	0		3	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Quinolones - Nalidixic acid	16	4	0		0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0				
Trimethoprim	2	4	0		0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Streptomycin	32	4	0		0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Gentamicin	2	4	0		0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Kanamycin	8	4	0		0	0	0	0	0	0	0	3	0	1	0	0	0	0	0	0	0	0	0				
Penicillins - Ampicillin	4	4	0		0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Cefotaxim	0.5	4	0		0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Sulfonamides	256	4	0		0	0	0	0	0	0	0	0	0	1	0	2	1	0	0	0	0	0	0				
Cephalosporins - Ceftazidim	2	4	0		0	0	0	3	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0				
Polymyxins - Colistin	4	4	0		0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0				

Table Antimicrobial susceptibility testing of *S. Heidelberg* in Meat from turkey - in total - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Heidelberg Isolates out of a monitoring program (yes/no) Number of isolates available in the laboratory		Meat from turkey - in total - Surveillance																									
		1																									
		Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Antimicrobials:	16	1	0		0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0				
Amphenicols - Chloramphenicol	16	1	0		0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0				
Amphenicols - Florfenicol	8	1	1		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0				
Tetracyclines - Tetracycline	0.06	1	1		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Fluoroquinolones - Ciprofloxacin	16	1	1		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0				
Quinolones - Nalidixic acid	2	1	0		0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0				
Trimethoprim	32	1	1		0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0				
Aminoglycosides - Streptomycin	2	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Gentamicin	8	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Kanamycin	4	1	1		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0				
Penicillins - Ampicillin	0.5	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Cefotaxim	256	1	0		0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0				
Sulfonamides	2	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Ceftazidim	4	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0				
Polymyxins - Colistin																											

Table Antimicrobial susceptibility testing of *S. Heidelberg* in *Gallus gallus* (fowl) - at farm - Surveillance - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Heidelberg Isolates out of a monitoring program (yes/no) Number of isolates available in the laboratory		Gallus gallus (fowl) - at farm - Surveillance																									
		6																									
		Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Antimicrobials:	16	6	1		0	0	0	0	0	0	0	0	4	1	0	0	1	0	0	0	0	0	0				
Amphenicols - Chloramphenicol	16	6	1		0	0	0	0	0	0	0	0	4	0	1	0	0	1	0	0	0	0	0				
Amphenicols - Florfenicol	8	6	3		0	0	0	0	0	0	0	3	0	0	0	0	1	2	0	0	0	0	0				
Tetracyclines - Tetracycline	0.06	6	0		3	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Fluoroquinolones - Ciprofloxacin	16	6	0		0	0	0	0	0	0	0	5	0	0	1	0	0	0	0	0	0	0	0				
Quinolones - Nalidixic acid	2	6	0		0	0	0	0	5	0	1	0	0	0	0	0	0	0	0	0	0	0	0				
Trimethoprim	32	6	3		0	0	0	0	0	0	0	0	0	0	3	0	0	1	2	0	0	0	0				
Aminoglycosides - Streptomycin	2	6	1		0	0	0	4	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0				
Aminoglycosides - Gentamicin	8	6	1		0	0	0	0	0	0	0	5	0	0	0	0	0	0	1	0	0	0	0				
Aminoglycosides - Kanamycin	4	6	3		0	0	0	0	0	0	3	0	0	0	0	0	3	0	0	0	0	0	0				
Penicillins - Ampicillin	0.5	6	0		0	4	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Cefotaxim	256	6	3		0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3	0				
Sulfonamides	2	6	0		0	0	0	5	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Ceftazidim	4	6	0		0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0				
Polymyxins - Colistin																											

Table Antimicrobial susceptibility testing of *S. Heidelberg* in *Gallus gallus* (fowl) - broilers - at farm - Control and eradication programmes - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Heidelberg	Gallus gallus (fowl) - broilers - at farm - Control and eradication programmes																									
	Isolates out of a monitoring program (yes/no)																									
	Number of isolates available in the laboratory																									
	2																									
Antimicrobials:	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Amphenicols - Chloramphenicol	16	2	1		0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0			
Amphenicols - Florfenicol	16	2	0		0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0			
Tetracyclines - Tetracycline	8	2	1		0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0			
Fluoroquinolones - Ciprofloxacin	0.06	2	1		0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Quinolones - Nalidixic acid	16	2	1		0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0			
Trimethoprim	2	2	0		0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Streptomycin	32	2	1		0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0			
Aminoglycosides - Gentamicin	2	2	0		0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0			
Aminoglycosides - Kanamycin	8	2	0		0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0			
Penicillins - Ampicillin	4	2	1		0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0			
Cephalosporins - Cefotaxim	0.5	2	1		0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0			
Sulfonamides	256	2	1		0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0			
Cephalosporins - Ceftazidim	2	2	1		0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0			
Polymyxins - Colistin	4	2	0		0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0			

Table Antimicrobial susceptibility testing of S. Napoli in Gallus gallus (fowl) - breeding flocks, unspecified - at farm - Control and eradication programmes - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Napoli Isolates out of a monitoring program (yes/no) Number of isolates available in the laboratory		Gallus gallus (fowl) - breeding flocks, unspecified - at farm - Control and eradication programmes																									
		1																									
		Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Antimicrobials:	16	1	0		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0				
Amphenicols - Chloramphenicol	16	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0				
Amphenicols - Florfenicol	8	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Tetracyclines - Tetracycline	0.06	1	0		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Fluoroquinolones - Ciprofloxacin	16	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Quinolones - Nalidixic acid	2	1	0		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Trimethoprim	32	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Streptomycin	2	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Gentamicin	8	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Kanamycin	4	1	0		0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0				
Penicillins - Ampicillin	0.5	1	0		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Cefotaxim	256	1	0		0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0				
Sulfonamides	2	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Ceftazidim	4	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0				
Polymyxins - Colistin																											

Table Antimicrobial susceptibility testing of *S. Isangi* in *Gallus gallus* (fowl) - laying hens - at farm - Control and eradication programmes - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Isangi	Gallus gallus (fowl) - laying hens - at farm - Control and eradication programmes																										
	Isolates out of a monitoring program (yes/no)																										
	Number of isolates available in the laboratory																										
	1																										
Antimicrobials:	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest		
Amphenicols - Chloramphenicol	16	1	0		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0				
Amphenicols - Florfenicol	16	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0				
Tetracyclines - Tetracycline	8	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0				
Fluoroquinolones - Ciprofloxacin	0.06	1	0		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Quinolones - Nalidixic acid	16	1	0		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0				
Trimethoprim	2	1	0		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Streptomycin	32	1	0		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Gentamicin	2	1	0		0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0				
Aminoglycosides - Kanamycin	8	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Penicillins - Ampicillin	4	1	0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Cephalosporins - Cefotaxim	0.5	1	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Sulfonamides	256	1	0		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0				
Cephalosporins - Ceftazidim	2	1	0		0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0				
Polymyxins - Colistin	4	1	0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0				

Table Cut-off values for antibiotic resistance testing of Salmonella in Animals

Test Method Used		Standard methods used for testing		
			Concentration (microg/ml)	Zone diameter (mm)
		Standard	Resistant >	Resistant <=
Amphenicols	Chloramphenicol		16	
Tetracyclines	Tetracycline		8	
Fluoroquinolones	Ciprofloxacin		0.06	
Quinolones	Nalidixic acid		16	
Trimethoprim	Trimethoprim		2	
Sulfonamides	Sulfonamides		256	
Aminoglycosides	Streptomycin		32	
	Gentamicin		2	
Cephalosporins	Cefotaxim		0.5	
Penicillins	Ampicillin		4	

Test Method Used	Standard methods used for testing

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Table Cut-off values for antibiotic resistance testing of Salmonella in Feed

Test Method Used		Standard methods used for testing		
			Concentration (microg/ml)	Zone diameter (mm)
		Standard	Resistant >	Resistant <=
Amphenicols	Chloramphenicol		16	
Tetracyclines	Tetracycline		8	
Fluoroquinolones	Ciprofloxacin		0.06	
Quinolones	Nalidixic acid		16	
Trimethoprim	Trimethoprim		2	
Sulfonamides	Sulfonamides		256	
Aminoglycosides	Streptomycin		32	
	Gentamicin		2	
Cephalosporins	Cefotaxim		0.5	
Penicillins	Ampicillin		4	

2.2 CAMPYLOBACTERIOSIS

2.2.1 General evaluation of the national situation

A. Thermophilic Campylobacter general evaluation

History of the disease and/or infection in the country

From the veterinary point of view no structured national sampling programmes are in place for monitoring the contamination in animals and food.

Some studies indicate that poultry meat is one of the major vehicles of human infection.

Interesting data came out from Campylobacter prevalence in dogs.

Suggestions to the Community for the actions to be taken

There is no action taken in Italy for the control of this zoonoses.

2.2.2 Campylobacteriosis in humans

A. Thermophilic Campylobacter in humans

Reporting system in place for the human cases

It's in progress an information system based on the implementation of the Decision of the European Commission of 28 April 2008, of the Decision 2002/253 and the Decision of the European Parliament and Council N. 2119/98, for the surveillance of infectious and pervasive diseases, and also provides a specific definition of a case.

Diagnostic/analytical methods used

Biological human samples collected to isolate Campylobacter are faeces, blood or others body fluids. Samples are directly inoculated on solid selective media, incubated in microaerophilic and thermophilic condition, and characteristic colonies are selected to be submitted to Gram staining, and biochemical tests for final confirmation. Molecular techniques are also used for isolation, identification and characterization of Campylobacter strain isolated from biological samples.

Notification system in place

Campylobacteriosis is a disease subject to notification on the basis of the Ministerial Decree 15 December 1990: in class II (non-infectious diarrhea, different from salmonella), in class IV if it occurs in the form of an outbreak and in class V as a cluster of cases of unspecified diseases ion the other classes of the decree, to send yearly.

History of the disease and/or infection in the country

Studies conducted from 1981 at 1992 in different part of Italy on human Campylobacteriosis (Baffone et al.1995;Figura et alt.1997) on stool samples taken from patients with diarrhea, confirmed the presence of Campylobacter (from 2,3% of tested samples at 10.8%)

In 1992 a study performed in 6 different hospitals of North, Central and South Italy (Caprioli et al.,1996) revealed the presence of Campylobacter spp. in 7.9% of samples taken from children with diarrhea. Despite of the lack of official data, the available studies suggest that human campylobacteriosis is a major problem also in Italy. This outcome is also supported by the detection of Campylobacter spp. in foodstuffs.

In fact, data on thermotolerant Campylobacter contamination levels in chicken meat at retail in Italy confirm that the bacterium is frequently found. Prencipe et al. (2007) observed 33.2% of samples contaminated by Campylobacter jejuni, taken from whole and sectioned raw chickens collected at retail in Abruzzo and Molise regions from December 2002 to June 2003. Other studies conducted in Italy showed similar or even higher contamination levels (Pezzotti et al., 2003).

2.2.3 Campylobacter in foodstuffs

Table Campylobacter in poultry meat

	Source of information	Sampling unit	Sample weight	Units tested	Total units positive for Campylobacter	C. coli	C. jejuni	C. lari	C. upsaliensis	Thermophilic Campylobacter spp., unspecified
Meat from broilers (Gallus gallus) - Survey - national survey		Single		33	0	0	0	0	0	0
Meat from broilers (Gallus gallus) - fresh - Surveillance - HACCP and own checks		Single		752	0	0	0	0	0	0
Meat from broilers (Gallus gallus) - fresh - Surveillance - official controls		Batch		59	10	5	3	0	0	2
Meat from broilers (Gallus gallus) - fresh - Surveillance - official controls - objective sampling		Single		108	0	0	0	0	0	
Meat from broilers (Gallus gallus) - meat preparation - Surveillance - HACCP and own checks		Single		37	0	0	0	0	0	0
Meat from turkey - fresh - Surveillance - HACCP and own checks		Single		120	0	0	0	0	0	0

Table Campylobacter in other food

	Source of information	Sampling unit	Sample weight	Units tested	Total units positive for Campylobacter	C. coli	C. jejuni	C. lari	C. upsaliensis	Thermophilic Campylobacter spp., unspecified
Cheeses made from goats' milk - Surveillance - official controls		Single		26	1	0	0	0	0	1
Cheeses made from sheep's milk - Surveillance - official controls		Single		95	0	0	0	0	0	0
Cheeses, made from unspecified milk or other animal milk - Surveillance - official controls		Single		89	0	0	0	0	0	0
Dairy products (excluding cheeses) - dairy products, not specified - Surveillance - HACCP and own checks		Batch		32	0	0	0	0	0	0
Meat from bovine animals - fresh - Survey - national survey		Batch		79	0	0	0	0	0	0
Meat from bovine animals - offal - Surveillance - official controls - objective sampling		Single		107	0	0	0	0	0	0
Meat from other animal species or not specified - fresh - Surveillance - HACCP and own checks		Single		116	0	0	0	0	0	0
Meat from other animal species or not specified - fresh - Surveillance - official controls - objective sampling		Single		185	0	0	0	0	0	0
Meat from other animal species or not specified - meat preparation - Surveillance - official controls		Single		35	3	0	1	0	0	2
Meat from other animal species or not specified - meat products - Surveillance - official controls		Batch		132	0	0	0	0	0	0
Meat from pig - fresh - Surveillance - official controls - objective sampling		Single		112	0	0	0	0	0	0
Milk from other animal species or unspecified - Surveillance - HACCP and own checks		Single		231	0	0	0	0	0	0

Table Campylobacter in other food

	Source of information	Sampling unit	Sample weight	Units tested	Total units positive for Campylobacter	C. coli	C. jejuni	C. lari	C. upsaliensis	Thermophilic Campylobacter spp., unspecified
Milk from other animal species or unspecified - Surveillance - official controls		Batch		5707	13	0	10	0	0	3
Milk from other animal species or unspecified - Survey - national survey		Single		43	0	0	0	0	0	0
Milk, cows' - Clinical investigations		Single		132	0	0	0	0	0	0
Milk, cows' - Surveillance - HACCP and own checks		Single		104	0	0	0	0	0	0
Milk, cows' - Surveillance - official controls		Batch		835	1	0	0	0	0	1
Milk, cows' - Surveillance - official controls - objective sampling		Batch		36	0	0	0	0	0	0
Milk, cows' - Survey - national survey		Batch		81	0	0	0	0	0	0
Molluscan shellfish - Surveillance - official controls		Single		112	0	0	0	0	0	0
Vegetables - Surveillance - official controls - suspect sampling		Single		63	0	0	0	0	0	0

2.2.4 Campylobacter in animals

Table Campylobacter in animals

	Source of information	Sampling unit	Units tested	Total units positive for Campylobacter	C. coli	C. jejuni	C. lari	C. upsaliensis	Thermophilic Campylobacter spp., unspecified
Cats		Animal	27	0	0	0	0	0	0
Dogs		Animal	169	6	1	1	0	1	3
Goats		Animal	82	0	0	0	0	0	0
Pigs		Animal	155	5	0	1	0	0	4
Sheep		Animal	695	13	0	0	0	0	13
Solipeds, domestic		Animal	33	0	0	0	0	0	0
Birds - wild		Animal	994	70	8	6	0	0	56
Cattle (bovine animals)		Animal	2756	32	3	9	0	0	20
Deer - wild - roe deer		Animal	47	0	0	0	0	0	0
Gallus gallus (fowl)		Flock	149	18	3	6	0	0	9
Goats - mixed herds		Animal	104	5	0	0	0	0	5
Pigeons		Animal	108	8	0	0	0	0	8
Rabbits		Animal	69	0	0	0	0	0	0
Sheep and goats		Animal	25	0	0	0	0	0	0
Turtles - pet animals		Animal	44	0	0	0	0	0	0
Water buffalos - farmed		Animal	42	1	1	0	0	0	0
Wild animals		Animal	282	8	7	0	0	0	1

2.2.5 Antimicrobial resistance in *Campylobacter* isolates

A. Antimicrobial resistance in *Campylobacter jejuni* and *coli* in cattle

Sampling strategy used in monitoring

Procedures for the selection of isolates for antimicrobial testing

Sampling context: Monitoring (at slaughter)

Methods used for collecting data

Sampling context: Monitoring (at slaughter)

Laboratory methodology used for identification of the microbial isolates

PCR testing (according to EFSA guidelines on AMR monitoring in primary productions)

Laboratory used for detection for resistance

Antimicrobials included in monitoring

MIC testing at NRL-AR. Antimicrobials included according to EFSA guidelines and Comm. Dec. 2007/407/EC.

Cut-off values used in testing

EUCAST epidemiological cut-off values used (according to Comm. Dec. 2007/407/EC).

National evaluation of the recent situation, the trends and sources of infection

C. jejuni

In 2009, 35 isolates from cattle were available for sensitivity testing. Among these isolates, 37.1% (n=13) were resistant to FQs and 8.6% to macrolides. No resistance to newer aminoglycosides was observed, nor multi-resistance involving more than one class of Critically Important Antimicrobials. Beta-lactam and tetracycline resistance resulted also widespread (22.9% and 28.6% respectively). 11.4% isolates (4/35) were resistant to 4+ antimicrobial drugs.

C. coli

In 2009, 10 isolates from cattle were available for sensitivity testing: 6 were resistant to FQs and 1 to macrolides. No resistance to newer aminoglycosides was observed, nor multi-resistance involving more than one class of Critically Important Antimicrobials. Two isolates were resistant to 4+ antimicrobial drugs.

B. Antimicrobial resistance in *Campylobacter jejuni* and *coli* in poultry

National evaluation of the recent situation, the trends and sources of infection

The survey according to Comm. Dec. 516/2007/EC provided 54 *C. coli* and 55 *C. jejuni* viable isolates for antimicrobial susceptibility testing. Very high resistance rates were observed for the two major classes of antimicrobials used to treat human invasive infections (i. e. fluoroquinolones, and macrolides ERY, both Critically Important Antimicrobials). Resistance rates observed in *C. coli* were 88.9% to CIP and 53.7% to ERY. Conversely, lower resistance rates to ERY were detected (5.5%) in *C. jejuni*, with high resistance rates (80%) to fluoroquinolones. No trend over time seems to be evident for these figures from the voluntary monitoring activity carried out in Italy in the last five years.

High resistance rates were observed also for aminopenicillins (e. g. in *C. jejuni* amoxicillin, AMX 54.5%) and tetracyclines, (e. g. in *C. jejuni* 58.2%).

Table Antimicrobial susceptibility testing of *C. coli* in Cattle (bovine animals) - at slaughterhouse - Monitoring - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

C. coli	Cattle (bovine animals) - at slaughterhouse - Monitoring																										
	Isolates out of a monitoring program (yes/no)																										
	Number of isolates available in the laboratory																										
Antimicrobials:	11																										
	Cut-off value	N	n	≤0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest		
Amphenicols - Chloramphenicol	16	11	0		0	0	0	0	0	1	0	5	4	0	1	0	0	0	0	0	0	0	0				
Tetracyclines - Tetracycline	2	11	6		0	0	2	0	2	1	0	0	0	0	0	0	3	3	0	0	0	0	0				
Fluoroquinolones - Ciprofloxacin	1	11	7		0	0	0	2	2	0	0	0	0	2	5	0	0	0	0	0	0	0	0				
Quinolones - Nalidixic acid	32	11	7		0	0	0	0	0	0	0	1	1	1	1	0	5	2	0	0	0	0	0				
Aminoglycosides - Streptomycin	4	11	2		0	0	0	0	0	1	4	4	0	0	1	0	1	0	0	0	0	0	0				
Aminoglycosides - Gentamicin	2	11	0		0	0	0	0	5	6	0	0	0	0	0	0	0	0	0	0	0	0	0				
Macrolides - Erythromycin	16	11	1		0	0	0	0	0	5	3	2	0	0	0	0	0	0	1	0	0	0	0				
Nitroimidazoles and Nitrofurans - Metronidazole	0	11	11		0	0	0	0	0	0	1	3	1	2	3	0	1	0	0	0	0	0	0				
Penicillins - Amoxicillin	8	11	1		0	0	0	0	0	0	2	1	1	6	0	0	1	0	0	0	0	0	0				

Table Antimicrobial susceptibility testing of *C. jejuni* in Cattle (bovine animals) - at slaughterhouse - Monitoring - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

C. jejuni	Cattle (bovine animals) - at slaughterhouse - Monitoring																										
	Isolates out of a monitoring program (yes/no)																										
	Number of isolates available in the laboratory																										
Antimicrobials:	35																										
	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest		
Amphenicols - Chloramphenicol	16	35	0		0	0	0	0	0	11	1	21	2	0	0	0	0	0	0	0	0	0	0				
Tetracyclines - Tetracycline	2	35	10		0	1	21	0	3	0	0	0	0	0	1	1	4	4	0	0	0	0	0				
Fluoroquinolones - Ciprofloxacin	1	35	13		0	5	0	14	3	0	0	0	0	6	6	1	0	0	0	0	0	0	0				
Quinolones - Nalidixic acid	16	35	13		0	0	0	0	0	0	0	7	11	3	1	0	5	8	0	0	0	0	0				
Aminoglycosides - Streptomycin	2	35	2		0	0	0	0	0	1	12	20	1	0	1	0	0	0	0	0	0	0	0				
Aminoglycosides - Gentamicin	1	35	0		0	0	5	0	11	19	0	0	0	0	0	0	0	0	0	0	0	0	0				
Macrolides - Erythromycin	4	35	3		0	0	0	0	10	16	4	2	0	1	0	1	0	0	1	0	0	0	0				
Nitroimidazoles and Nitrofurans - Metronidazole	0	35	35		0	0	0	0	1	0	4	3	2	7	1	10	2	1	4	0	0	0	0				
Penicillins - Amoxicillin	16	35	8		0	0	2	0	0	5	2	6	6	6	0	1	3	3	1	0	0	0	0				

Table Cut-off values used for antimicrobial susceptibility testing of *Campylobacter* in Animals

Test Method Used		Standard methods used for testing		
			Concentration (microg/ml)	Zone diameter (mm)
		Standard	Resistant >	Resistant <=
Tetracyclines	Tetracycline		2	
Fluoroquinolones	Ciprofloxacin		1	
Aminoglycosides	Gentamicin		1	
	Streptomycin		2	
Macrolides	Erythromycin		4	

Table Cut-off values used for antimicrobial susceptibility testing of *Campylobacter* in Food

Test Method Used		Standard methods used for testing		
			Concentration (microg/ml)	Zone diameter (mm)
		Standard	Resistant >	Resistant <=
Tetracyclines	Tetracycline		2	
Fluoroquinolones	Ciprofloxacin		1	
Aminoglycosides	Gentamicin		1	
	Streptomycin		2	
Macrolides	Erythromycin		4	

Table Cut-off values used for antimicrobial susceptibility testing of *Campylobacter* in Feed

Test Method Used		Standard methods used for testing		
			Concentration (microg/ml)	Zone diameter (mm)
		Standard	Resistant >	Resistant <=
Tetracyclines	Tetracycline		2	
Fluoroquinolones	Ciprofloxacin		1	
Aminoglycosides	Gentamicin		1	
	Streptomycin		2	
Macrolides	Erythromycin		4	

2.3 LISTERIOSIS

2.3.1 General evaluation of the national situation

A. Listeriosis general evaluation

History of the disease and/or infection in the country

The notification rate of listeriosis cases in Italy is lower than in EU but during the last five years data showed an increasing trend, behaviour shared also by other MSs.
Data on listeriosis cases in animals are not collected.

National evaluation of the recent situation, the trends and sources of infection

According to data, in Italy the prevalence of *Listeria monocytogenes* has been recorded high in many food categories, mostly ready-to-eat.

Meat products (17.8%), fishery products and fish preparations (13.4%) and gastronomic preparations (8.6%), some of the most representative

RTE products, showed significant level of contamination confirming how this category represents an important source of *Listeria monocytogenes* for consumers.

The positive rate of raw milk samples (1,5%), collected mainly at the farm level, fundamentally confirm the results obtained in 2008.

The contamination rate in cheeses (5.4% of positive samples) is similar to the prevalence detected in 2008.

Among no-RTE products, fresh meat and meat preparation registered a 7,5% rate of positive samples to *L. monocytogenes*. All the samples exceeding the limit of 100 CFU/g belong to this food category.

Regarding environmental samples, 1,3% of the surfaces investigated were contaminated.

Interesting results about vegetables report a 14,3% of positive samples. The consistency of this food category was poor.

2.3.2 Listeria in foodstuffs

Table Listeria monocytogenes in other foods

	Source of information	Sampling unit	Sample weight	Units tested	Total units positive for Listeria	Units tested with detection method	Listeria monocytogenes presence in x g	Units tested with enumeration method	> detection limit but ≤ 100 cfu/g	L. monocytogenes > 100 cfu/g
All foodstuffs - Survey - national survey		Single		2	2	2	2	0	0	0
Crustaceans - Surveillance - official controls		Batch		1	1	1	1	0	0	0
Fishery products, unspecified - Surveillance - HACCP and own checks		Single		21	21	21	21	0	0	0
Fishery products, unspecified - Surveillance - official controls		Single		194	8	191	34	3	1	0
Meat from bovine animals - fresh - Surveillance - HACCP and own checks		Single		5	5	5	5	0	0	0
Meat from bovine animals - fresh - Surveillance - official controls		Batch		2	2	2	2	0	0	0
Meat from bovine animals - fresh - Surveillance - official controls - objective sampling		Batch		6	3	4	3	2	2	0
Meat from bovine animals - fresh - Survey - national survey		Batch		5	5	5	5	0	0	0
Meat from bovine animals and pig - fresh - Surveillance - HACCP and own checks (single)		Single		5	5	5	5	0	0	0
Meat from bovine animals and pig - meat preparation - Surveillance - official controls		Single		5	5	5	5	0	0	0
Meat from bovine animals and pig - meat products - Surveillance - official controls		Single		79	70	68	67	11	2	9
Meat from other animal species or not specified - fresh - Surveillance - HACCP and own checks		Batch		47	18	27	18	20	7	0

Table *Listeria monocytogenes* in other foods

	Source of information	Sampling unit	Sample weight	Units tested	Total units positive for <i>Listeria</i>	Units tested with detection method	<i>Listeria monocytogenes</i> presence in x g	Units tested with enumeration method	> detection limit but ≤ 100 cfu/g	<i>L. monocytogenes</i> > 100 cfu/g
Meat from other animal species or not specified - fresh - Surveillance - official controls		Single		91	14	87	13	4	1	0
Meat from other animal species or not specified - meat preparation - Surveillance - HACCP and own checks		Single		146	12	68	12	78	1	0
Meat from other animal species or not specified - meat preparation - Surveillance - official controls		Single		441	48	438	47	3	2	1
Meat from other animal species or not specified - meat preparation - Survey - national survey		Batch		33	5	33	5	0	0	0
Meat from other animal species or not specified - meat products - Surveillance - official controls		Single		77	47	72	43	5	3	2
Meat from other animal species or not specified - meat products - Surveillance - official controls (Batch)		Batch		69	16	50	16	19	7	0
Meat from other animal species or not specified - meat products - Survey - national survey		Batch		55	24	33	24	22	15	1
Meat from other animal species or not specified - minced meat - Surveillance - HACCP and own checks		Single		14	3	7	3	7	0	0
Other processed food products and prepared dishes - Surveillance - official controls ¹⁾		Single		65	1	65	1	0	0	0

Comments:

¹⁾ MIXED FOOD PREPARATIONS

Table *Listeria monocytogenes* in milk and dairy products

	Source of information	Sampling unit	Sample weight	Units tested	Total units positive for <i>Listeria</i>	Units tested with detection method	<i>Listeria monocytogenes</i> presence in x g	Units tested with enumeration method	> detection limit but ≤ 100 cfu/g	<i>L. monocytogenes</i> > 100 cfu/g
Cheeses made from cows' milk - unspecified - Surveillance - official controls		Batch		25	18	25	18	0	0	0
Cheeses, made from unspecified milk or other animal milk - unspecified - Surveillance - HACCP and own checks		Single		34	2	34	2	0	0	0
Cheeses, made from unspecified milk or other animal milk - unspecified - Surveillance - official controls		Batch		214	32	211	32	3	0	0
Milk from other animal species or unspecified - Surveillance - official controls		Single		4551	70	4551	70	0	0	0

2.3.3 Listeria in animals

Table Listeria in animals

	Source of information	Sampling unit	Units tested	Total units positive for Listeria	L. monocytogenes	Listeria spp., unspecified
Cattle (bovine animals)		Herd	374	6	0	6
Cattle (bovine animals) - dairy cows		Herd	7	2	0	2
Goats		Flock	122	3	0	3
Pigs		Animal	13	1	0	1
Sheep		Flock	380	8	0	8
Birds - wild		Animal	118	0	0	0
Sheep and goats		Flock	77	1	0	1
Solipeds, domestic - horses		Animal	14	2	0	2
Water buffalos - farmed		Herd	137	0	0	0
Wild animals		Animal	269	1	0	0

2.4 E. COLI INFECTIONS

2.4.1 General evaluation of the national situation

2.4.2 E. coli infections in humans

A. Verotoxigenic Escherichia coli infections in humans

Reporting system in place for the human cases

VTEC infection and HUS are not notifiable diseases, and surveillance is carried out on a voluntary basis. A surveillance system for HUS in paediatric patients has been working since 1988. HUS cases are notified to Istituto Superiore Sanità, which is the National Reference Laboratory for both medical and veterinary/food fields.

The NRL performs laboratory diagnosis of VTEC infection in clinical samples from HUS cases. It also receives suspected VTEC strains from clinical microbiology laboratories. However, VTEC are routinely searched by only a few laboratories, and therefore HUS cases represent most of the cases of VTEC infection identified.

An information flow based on the transposition of the specific European legislation is in progress

laboratory surveillance system on a voluntary base

Case definition

Confirmed case: Laboratory evidence of VTEC infections

Diagnostic/analytical methods used

- Identification of E.coli strains as VTEC by demonstration of VT production (vero cells) and presence of vtx genes (PCR).
- in HUS cases, detection of free fecal VT by vero cells.
- in HUS cases, detection of LPS- antibodies for serogroups O157, O26, O103, O111, O145.

Notification system in place

Cases of VTEC-associated diarrhea can be reported as "non-salmonella gastroenteritis"
laboratory surveillance system on a voluntary base.

History of the disease and/or infection in the country

The HUS trend is quite stable, with 30-40 HUS cases per year reported, for an annual incidence of about 0.40 cases per 100,000 residents aged 0-14 years. The most common serogroup in the 1990s was O157, while O26 prevailed in the 2000s. In 2007, 2008 and 2009 similar numbers of cases by O157 and O26 were observed.

National evaluation of the recent situation, the trends and sources of infection

The HUS trend is quite stable. During 2007 and 2008 an increasing number of HUS cases have been associated to raw milk consumption, which is becoming popular in Italy due to local sale by automatic dispenser.

The data on intestinal infections are too scanty, since only a few laboratories perform the diagnosis.

Relevance as zoonotic disease

Although not very frequent, the severity of the HUS cases make the zoonosis relevant for public health.

2.4.3 Escherichia coli, pathogenic in foodstuffs

Table VT E. coli in food

	Source of information	Sampling unit	Sample weight	Units tested	Total units positive for Verotoxigenic E. coli (VTEC)	Verotoxigenic E. coli (VTEC) - VTEC O157	Verotoxigenic E. coli (VTEC) - VTEC non-O157	Verotoxigenic E. coli (VTEC) - VTEC, unspecified
Cheeses made from goats' milk - unspecified ¹⁾		Single		43	0			
Cheeses made from sheep's milk - Surveillance - official controls ²⁾		Single		81	0			
Cheeses, made from unspecified milk or other animal milk - unspecified ³⁾		Single		255	1	1		
Fishery products, unspecified ⁴⁾		Single		65	0			
Meat from bovine animals - Surveillance - HACCP and own checks ⁵⁾		Batch		38	0			
Meat from broilers (Gallus gallus) - Surveillance - HACCP and own checks ⁶⁾		Single		551	0			
Meat from broilers (Gallus gallus) - meat preparation - Surveillance - HACCP and own checks ⁷⁾		Single		715	0			
Meat from broilers (Gallus gallus) - meat products - Surveillance - HACCP and own checks ⁸⁾		Single		170	0			
Meat from other animal species or not specified - meat preparation ⁹⁾		Single		178	0			
Meat from pig - Surveillance - HACCP and own checks ¹⁰⁾		Single		91	0			
Meat from pig - Surveillance - official controls ¹¹⁾		Single		73	0			
Meat from pig - minced meat - Surveillance - HACCP and own checks ¹²⁾		Batch		428	0			

Table VT E. coli in food

	Source of information	Sampling unit	Sample weight	Units tested	Total units positive for Verotoxigenic E. coli (VTEC)	Verotoxigenic E. coli (VTEC) - VTEC O157	Verotoxigenic E. coli (VTEC) - VTEC non-O157	Verotoxigenic E. coli (VTEC) - VTEC, unspecified
Meat from poultry, unspecified - Surveillance - official controls ¹³⁾		Single		30	0			
Meat from turkey - Surveillance - HACCP and own checks ¹⁴⁾		Single		302	0			
Meat, mixed meat - meat preparation - Surveillance - HACCP and own checks ¹⁵⁾		Single		250	0			
Milk from other animal species or unspecified ¹⁶⁾		Single		139	0			
Milk from other animal species or unspecified - Surveillance - official controls ¹⁷⁾		Single		1211	4	4		
Milk, cows' ¹⁸⁾		Single		173	0			
Milk, cows' - Surveillance - HACCP and own checks ¹⁹⁾		Single		183	0			
Milk, cows' - Surveillance - official controls ²⁰⁾		Batch		821	0			
Milk, goats' - Surveillance - official controls ²¹⁾		Batch		27	0			
Milk, sheep's - Surveillance - official controls ²²⁾		Single		27	0			

Comments:

- ¹⁾ Detection of VTEC in animals and food: identification of isolated strains as VTEC is usually based on PCR detection of vtx1 and vtx2 genes. Detection of VTEC O157 in food: ISO 16654/2001 or other methods validated against this standard.
- ²⁾ Detection of VTEC in animals and food: identification of isolated strains as VTEC is usually based on PCR detection of vtx1 and vtx2 genes. Detection of VTEC O157 in food: ISO 16654/2001 or other methods validated against this standard.
- ³⁾ Detection of VTEC in animals and food: identification of isolated strains as VTEC is usually based on PCR detection of vtx1 and vtx2 genes. Detection of VTEC O157 in food: ISO 16654/2001 or other methods validated against this standard.
- ⁴⁾ Detection of VTEC in animals and food: identification of isolated strains as VTEC is usually based on PCR detection of vtx1 and vtx2 genes. Detection of VTEC O157 in food: ISO 16654/2001 or other methods validated against this standard.
- ⁵⁾ Detection of VTEC in animals and food: identification of isolated strains as VTEC is usually based on PCR detection of vtx1 and vtx2 genes. Detection of

[illegible]

2.4.4 Escherichia coli, pathogenic in animals

A. Verotoxigenic Escherichia coli in cattle (bovine animals)

Control program/mechanisms

The control program/strategies in place

No monitoring system in place

Table VT E. coli in animals

	Source of information	Sampling unit	Sample weight	Units tested	Total units positive for Verotoxigenic E. coli (VTEC)	Verotoxigenic E. coli (VTEC) - VTEC O157	Verotoxigenic E. coli (VTEC) - VTEC non-O157	Verotoxigenic E. coli (VTEC) - VTEC, unspecified
Cattle (bovine animals)	¹⁾	Animal		296	73			73
Dogs	²⁾	Animal		35	0	0		
Water buffalos	³⁾	Animal		53	9	7		2
Wild animals	⁴⁾	Animal		100	1			1
Zoo animals, all	⁵⁾	Animal		25	0			

Comments:

- ¹⁾ Detection of VTEC in animals and food: identification of isolated strains as VTEC is usually based on PCR detection of vtx1 and vtx2 genes. Detection of VTEC in animal feces: ISO16654/2001 method adapted to feces according to the OIE Manual of Diagnostic Tests and Vaccines for Terrestrial Animals 2004, Chapter 2.10.13.
- ²⁾ Detection of VTEC in animals and food: identification of isolated strains as VTEC is usually based on PCR detection of vtx1 and vtx2 genes. Detection of VTEC in animal feces: ISO16654/2001 method adapted to feces according to the OIE Manual of Diagnostic Tests and Vaccines for Terrestrial Animals 2004, Chapter 2.10.13.
- ³⁾ Detection of VTEC in animals and food: identification of isolated strains as VTEC is usually based on PCR detection of vtx1 and vtx2 genes. Detection of VTEC in animal feces: ISO16654/2001 method adapted to feces according to the OIE Manual of Diagnostic Tests and Vaccines for Terrestrial Animals 2004, Chapter 2.10.13.
- ⁴⁾ Detection of VTEC in animals and food: identification of isolated strains as VTEC is usually based on PCR detection of vtx1 and vtx2 genes. Detection of VTEC in animal feces: ISO16654/2001 method adapted to feces according to the OIE Manual of Diagnostic Tests and Vaccines for Terrestrial Animals 2004, Chapter 2.10.13.
- ⁵⁾ Detection of VTEC in animals and food: identification of isolated strains as VTEC is usually based on PCR detection of vtx1 and vtx2 genes. Detection of VTEC in animal feces: ISO16654/2001 method adapted to feces according to the OIE Manual of Diagnostic Tests and Vaccines for Terrestrial Animals 2004, Chapter 2.10.13.

2.5 TUBERCULOSIS, MYCOBACTERIAL DISEASES

2.5.1 General evaluation of the national situation

2.5.2 Mycobacterium in animals

A. Mycobacterium bovis in bovine animals

Status as officially free of bovine tuberculosis during the reporting year

Free regions

Those recognized by the European Commission according to community legislation (i.e. Dir. 97/12/EC).

Province of Pescara (2006/169/CE);

Emilia Romagna Region (2007/174/CE);

Friuli-Venezia Giulia Region (2006/290/CE);

Provinces of Bergamo, Lecco, Sondrio (2003/467/CE), Como (2005/28/CE) in Lombardia Region;

Province of Ascoli Piceno in Marche Region (2003/467/CE);

Provinces of Novara, Verbania (2007/174/CE), Vercelli (draft 04/12/2007) in Piemonte Region;

Bolzano, Trento provinces (2003/467/CE);

Provinces of Grosseto (2004/230/CE), Prato (2005/28/CE), Livorno, Lucca, Siena (2007/174/CE) , Pisa, Pistoia (draft 04/12/2007) in Toscana

Region;

Province of Oristano (2009/342/CE);

Veneto Region (2008/404/CE);

Updated to 26th May 2010

Additional information

Under Approval at next SCoFAH 01-02 June 2010

Toscana Region (whole region);

Lombardia Region (whole region);

Monitoring system

Frequency of the sampling

National compulsory eradication program based on a single intradermal skin test according to EU legislation for OTF regions; almost annually

for the remaining regions.

Post mortem meat inspection.

Single skin test According to EC legislation for OTF regions; almost annually for the remaining regions

Type of specimen taken

Other: ____ Type of specimen taken: lymph nodes and organs from TB lesions at abattoir. Blood samples for gamma interferon test according to EU

legislation.

Case definition

In OTF regions according to EU legislation.

In the remaining regions when the single skin test is positive.

Isolation of *M. bovis* from organs and/or lymph nodes coming from the active surveillance carried out in the slaughterhouses.

Diagnostic/analytical methods used

Isolation and bacteriological identification is performed by standard methods according to the chapter 2.4.7 of the OIE manual (2008).

Molecular identification and subtyping of *Mycobacterium bovis* is performed by in-house standardized methods (Boniotti et al. 2009, J. Clin.

Microbiol. 47:636-644).

Vaccination policy

None

Control program/mechanisms

The control program/strategies in place

National control program: all cattle over 6 weeks of age are tested once a year in all officially free herds; 2 negative testing are carried out at a

distance of 6 months in order to gain the qualification. Official post mortem examination is performed in all slaughtered cattle with obligatory

report to the competent Local Veterinary Services.

The control measures reported in Annex A, Chapter I, point 2, letter c), third paragraph of Decision 98/46/EC (i.e. post mortem examination in

the slaughterhouse only, with testing of all animals entering an holding inside of the officially free province-region) are applied in Bolzano,

Trento and Friuli Venezia Giulia.

Extraordinary TB eradication regional programs are always approved by National Authorities.

Recent actions taken to control the zoonoses

Annually control by single skin test is performed in dairy herds producing and commercializing raw milk for human consumption also in OTF

regions.

In TB outbreak Mantoux test is carried out on the farm workers and family member.

Suggestions to the Community for the actions to be taken

It is suggested to implement a monitoring plan through a targeted sampling in OTF member States

Notification system in place

The disease is notifiable since 1954.

Each declaration of infected herd is reported by the Local Veterinary Service to the local Health Authority (Mayor of the Municipality). A final report is sent to the Ministry of Health, according to Decision 2008/940, every 6 months from Non officially free regions. A final report is sent from officially free Regions once a year to the Ministry of Health, as foreseen by Decision 2003/886.

National evaluation of the recent situation, the trends and sources of infection

There are endemic areas (Sicilia, Calabria, Campania, Puglia); recently (2007-2008) clusters of new outbreaks were identified in some

regions/provinces (Valle d'Aosta, Sardegna, Trento).

Table Tuberculosis in other animals

	Source of information	Sampling unit	Units tested	Total units positive for Mycobacterium	M. bovis	M. tuberculosis	Mycobacterium spp., unspecified
Sheep		Animal	33	1	0	0	1
Birds - wild		Animal	70	4	0	0	4
Cattle (bovine animals)		Herd	871	330	21	1	308
Water buffalos - Control and eradication programmes		Herd	2133	36	0	0	36
Water buffalos - farmed - Control and eradication programmes		Animal	302678	567	0	0	567
Wild animals		Animal	41	7	0	3	4
Wild boars - wild		Animal	225	49	2	2	45

Table Bovine tuberculosis - data on herds - Community co-financed eradication programmes

Region	Total number of herds	Total number of herds under the programme	Number of herds checked	Number of positive herds	Number of new positive herds	Number of herds depopulated	% positive herds depopulated	Indicators		
								% herd coverage	% positive herds Period herd prevalence	% new positive herds Herd Incidence
Abruzzo	4574	3245	2809	6	5	0	0	86.56	.21	.18
Basilicata	3143	3048	3009	22	12	3	13.64	98.72	.73	.4
Calabria	7827	6794	6794	49	25	3	6.12	100	.72	.37
Campania	12297	9705	9496	42	30	1	2.38	97.85	.44	.32
Lazio	12587	7619	7528	23	17	6	26.09	98.81	.31	.23
Liguria	1750	1227	1225	0	0	0	N.A.	99.84	0	0
Lombardia	13647	4079	4079	2	1	0	0	100	.05	.02
Marche	4769	1987	1986	0	0	0	N.A.	99.95	0	0
Molise	3152	2574	2574	2	2	0	0	100	.08	.08
Piemonte	15118	10094	10094	8	5	1	12.5	100	.08	.05
Puglia	4607	4469	4388	27	24	3	11.11	98.19	.62	.55
Sardegna	9136	5643	5629	16	11	0	0	99.75	.28	.2
Sicilia	10844	10585	10551	391	264	1	.26	99.68	3.71	2.5

Table Bovine tuberculosis - data on herds - Community co-financed eradication programmes

Toscana	2104	680	680	0	0	0	N.A.	100	0	0
Umbria	4031	1988	1988	4	4	0	0	100	.2	.2
Valle d'Aosta/Vallée d'Aoste	1199	1124	1124	18	7	0	0	100	1.6	.62
Total : ¹⁾	110785	74861	73954	610	407	18	2.95	98.79	.82	.55

Comments:

¹⁾ N.A.

Footnote:

In the tables of bovine tuberculosis, bovine brucellosis and small ruminant brucellosis pertaining to MSs with cofinanced programmes, the data were submitted to EFSA according to the same criteria for the submission to the European Commission.

Table Bovine tuberculosis - data on animals - Community co-financed eradication programmes

Region	Total number of animals	Number of animals to be tested under the programme	Number of animals tested	Number of animals tested individually	Number of positive animals	Slaughtering		Indicators	
						Number of animals with positive result slaughtered or culled	Total number of animals slaughtered	% coverage at animal level	% positive animals - animal prevalence
Abruzzo	37181	33184	30062	30062	53	12	12	90.59	.18
Basilicata	87017	84375	84173	84173	127	94	178	99.76	.15
Calabria	116902	106814	106814	106814	197	196	200	100	.18
Campania	200551	176935	174616	174616	412	412	437	98.69	.24
Lazio	242747	212581	212574	212574	235	222	315	100	.11
Liguria	15801	14083	14080	14080	0	0	0	99.98	0
Lombardia	1370946	541453	541453	541453	1	0	0	100	0
Marche	56747	47363	47262	50262	0	0	0	99.79	0
Molise	49086	44606	44606	44806	16	16	16	100	.04
Piemonte	794086	526060	514779	514779	358	260	362	97.86	.07
Puglia	180167	179053	176756	176756	315	315	339	98.72	.18
Sardegna	264606	116108	115557	123924	29	29	29	99.53	.03
Sicilia	379474	369556	367756	367756	4341	4005	4624	99.51	1.18

Table Bovine tuberculosis - data on animals - Community co-financed eradication programmes

Toscana	32628	17114	17114	22387	0	0	0	100	0
Umbria	65154	49099	49099	49099	6	6	6	100	.01
Valle d'Aosta/Vallée d'Aoste	42140	30221	30221	30221	42	42	42	100	.14
Total : ¹⁾	3935233	2548605	2526922	2543762	6132	5609	6560	99.15	.24

Comments:

¹⁾ N.A.

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

Region	Total number of existing bovine		Officially free herds		Infected herds		Routine tuberculin testing		Number of tuberculin tests carried out before the introduction into the herds (Annex A(I)(2)(c) third indent (1) of Directive 64/432/EEC)	Number of animals with suspicious lesions of tuberculosis examined and submitted to histopathological and bacteriological	Number of animals detected positive in bacteriological examination
	Herds	Animals	Number of herds	%	Number of herds	%	Interval between routine tuberculin tests	Number of animals tested			
Ascoli Piceno	700	11146	700	100	0	0	every two years	5871	282	0	0
Bolzano-Bozen	8538	144295	8538	100	0	0	no routine test	20244	0	14	0
Emilia-Romagna	7275	470380	7271	99.95	4	.05	every two years	263607	26818	5	13
Friuli-Venezia Giulia	2481	91297	2480	99.96	1	.04	no routine test	0	2865	2	2
Lombardia	4092	199262	4092	100	1	.02	every two years	97965	6135	0	4
Oristano	1523	64687	1523	100	0	0	every two years	0	0	0	0
Pescara	836	14100	836	100	0	0	every two years	7633	0	0	0
Piemonte	604	11283	1052	174.17	0	0	every two years	11283	1254	0	0
Toscana	776	26283	776	100	0	0	every three years	26283	657	6	0
Trento	1508	44440	1504	99.73	4	.27	once a year	38588	2123	0	0
Veneto	7787	325494	7787	100	0	0	every three years	0	0	0	0
Total : ¹⁾	36120	1402667	36559	101.22	10	.03	N.A.	471474	40134	27	19

Comments:

Table Bovine tuberculosis in countries and regions that do not receive Community co-financing for eradication programmes¹⁾ N.A.

Table Bovine tuberculosis - data on status of herds at the end of the period - Community co-financed eradication programmes

Region	Status of herds and animals under the programme													
	Total number of herds and animals under the programme		Unknown		Not free or not officially free				Free or officially free suspended		Free		Officially free	
					Last check positive		Last check negative							
	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals
Abruzzo	3245	54501	10	642	5	322	2	15	403	2480	0	0	2825	51042
Basilicata	3033	84375	25	217	4	240	6	271	0	0	0	0	2998	83647
Calabria	6794	106814	0	0	19	267	20	470	1	29	0	0	6754	106048
Campania	9680	177627	197	2127	13	285	110	2334	0	0	0	0	9360	172881
Lazio	7620	212613	85	2044	11	914	3	511	9	354	0	0	7512	208790
Liguria	1227	14083	2	3	0	0	0	0	0	0	0	0	1225	14080
Lombardia	7513	1022328	0	0	0	0	0	0	1	33	0	0	7512	1022295
Marche	2257	47893	0	0	0	0	0	0	1	70	0	0	2256	47823
Molise	2574	44606	0	0	0	0	1	115	2	79	0	0	2571	44412
Piemonte	10738	538239	0	0	0	0	2	289	1	175	0	0	10735	537775
Puglia	4469	179053	81	2297	5	404	6	101	1	45	0	0	4376	176206
Sardegna	5909	124714	5	365	7	388	52	2146	10	208	0	0	5835	121607
Sicilia	10385	368485	5	212	162	13057	553	25458	31	2125	0	0	9634	327633

Table Bovine tuberculosis - data on status of herds at the end of the period - Community co-financed eradication programmes

Toscana	680	17114	0	0	0	0	0	0	0	0	0	0	680	17114
Umbria	1988	49099	0	0	1	65	1	60	0	0	0	0	1986	48974
Valle d'Aosta/Vallée d'Aoste	1124	30221	0	0	1	44	17	413	0	0	0	0	1106	29764
Total : ¹⁾	79236	3071765	410	7907	228	15986	773	32183	460	5598	0	0	77365	3010091

Comments:

¹⁾ N.A.

2.6 BRUCELLOSIS

2.6.1 General evaluation of the national situation

A. Brucellosis general evaluation

History of the disease and/or infection in the country

In the Italian regions, the control of brucellosis is carried out with periodic inspections, according to the current legislation, which is based on regional or provincial status.

For Campania, Calabria, Puglia and Sicily regions the national legislation (OM November 14, 2006), provides the control of all the cattle herds and the slaughtering of infected animals in short time in order to eliminate as quickly as possible the infection and to reduce the incidence and prevalence of disease in these regions, which is still very high.

The presence of a *Brucella abortus* 1 and 3 and of *Brucella melitensis* 3 during the year 2009, is a dangerous source of infection for humans, because in the four regions brucella has been isolated from milk and milk products. As a consequence, even the workers of farms and of slaughterhouses are at risk of infection

National evaluation of the recent situation, the trends and sources of infection

According to the national eradication control programs, the spread of disease is linked to the four regions under the OM november 14 2006, where the prevalence is very high. In other regions brucellosis is sporadic and closed to few herds.

The sources of infection for human are especially milk and milk products and it would be necessary to implement a systematic control of milk intended for processing plants.

It is important to remember the reporting of outbreaks of swine brucellosis, both in wild and farmed animals, although all isolates were identified as *Brucella suis* 2, which should not be pathogenic to humans.

2.6.2 Brucella in foodstuffs

Table Brucella in food

	Source of information	Sampling unit	Units tested	Total units positive for Brucella	B. abortus	B. melitensis	B. suis	Brucella spp., unspecified
Cheeses made from cows' milk - Surveillance - official controls - objective sampling		Single	26	0	0	0	0	0
Cheeses made from sheep's milk - Surveillance - official controls		Single	84	0	0	0	0	0
Cheeses made from sheep's milk - Surveillance - official controls - objective sampling		Single	253	0	0	0	0	0
Cheeses, made from mixed milk from cows, sheep and/or goats - Surveillance - official controls		Single	114	0	0	0	0	0
Cheeses, made from unspecified milk or other animal milk - Surveillance - official controls		Single	192	0	0	0	0	0
Dairy products (excluding cheeses) - Surveillance - official controls		Single	25	0	0	0	0	0
Dairy products (excluding cheeses) - dairy products, not specified - Surveillance - official controls		Single	422	0	0	0	0	0
Milk from other animal species or unspecified - Surveillance - HACCP and own checks		Single	717	0	0	0	0	0
Milk from other animal species or unspecified - Surveillance - official controls		Single	39	0	0	0	0	0
Milk, cows' - Surveillance - official controls		Single	25	0	0	0	0	0
Milk, cows' - Surveillance - official controls - objective sampling		Batch	401	0	0	0	0	0

Table Brucella in food

	Source of information	Sampling unit	Units tested	Total units positive for Brucella	B. abortus	B. melitensis	B. suis	Brucella spp., unspecified
Milk, sheep's - Surveillance - official controls - objective sampling		Single	188	0	0	0	0	0

2.6.3 Brucella in animals

Table Brucellosis in other animals

	Source of information	Sampling unit	Units tested	Total units positive for Brucella	B. abortus	B. melitensis	B. suis	Brucella spp., unspecified
Pigs		Herd	57	3	0	0	2	1
Dogs		Animal	220	11	0	0	0	11
Goats		Herd	75	4	0	0	0	4
Water buffalos - Control and eradication programmes		Animal	292289	6316	0	0	0	6316
Water buffalos - farmed		Animal	26	8	0	0	0	8
Water buffalos - farmed - Control and eradication programmes		Herd	2173	212	0	0		212
Wild animals		Animal	261	4	0	0	0	4
Wild boars - wild		Animal	267	0	0	0	0	0

Footnote:

Water buffalo herds are raised especially in the region Lazio and Campania

Table Ovine or Caprine brucellosis - data on herds - Community co-financed eradication programmes

Region	Total number of herds	Total number of herds under the programme	Number of herds checked	Number of positive herds	Number of new positive herds	Number of herds depopulated	% positive herds depopulated	Indicators		
								% herd coverage	% positive herds Period herd prevalence	% new positive herds Herd Incidence
Abruzzo	4914	4842	4213	2	1	1	50	87.01	.05	.02
Basilicata	6441	6432	5802	11	6	1	9.09	90.21	.19	.1
Calabria	9278	9168	9168	258	106	1	.39	100	2.81	1.16
Campania	7786	7437	6104	56	48	5	8.93	82.08	.92	.79
Emilia-Romagna	3471	2520	2417	2	2	0	0	95.91	.08	.08
Lazio	1591	1591	1195	1	1	0	0	75.11	.08	.08
Liguria	2074	2056	2056	0	0	0	N.A.	100	0	0
Molise	2365	1901	1901	0	0	0	N.A.	100	0	0
Puglia	3806	3778	3687	69	56	23	33.33	97.59	1.87	1.52
Sicilia	9113	9061	8992	1186	729	3	.25	99.24	13.19	8.11
Valle d'Aosta/Vallée d'Aoste	557	496	496	0	0	0	N.A.	100	0	0
Total : ¹⁾	51396	49282	46031	1585	949	34	2.15	93.4	3.44	2.06

Comments:

¹⁾ N.A.

Table Ovine or Caprine brucellosis - data on herds - Community co-financed eradication programmes

Footnote:
In the tables of bovine tuberculosis, bovine brucellosis and small ruminant brucellosis pertaining to MSs with cofinanced programmes, the data were submitted to EFSA according to the same criteria for the submission to the European Commission.

Table Ovine or Caprine brucellosis - data on animals - Community co-financed eradication programmes

Region	Total number of animals	Number of animals to be tested under the programme	Number of animals tested	Number of animals tested individually	Number of positive animals	Slaughtering		Indicators	
						Number of animals with positive result slaughtered or culled	Total number of animals slaughtered	% coverage at animal level	% positive animals - animal prevalence
Abruzzo	204266	202705	171630	155890	3	1	1	84.67	0
Basilicata	400207	321719	309779	205471	371	361	425	96.29	.12
Calabria	461025	448246	448246	448246	4367	4358	4358	100	.97
Campania	285384	254950	240878	240868	861	781	934	94.48	.36
Emilia-Romagna	86375	75789	69109	69109	2	2	2	91.19	0
Lazio	80702	80702	58922	58922	1	1	1	73.01	0
Liguria	19985	19079	19079	16677	0	0	0	100	0
Molise	52371	50205	50205	41389	0	0	0	100	0
Puglia	390672	368986	360012	360449	3721	3721	7730	97.57	1.03
Sicilia	1046188	977289	966153	966153	39736	37159	37864	98.86	4.11
Valle d'Aosta/Vallée d'Aoste	8369	6031	6031	6031	0	0	0	100	0
Total : ¹⁾	3035544	2805701	2700044	2569205	49062	46384	51315	96.23	1.82

Comments:

¹⁾ N.A.

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

Region	Total number of existing		Officially free herds		Infected herds		Surveillance			Investigations of suspect cases				
	Herds	Animals	Number of herds	%	Number of herds	%	Number of herds tested	Number of animals tested	Number of infected herds	Number of animals tested with serological blood tests	Number of animals positive serologically	Number of animals examined microbiologically	Number of animals positive microbiologically	Number of suspended herds
Bolzano-Bozen	4354	68868	4354	100	0	0	4354	32596	0	69	0	0	0	1
Friuli-Venezia Giulia	896	14125	896	100	0	0	246	960	0	0	0	0	0	0
Isernia	1351	37355	1351	100	0	0	703	22081	0	0	0	0	0	0
Lazio	2416	135955	2401	99.38	1	.04	2416	135955	3	650	30	0	0	2
Lombardia	11888	182534	11886	99.98	2	.02	5996	84926	2	1418	487	14	4	2
Marche	3533	173204	3533	100	0	0	1521	95620	0	0	0	0	0	0
Pescara	1383	32341	1383	100	0	0	1316	27539	0	27539	0	0	0	0
Piemonte	1921	89007	8350	434.67	0	0	1921	53045	0	234	42	10	0	32
Sardegna	14128	2796705	14127	99.99	2	.01	2175	119568	2	32652	2	8	0	1
Savona	528	5862	528	100	0	0	528	5862	0	5862	0	0	0	0
Toscana	1390	57605	1390	100	0	0	1390	57605	0	45	0	10	0	0
Trento	983	33154	983	100	0	0	983	31101	0	31101	0	0	0	0
Umbria	3099	136172	3099	100	0	0	875	19102	0	0	0	0	0	0

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

Veneto	2342	57356	2342	100	0	0	876	34614	0	0	0	0	0	0
Total : ¹⁾	50212	3820243	56623	112.77	5	.01	25300	720574	7	99570	561	42	4	38

Comments:

¹⁾ N.A.

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

Region	Total number of existing bovine		Officially free herds		Infected herds		Surveillance						Investigations of suspect cases								
	Herds	Animals	Number of herds	%	Number of herds	%	Serological tests			Examination of bulk milk			Information about			Epidemiological investigation					
							Number of bovine herds tested	Number of animals tested	Number of infected herds	Number of bovine herds tested	Number of animals or pools tested	Number of infected herds	Number of notified abortions whatever cause	Number of isolations of Brucella infection	Number of abortions due to Brucella abortus	Number of animals tested with serological blood tests	Number of suspended herds	Number of positive animals		Number of animals examined microbiologically	Number of animals positive microbiologically
																		Sero logically	BST		
Bolzano-Bozen	8538	144295	8538	100	0	0	3351	23844	0	5180	115430	0	11	0	0	543	27	0	0	10	0
Emilia-Romagna	7275	470380	7275	100	0	0	1924	50003	0	3910	10619	0	77	0	0	1950	11	12	0	25	0
Friuli-Venezia Giulia	2481	85070	2481	100	0	0	580	10873	0	0	0	0	0	0	0	0	0	0	0	0	0
Imperia	362	5467	362	100	0	0	362	5467	0	0	0	0	0	0	0	2842	0	0	0	0	0
Lombardia	11588	1010789	11588	100	1	.01	6678	472466	1	2721	414019	1	128	0	0	1080	1	3	0	0	0
Marche	2427	40371	2426	99.96	0	0	2426	38037	0	0	0	0	8	0	0	0	1	0	0	0	0
Pescara	836	14100	836	100	0	0	457	7633	0	0	0	0	0	0	0	7633	0	0	0	0	0
Piemonte	3522	106240	11776	334.36	0	0	2967	64047	0	555	42193	0	189	0	0	362	22	25	0	2	0
Rieti	2011	73821	2011	100	0	0	793	10952	0	0	0	0	0	0	0	0	0	0	0	0	0
Sardegna	9102	264596	9097	99.95	1	.01	2343	38318	1	47	4535	0	0	0	0	21781	5	1	0	0	0
Toscana	1208	21753	1208	100	0	0	1208	21753	0	0	0	0	15	0	0	1	0	0	0	0	0
Trento	1508	44440	1507	99.93	1	.07	1432	34008	1	0	0	0	308	0	1	34008	0	5	0	7	3
Umbria	1990	31349	1990	100	0	0	743	13567	0	0	0	0	0	0	0	0	0	0	0	0	0

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

Veneto	7787	197603	7787	100	0	0	1088	11749	0	1075	66702	0	328	0	0	0	0	0	0	0	0
Total : ¹⁾	60635	2510274	68882	113.6	3	0	26352	802717	3	13488	653498	1	1064	0	1	70200	67	46	0	44	3

Comments:

¹⁾ N.A.

Table Bovine brucellosis - data on herds - Community co-financed eradication programmes

Region	Total number of herds	Total number of herds under the programme	Number of herds checked	Number of positive herds	Number of new positive herds	Number of herds depopulated	% positive herds depopulated	Indicators		
								% herd coverage	% positive herds Period herd prevalence	% new positive herds Herd Incidence
Abruzzo	4514	3005	2606	11	6	2	18.18	86.72	.42	.23
Basilicata	3143	3011	3001	64	30	4	6.25	99.67	2.13	1
Calabria	7383	6139	6139	253	93	4	1.58	100	4.12	1.51
Campania	12297	9630	9443	121	81	3	2.48	98.06	1.28	.86
Lazio	10596	6165	6096	3	3	1	33.33	98.88	.05	.05
Liguria	951	772	772	0	0	0	N.A.	100	0	0
Molise	3152	2207	2207	8	7	0	0	100	.36	.32
Puglia	4313	3976	3895	53	41	5	9.43	97.96	1.36	1.05
Sicilia	10878	10602	10588	712	583	0	0	99.87	6.72	5.51
Valle d'Aosta/Vallée d'Aoste	1199	1138	1138	0	0	0	N.A.	100	0	0
Total : ¹⁾	58426	46645	45885	1225	844	19	1.55	98.37	2.67	1.84

Comments:

¹⁾ N.A.

Footnote:

In the tables of bovine tuberculosis, bovine brucellosis and small ruminant brucellosis pertaining to MSs with cofinanced programmes, the data were submitted to EFSA according to the same criteria for the submission to the European Commission.

Table Bovine brucellosis - data on animals - Community co-financed eradication programmes

Region	Total number of animals	Number of animals to be tested under the programme	Number of animals tested	Number of animals tested individually	Number of positive animals	Slaughtering		Indicators	
						Number of animals with positive result slaughtered or culled	Total number of animals slaughtered	% coverage at animal level	% positive animals - animal prevalence
Abruzzo	58312	37445	34786	34786	90	90	90	92.9	.26
Basilicata	81713	67912	67461	67461	395	374	396	99.34	.59
Calabria	106895	77431	76861	76861	853	850	1093	99.26	1.11
Campania	200551	142078	139968	56320	744	733	1035	98.51	.53
Lazio	189861	132147	130203	130203	6	6	6	98.53	0
Liguria	8990	5584	5584	5732	0	0	0	100	0
Molise	49086	29275	29275	29975	53	50	50	100	.18
Puglia	172601	127461	125939	125939	351	351	464	98.81	.28
Sicilia	371242	312526	311010	311010	4067	3345	4226	99.51	1.31
Valle d'Aosta/Vallée d'Aoste	42140	24516	24516	24516	0	0	0	100	0
Total : ¹⁾	1281391	956375	945603	862803	6559	5799	7360	98.87	.69

Comments:

¹⁾ N.A.

Table Bovine brucellosis - data on status of herds at the end of the period - Community co-financed eradication programmes

	Status of herds and animals under the programme													
	Total number of herds and animals under the programme		Unknown		Not free or not officially free				Free or officially free suspended		Free		Officially free	
					Last check positive		Last check negative							
Region	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals
Abruzzo	3046	37445	8	172	8	336	2	2	440	2485	0	0	2588	34450
Basilicata	3015	67912	11	113	24	1255	35	1090	0	0	0	0	2945	65454
Calabria	6139	77431	0	0	75	1821	67	1217	28	408	0	0	5969	73985
Campania	9648	174648	187	2032	50	2625	383	5817	0	0	0	0	9028	164174
Lazio	6165	144322	90	991	3	27	0	0	1	178	0	0	6071	143126
Liguria	865	5584	0	0	0	0	0	0	0	0	0	0	865	5584
Molise	2207	29275	0	0	4	110	2	28	0	0	0	0	2201	29137
Puglia	3976	127461	81	1522	14	562	4	132	0	0	0	0	3877	125245
Sicilia	10406	293293	5	202	188	9998	672	23603	102	3687	0	0	9439	255803
Valle d'Aosta/Vallée d'Aoste	1138	24516	0	0	0	0	0	0	0	0	0	0	1138	24516
Total : ¹⁾	46605	981887	382	5032	366	16734	1165	31889	571	6758	0	0	44121	921474

Comments:

¹⁾ N.A.

Table Ovine or Caprine brucellosis - data on status of herds at the end of the period - Community co-financed eradication programmes

Region	Status of herds and animals under the programme													
	Total number of herds and animals under the programme		Unknown		Not free or not officially free				Free or officially free suspended		Free		Officially free	
					Last check positive		Last check negative							
	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals
Abruzzo	4842	202705	180	4587	2	537	23	126	433	26388	0	0	4204	171067
Basilicata	6432	321719	631	10268	7	805	13	1194	0	0	0	0	5781	309452
Calabria	9168	438306	0	0	83	4726	327	5406	8	741	0	0	8750	427433
Campania	7425	264262	1327	13879	16	4373	54	4752	0	0	0	0	6028	241258
Emilia-Romagna	2520	75789	27	269	0	0	10	49	1	4	0	0	2482	75467
Lazio	1591	80702	396	21779	1	11	0	0	0	0	0	0	1194	58912
Liguria	1625	15611	0	0	0	0	0	0	0	0	0	0	1625	15611
Molise	1901	50205	0	0	0	0	0	0	0	0	0	0	1901	50205
Puglia	3778	368986	91	9101	8	1586	13	2062	0	0	0	0	3666	356237
Sicilia	8925	962206	0	0	500	130678	864	135043	139	16955	906	110054	6516	569476
Valle d'Aosta/Vallée d'Aoste	496	6031	0	0	0	0	0	0	0	0	0	0	496	6031
Total : ¹⁾	48703	2786522	2652	59883	617	142716	1304	148632	581	44088	906	110054	42643	2281149

Comments:

¹⁾ N.A.

2.7 YERSINIOSIS

2.7.1 General evaluation of the national situation

A. Yersinia enterocolitica general evaluation

History of the disease and/or infection in the country

In Italy *Yersinia enterocolitica*, is rarely involved in food born transmission; infection is often acquired eating contaminated food, especially undercooked pork meat or drinking contaminated unpasteurized milk. Its incidence in Italy is not known. Data on Yersiniosis cases in food or animals are not collected

National evaluation of the recent situation, the trends and sources of infection

Yersinia enterocolitica is occasionally associated with foodborne human disease. Data from 2008 zoonoses report showed *Y. enterocolitica*

infection in pig fresh meat, pig meat preparation and pig meat products.

Results from official samplings performed in 2009 showed that principal food contaminated with *Y. enterocolitica* were: meat preparation, gastronomic preparation, minced meat. In fresh meat and vegetable prevalence is very low.

At present, official data about prevalence of Yersiniosis in Italian farms are not available but *Y. enterocolitica* was isolated predominantly in cattle and pig.

Differentiation between non pathogenetic and pathogenetic strains of *Y. enterocolitica* are not reported.

Relevance of the findings in animals, feedingstuffs and foodstuffs to human cases (as a source of infection)

The importance of *Yersinia enterocolitica* in contamination routes is still not clear

A number of different foods can vehicle *Yersinia enterocolitica* to consumers: fresh meat (pig, cattle, sheep) ready-to-eat meat

pig products, cheeses, unpasteurized milk. Raw meats are also easily contaminated, but a thoroughly cooking process is usually sufficient to inactivate this microorganism.

Recent actions taken to control the zoonoses

There is no action taken in Italy for the control of this zoonoses.

Suggestions to the Community for the actions to be taken

The epidemiology of the infection, the distribution of serotypes and the importance of transmission between animal and men need to be more fully understood.

Additional information

Only pathogenetic *Yersinia enterocolitica* strain (with indication of their serotype) should be included when reporting on the occurrence in animals, food and human cases.

2.7.2 Yersiniosis in humans

A. Yersiniosis in humans

Reporting system in place for the human cases

It's in progress an information system based on the implementation of the Decision of the European Commission of 28 April 2008, of the Decision 2002/253 and the Decision of the European Parliament and Council N. 2119/98, for the surveillance of infectious and pervasive diseases, and also provides a specific definition of a case.

Diagnostic/analytical methods used

Y. enterocolitica infections are generally diagnosed by detecting the organism in the stools but a stool culture for it is not systematically requested and performed. Many laboratories do not routinely test for *Y. Enterocolitica*, so it's important to notify laboratory personnel when infection with this bacterium is suspected so that special tests can be done. The organism can also be recovered from other sites, including joint fluid, urine, bile and blood. Samples are directly inoculated on solid selective media. Characteristic colonies are selected to be submitted to biochemical tests for final confirmation. In isolated study, the serotypes most commonly isolated in Italy from human results O:3 and O:9.

Notification system in place

Yersiniosis is a disease subject to notification on the basis of the Ministerial Decree 15 December 1990: in class II (non-infectious diarrhea, different from salmonella), in class IV if it occurs in the form of an outbreak and in class V as a cluster of cases of unspecified diseases among the other classes of the decree, to send yearly.

2.7.3 Yersinia in foodstuffs

Table Yersinia in food

	Source of information	Sampling unit	Sample weight	Units tested	Total units positive for Yersinia	Y. enterocolitica	Y. pseudotuberculosis	Yersinia spp., unspecified	Y. enterocolitica - O:3	Y. enterocolitica - O:9	Y. enterocolitica - Y. enterocolitica, unspecified
Meat from bovine animals - fresh		Batch		111	0						
Meat from bovine animals - meat products		Single		31	0						
Meat from pig - fresh		Batch		135	0						
Meat from pig - meat products		Single		31	0						
Milk, cows' - raw milk for manufacture - intended for manufacture of raw or low heat-treated products		Single		29	0						
Vegetables		Single		26	2	1		1			1
Live bivalve molluscs		Single		117	0						
Meat from other animal species or not specified - fresh		Single		218	2	2					2
Meat from other animal species or not specified - meat preparation		Single		77	4	4					4
Meat from other animal species or not specified - meat products		Single		117	1	1					1
Meat from other animal species or not specified - minced meat		Single		44	2	2					2
Meat from other animal species or not specified - offal		Single		39	6	1		5			1
Other processed food products and prepared dishes		Single		50	2	2					2

2.7.4 Yersinia in animals

A. Yersinia enterocolitica in pigs

Vaccination policy

Vaccination was not used.

Other preventive measures than vaccination in place

There aren't other preventive measures than vaccination in place.

Control program/mechanisms

The control program/strategies in place

No control program are in place at National level.

Recent actions taken to control the zoonoses

No action was taken

Additional information

Diagnostic/analytical methods used: ISO 10273:2003 method for the detection of pathogenetic Y. enterocolitica in food is also be applied to lymphatic tissues such as tonsils.

Commercially available identification system is widely used for strain of Yersinia. Serotyping of the most isolated strain was performed with commercial antisera. Identification Polymerase chain reaction (PCR) is used for the identification of pathogenic isolates.

Table Yersinia in animals

	Source of information	Sampling unit	Units tested	Total units positive for Yersinia	Y. enterocolitica	Y. pseudotuberculosis	Yersinia spp., unspecified	Y. enterocolitica - O:3	Y. enterocolitica - O:9	Y. enterocolitica - Y. enterocolitica, unspecified
Cattle (bovine animals)		Animal	460	96	69	24	3			69
Goats		Flock	26	8			8			
Pigs		Animal	34	0						
Sheep		Animal	218	55			55			
Birds - wild		Animal	417	0						
Hares - wild		Animal	65	7	1	5	1			1
Water buffalos		Animal	383	160	34		126			34
Wild animals		Animal	44	2	2					2

2.8 TRICHINELLOSIS

2.8.1 General evaluation of the national situation

A. Trichinellosis general evaluation

National evaluation of the recent situation, the trends and sources of infection

Since 2009, parasites of the genus *Trichinella* were not found in domestic Suidae and in horses.

Trichinella larvae were found in five wolves, a fox and a boar.

Currently in Italy, *T. britovi* is circulating in wild carnivores (foxes, wolves and mustelids) with a lower prevalence of 0.5%. In the wild boar population, the prevalence is less than 0.1%. In addition the animals positive for *T. britovi* were observed only in mountain areas above 500 m. Among the livestock susceptible to the parasite, *Trichinella* has been found only in animals in contact with wilds, such as in Suidae in wild state or breeding in family farms.

T. britovi affects Suede, rats and man less than *T. spiralis*, and the risk for Suede to acquire the infestation is very low.

Recent actions taken to control the zoonoses

Since 2006, in agreement with the EU regulation 2075/2005, the number of *Trichinella*-susceptible animals (both domestic and sylvatic) has been greatly increased. Furthermore, animals have been tested with validated methods. The personnel performing the tests has been trained and a number of laboratories (both public and private) participate to proficiency tests.

2.8.2 Trichinellosis in humans

A. Trichinellosis in humans

Reporting system in place for the human cases

According to Governmental Decree 15 December 1990, Trichinellosis must be notified in the first class of the infectious disease, because of the particular interest in health. Trichinellosis should be notified to international organizations.

Case definition

According to the EC Decision of 28 April 2008, the case definition must meet clinical, epidemiological and laboratory criteria.

The clinical criterion is the presence of at least three of the following manifestations: fever, myalgia, diarrhea, facial edema, eosinophilia, bleeding nail and sub-retinal. The epidemiological criteria are represented by exposure to a common source of infection or contaminated food (meat).

The laboratory criteria are established by satisfying at least one of these criteria: demonstration of *Trichinella* larvae in muscle tissue obtained by biopsy or specific antibody response to *Trichinella* (IFA test, ELISA or Western blot)

For the epidemiological surveillance of human, should be considered the probable case in which they met the clinical criteria, the epidemiological and laboratory confirmation. Currently only the confirmed cases should be notified to the Ministry of Health.

Diagnostic/analytical methods used

Detection of anti-*Trichinella* IgG in the human serum by a validated ELISA using excretory/secretory antigens. ELISA positive sera are confirmed with Western blot validated

History of the disease and/or infection in the country

From the '50s to 2009, Italy have been 1,422 *Trichinella* infestation in humans: 89 cases (six outbreaks) were caused by the consumption of uncontrolled meat of hunted wild boar, 11 cases (2 outbreaks) for consumption of meat of hunted foxes, 110 cases (three outbreaks) for consumption of uncontrolled meat of breeding boars, 163 (9 outbreaks) for consumption of uncontrolled meat from breeding pigs, 11 cases (2 outbreaks) for consumption of uncontrolled pig meat imported from Romania, 1,038 cases (7 outbreaks) for consumption of horse meat imported from Eastern European countries.

2.8.3 Trichinella in animals

A. Trichinella in horses

Monitoring system

Sampling strategy

Italy does not currently have in place specific control programs because of the origin of most of the horses positive for Trichinella (EU countries) and their destination (meat production). Muscle samples from Trichinella-preferential muscles (according to the Commission regulation 2075/2005) are collected from the horse carcass immediately after slaughtering from all slaughtered horses, by the slaughterhouse personnel.

Case definition

The sample is considered positive if one or more Trichinella larvae are detected after artificial digestion.

Diagnostic/analytical methods used

Magnetic stirrer method for pooled sample digestion

Mechanically assisted pooled sample digestion method/sedimentation technique

Automatic digestion method for pooled samples of up to 35 g

Results of the investigation including the origin of the positive animals

During 2009, no slaughtered horse in Italy resulted positive for Trichinella

Notification system in place

According to the Commission regulation 2075/2005, Trichinella infections in animals should be immediately notified.

B. Trichinella in pigs

Number of officially recognised Trichinella-free holdings

Since 31st of december 2009, the number of the holdings officially free from Trichinella registered in the National Bank of Data (BDN) is of 363.

The holdings officially free from Trichinella must be inspected by the local health units two times a year in order to maintain the status.

The local health unit must place at disposal of the other Authority the documents related to the inspections.

Officially recognised regions with negligible Trichinella risk

No region has been declared officially free from Trichinella

Monitoring system

Sampling strategy

General

All slaughtered pigs are tested according to the EU regulation 2075/2005

Sampling strategy

Muscle samples are collected from preferential muscles according to the EC regulation 2075/2005. Most of domestic Suidae are raised in Italy in integrated production systems with biosafety measures.

In Italy there are regional programs for monitoring of wildlife (boars, foxes, etc.).

All carcasses of Suidae slaughtered are inspected in accordance with the European Commission

Regulation 2075/2005

Methods of sampling (description of sampling techniques)

General

The muscle samples collected for Trichinella (in agreement with the European Commission Regulation 2075/2005) are drawn from all carcasses of Suidae at the slaughterhouse

Case definition

General

A pig is considered to be infected with Trichinella larvae when at least one larva is detected in the muscles after digestion and the larva is identified as belonging to the genus Trichinella at the National Reference Laboratory for Trichinella.

Diagnostic/analytical methods used

General

The Magnetic stirrer method for pooled sample digestion, the mechanically assisted pooled sample digestion method/sedimentation technique or the automatic digestion method for pooled samples of up to 35 g are used to detect Trichinella larvae in pig muscle tissues.

Measures in case of the positive findings or single cases

An epidemiological investigation is put in place to identify the source of infection, the type of breeding, to identify the etiological agent at the species level, and to destroy the infected carcass.

Results of the investigation including description of the positive cases and the verification of the Trichinella species

Fattening pigs raised under controlled housing conditions in integrated production system

No positive pig has been detected in Italy during 2009

National evaluation of the recent situation, the trends and sources of infection

Since *Trichinella* infection has been detected only in very few free-ranging or backyard pigs (27 animals) from 1959 when the investigation became mandatory in Italy, there is strong epidemiological evidence which supports that pigs from controlled housing conditions in integrated production systems, i.e. most of pigs reared in Italy, are *Trichinella*-free. The prevalence of the infection in domestic pigs in Italy is negligible.

During the 1959-2009 years, about 510 million of pigs have been slaughtered (about 10 million/year) and only 27 pigs resulted positive for the parasite (0,0000054% prevalence).

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

The requirement to test carcasses Suidae also demonstrated a substantial reduction of *Trichinella* infestation in humans. It would be possible to reduce controls on pigs reared under controlled conditions in integrated production systems, while enhancing control of Suidae:

1. kept free;
2. from family farms;
3. hunted;

whether they are for trade or for direct consumption of the owner / breeder / hunter.

Table Trichinella in animals

	Source of information	Sampling unit	Units tested	Total units positive for Trichinella	T. spiralis	Trichinella spp., unspecified
Foxes		Animal	1022	1	0	1
Pigs		Animal	5268922	0	0	0
Pigs - breeding animals - unspecified - sows and boars		Animal	26175	0	0	0
Pigs - fattening pigs - raised under controlled housing conditions in integrated production system		Animal	3944933	0	0	0
Solipeds, domestic		Animal	1521	0	0	0
Solipeds, domestic - horses		Animal	13485	0	0	0
Wild boars - farmed		Animal	594	0	0	0
Wild boars - wild		Animal	42294	3	0	3
Birds - wild		Animal	1743	0	0	0
Cattle (bovine animals)		Herd	68	0	0	0
Deer - wild - red deer		Animal	137	0	0	0
Other animals - unspecified		Animal	328	0	0	0
Pigs - mixed herds		Animal	1045	0	0	0
Wild animals		Animal	91	0	0	0
Wolves - wild		Animal	38	3	0	3

2.9 ECHINOCOCCOSIS

2.9.1 General evaluation of the national situation

A. Echinococcus spp. general evaluation

History of the disease and/or infection in the country

Until now, in Italy, the following agents of Cystic echinococcosis (CE) have been identified: *Echinococcus granulosus sensu stricto* (genotypes G1, G2, G3), *E. equinus* (G4), *E. ortleppi* (G5), and pig strain (G7). CE has been reported in farmed animals, dogs, wildlife (mainly wolves and wild-boars), and in humans. *E. multilocularis* (Alveolar echinococcosis) has been reported in foxes. It is not present in other animals (although some wrong reports were notified in recent years) or in humans.

National evaluation of the recent situation, the trends and sources of infection

No case of acute CE has ever been reported, so incidence is generally related to the first diagnosis of the disease, irrespective of cyst stage.

Reports based on surgery-based surveys are known to greatly underestimate rates of infection. Several papers published in the last years evaluated a mean incidence of 1.3 cases/100,000 inhabitants in Italy.

In confirmed cases the Local Health Unit transmits the information by electronic record to the Region, which in turn will transmit the data to the Ministry of Health.

The epidemiological situation of animal CE in Italy has been presented mainly reviewing recent surveys and studies carried out on MIUR National Projects, PHD research or other regional or local research plans.

So, at the moment, the most reliable epidemiological information is based on research data.

Relevance of the findings in animals, feedingstuffs and foodstuffs to human cases (as a source of infection)

High prevalences of CE in adult sheep have been reported in different Italian provinces, irrespective of area of origin, and in alpine

areas previously considered ipoendemic. High and unexpected prevalences were found at necropsy in sheep (15%; cyst fertility 98%) and in wolves (2 out of 4 animals) from some alpine valleys, where previously 27% of shepherd dogs resulted positive by coproantigen test.

The sheep-dog cycle is the most important way of diffusion followed by the parasite

Recent actions taken to control the zoonoses

CE control programmes have been implemented in some regions. Treatment of dogs in dog-shelters is required by law.

2.9.2 Echinococcosis in humans

A. Echinococcus spp. in humans

Reporting system in place for the human cases

The notification of the disease is mandatory, based on the Decree 15th December 1990, in the class V of the infective diseases.

This class V, who collects the annual reports of clusters of disease cases not specified in the other classes of the same decree, has been sadly neglected by the Regions in reporting.

Surveys also were conducted through consultation of hospital discharge records, which do not allow to obtain complete data for follow up of the patient, the correlation between time of onset, the work of the patient, etc..

In the last 5 years, human cases of echinococcosis were not notified to the Ministry of Health. The available data are those derived from research studies and surgical reports (as in doc EFSA).

Case definition

According to the current case definition (Commission Decision of 28 April 2008) the possible and probable cases are not relevant, while confirmed cases are, namely cases that meet at least one of these diagnostic criteria:

organ lesions detected by imaging techniques (ultrasound, CT, MRI)

high antibody titer obtained by laboratory methods with high sensitivity

Direct visualization of scolex proto liquid or cystic lesions in organ
reflected in surgical specimens of pathognomonic gross lesions.

History of the disease and/or infection in the country

Until now, in Italy, the following agents of Cystic echinococcosis (CE) have been identified: *Echinococcus granulosus sensu stricto* (genotypes G1, G2, G3), *E. equinus* (G4), *E. ortleppi* (G5), and pig strain (G7). CE has been reported in farmed animals, dogs, wildlife (mainly wolves and wild-boars), and in humans. *E. multilocularis* (Alveolar echinococcosis) has been reported in foxes. It is not present in other animals (although some wrong reports were notified in recent years) or in humans.

2.9.3 Echinococcus in animals

Table Echinococcus in animals

	Source of information	Sampling unit	Units tested	Total units positive for Echinococcus	E. granulosus	E. multilocularis	Echinococcus spp., unspecified
Cattle (bovine animals) - at slaughterhouse - animal sample - Surveillance - official controls		Animal	1730438	6322	2479		3843
Cattle (bovine animals) - at slaughterhouse - animal sample - Surveillance - official controls - suspect sampling		Animal	17118	69			69
Deer - wild - fallow deer - at slaughterhouse - animal sample - Surveillance - official controls		Animal	444	0			
Deer - wild - red deer - at slaughterhouse - animal sample - Surveillance - official controls		Animal	553	0			
Deer - wild - roe deer - at slaughterhouse - animal sample - Surveillance - official controls		Animal	120	0			
Goats - at slaughterhouse - animal sample - Surveillance - official controls		Animal	27055	702	39		663
Pigs - at slaughterhouse - animal sample - Surveillance - official controls		Animal	6093180	159	136		23
Sheep - at slaughterhouse - animal sample - Surveillance - official controls		Animal	306048	34660	212		34448
Sheep and goats - at slaughterhouse - animal sample - Surveillance - official controls		Animal	848702	10096	8547		1549
Solipeds, domestic - at slaughterhouse - animal sample - Surveillance - official controls		Animal	10186	1			1
Solipeds, domestic - horses - at slaughterhouse - animal sample - Surveillance - official controls		Animal	11127	1			1

Table Echinococcus in animals

	Source of information	Sampling unit	Units tested	Total units positive for Echinococcus	E. granulosus	E. multilocularis	Echinococcus spp., unspecified
Water buffalos - at slaughterhouse - animal sample - Surveillance - official controls		Animal	11028	80			80
Wild animals - Clinical investigations		Animal	452	0			
Wild animals - at slaughterhouse - animal sample - Surveillance - official controls		Animal	10454	28	25		3
Wild animals - at slaughterhouse - animal sample - Surveillance - official controls - objective sampling		Animal	2409	65			65
Wild boars - at slaughterhouse - animal sample - Surveillance - official controls		Animal	4845	21	15		6

2.10 TOXOPLASMOSIS

2.10.1 General evaluation of the national situation

A. Toxoplasmosis general evaluation

History of the disease and/or infection in the country

Over the last twenty years, several studies have reported a decrease in the number of human cases of toxoplasmosis in Italy as well as in most developed countries. This downward trend is probably due to better hygienic conditions and the introduction of the cold chain system along the food supply chain. However, the exposure of women of child-bearing age is still of greatest concern because of the lack of effective vaccines in case of congenital toxoplasmosis. Clinical disease acquired during pregnancy is especially important in public health and, indeed, it may result in foetal death, abortion, and foetal abnormalities such as retinal inflammation and brain calcification. For this reason, it is useful to request a screening as from the 13th week of the gestation period and every 30-40 days until the expected date of confinement (Annex B, government decree 10th September 1988).

The National Centre for Toxoplasmosis (CETOX) has found a high seroprevalence in some areas of the country in animals from family-owned holdings, especially in sheep herds. Eating habits also play a crucial role in the transmission of the parasite and as a matter of fact the eating of fresh or not properly cooked meat may result in the infection.

National evaluation of the recent situation, the trends and sources of infection

Because acute toxoplasmosis is not always notified, it is difficult to define a linkage between the spread of the disease among animals and human cases. Nowadays, informative campaigns of nutrition education addressed to childbearing women have appeared to be very effective in the prevention of the disease.

Recent actions taken to control the zoonoses

CETOX is currently running a serological and molecular screening on several animal species, both wild and farmed, in order to gain an insight of the spread of the disease throughout the country.

It would be desirable to set up a network between the National Reference Centre and infectious disease units at which patients with acute toxoplasmosis are usually hospitalized in order to tie the spread of the disease among animals and human cases.

2.10.2 Toxoplasmosis in humans

A. Toxoplasmosis in humans

Reporting system in place for the human cases

Currently, there is not a reporting system of human cases of toxoplasmosis in place in Italy and, as such, the actual spread of the disease in humans is likely to be underestimated.

From an epidemiological viewpoint, the acute infection is asymptomatic in healthy adults or may present as an influenza-like syndrome with mild fever, lateral cervical pharyngeal adenopathy and myalgia.

However, the occurrence of toxoplasmosis in immuno-compromised hosts, such as HIV-infected patients, may cause encephalitis because of the infection of the brain.

Toxoplasmosis of the brain in adults with CD4 < 200 elements/ mm³ had an occurrence of 6,5% and 6,7% over the two year period 2005-2006 and 2006-2008 respectively (source: National Centre for AIDS and Istituto Superiore di Sanità) and it is currently taken into account for AIDS diagnosis (Annex A - CDC Guidelines, 2008).

Case definition

According to this legislation, cases are classified as “possible”, “probable” and “confirmed”. “Possible” and “probable” cases are not considered for surveillance purposes and are defined as cases with clinical criteria and an epidemiological link without laboratory evidence. Conversely, “confirmed” cases are relevant for surveillance of toxoplasmosis and are usually laboratory confirmed through at least one of the following criteria: demonstration of *T. gondii* in body tissues or fluids, detection of *T. gondii* nucleic acid in a clinical specimen, *T. gondii* specific antibody response (IgM, IgG, IgA) in a newborn and, in the end, persistently stable IgG *T. gondii* titres in an infant of less than 12 months of age.

Notification system in place

According to Government Decree 15th December 1990, toxoplasmosis is a group V mandatorily notifiable disease. All the diseases that are not included in other groups fall within the group V and an annual report containing aggregate data is submitted to the Ministry of Health.

2.10.3 Toxoplasma in animals

Table Toxoplasma in animals

	Source of information	Sampling unit	Units tested	Total units positive for Toxoplasma	T. gondii
Cats		Animal	287	106	106
Cattle (bovine animals)		Animal	163	31	31
Dogs		Animal	549	234	234
Goats		Animal	141	41	41
Sheep		Animal	474	253	253
Deer - wild - roe deer		Animal	293	98	98
Hares - wild		Animal	240	11	11
Mouflons - wild		Animal	42	4	4
Pigeons		Animal	107	69	69
Sheep and goats		Animal	39	10	10
Water buffalos		Animal	36	2	2

2.11 RABIES

2.11.1 General evaluation of the national situation

A. Rabies general evaluation

History of the disease and/or infection in the country

After the eight cases of rabies diagnosed in wild animals in the province of Udine (Friuli Venezia Giulia region, northeastern Italy) in 2008, the epidemic of sylvatic rabies further spread westward the following year.

In fact, in 2009, 68 cases of rabies have been diagnosed, 35 in the Friuli Venezia Giulia region affecting Udine, Pordenone and Trieste provinces and 33 in the province of Belluno (Veneto region). Among rabid animals, 62 were foxes, 1 roe deer, 1 badger; 3 dogs and 1 donkey were also found positive.

National evaluation of the recent situation, the trends and sources of infection

While the cases recorded in Friuli Venezia Giulia region were closely related to those previously detected, the new cases diagnosed in Belluno province since mid November 2009 affected a new area, where rabies has been present from 1978 to 1983.

Recent actions taken to control the zoonoses

Following the reappearance of rabies in Northern Italy, Italian authorities, in coordination with Slovenia and Austria, have taken the necessary measures to control the outbreak. The preventive measures implemented in the affected areas include compulsory rabies vaccination of dogs and domestic herbivores at risk of infection (i.e. cows, horses, sheep and goats kept outdoors), prohibition of hunting with dogs, obligation to keep dogs on leash, enhanced passive surveillance in the wild animal population and implementation of oral vaccination of foxes which is the most important and effective measure to fight the spread of the disease. From January to December 2009, 4 oral fox vaccination campaigns have been carried out in Friuli Venezia Giulia region covering the whole regional territory. In addition, according to the further spreading of the epidemic, in December 2009 a new campaign of aerial distribution of vaccine baits has been organized and initiated covering the all territory of north-eastern Italy with a radius of at least 50 km westward to the last detected case of rabies. Furthermore, an informative campaign on the risk for the local population, as well as visitors and tourists, has been implemented and a protocol for post-exposure prophylaxis and recommendations for pre-exposure immunisation for individuals at high risk (such as hunters, forest workers, game wardens, veterinarians) have been sent to all healthcare facilities and medical associations in the affected area.

2.11.2 Lyssavirus (rabies) in animals

Table Rabies in animals

	Source of information	Sampling unit	Units tested	Total units positive for Lyssavirus (rabies)	Lyssavirus, unspecified	Classical rabies virus (genotype 1)	European Bat Lyssavirus - unspecified
Badgers - wild		Animal	131	2		2	
Bats - wild		Animal	7	0			
Cats		Animal	198	0			
Cattle (bovine animals)		Animal	2	0			
Deer - wild - red deer		Animal	22	0			
Deer - wild - roe deer		Animal	500	1		1	
Dogs		Animal	431	3		3	
Dogs - stray dogs		Animal	0	0			
Foxes - wild		Animal	2921	61		61	
Goats		Animal	4	0			
Marten - wild		Animal	83	0			
Pigs		Animal	0	0			
Raccoon dogs - wild		Animal	0	0			
Raccoons - wild		Animal	0	0			
Sheep		Animal	4	0			
Solipeds, domestic		Animal	1	0			
Wild boars - wild		Animal	1	0			

Table Rabies in animals

	Source of information	Sampling unit	Units tested	Total units positive for Lyssavirus (rabies)	Lyssavirus, unspecified	Classical rabies virus (genotype 1)	European Bat Lyssavirus - unspecified
Wolves - wild		Animal	5	0			
Other animals - unspecified		Animal	6	1		1	
Other carnivores - wild		Animal	0	0			
Other mustelides - wild		Animal	264	0			
Wild animals		Animal	45	0			

2.12 Q-FEVER

2.12.1 General evaluation of the national situation

A. *Coxiella burnetii* (Q-fever) general evaluation

History of the disease and/or infection in the country

Q-fever is a zoonosis caused by a Gram negative bacteria, named *Coxiella burnetii*. Multiple host can serve as reservoir of infection. The most commonly sources of infection for human are farm animals, like cattle, sheep and goats; they shed bacteria in urine, faeces, milk and placental fluids, but ticks are considered to be the natural primary reservoirs of *C. burnetii*. Infection occurs by inhalation of organisms or ingestion of raw milk from animals to humans. *C. burnetii* can cause abortion in sheep and goats, but is unapparent in cattle.

National evaluation of the recent situation, the trends and sources of infection

In Italy the disease is still present in all regions. There is no specific monitoring plan, but the etiological agent is identified from aborted samples as a differential diagnosis with other agents. The disease has been a notifiable as prescribed by rule.

Relevance of the findings in animals, feedingstuffs and foodstuffs to human cases (as a source of infection)

The highest risk factor for acquisition of Q-fever is exposure to parturient infected animals. Another risk factor to acquired infection are exposure to migrating sheep flocks.

Recent actions taken to control the zoonoses

Routine diagnosis of Q-fever is usually made by serological tests that have the disadvantage of indicating exposure rather than detecting the organism. The PCR technique has become a useful tool to detect *C. burnetii* in biological samples.

Suggestions to the Community for the actions to be taken

We suggest to define the protocols to be follow during the investigations of abortion to check the responsible agent, including also the research of *C. burnetii* by PCR, and prevent quickly possible contaminations for the human. Also to be studied the role of ticks for transmission the disease to the human.

2.12.2 Coxiella (Q-fever) in animals

Table Coxiella burnetii (Q fever) in animals

	Source of information	Sampling unit	Units tested	Total units positive for Coxiella (Q-fever)	C. burnetii
Cattle (bovine animals)		Herd	5534	21	21
Goats		Flock	43	3	3
Sheep		Flock	253	50	50
Alpine chamois		Animal	46	0	0
Other animals		Animal	33	0	0
Sheep and goats		Flock	1858	0	0
Water buffalos		Herd	89	20	20
Wild animals		Animal	29	0	0

Footnote:

Diagnostic methods used for each of the investigations reported: SEROLOGICAL METHODS (complement fixation, ELISA)

3. INFORMATION ON SPECIFIC INDICATORS OF ANTIMICROBIAL RESISTANCE

3.1 ESCHERICHIA COLI, NON-PATHOGENIC

3.1.1 General evaluation of the national situation

3.1.2 Antimicrobial resistance in Escherichia coli, non-pathogenic

Table Cut-off values used for antimicrobial susceptibility testing of Escherichia coli, non-pathogenic in Animals

Test Method Used	Standard methods used for testing

			Concentration (microg/ml)	Zone diameter (mm)
		Standard	Resistant >	Resistant <=
Amphenicols	Chloramphenicol		16	
Tetracyclines	Tetracycline		8	
Fluoroquinolones	Ciprofloxacin		0.03	
Quinolones	Nalidixic acid		16	
Trimethoprim	Trimethoprim		2	
Sulfonamides	Sulfonamides		256	
Aminoglycosides	Streptomycin		16	
	Gentamicin		2	
Cephalosporins	Cefotaxim		0.25	

Table Cut-off values used for antimicrobial susceptibility testing of Escherichia coli, non-pathogenic in Animals

			Concentration (microg/ml)	Zone diameter (mm)
		Standard	Resistant >	Resistant <=
Penicillins	Ampicillin		8	

Test Method Used	Standard methods used for testing

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Table Cut-off values used for antimicrobial susceptibility testing of Escherichia coli, non-pathogenic in Feed

Test Method Used		Standard methods used for testing		
			Concentration (microg/ml)	Zone diameter (mm)
		Standard	Resistant >	Resistant <=
Amphenicols	Chloramphenicol		16	
Tetracyclines	Tetracycline		8	
Fluoroquinolones	Ciprofloxacin		0.03	
Quinolones	Nalidixic acid		16	
Trimethoprim	Trimethoprim		2	
Sulfonamides	Sulfonamides		256	
Aminoglycosides	Streptomycin		16	
	Gentamicin		2	
Cephalosporins	Cefotaxim		0.25	
Penicillins	Ampicillin		8	

3.2 ENTEROCOCCUS, NON-PATHOGENIC

3.2.1 General evaluation of the national situation

3.2.2 Antimicrobial resistance in Enterococcus, non-pathogenic isolates

Table Cut-off values for antibiotic resistance of Enterococcus, non-pathogenic in Animals

Test Method Used	Standard methods used for testing

			Concentration (microg/ml)	Zone diameter (mm)
		Standard	Resistant >	Resistant <=
Aminoglycosides	Streptomycin		512	
	Gentamicin		32	
Amphenicols	Chloramphenicol		32	
Penicillins	Ampicillin		4	
Glycopeptides (Cyclic peptides, Polypeptides)	Vancomycin		4	
Macrolides	Erythromycin		4	
Streptogramins	Quinupristin/Dalfopristin		32	
Tetracyclines	Tetracycline		2	
Oxazolidines	Linezolid		4	

Table Cut-off values for antibiotic resistance of Enterococcus, non-pathogenic in Food

Test Method Used		Standard methods used for testing		
			Concentration (microg/ml)	Zone diameter (mm)
		Standard	Resistant >	Resistant <=
Aminoglycosides	Streptomycin		512	
	Gentamicin		32	
Amphenicols	Chloramphenicol		32	
Penicillins	Ampicillin		4	
Glycopeptides (Cyclic peptides, Polypeptides)	Vancomycin		4	
Macrolides	Erythromycin		4	
Streptogramins	Quinupristin/Dalfopristin		32	
Tetracyclines	Tetracycline		2	
Oxazolidines	Linezolid		4	

Table Cut-off values for antibiotic resistance of Enterococcus, non-pathogenic in Feed

Test Method Used		Standard methods used for testing		
			Concentration (microg/ml)	Zone diameter (mm)
		Standard	Resistant >	Resistant <=
Aminoglycosides	Streptomycin		512	
	Gentamicin		32	
Amphenicols	Chloramphenicol		32	
Penicillins	Ampicillin		4	
Glycopeptides (Cyclic peptides, Polypeptides)	Vancomycin		4	
Macrolides	Erythromycin		4	
Streptogramins	Quinupristin/Dalfopristin		32	
Tetracyclines	Tetracycline		2	
Oxazolidines	Linezolid		4	

4. INFORMATION ON SPECIFIC MICROBIOLOGICAL AGENTS

4.1 ENTEROBACTER SAKAZAKII

4.1.1 General evaluation of the national situation

4.2 HISTAMINE

4.2.1 General evaluation of the national situation

4.2.2 Histamine in foodstuffs

Table Histamine in food

	Source of information	Sampling unit	Sample weight	Units tested	Total units in non-conformity	<= 100 mg/kg	>100 - <= 200 mg/kg	>200 - <= 400 mg/kg	> 400 mg/kg
Fishery products, unspecified - Surveillance - official controls		Single		366	43	16	20	3	4
Other food			Fish preparations	131	5	5			

4.3 STAPHYLOCOCCAL ENTEROTOXINS

4.3.1 General evaluation of the national situation

4.3.2 Staphylococcal enterotoxins in foodstuffs

Table Staphylococcal enterotoxins in food

	Source of information	Sampling unit	Sample weight	Units tested	Total units positive for Staphylococcal enterotoxins
Cheeses made from cows' milk - Surveillance - HACCP and own checks		Single		43	0
Cheeses made from cows' milk - Surveillance - official controls - convenience sampling		Single		81	0
Cheeses, made from unspecified milk or other animal milk - Surveillance - HACCP and own checks		Single		32	3
Cheeses, made from unspecified milk or other animal milk - Surveillance - official controls - convenience sampling		Single		617	2
Cheeses, made from unspecified milk or other animal milk - Survey - national survey		Single		148	2
Dairy products (excluding cheeses) - Surveillance - official controls - convenience sampling		Single		85	5
Dairy products (excluding cheeses) - Survey - national survey		Single		49	0
Dairy products (excluding cheeses) - butter - Surveillance - official controls - convenience sampling		Single		62	0

Table Staphylococcal enterotoxins in food

	Source of information	Sampling unit	Sample weight	Units tested	Total units positive for Staphylococcal enterotoxins
Milk, cows' - Survey - national survey		Single		25	19
Milk, goats' - Survey - national survey		Single		285	28
Milk, sheep's - Survey - national survey		Single		121	58

5. FOODBORNE

Foodborne outbreaks are incidences of two or more human cases of the same disease or infection where the cases are linked or are probably linked to the same food source. Situation, in which the observed human cases exceed the expected number of cases and where a same food source is suspected, is also indicative of a foodborne outbreak.

Table Foodborne Outbreaks: summarised data

	Total number of outbreaks	Outbreaks	Human cases	Hospitalized	Deaths	Number of verified outbreaks
Bacillus	4	4	118	unknown	unknown	0
Campylobacter	3	3	7	unknown	unknown	0
Clostridium	3	3	141	unknown	unknown	0
Escherichia coli, pathogenic	1	1	11	unknown	unknown	0
Foodborne viruses	42	42	232	unknown	unknown	0
Listeria	0	0	unknown	unknown	unknown	0
Other agents	64	64	472	unknown	unknown	0
Parasites	0	0	0	unknown	unknown	0
Salmonella	111	111	356	unknown	unknown	0
Staphylococcus	3	3	31	unknown	unknown	0
Unknown	17	17	83	unknown	unknown	0
Yersinia	0	0	unknown	unknown	unknown	0

Data source: Italian National Reporting System of Human Communicable Diseases - data are still provisional.