

Hungary

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

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

IN 2016

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 Hungary during the year 2016.

The information covers the occurrence of these diseases and agents in animals, foodstuffs and in some cases also in feedingstuffs. In addition the report includes data on antimicrobial resistance in some zoonotic agents and indicator bacteria as well as information on epidemiological investigations of foodborne outbreaks. Complementary data on susceptible animal populations in the country is also given. The information given covers both zoonoses that are important for the public health in the whole European Union as well as zoonoses, which are relevant on the basis of the national epidemiological situation.

The report describes the monitoring systems in place and the prevention and control strategies applied in the country. For some zoonoses this monitoring is based on legal requirements laid down by the European Union legislation, while for the other zoonoses national approaches are applied.

The report presents the results of the examinations carried out in the reporting year. A national evaluation of the epidemiological situation, with special reference to trends and sources of zoonotic infections, is given. Whenever possible, the relevance of findings in foodstuffs and animals to zoonoses cases in humans is evaluated.

The information covered by this report is used in the annual European Union Summary Reports on zoonoses and antimicrobial resistance that are published each year by EFSA.

* 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

TEXTFORMS	3
1 DISEASE STATUS	3
1.1 TUBERCULOSIS, MYCOBACTERIAL DISEASES	3
1.1.1 General evaluation of the national situation	3
1.1.1.1 Mycobacterium - general evaluation	3
1.1.2 Mycobacterium in animals	3
1.1.2.1 Mycobacterium tuberculosis complex (MTC) in animal - Cattle (bovine animals) - animal sample	3
1.2 BRUCELLOSIS	5
1.2.1 General evaluation of the national situation	5
1.2.1.1 Brucella - general evaluation	5
1.2.2 Brucella in animals	5
1.2.2.1 B. abortus in animal - Cattle (bovine animals) - animal sample	5
1.2.2.2 B. melitensis in animal - Goats - animal sample	6
2 INFORMATION ON SPECIFIC ZOOSES AND ZOONOTIC AGENTS	8
2.1 SALMONELLOSIS	8
2.1.1 General evaluation of the national situation	8
2.1.1.1 Salmonella - general evaluation	8
2.1.2 Salmonella in foodstuffs	8
2.1.2.1 Salmonella in food - Cattle (bovine animals) - food sample	8
2.1.2.2 Salmonella in food - Meat from broilers (Gallus gallus) - food sample	10
2.1.2.3 Salmonella in food - Meat from pig - food sample	12
2.2 CAMPYLOBACTERIOSIS	13
2.2.1 General evaluation of the national situation	13
2.2.1.1 Thermophilic Campylobacter spp., unspecified - general evaluation	13
2.2.2 Campylobacter in foodstuffs	13
2.2.2.1 Thermophilic Campylobacter spp., unspecified in food - Meat from broilers (Gallus gallus) - animal sample	13
2.3 LISTERIOSIS	15
2.3.1 General evaluation of the national situation	15
2.3.1.1 Listeria - general evaluation	15
2.3.2 Listeria in foodstuffs	15
2.3.2.1 Listeria in food - All foodstuffs - food sample	15
2.4 YERSINIOSIS	16
2.4.1 General evaluation of the national situation	16
2.4.1.1 Yersinia - general evaluation	16
2.5 TRICHINELLOSIS	17
2.5.1 General evaluation of the national situation	17
2.5.1.1 Trichinella - general evaluation	17
2.5.2 Trichinella in animals	17
2.5.2.1 Trichinella in animal - Pigs - food sample	17
2.5.2.2 Trichinella in animal - Solipeds, domestic - horses - food sample	18
2.6 ECHINOCOCCOSIS	19
2.6.1 General evaluation of the national situation	19
2.6.1.1 Echinococcus - general evaluation	19
2.7 RABIES	19
2.7.1 General evaluation of the national situation	19
2.7.1.1 Lyssavirus (rabies) - general evaluation	19
2.7.2 Lyssavirus (rabies) in animals	20
2.7.2.1 Lyssavirus (rabies) in animal - All animals - wild - animal sample	20
2.7.2.2 Lyssavirus (rabies) in animal - Dogs - animal sample	22
2.8 Q-FEVER	24
2.8.1 General evaluation of the national situation	24
2.8.1.1 Coxiella (Q-fever) - general evaluation	24
3 ANTIMICROBIAL RESISTANCE INFORMATION ON SPECIFIC ZOOSES AND ZOONOTIC AGENTS	26
3.1 SALMONELLOSIS	26
3.1.1 Salmonella in animals	26
3.1.1.1 Antimicrobial resistance in Salmonella Gallus gallus (fowl)	26
3.1.1.2 Antimicrobial resistance in Salmonella Turkeys	27
3.2 CAMPYLOBACTERIOSIS	28
3.2.1 Campylobacter in animals	28
3.2.1.1 Antimicrobial resistance in C. jejuni Gallus gallus (fowl)	28
3.2.1.2 Antimicrobial resistance in C. jejuni Turkeys	29
3.3 ESCHERICHIA COLI, NON-PATHOGENIC	30
3.3.1 Escherichia coli, non-pathogenic in foodstuffs	31
3.3.1.1 Antimicrobial resistance in E.coli, non-pathogenic, unspecified Meat from broilers (Gallus gallus)	31
3.3.2 Escherichia coli, non-pathogenic in animals	32
3.3.2.1 Antimicrobial resistance in E.coli, non-pathogenic, unspecified Gallus gallus (fowl)	32
3.3.2.2 Antimicrobial resistance in E.coli, non-pathogenic, unspecified Turkeys	33
4 FOODBORNE OUTBREAKS	35
4.1 Outbreaks	35
4.1.1 Foodborne outbreaks	35
ANIMAL POPULATION TABLES	36
DISEASE STATUS TABLES FOR BRUCELLA	37
Bovine brucellosis in countries and regions that do not receive Community co-financing for eradication programme	37
Ovine or Caprine brucellosis in countries and regions that do not receive Community co-financing for eradication programme	38
DISEASE STATUS TABLES FOR MYCOBACTERIUM	39
Bovine tuberculosis in countries and regions that do not receive Community co-financing for eradication programme	39
PREVALENCE TABLES	40
CAMPYLOBACTER	40
animal	40
food	41
COXIELLA	42
animal	42
CRONOBACTER	43
food	43
ECHINOCOCCUS	44
animal	44
ESCHERICHIA COLI	45
food	45
FLAVIVIRUS	46
animal	46
LISTERIA	47
animal	47
food	48
LYSSAVIRUS	56
animal	56
MYCOBACTERIUM	57
animal	57
SALMONELLA	58
animal	58
food	60
feed	69
STAPHYLOCOCCAL ENTEROTOXINS	70
food	70
STAPHYLOCOCCUS AUREUS METICILLIN RESISTANT (MRSA)	71
animal	71
TOXOPLASMA	72

animal	72
TRICHINELLA	73
animal	73
YERSINIA	74
animal	74
FOODBORNE OUTBREAKS TABLES	75
AMR TABLES FOR CAMPYLOBACTER	84
Campylobacter jejuni	84
Gallus gallus (fowl) - broilers - Slaughterhouse - Monitoring - Official sampling - AMR MON	84
N_A	84
Turkeys - fattening flocks - Slaughterhouse - Monitoring - Official sampling - AMR MON	85
N_A	85
AMR TABLES FOR SALMONELLA	86
Salmonella Abony	86
Turkeys - fattening flocks - Farm - Control and eradication programmes - Industry sampling - AMR MON	86
N_A	86
Gallus gallus (fowl) - laying hens - Farm - Control and eradication programmes - Industry sampling - AMR MON	87
N_A	87
Salmonella Bovismorbificans	88
Meat from turkey - carcase - Slaughterhouse - Monitoring - HACCP and own check - AMR MON	88
N_A	88
Gallus gallus (fowl) - broilers - Farm - Control and eradication programmes - Industry sampling - AMR MON	89
N_A	89
Gallus gallus (fowl) - broilers - Farm - Control and eradication programmes - Official sampling - AMR MON	90
N_A	90
Gallus gallus (fowl) - laying hens - Farm - Control and eradication programmes - Industry sampling - AMR MON	91
N_A	91
Gallus gallus (fowl) - laying hens - Farm - Control and eradication programmes - Industry sampling - AMR MON	92
N_A	92
Salmonella Braenderup	93
Gallus gallus (fowl) - laying hens - Farm - Control and eradication programmes - Industry sampling - AMR MON	93
N_A	93
Gallus gallus (fowl) - laying hens - Farm - Control and eradication programmes - Official sampling - AMR MON	94
N_A	94
Salmonella Bredeney	95
Turkeys - fattening flocks - Farm - Control and eradication programmes - Industry sampling - AMR MON	95
N_A	95
Turkeys - fattening flocks - Farm - Control and eradication programmes - Official sampling - AMR MON	96
N_A	96
Salmonella Derby	97
Gallus gallus (fowl) - laying hens - Farm - Control and eradication programmes - Industry sampling - AMR MON	97
N_A	97
Gallus gallus (fowl) - laying hens - Farm - Control and eradication programmes - Official sampling - AMR MON	98
N_A	98
Salmonella Enteritidis	99
Gallus gallus (fowl) - broilers - Farm - Control and eradication programmes - Industry sampling - AMR MON	99
N_A	99
Gallus gallus (fowl) - broilers - Farm - Control and eradication programmes - Official sampling - AMR MON	100
N_A	100
Turkeys - fattening flocks - Farm - Control and eradication programmes - Industry sampling - AMR MON	101
N_A	101
Turkeys - fattening flocks - Farm - Control and eradication programmes - Official sampling - AMR MON	102
N_A	102
Gallus gallus (fowl) - laying hens - Farm - Control and eradication programmes - Industry sampling - AMR MON	103
N_A	103
Gallus gallus (fowl) - laying hens - Farm - Control and eradication programmes - Official sampling - AMR MON	104
N_A	104
Gallus gallus (fowl) - laying hens - Farm - Control and eradication programmes - Industry sampling - AMR MON	105
N_A	105
Gallus gallus (fowl) - laying hens - Farm - Control and eradication programmes - Industry sampling - AMR MON	106
N_A	106
Gallus gallus (fowl) - laying hens - Farm - Control and eradication programmes - Official sampling - AMR MON	107
N_A	107
Salmonella Hadar	108
Meat from turkey - carcase - Slaughterhouse - Monitoring - HACCP and own check - AMR MON	108
N_A	108
Turkeys - fattening flocks - Farm - Control and eradication programmes - Industry sampling - AMR MON	109
N_A	109
Salmonella I, group O:7	110
Meat from turkey - carcase - Slaughterhouse - Monitoring - HACCP and own check - AMR MON	110
N_A	110
Salmonella Infantis	111
Meat from turkey - carcase - Slaughterhouse - Monitoring - HACCP and own check - AMR MON	111
N_A	111
Gallus gallus (fowl) - broilers - Farm - Control and eradication programmes - Industry sampling - AMR MON pni2	112
N_A	112
Gallus gallus (fowl) - broilers - Farm - Control and eradication programmes - Industry sampling - AMR MON	113
N_A	113
Gallus gallus (fowl) - broilers - Farm - Control and eradication programmes - Official sampling - AMR MON	115
N_A	115
Gallus gallus (fowl) - broilers - Farm - Control and eradication programmes - Industry sampling - AMR MON	116
N_A	116
Turkeys - fattening flocks - Farm - Control and eradication programmes - Industry sampling - AMR MON	117
N_A	117
Turkeys - fattening flocks - Farm - Control and eradication programmes - Official sampling - AMR MON	118
N_A	118
Turkeys - fattening flocks - Farm - Control and eradication programmes - Industry sampling - AMR MON	119
N_A	119
Gallus gallus (fowl) - laying hens - Farm - Control and eradication programmes - Industry sampling - AMR MON	120
N_A	120
Gallus gallus (fowl) - laying hens - Farm - Control and eradication programmes - Industry sampling - AMR MON	121
N_A	121
Gallus gallus (fowl) - laying hens - Farm - Control and eradication programmes - Industry sampling - AMR MON	122
N_A	122
Meat from broilers (Gallus gallus) - carcase - Slaughterhouse - Monitoring - HACCP and own check - AMR MON pni2	123
N_A	123
Meat from broilers (Gallus gallus) - carcase - Slaughterhouse - Monitoring - HACCP and own check - AMR MON	124
N_A	124
Salmonella Kedougou	125
Gallus gallus (fowl) - broilers - Farm - Control and eradication programmes - Industry sampling - AMR MON	125
N_A	125
Turkeys - fattening flocks - Farm - Control and eradication programmes - Industry sampling - AMR MON	126
N_A	126
Gallus gallus (fowl) - laying hens - Farm - Control and eradication programmes - Industry sampling - AMR MON	127
N_A	127
Gallus gallus (fowl) - laying hens - Farm - Control and eradication programmes - Official sampling - AMR MON	128
N_A	128
Salmonella Kentucky	129
Meat from turkey - carcase - Slaughterhouse - Monitoring - HACCP and own check - AMR MON	129

N_A	129
Turkeys - fattening flocks - Farm - Control and eradication programmes - Industry sampling - AMR MON	130
N_A	130
Gallus gallus (fowl) - laying hens - Farm - Control and eradication programmes - Industry sampling - AMR MON	131
N_A	131
Salmonella Kottbus	132
Gallus gallus (fowl) - broilers - Farm - Control and eradication programmes - Industry sampling - AMR MON	132
N_A	132
Turkeys - fattening flocks - Farm - Control and eradication programmes - Official sampling - AMR MON	133
N_A	133
Salmonella Lille	134
Gallus gallus (fowl) - broilers - Farm - Control and eradication programmes - Industry sampling - AMR MON	134
N_A	134
Gallus gallus (fowl) - laying hens - Farm - Control and eradication programmes - Official sampling - AMR MON	135
N_A	135
Salmonella Mbandaka	136
Gallus gallus (fowl) - broilers - Farm - Control and eradication programmes - Industry sampling - AMR MON pni2	136
N_A	136
Gallus gallus (fowl) - broilers - Farm - Control and eradication programmes - Industry sampling - AMR MON	137
N_A	137
Gallus gallus (fowl) - laying hens - Farm - Control and eradication programmes - Official sampling - AMR MON	138
N_A	138
Gallus gallus (fowl) - laying hens - Farm - Control and eradication programmes - Official sampling - AMR MON	139
N_A	139
Meat from broilers (Gallus gallus) - carcass - Slaughterhouse - Monitoring - HACCP and own check - AMR MON	140
N_A	140
Salmonella Newport	141
Meat from turkey - carcass - Slaughterhouse - Monitoring - HACCP and own check - AMR MON	141
N_A	141
Gallus gallus (fowl) - broilers - Farm - Control and eradication programmes - Industry sampling - AMR MON	142
N_A	142
Gallus gallus (fowl) - broilers - Farm - Control and eradication programmes - Industry sampling - AMR MON	143
N_A	143
Gallus gallus (fowl) - broilers - Farm - Control and eradication programmes - Industry sampling - AMR MON	144
N_A	144
Turkeys - fattening flocks - Farm - Control and eradication programmes - Industry sampling - AMR MON	145
N_A	145
Turkeys - fattening flocks - Farm - Control and eradication programmes - Official sampling - AMR MON	147
N_A	147
Gallus gallus (fowl) - laying hens - Farm - Control and eradication programmes - Industry sampling - AMR MON	148
N_A	148
Salmonella Ohio	149
Gallus gallus (fowl) - broilers - Farm - Control and eradication programmes - Industry sampling - AMR MON	149
N_A	149
Gallus gallus (fowl) - broilers - Farm - Control and eradication programmes - Industry sampling - AMR MON	150
N_A	150
Salmonella Senftenberg	151
Gallus gallus (fowl) - broilers - Farm - Control and eradication programmes - Industry sampling - AMR MON	151
N_A	151
Gallus gallus (fowl) - broilers - Farm - Control and eradication programmes - Industry sampling - AMR MON	152
N_A	152
Turkeys - fattening flocks - Farm - Control and eradication programmes - Industry sampling - AMR MON	153
N_A	153
Gallus gallus (fowl) - laying hens - Farm - Control and eradication programmes - Industry sampling - AMR MON	154
N_A	154
Salmonella Stanley	155
Meat from turkey - carcass - Slaughterhouse - Monitoring - HACCP and own check - AMR MON	155
N_A	155
Turkeys - fattening flocks - Farm - Control and eradication programmes - Industry sampling - AMR MON	156
N_A	156
Salmonella Thompson	157
Gallus gallus (fowl) - broilers - Farm - Control and eradication programmes - Industry sampling - AMR MON	157
N_A	157
Turkeys - fattening flocks - Farm - Control and eradication programmes - Industry sampling - AMR MON	158
N_A	158
Salmonella Typhimurium	159
Gallus gallus (fowl) - broilers - Farm - Control and eradication programmes - Industry sampling - AMR MON	159
N_A	159
Turkeys - fattening flocks - Farm - Control and eradication programmes - Industry sampling - AMR MON	160
N_A	160
Turkeys - fattening flocks - Farm - Control and eradication programmes - Official sampling - AMR MON	161
N_A	161
Gallus gallus (fowl) - laying hens - Farm - Control and eradication programmes - Industry sampling - AMR MON	162
N_A	162
Gallus gallus (fowl) - laying hens - Farm - Control and eradication programmes - Official sampling - AMR MON	163
N_A	163
Gallus gallus (fowl) - laying hens - Farm - Control and eradication programmes - Industry sampling - AMR MON	164
N_A	164
Meat from broilers (Gallus gallus) - carcass - Slaughterhouse - Monitoring - HACCP and own check - AMR MON	165
N_A	165
Salmonella Typhimurium, monophasic	166
Gallus gallus (fowl) - laying hens - Farm - Control and eradication programmes - Official sampling - AMR MON	166
N_A	166
Gallus gallus (fowl) - laying hens - Farm - Control and eradication programmes - Industry sampling - AMR MON	167
N_A	167
AMR TABLES FOR ESCHERICHIA COLI	168
Escherichia coli, non-pathogenic, unspecified	168
Meat from broilers (Gallus gallus) - fresh - Retail - Monitoring - Official and industry sampling - ESBL MON pni2	168
N_A	168
Meat from broilers (Gallus gallus) - fresh - Retail - Monitoring - Official and industry sampling - ESBL MON	170
N_A	170
Gallus gallus (fowl) - broilers - Slaughterhouse - Monitoring - Official sampling - AMR MON pni2	172
N_A	172
Gallus gallus (fowl) - broilers - Slaughterhouse - Monitoring - Official sampling - AMR MON	174
N_A	174
Gallus gallus (fowl) - broilers - Slaughterhouse - Monitoring - Official sampling - ESBL MON pni2	176
N_A	176
Gallus gallus (fowl) - broilers - Slaughterhouse - Monitoring - Official sampling - ESBL MON	178
N_A	178
Turkeys - fattening flocks - Slaughterhouse - Monitoring - Official sampling - AMR MON pni2	180
N_A	180
Turkeys - fattening flocks - Slaughterhouse - Monitoring - Official sampling - AMR MON	181
N_A	181
Turkeys - fattening flocks - Slaughterhouse - Monitoring - Official sampling - ESBL MON pni2	183
N_A	183
Turkeys - fattening flocks - Slaughterhouse - Monitoring - Official sampling - ESBL MON	185
N_A	185
OTHER AMR TABLES	187
ESBL	188

1 DISEASE STATUS

1.1 TUBERCULOSIS, MYCOBACTERIAL DISEASES

1.1.1 General evaluation of the national situation

1.1.1.1 Mycobacterium - general evaluation

History of the disease and/or infection in the country

Hungary is official free from bovine tuberculosis.

Recent actions taken to control the zoonoses

All farm workers have to be checked by the competent public health authority for their compliance with the rules set for persons dealing with animals and food intended for human consumption. The documents proving their compliance are subject to on farm checks performed by the veterinary service.

1.1.2 Mycobacterium in animals

1.1.2.1 Mycobacterium tuberculosis complex (MTC) in animal - Cattle (bovine animals) - animal sample

Status as officially free of bovine tuberculosis during the reporting year

The entire country free

The nationwide program for eradication of bovine tuberculosis in Hungary has successfully been completed by 31 December 1980 and the tuberculosis free status of the country were declared to the OIE. Since then no evidence of the presence of infection in more than 0,1 % of our herds has been found. The Commission Implementing Decision 2014/91/EU recognized Hungary's freedom from the disease.

Monitoring system

Sampling strategy

Post mortem inspections According to the meat inspection rules in force in Hungary, based on a tradition of at least a century, each animal for slaughter is to be checked individually ante and post mortem. Technical methods applied at meat inspection is suitable to detect even the slightest tuberculous lesions. The legal provisions for tuberculosis require that the organs, together with the lymphnodes belonging to them, shall be sent to the National Food Chain Safety Office, Veterinary Diagnostic Directorate for further laboratory examination, if during post mortem inspection of a slaughtered animal the tuberculous lesions are revealed. In case of animals ordered to be slaughtered for establishing the reason for unclarified positive or inconclusive reactions during intradermal tuberculin testing, a set of lymph nodes belonging to several organs and systems, as listed in the Annex 3 of the Decree No. 65/2002. (VIII. 9.) FVM and in the Technical Guideline, shall be sent to the National Food Chain Safety Office, Veterinary Diagnostic Directorate. Intradermal tuberculin testing Together with the post mortem control program, the compulsory intradermal tuberculin testing with a yearly interval of the whole Hungarian cattle population (older than six weeks), as well as case by case testing of animals moved from one herd to another, has been maintained and executed.

Methods of sampling (description of sampling techniques)

According to the Annex 3 of the Decree No. 65/2002. (VIII.9) FVM the rules of taking samples are the followings: All samples taken from animals with a large body (cattle, swine) must include the organs showing signs of the disease and the adjacent lymphatic glands, in case of birds and smaller animals the sample must be an entire carcass; All samples used for confirming paraallergic reaction must include the tonsils, pharyngeal, mesenteric and portal lymphatic glands of the slaughtered animal; For the purpose of detecting the presence of mycobacteria from the feedingstuffs, litter, soil etc. 20-50 gramm samples must be taken, 20 gramm samples from faeces, 50cm3 from urine and 5 litres from drinking water. The samples must be sent to the VDD with a view to carry out tests to detect tuberculosis and confirm the presence of mycobacteria.

Case definition

An animal is considered a positive case, if the presence of tuberculosis is confirmed by the isolation of *M. bovis* from its lymph node(s) or parenchymatous organs on laboratory examination. Suspension or withdrawal of the free status of a herd is based upon the analysis of the results of the intradermal tuberculin tests (if necessary, repeated and completed by simultaneous testing), post mortem examinations and laboratory tests. According to the Annex 1 of the Decree No. 65/2002. (VIII.9) the officially tuberculosis-free status of the herd have to be withdrawn if the presence of tuberculosis is confirmed by the isolation of *M. bovis* on laboratory examination.

Diagnostic/analytical methods used

The identification of *Mycobacterium bovis* is carried out only in the National Food Chain Safety Office, Veterinary Diagnostic Directorate (Budapest). The VDD works according to the OIE Manual of Standards for Diagnostic tests and Vaccines, Forth Edition, Chapter 2.3.3. (bovine tuberculosis). Annex 7. of the Decree No. 65/2002. (VIII.9) FVM contains the standards for the tuberculin (bovine and avian) to be used during the intradermal tests. These rules are fully compatible with Annex B point 2.1. of Council Directive 64/432/EEC. Annex 2., which contains the standards for the test procedures is fully compatible with Council Directive 64/432/EEC.

Vaccination policy

Preventive vaccination against *M. bovis* is prohibited by Decree No. 65/2002. (VIII. 9.) FVM.

Control program/mechanisms

The control program/strategies in place

The whole cattle population is continuously monitored for bovine tuberculosis on a yearly basis by the intradermal tuberculin tests and by post-mortem inspections. For measures taken in case of single cases, see "Measures in case of the positive findings or single cases".

Recent actions taken to control the zoonoses

Guidelines have been issued first by the Ministry of Agriculture and Rural Development and later by the Central Agricultural Office about the carrying out the tuberculin test in cattle herds taking into consideration the false positive or interference reactions as well as the data collection, and reporting by the regional authorities.

Measures in case of the positive findings or single cases

When an animal is considered to be a positive reactor in the intradermal tests, it is removed from the herd and slaughtered. The post-mortem, laboratory and epidemiological examinations shall be carried out. The status of the herd will remain suspended until the all laboratory examinations have been completed. If the presence of tuberculosis is not confirmed, the suspension of the officially tuberculosis-free status may be lifted following a test of all animals over six weeks of age with negative results at least 42 days after the removal of the reactor animal. According to the Annex 1 of the Decree No. 65/2002. (VIII.9) the officially tuberculosis-free status of the herd have to be withdrawn if the presence of tuberculosis is confirmed by the isolation of *M. bovis* on laboratory examination. The district chief veterinarian may initiate a procedure to withdraw the tuberculosis-free status of the herd, and the animal health and food control station may withdraw the status, if the conditions for retention of the officially free status are not complied with, or classical lesions of tuberculosis are seen at post-mortem examination, an epidemiological enquiry establishes the likelihood of infection, it is deemed necessary to control of bovine tuberculosis in the herd for any other reason.

Notification system in place

Bovine tuberculosis is compulsory notifiable by virtue the Decree No 113/2008 (VIII. 30.) of the Ministry of Agriculture and Rural Development (MARD) on notification of animal diseases. The detailed rules regarding bovine tuberculosis are laid down by the Decree No. 65/2002. (VIII.9) FVM of the Minister of Agriculture and Rural Development, which texts replaced the relevant parts of the Zoo-Sanitary Code implemented by the Decree No 41/1997. (V. 28.) FM of the Minister of Agriculture. As regards keeping and movements of the bovine animals the Zoosanitary Code is applied further. Before the 1st of July of 1997 the Decree No. 28/1981. (XII. 30.) MEM of the Minister of Agriculture and Alimentation contained the rules for the bovine tuberculosis and keeping or movements of the bovine animals. It is very important that the former legislative rules were essentially the same as the current ones.

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

Hungary is free of bovine tuberculosis. In some years sporadic cases are reported.

1.2 BRUCELLOSIS

1.2.1 General evaluation of the national situation

1.2.1.1 Brucella - general evaluation

History of the disease and/or infection in the country

Hungary is officially free from bovine brucellosis. Ovine and caprine brucellosis never occurred in Hungary.

1.2.2 Brucella in animals

1.2.2.1 B. abortus in animal - Cattle (bovine animals) - animal sample

Status as officially free of bovine brucellosis during the reporting year

The entire country free

The nationwide programme for eradication of bovine brucellosis in Hungary has successfully been completed by the 31st of August 1985. and the brucellosis free status of the country were declared to the OIE. Since then no evidence of the presence of infection in more than 0,2 % of our herds has been found.

Monitoring system

Sampling strategy

Together with the random blood sampling of the Hungarian cattle population, as well as case-by-case testing of animals moved from one herd to another, a system of checking abortions and irregular parturition has been maintained.

Frequency of the sampling

The whole cattle population in Hungary is subject to regular checks. Investigation of abortion and related cases is the key point of the system. Random, yearly serological testing is a complementary element. 10 % of cows in herds containing 50 or more animals shall be tested yearly, after calving. If necessary, the district veterinary officer is entitled to extend the testing to the whole herd. Small herds are serologically tested every three years, linked to the EBL screening.

Methods of sampling (description of sampling techniques)

Blood, milk and semen samples are taken at farm. In case of abortion, the aborted fetus, its chorions and a blood sample from the aborted cattle shall be sent to the laboratory.

Case definition

For the diagnosis of B. abortus the following diagnostic methods are used: -pathology-bacteriology-immunology (CFT, ELISA, SAT)

Case definition

An animal is considered to be infected with B. abortus, when - it shows clinical signs of the disease and pathological lesions can be detected on its internal organs or on its fetus or on the chorions; or- bacteria of B. abortus could be isolated from its body fluids, its chorions or from the organs of the fetus, or- it was suspected to be infected with B. abortus and the serological or bacteriological investigations were positive for that animal.

Vaccination policy

Preventive vaccination against B. abortus is prohibited in the whole territory of Hungary.

Control program/mechanisms

Recent actions taken to control the zoonoses

Continuous monitoring of bovine herds and investigation of aborted fetuses as well as pre-movement checks are continued.

Measures in case of the positive findings or single cases

Infected male animals are to be killed as soon as possible but not later than five days or to be castrated and placed under movement prohibition until it is slaughtered. Female animals must be placed under breeding prohibition and movement control. They must be slaughtered within 15 days after the acute period or the recovery after the abortion.

Notification system in place

Investigation of cases of abortion is compulsory. In case of abortion or irregular parturition, the veterinarian in charge has to send a set of samples for further laboratory examination. Until thorough clarification of the case, the animal is kept separated and, if necessary, repeatedly tested.

Results of the investigation

Since 1985 no infection of B. abortus has been found.

1.2.2.2 B. melitensis in animal - Goats - animal sample

Status as officially free of caprine brucellosis during the reporting year

The entire country free

Ovine and caprine brucellosis (B. melitensis) has been a compulsorily notifiable animal disease in Hungary since 1982. Neither a single clinical case, nor any positive serological or bacteriological test result for B. melitensis has ever occurred in Hungary.

Monitoring system

Sampling strategy

Given, that *B. melitensis* is not an agent which can be spread under Hungary's geographical and climatic conditions, furthermore no sign of the disease has ever been revealed, there was no scientifically based reason for an extended serological survey. Since 2007, all caprine animals tested for *B. melitensis* were negative.

Frequency of the sampling

Approximately 5% of the caprine population is sampled and tested for *B. melitensis*.

Type of specimen taken

Blood

Methods of sampling (description of sampling techniques)

Blood samples are taken at farm.

Case definition

An animal is considered to be infected with *B. melitensis*, when - it shows clinical signs of the disease and pathological lesions can be detected on its internal organs or on its fetus or on the chorions; or - bacteria of *B. melitensis* could be isolated from its body fluids, its chorions or from the organs of the fetus, or - it was suspected to be infected with *B. melitensis* and the serological or bacteriological investigations were positive for that animal.

Diagnostic/analytical methods used

For the diagnosis of *B. melitensis* in goats, the CFT is used.

Vaccination policy

Vaccines for *B. melitensis* have never been registered in Hungary and the using of vaccines without the registration is banned in the country. Therefore no vaccination against this disease has ever been practised in the territory of Hungary.

Control program/mechanisms

The control program/strategies in place

Hungary is free of *B. melitensis*. However, monitoring of ovine and caprine populations is continuously done.

Measures in case of the positive findings or single cases

In case of positive findings the positive animals have to be killed without delay. The herd containing the positive animal is subject to movement control. The further measures affecting the herd shall be decided following screening of the animals and epidemiological investigation.

Notification system in place

Ovine and caprine brucellosis (*B. melitensis*) are compulsorily notifiable since 1 January 1982.

Results of the investigation

No evidence of infection with *B. melitensis* was ever found.

2 INFORMATION ON SPECIFIC ZONOSSES AND ZONOTIC 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

2.1.1.1 Salmonella - general evaluation

History of the disease and/or infection in the country

In 1992 the Veterinary Science Committee of the Hungarian Academy of Sciences has established its Salmonella Subcommittee with the main aim to support the work of the Hungarian Ministry of Agriculture and Rural Development in the control of Salmonella with regards to poultry flocks. After the accession the EC regulations became directly applicable in Hungary as well. From that time EC regulations are followed. The implementation of these regulations is regulated by Decree 180/2009. (XII. 29.) of Ministry of Agriculture. Due to the control programs, salmonella prevalence decreased significantly in the last decades. EU prevalence aims were reached first in 2012. In the last three years the prevalence remained under the limit in all types of poultry, with the exception of Gg breeders in 2013 (1,1%) and in Gallus gallus layers in 2016 (2,2%). Relevant salmonella serotypes in turkey breeders have not been observed for years, until 2016, when mST was found at one farm.

Recent actions taken to control the zoonoses

Vaccination is not compulsory in flocks of Gallus gallus and Meleagris gallopavo. The rules of using vaccination and treatment are laid down in Commission Regulation (EC) No 200/2010 of implementing Regulation (EC) No 2160/2003 of the European Parliament and of the Council as regards requirements for the use of specific control methods in the framework of the national programmes for the control of salmonella in poultry.

2.1.2 Salmonella in foodstuffs

2.1.2.1 Salmonella in food - Cattle (bovine animals) - food sample

Monitoring system

Sampling strategy

At slaughterhouse and cutting plant

Food business operators perform continuous sampling system determined in their HACCP plans, and nearby there is an official control system of the competent authorities with a randomised sampling as well. The data of self control processes are checked in the frame of official control of course, but are not collected to a database, therefore these are not involved in this report. The test results of samples examined by competent authorities in their own laboratories are reported, but the data collection system do not allow to report the data separately for the different stages of food chain (slaughterhouses, processing plants, retail). Based on the structure of the EU zoonosis report, the data collection system will be restructured this year. This year all the data on fresh meat are reported in the table of slaughterhouses.

At meat processing plant

The sampling strategy is randomised and continuous, performed by the competent authorities. Food producers operate their own continuous sampling system determined in their HACCP plans as well, with the same remarks as in the case of slaughterhouses.

Frequency of the sampling

At slaughterhouse and cutting plant

Sampling distributed evenly throughout the year

At meat processing plant

Sampling distributed evenly throughout the year

At retail

Sampling distributed evenly throughout the year

Type of specimen taken

At slaughterhouse and cutting plant

Fresh meat

At meat processing plant

Surface of carcass

At retail

fresh meat and all kinds of meat products

Methods of sampling (description of sampling techniques)

At slaughterhouse and cutting plant

500 grams of sample is sent to the laboratory, the test portion is 25 grams

At meat processing plant

Batch sampling with 5 subsamples. Test portion is 10 or 25 grams determined by 2073/2005/EC Regulation.

Diagnostic/analytical methods used

At slaughterhouse and cutting plant

Bacteriological method: ISO 6579:2002

At meat processing plant

Bacteriological method: ISO 6579:2002

At retail

Bacteriological method: ISO 6579:2002

2.1.2.2 Salmonella in food - Meat from broilers (Gallus gallus) - food sample

Monitoring system

Sampling strategy

At slaughterhouse and cutting plant

The sampling strategy in the slaughterhouses is based on the previous years' data on production volume. The monitoring plan prepared by the CAO Food and Feed Safety Directorate determines the number of samples/county/month. The monitoring samples are thrown by the regional veterinary authority and are examined in the official control laboratories belonging to the Central Agricultural Office (CAO). It is a permanent monitoring scheme, data are reported by the official laboratories to CAO and the Ministry of Agriculture and Rural Development in the frame of an annual laboratory report. All the Salmonella strains isolated are serotyped by the NRL Salmonella.

At meat processing plant

The sampling strategy in processing plants is randomised based on the previous years' data on production volume. The samples are thrown by the veterinary authority and are examined in the official food control laboratory. It is a permanent monitoring scheme, data are reported by the official laboratories to the Ministry of Agriculture and Rural Development in the frame of an annual laboratory report.

At retail

Retail is also sampled by the authority on a regular basis. The total number of samples is determined in the annual monitoring plan. About 60 % of the official control samples in a product group are taken at retail.

Frequency of the sampling

At slaughterhouse and cutting plant

Sampling distributed evenly throughout the year

At meat processing plant

Sampling distributed evenly throughout the year

At retail

Sampling distributed evenly throughout the year

Type of specimen taken

At slaughterhouse and cutting plant

Fresh meat

At meat processing plant

minced meat, meat prep., meat products

At retail

minced meat, meat prep., meat products

Methods of sampling (description of sampling techniques)

At slaughterhouse and cutting plant

At least 500 grams of meat is sent to the laboratory. The test portion is 25 grams.

At meat processing plant

Batch sampling with 5 subsamples. Test portion is 5 x 10 or 25 grams according to Regulation 2073/2005/EC.

Definition of positive finding

At slaughterhouse and cutting plant

a sample or a batch is positive if salmonella was isolated

At meat processing plant

a sample or a batch is positive if salmonella was isolated

At retail

a sample or a batch is positive if salmonella was isolated

Diagnostic/analytical methods used

At slaughterhouse and cutting plant

Bacteriological method: ISO 6579:2002

At meat processing plant

Bacteriological method: ISO 6579:2002

At retail

Bacteriological method: ISO 6579:2002

Preventive measures in place

According to 2073/2005/EC Reg.

Measures in case of the positive findings or single cases

According to Reg.2073/2005/EC.

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

Based on the monitoring results, salmonella prevalence is high in broiler meat in Hungary. The dominance of Salmonella Infantis strains is well-known in the past years. 90 % of the isolated strains are belonging to this serovar now. From 1995, the rate of Salmonella Infantis/Enteritidis is showing a continuous increase for Infantis (1% to 90 %), and a decreasing trend for S. Enteritidis (from 60 % to 5%). The marked increase of Salmonella Infantis serovar in broiler meat was not caused a significant increase in human Salmonella Infantis incidence. The dominating serovar in human infections is continuously S. Enteritidis which has been responsible for 70-80 % of the human infections for many years.

2.1.2.3 Salmonella in food - Meat from pig - food sample

Monitoring system

Sampling strategy

At slaughterhouse and cutting plant

The sampling strategy in the slaughterhouses is based on the previous years' data on production volume. The monitoring plan prepared by the CAO Food and Feed Safety Directorate determines the number of samples/county/month. The monitoring samples are thrown by the regional veterinary authority and are examined in the official control laboratories belonging to the Central Agricultural Office (CAO). It is a permanent monitoring scheme, data are reported by the official laboratories to CAO and the Ministry of Agriculture and Regional Development in the frame of an annual laboratory report. All the Salmonella strains isolated are serotyped by the NRL Salmonella.

At meat processing plant

The sampling strategy in processing plants is randomised based on the previous years' data on production volume. The samples are thrown by the veterinary authority and are examined in the official food control laboratory. It is a permanent monitoring scheme, data are reported by the official laboratories to the Ministry of Agriculture and Regional Development in the frame of an annual laboratory report.

Frequency of the sampling

At slaughterhouse and cutting plant

Sampling distributed evenly throughout the year

At meat processing plant

Sampling distributed evenly throughout the year

Type of specimen taken

At slaughterhouse and cutting plant

Fresh meat

At meat processing plant

Surface of carcass

Diagnostic/analytical methods used

At slaughterhouse and cutting plant

Bacteriological method: ISO 6579:2002

At meat processing plant

Bacteriological method: NMKL No 71:1999

2.2 CAMPYLOBACTERIOSIS

2.2.1 General evaluation of the national situation

2.2.1.1 Thermophilic *Campylobacter* spp., unspecified - general evaluation

Relevance of the findings in animals, feedingstuffs and foodstuffs to human cases (as a source of infection)

The main source of human campylobacter infections in Hungary is raw meat especially poultry meat. The seasonal prevalence of campylobacters in raw chicken meat shows a strong correlation with the seasonal distribution of human cases. The prevalence in raw milk is low, but it can mean a possible source in some cases. As typing of *Campylobacter* of food origin is not performed at a large scale, PFGE and other molecular based methods are used mainly for outbreak investigations and in small scale regional studies, the identification of sources should be improved in the future.

Recent actions taken to control the zoonoses

Actions specifically used for the control of campylobacters are not implemented in Hungary. Hygienic measurements used in the primary production (all in -all out systems, cleaning, disinfection, pest control) HACCP and GHP systems at slaughterhouses, improvement of the packaging of raw meat, labelling the minced meat and meat preparations with the requirement of heat treatment before consumption are the main actions in use.

2.2.2 *Campylobacter* in foodstuffs

2.2.2.1 Thermophilic *Campylobacter* spp., unspecified in food - Meat from broilers (*Gallus gallus*) - animal sample

Monitoring system

Sampling strategy

At slaughterhouse and cutting plant

There is an annual monitoring program based on the production capacity of the region. The monitoring plan is prepared by the central authority. The samples are taken by the regional authorities. Only one sample unit is taken from a batch, 25 grams are examined in the laboratory. These official samples are examined in the NRL Campylobacter with a presence-absence test followed by species identification and antimicrobial resistance.

At retail

To be reported via ECDC.

Frequency of the sampling

At slaughterhouse and cutting plant

Sampling distributed evenly throughout the year

Type of specimen taken

At slaughterhouse and cutting plant

Fresh meat

Methods of sampling (description of sampling techniques)

At slaughterhouse and cutting plant

At least 500 grams of fresh meat is sampled in a sterile plastic bag. The sample is transported to the laboratory in a cool box by courier.

Definition of positive finding

At slaughterhouse and cutting plant

When a strain of thermophilic Campylobacter is isolated from the sample (25g) after enrichment.

Diagnostic/analytical methods used

At slaughterhouse and cutting plant

Bacteriological method: ISO 10272:1995

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

Thermophilic Campylobacter - as in many countries - shows a high prevalence in broiler meat with a marked seasonal distribution of 30 % in winter to more than 60% in the summer months.

2.3 LISTERIOSIS

2.3.1 General evaluation of the national situation

2.3.1.1 Listeria - general evaluation

Relevance of the findings in animals, feedingstuffs and foodstuffs to human cases (as a source of infection)

Testing of ready-to-eat products for the presence/and/or the determination of the number of *Listeria monocytogenes* is obligatory for food business operators based on Reg.2073/2005/EC. The official monitoring program concentrates to take samples from these products on a risk based approach as well. Only the data of official control are presented in this report, because only these data are collected in the database of the authority. The legislative background has changed a lot, because before 2006 only milk and milk products were regularly tested for *Listeria monocytogenes* and only by presence absence tests. In the frame of USDA-FSIS monitoring obligatory for US exporting establishments raw cured products were tested as well with presence-absence tests and MPN based method suitable for enumeration of low numbers of the microorganism. From 2006, those RTE products that not support the growth of *Listeria*, are examined by the enumeration method ISO 11290:2 (e.g.salami, raw smoked ham). If the product is able to support the growth of the pathogen, presence-absence test is used as a first step (ISO 11290:1), or the two method run parallel (depending on the expiry date, the amount of sample is enough to perform an enumeration test if the first test is positive). The pathogen is enumerated from all the positive samples. Based on the past decade's USDA *Listeria* monitoring data, *Listeria monocytogenes* can be frequently isolated from traditional raw and smoked meat products as salami and sausages, but the highest contamination level was 2.3 cells (MPN method)/gram. Therefore this product group certainly does not play an important role in human infections. *Listeria monocytogenes* can be isolated from mixed salads as well, but because of low pH and preservatives characteristic for this product group generally do not support the growth of the pathogen, and only level of less than 10 cells per gram was measured from the positive samples. Milk products are characteristically made of pasteurised milk in Hungary, therefore these types of foodstuff are practically free from *Listeria*. Consumers show an increasing interest to buy raw milk for consumption in the past few years. Despite of the obligatory labelling to call the consumers' attention for heat treating of raw milk, this product can be considered as a potential source of infection in the future.

Recent actions taken to control the zoonoses

Based on Reg. 2073/2005/EC.

2.3.2 Listeria in foodstuffs

2.3.2.1 Listeria in food - All foodstuffs - food sample

Monitoring system

Sampling strategy

monitoring, objective sampling

Type of specimen taken

At the production plant

RTE

At retail

RTE

Methods of sampling (description of sampling techniques)

At the production plant

single sample

At retail

single sample

Definition of positive finding

At the production plant

Listeria monocytogenes is isolated

At retail

Listeria monocytogenes is isolated

Diagnostic/analytical methods used

At the production plant

ISO 11290-1, ISO 11290-2

At retail

ISO 11290-1, ISO 11290-2

2.4 YERSINIOSIS

2.4.1 General evaluation of the national situation

2.4.1.1 Yersinia - general evaluation

Additional information

diagnostic methods: bacteriological examination and PCR

2.5 TRICHINELLOSIS

2.5.1 General evaluation of the national situation

2.5.1.1 Trichinella - general evaluation

History of the disease and/or infection in the country

In Hungary, mandatory testing for *Trichinella* spp. is in place since 1960. Slaughtered susceptible animals intended to be placed on the market are subject to mandatory testing for *Trichinella* spp.

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

Trichinellosis was a significant zoonotic disease in Hungary in the 1950s and 1960s. Due to the introduction of control strategies, the average annual incidence of trichinellosis decreased to 0-0.7 cases per 100,000 for the early 1990s. In the past 15 years, the annual incidence dropped to 0-0.07 cases per 100,000, and no mortality in men caused by the parasite was observed in the same period. The decrease of incidence observed in men is similar to that of prevalence seen in swine at slaughterhouses.

Recent actions taken to control the zoonoses

Mandatory testing during meat inspection in all susceptible cases (swine, horse, nutria, wild boar).

2.5.2 Trichinella in animals

2.5.2.1 Trichinella in animal - Pigs - food sample

Monitoring system

Sampling strategy

Trichinella sampling and testing is mandatory for all pigs intended to be placed on the market.

Frequency of the sampling

Every slaughtered animal is sampled

Type of specimen taken

Diaphragm muscle

Methods of sampling (description of sampling techniques)

Methods specified in Regulation 1375/2015/EU

Case definition

Animal with one or more Trichinella larva in the official examination.

Diagnostic/analytical methods used

Artificial digestion method of collective samples.

Vaccination policy

None.

Control program/mechanisms

The control program/strategies in place

See above.

Measures in case of the positive findings or single cases

Positive cases are considered not to be eligible for human consumption.

2.5.2.2 Trichinella in animal - Solipeds, domestic - horses - food sample

Monitoring system

Sampling strategy

Trichinella testing is mandatory, all animal is sampled.

Frequency of the sampling

Every slaughtered animal is sampled

Type of specimen taken

Diaphragm muscle

Methods of sampling (description of sampling techniques)

1375/2015/EU regulation

Case definition

Animal with one or more Trichinella larva in the official examination

Diagnostic/analytical methods used

Artificial digestion method of collective samples

Vaccination policy

None.

Measures in case of the positive findings or single cases

Positive cases are considered not to be eligible for human consumption.

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

Trichinella infection has never been detected in horses in Hungary.

2.6 ECHINOCOCCOSIS

2.6.1 General evaluation of the national situation

2.6.1.1 Echinococcus - general evaluation

History of the disease and/or infection in the country

Echinococcus granulosus Cystic echinococcosis caused by *E. granulosus* was a significant zoonosis in Hungary in the 1960s and 1970s. Due to the introduction of integrated control strategies, the average annual incidence of human cystic echinococcosis decreased to 0.08-0.2 case per 100,000 population for the early 1990s. The decrease of incidence observed in man is almost parallel with that of overall prevalence seen in swine, sheep and cattle at slaughterhouses. *Echinococcus multilocularis* was not detected in man or animals in Hungary until 2002.

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

Echinococcus granulosus In the past decade, the annual incidence was 0.05-0.1 case per 100,000 human population. The prevalence was under 0.2% in sheep, cattle and swine at slaughterhouses. Genotype identification of slaughterhouse isolates was initiated in 2010. *Echinococcus multilocularis* *E. multilocularis* was first detected in red foxes (*Vulpes vulpes*) in Hungary in the northern border area in 2002. Between 2002 and 2004, the parasite was described in 7 northern counties with low overall prevalence (8.7%) in foxes. In the study carried out in 2009, *E. multilocularis* was detected in foxes of 16 out of the 19 Hungarian counties and in the suburban areas of the capital, Budapest. The prevalence of infection was significantly higher in the north-western half (16.2%) than in the south-eastern half (4.2%) of the country. The multi-locus microsatellite analysis of the isolates indicate that Hungary should be considered as a peripheral area of a single European focus, where the dispersal movement of foxes resulted in the spreading of *E. multilocularis* within a time period short enough to avoid a substantial genetic drift.

2.7 RABIES

2.7.1 General evaluation of the national situation

2.7.1.1 Lyssavirus (rabies) - general evaluation

History of the disease and/or infection in the country

At the beginning of the twentieth century, rabies predominantly occurred in Hungary in its urban form and was transmitted to humans mainly by dogs. Therefore, in the 1930's strict animal health regulations were introduced, the main elements of these remained unchanged till recent days. These measures included nationwide mandatory regular vaccination of dogs over three months of age. During World War II, epidemiological actions were hindered, which resulted in a re-emergence of urban rabies in 1946-47. As a result of the re-introduction of regulatory measures as well as mandatory preventive vaccination, urban rabies became sporadic in Hungary. The register of the annual vaccination of dogs shows that around 1.1-1.5 million dogs are vaccinated every year. Preventive vaccination of cats against rabies is recommended but not mandatory and special epidemiological aspects are to be considered. Sylvatic rabies reached the North-Eastern part of Hungary in the year 1954. Until 1966 cases remained sporadic (a total of 97 foxes, 16 badgers and wild cats confirmed positive for rabies). In the same timeframe, 35 dogs and 96 domestic cats were confirmed positive for the disease. In 1967, sylvatic rabies crossed the Danube and by 1971 the whole country was infected. At this time, intensive attempts were executed in order to reduce the number of foxes, with minimum results. These actions were suspended in 1987. Between 1988 and 1996 around 1000 rabies cases in foxes were diagnosed per year. Oral vaccination of foxes was introduced in Hungary in 1992. From that year, the rabies cases in foxes decreased year by year, as the vaccination zone was extended from the western part of the country to the whole territory of Hungary (2005-2007). The efficacy of the oral immunization of foxes can be demonstrated by the drastic decrease in the number of rabies cases in the country. During the recent years the number of the detected positive cases remained under ten cases. In the calendar years 2005 only 9, in 2006 only 3, in 2007 only 4, in 2008 only 7 and in 2009 only 2 positive cases could be detected for the whole territory of the country. In 2010 11 rabies cases happened in Hungary: 1 dog, 9 foxes and 1 bat (EBLV-1). In 2011 and 2012 no rabies cases were diagnosed in domestic animals or wildlife (except 3 bats, EBLV-1). In September 2013 rabies was diagnosed in a red fox originating from Bács-Kiskun county, a territory that had not been vaccinated since 2008. In 2013, 24 cases were detected in 3,5 months. An emergency ring vaccination was implemented in autumn 2013. In 2014, 23 cases were detected while vaccination area was extended to the north up to highway M3 (E71) and in this area a double baiting density was applied (40 baits/km²). After 3 consecutive campaigns in the infected area, no further cases were found. The epidemic concerned 3 counties (Bács-Kiskun, Pest, Jász-Nagykun-Szolnok), and 47 cases were found in total, of which 4 in domestic animals (2 cattle, 1 goat, 1 dog) and 43 in wild animals (1 roe deer, 42 foxes). Only two of the cases were detected in the frame of active surveillance. In 2015, vaccination area was further extended to the north and no rabies cases were diagnosed in domestic animals or wildlife. Only one bat (EBLV-1, Pest county) and one fox was found positive (Békés county, vaccine induced case, confirmed by the EURL as well.) Last human rabies case in Hungary occurred in 1994.

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

After the set back of years 2013-2014, the territory under oral vaccination campaigns has been extended respectively. In 2015 there were no rabies cases in Hungary. (1 bat, EBLV-1 and 1 vaccine induced case in fox). In February 2016, a rabid fox was found in Borsod-Abaúj-Zemplén county. The outbreak occurred within the regular vaccination area. The virus strain isolated from the sample was different from the strain detected during the 2013-2014 rabies outbreak in Hungary.

Relevance of the findings in animals, feedingstuffs and foodstuffs to human cases (as a source of infection)

Not of relevance.

Recent actions taken to control the zoonoses

In order to eradicate rabies from Hungary and to protect public health, regulatory measures on domestic animals are in place. Regular preventive vaccination of dogs is mandatory two times between 3 months of age and under 1 year of age with monovalent vaccine. After 1 year of age vaccination shall be repeated annually. Stray dogs are removed from public areas and are vaccinated against the disease. Oral vaccination of foxes is performed twice yearly in a specific part of Hungary's territory. During the spring oral vaccination campaign in 2016, an emergency ring vaccination was performed within the area of an 50 km circle around the outbreak (500 m flight lines, 40 baits/km²). Shooting of an extra number of foxes from the area has been ordered but no further cases were detected in 2016. In 2016, in the framework of an awareness campaign, leaflets have been produced and distributed, explaining the importance of rabies and describing the symptoms of the disease and the way of reporting the suspicion of the disease to the veterinary services. A website has been developed as well, specifically dedicated for rabies, in order to provide information about the disease to the public (veszettsegmentesites.hu).

Suggestions to the European Union for the actions to be taken

Golden jackals are a species of concern in some areas of Hungary. Sampling and laboratory testing of golden jackals was within the framework of monitoring of effectiveness of OV was not eligible for co-financing until 2016. We welcome the decision of the Commission to finance the testing of this species as of 2016.

Additional information

Not of relevance.

2.7.2 Lyssavirus (rabies) in animals

2.7.2.1 Lyssavirus (rabies) in animal - All animals - wild - animal sample

Monitoring system

Sampling strategy

Passive monitoring of dead foxes and all susceptible species (suspect animals as well as road kills) in the whole territory of the country and active monitoring to control the effectiveness of oral vaccination in the vaccinated area.

Frequency of the sampling

In the dedicated period of the year in a definite number: sampling period starts 30 day after the completion of each vaccination campaign and the minimum number of foxes to be sampled is 4 foxes/100 km²/year (2 foxes/100 km²/campaign)

Type of specimen taken

Whole fox carcasses are submitted to the veterinary authority by hunters in the framework of monitoring of OV. Transversal tooth section is performed to detect presence of tetracycline, and ELISA test is carried out to detect antibodies from blood samples.

Methods of sampling (description of sampling techniques)

Whole carcasses of healthy shot foxes, suspect foxes or suspect individuals of other species are submitted to the laboratory. Brain tissue sample is taken in the laboratory from all categories. Mandible and blood sample is taken in the laboratory from foxes shot in the framework of monitoring effectiveness of OV.

Case definition

Rabid animal: an animal in which, with laboratory examinations, rabies had been confirmed undoubtedly. Suspect animals: 1. animals showing clinical signs of rabies; 2. animals not showing clinical signs of rabies but injured by a rabid or a rabies suspected animal; 3. all wild mammals that are showing abnormal behavior or attack humans. Potentially rabies infected animal: animals that had possibly had contacted rabid or suspect animals within 90 days. Rabies-risky animals: 1. all mammals not showing clinical signs or abnormal behavior and not in contact with rabid or suspect animals, but attacking or injuring humans, 2. as well as dogs without a valid rabies vaccination.

Diagnostic/analytical methods used

Direct immunofluorescence (fluorescent antibody test -FAT) of brain imprints with a monovalent anti-nucleocapside conjugate is the primary diagnostic test applied. Furthermore, isolation of the virus in mice, isolation of the virus in the neuroblastoma cells cultures, PCR and serological (ELISA) test are performed in some cases. All FAT positive results are confirmed by 1. qRT-PCR (Picard-Meyer et. al., 2004.) with Rotor-Gene SYBR-Green RT-PCR kit QIAGEN 2. RTCIT (OIE Manual Chapter 2.1.13. Rabies (NB: Version adopted in May 2013) with N2A cells and Fujirebio monoclonal globulins (FDI) The inconclusive results are examined beside these above mentioned methods with 3. IHC ("in house" developed) 4. MIT (OIE Manual Chapter 2.1.13. Rabies (NB: Version adopted in May 2013) 5. RT-PCR (Heaton et. al., 1997) 6. Sequencing (Sanger et. al., 1977) In the framework of the monitoring of efficiency of the oral immunization of foxes the following tests are performed: - direct immunofluorescence (fluorescent antibody test -FAT) of imprints of the brain - Transversal tooth section – test for the presence of tetracycline - serological (ELISA) test

Vaccination policy

South and East border zone of Hungary (50 km zone along the borders to countries that are not free from rabies) and most of East Hungary covering the previously infected territories. Two vaccination campaigns per year (April and October)

Other preventive measures than vaccination in place

No other measures.

Control program/mechanisms

The control program/strategies in place

Decree No 81/2002 of the MARD on the animal health issues of the protection against zoonotic diseases Decree No 164/2008 of the MARD on detailed rules of the protection against rabies

Recent actions taken to control the zoonoses

Enlarging the territory of fox oral vaccination campaigns in 2015.

Suggestions to the European Union for the actions to be taken

-

Measures in case of the positive findings or single cases

Tracing human contacts, animal contacts. Vaccination of cats and farm animals upon the decision of the veterinary authority. Emergency ring vaccination.

Notification system in place

Rabies is a notifiable disease in Hungary according to Decree No 113/2008 of Ministry of Agriculture and Rural Development (MARD) on the order of the notification of animal diseases Moreover, rules regarding the notification of rabies suspected animals are detailed in the Decree No 164/2008 of the MARD on detailed rules of the protection against rabies.

Results of the investigation including the origin of the positive animals

One rabies case (a fox) in 2016.

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

Genom sequencing was performed in all cases of the past years, identifying the closest related strains. The way of introduction of rabies into the country could not be proved, however different theories exist.

Results of the investigation

Investigations of the human contacts with positive cases

All positive cases shall be reported to the human health service according to national legislation. Decision about immunization of a person in contact with a rabies positive animal is the competence of the human health authorities.

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

Not of relevance.

Additional information

Cooperation with Ukraine to conduct oral vaccination of foxes in a 70 km wide buffer zone in Ukraine along the border. In 2015 one vaccination campaign was performed in the buffer zone and also in 2016 one vaccination campaign was performed successfully.

2.7.2.2 Lyssavirus (rabies) in animal - Dogs - animal sample

Monitoring system

Sampling strategy

In case of dogs and other domestic animals, only suspect animals are sampled. Animals showing symptoms of rabies (=suspect animals) are killed and tested for rabies. Animals not showing the clinical signs of rabies but contacted and injured by a rabid or a rabies suspected animal are considered as suspects as well and are killed and tested for rabies (or in certain circumstances, when they have been vaccinated against rabies earlier and that vaccination is still valid, they can be put under official observation for 90 days.) Animals that had possibly had contacted rabid or suspect animals are put under official observation for 90 days. Animals not showing clinical signs or abnormal behavior but causing human injuries, as well as dogs without a valid rabies vaccination, are put under official observation for 14 days. If the animal perishes during the time of official observation, it will be sampled and tested for rabies.

Frequency of the sampling

Passive surveillance – Sampling only in case of suspicion (see point 1.).

Type of specimen taken

Whole carcass / head / brain tissue.

Methods of sampling (description of sampling techniques)

Whole carcasses of suspect dogs or other species are submitted to the laboratory. Brain tissue sample is taken in the laboratory.

Case definition

Rabid animal: an animal in which, with laboratory examinations, rabies had been confirmed undoubtedly. Suspect animals: 1. animals showing clinical signs of rabies; 2. animals not showing clinical signs of rabies but injured by a rabid or a rabies suspected animal; 3. all wild mammals that are showing abnormal behavior or attack humans. Potentially rabies infected animal: animals that had possibly had contacted rabid or suspect animals within 90 days. Rabies-risky animals: 1. all mammals not showing clinical signs or abnormal behavior and not in contact with rabid or suspect animals, but attacking or injuring humans, 2. as well as dogs without a valid rabies vaccination.

Diagnostic/analytical methods used

Direct immunofluorescence (fluorescent antibody test -FAT) of brain imprints with a monovalent anti-nucleocapside conjugate is the primary diagnostic test applied. Furthermore, isolation of the virus in mice, isolation of the virus in the neuroblastoma cells cultures, PCR and serological (ELISA) test are performed in some cases. All FAT positive results are confirmed by 1. qRT-PCR (Picard-Meyer et. al., 2004.) with Rotor-Gene SYBR-Green RT-PCR kit QIAGEN 2. RTCIT (OIE Manual Chapter 2.1.13. Rabies (NB: Version adopted in May 2013) with N2A cells and Fujirebio monoclonal globulins (FDI) The inconclusive results are examined beside these above mentioned methods with 3. IHC ("in house" developed) 4. MIT (OIE Manual Chapter 2.1.13. Rabies (NB: Version adopted in May 2013) 5. RT-PCR (Heaton et. al., 1997) 6. Sequencing (Sanger et. al., 1977)

Vaccination policy

Obligatory vaccination of dogs, once a year. According to national legislation in force, dogs shall be vaccinated against rabies two times between 3 months of age and under 1 year of age with monovalent vaccine. After 1 year of age vaccination shall be repeated annually. Vaccination of cats is recommended. In case of an outbreak, taking into consideration the epidemiological situation, the veterinary authority can order obligatory vaccination of cats and farm animals.

Other preventive measures than vaccination in place

In 2016, in the framework of an awareness campaign, leaflets have been produced and distributed, explaining the importance of rabies and describing the symptoms of the disease and the way of reporting the suspicion of the disease to the veterinary services. A website has been developed as well, specifically dedicated for rabies, in order to provide information about the disease to the public (veszettsegmentesites.hu).

Control program/mechanisms

The control program/strategies in place

Decree No 81/2002 of the MARD on the animal health issues of the protection against zoonotic diseases; Decree No 164/2008 of the MARD on detailed rules of the protection against rabies

Recent actions taken to control the zoonoses

Not of relevance.

Suggestions to the European Union for the actions to be taken

-

Measures in case of the positive findings or single cases

Tracing human contacts, animal contacts. Vaccination of cats and farm animals upon the decision of the veterinary authority. Emergency ring vaccination.

Notification system in place

Rabies is a notifiable disease in Hungary according to Decree No 113/2008 of Ministry of Agriculture and Rural Development (MARD) on the order of the notification of animal diseases. Moreover, rules regarding the notification of rabies suspected animals are detailed in the Decree No 164/2008 of the MARD on detailed rules of the protection against rabies.

Results of the investigation including the origin of the positive animals

No classical rabies cases in 2015.

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

Genom sequencing was performed in all cases of the past years, identifying the closest related strains. The way of introduction of rabies into the country could not be proved, however different theories exist.

Results of the investigation

Investigations of the human contacts with positive cases

All positive cases shall be reported to the human health service according to national legislation. Decision about immunization of a person in contact with a rabies positive animal is the competence of the human health authorities

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

Not of relevance.

Additional information

Not of relevance.

2.8 Q-FEVER

2.8.1 General evaluation of the national situation

2.8.1.1 Coxiella (Q-fever) - general evaluation

Additional information

Diagnostic methods : Complement fixation test (CFT) and immunohistochemical test

3 ANTIMICROBIAL RESISTANCE INFORMATION ON SPECIFIC ZONOTIC AND ZOONOTIC AGENTS

3.1 SALMONELLOSIS

3.1.1 Salmonella in animals

3.1.1.1 Antimicrobial resistance in Salmonella Gallus gallus (fowl)

Description of sampling designs

The number of caecal samples per animal population was planned to achieve the required number of Campylobacter jejuni. Prevalence was estimated based on the results of 2014.

Stratification procedures per animal populations and food categories

The sampling was stratified at slaughterhouse level based on the annual production data of the previous year (2015). Selection of slaughterhouses was made according to their production starting with higher throughput. So, bigger slaughterhouses produced together above the 60% of the total national production were involved into sampling. The number of samples had distributed per slaughterhouse proportionally to the annual throughput of the slaughterhouse.

Randomisation procedures per animal populations and food categories

Sampling days were defined for the availability of courier service by authority. After exclusion of epidemiological units already sampled in that year, samples were randomly collected at slaughterhouses on the day suitable for submission of samples in required time frame with even distribution by date. Samples were randomly collected from different suitable epidemiological units manually.

Sampling strategy used in monitoring

Frequency of the sampling

Every month

Type of specimen taken

Caecal samples taken from domestic broiler chicken and fattening turkey

Methods of sampling (description of sampling techniques)

Caecum should be cut and dropped into a plastic bag, cooled +2-+8C, transported within 48h

Procedures for the selection of isolates for antimicrobial testing

Randomized manually

Methods used for collecting data

Paper form submitted with the samples containing the data regarding sampling and origin of sample

Laboratory methodology used for identification of the microbial isolates

Phenotyping (E. coli and Salmonella) and PCR (Campylobacter) and serotyping (Salmonella)

Laboratory used for detection for resistance

Antimicrobials included in monitoring

NRL-AMR

Cut-off values used in testing

Published by EFSA

Additional information

All of the available Salmonella isolates from carcasses samples were involved into antimicrobial susceptibility testing

3.1.1.2 Antimicrobial resistance in Salmonella Turkeys

Description of sampling designs

The number of caecal samples per animal population was planned to achieve the required number of Campylobacter jejuni. Prevalence was estimated based on the results of 2014.

Stratification procedures per animal populations and food categories

The sampling was stratified at slaughterhouse level based on the annual production data of the previous year (2015). Selection of slaughterhouses was made according to their production starting with higher throughput. So, bigger slaughterhouses produced together above the 60% of the total national production were involved into sampling. The number of samples had distributed per slaughterhouse proportionally to the annual throughput of the slaughterhouse.

Randomisation procedures per animal populations and food categories

Sampling days were defined for the availability of courier service by authority. After exclusion of epidemiological units already sampled in that year, samples were randomly collected at slaughterhouses on the day suitable for submission of samples in required time frame with even distribution by date. Samples were randomly collected from different suitable epidemiological units manually.

Sampling strategy used in monitoring

Frequency of the sampling

Every month

Type of specimen taken

Caecal samples taken from domestic broiler chicken and fattening turkey

Methods of sampling (description of sampling techniques)

Caecum should be cut and dropped into a plastic bag, cooled +2-+8C, transported within 48h

Procedures for the selection of isolates for antimicrobial testing

Randomized manually

Methods used for collecting data

Paper form submitted with the samples containing the data regarding sampling and origin of sample

Laboratory methodology used for identification of the microbial isolates

Phenotyping (*E. coli* and *Salmonella*) and PCR (*Campylobacter*) and serotyping (*Salmonella*)

Laboratory used for detection for resistance

Antimicrobials included in monitoring

NRL-AMR

Cut-off values used in testing

Published by EFSA

Additional information

All of the available *Salmonella* isolates from carcasses samples were involved into antimicrobial susceptibility testing

3.2 CAMPYLOBACTERIOSIS

3.2.1 *Campylobacter* in animals

3.2.1.1 Antimicrobial resistance in *C. jejuni* *Gallus gallus* (fowl)

Description of sampling designs

The number of caecal samples per animal population was planned to achieve the required number of *Campylobacter jejuni*. Prevalence was estimated based on the results of 2014.

Stratification procedures per animal populations and food categories

The sampling was stratified at slaughterhouse level based on the annual production data of the previous year (2015). Selection of slaughterhouses was made according to their production starting with higher throughput. So, bigger slaughterhouses produced together above the 60% of the total national production were involved into sampling. The number of samples had distributed per slaughterhouse proportionally to the annual throughput of the slaughterhouse.

Randomisation procedures per animal populations and food categories

Sampling days were defined for the availability of courier service by authority. After exclusion of epidemiological units already sampled in that year, samples were randomly collected at slaughterhouses on the day suitable for submission of samples in required time frame with even distribution by date. Samples were randomly collected from different suitable epidemiological units manually.

Sampling strategy used in monitoring

Frequency of the sampling

Every month

Type of specimen taken

Caecal samples taken from domestic broiler chicken and fattening turkey

Methods of sampling (description of sampling techniques)

Caecum should be cut and dropped into a plastic bag, cooled +2-+8C, transported within 48h

Procedures for the selection of isolates for antimicrobial testing

Randomized manually

Methods used for collecting data

Paper form submitted with the samples containing the data regarding sampling and origin of sample

Laboratory methodology used for identification of the microbial isolates

Phenotyping (E. coli and Salmonella) and PCR (Campylobacter) and serotyping (Salmonella)

Laboratory used for detection for resistance

Antimicrobials included in monitoring

NRL-AMR

Cut-off values used in testing

Published by EFSA

Additional information

All of the available Salmonella isolates from carcasses samples were involved into antimicrobial susceptibility testing

3.2.1.2 Antimicrobial resistance in C. jejuni Turkeys

Description of sampling designs

The number of caecal samples per animal population was planned to achieve the required number of Campylobacter jejuni. Prevalence was estimated based on the results of 2014.

Stratification procedures per animal populations and food categories

The sampling was stratified at slaughterhouse level based on the annual production data of the previous year (2015). Selection of slaughterhouses was made according to their production starting with higher throughput. So, bigger slaughterhouses produced together above the 60% of the total national production were involved into sampling. The number of samples had distributed per slaughterhouse proportionally to the annual throughput of the slaughterhouse.

Randomisation procedures per animal populations and food categories

Sampling days were defined for the availability of courier service by authority. After exclusion of epidemiological units already sampled in that year, samples were randomly collected at slaughterhouses on the day suitable for submission of samples in required time frame with even distribution by date. Samples were randomly collected from different suitable epidemiological units manually.

Sampling strategy used in monitoring

Frequency of the sampling

Every month

Type of specimen taken

Caecal samples taken from domestic broiler chicken and fattening turkey

Methods of sampling (description of sampling techniques)

Caecum should be cut and dropped into a plastic bag, cooled +2-+8C, transported within 48h

Procedures for the selection of isolates for antimicrobial testing

Randomized manually

Methods used for collecting data

Paper form submitted with the samples containing the data regarding sampling and origin of sample

Laboratory methodology used for identification of the microbial isolates

Phenotyping (E. coli and Salmonella) and PCR (Campylobacter) and serotyping (Salmonella)

Laboratory used for detection for resistance

Antimicrobials included in monitoring

NRL-AMR

Cut-off values used in testing

Published by EFSA

Additional information

All of the available Salmonella isolates from carcasses samples were involved into antimicrobial susceptibility testing

3.3 ESCHERICHIA COLI, NON-PATHOGENIC

3.3.1 Escherichia coli, non-pathogenic in foodstuffs

3.3.1.1 Antimicrobial resistance in E.coli, non-pathogenic, unspecified Meat from broilers (Gallus gallus)

Description of sampling designs

The number of samples of each food category (broiler chicken fresh meat) was planned for the specific ESBL/AmpC monitoring (300 caecum samples per a year).

Stratification procedures per animal populations and food categories

The random sampling was stratified geographically by counties based on the humane population according to NUTS3 level.

Randomisation procedures per animal populations and food categories

Samples were randomly collected at retail with even distribution of the date. Retail shops were chosen randomly excluding the shops visited earlier.

Sampling strategy used in monitoring

Frequency of the sampling

Every month planned

Type of specimen taken

Fresh meat from broiler chicken

Methods of sampling (description of sampling techniques)

Manual pick up of samples from the refrigerator in the shop

Procedures for the selection of isolates for antimicrobial testing

Randomized manually

Methods used for collecting data

Paper form submitted with the samples containing the data regarding sampling and origin of sample

Laboratory methodology used for identification of the microbial isolates

Phenotyping (E. coli)

Laboratory used for detection for resistance

Antimicrobials included in monitoring

NRL-AMR

3.3.2 *Escherichia coli*, non-pathogenic in animals

3.3.2.1 Antimicrobial resistance in *E.coli*, non-pathogenic, unspecified *Gallus gallus* (fowl)

Description of sampling designs

The number of caecal samples per animal population was planned to achieve the required number of *Campylobacter jejuni*. Prevalence was estimated based on the results of 2014.

Stratification procedures per animal populations and food categories

The sampling was stratified at slaughterhouse level based on the annual production data of the previous year (2015). Selection of slaughterhouses was made according to their production starting with higher throughput. So, bigger slaughterhouses produced together above the 60% of the total national production were involved into sampling. The number of samples had distributed per slaughterhouse proportionally to the annual throughput of the slaughterhouse.

Randomisation procedures per animal populations and food categories

Sampling days were defined for the availability of courier service by authority. After exclusion of epidemiological units already sampled in that year, samples were randomly collected at slaughterhouses on the day suitable for submission of samples in required time frame with even distribution by date. Samples were randomly collected from different suitable epidemiological units manually.

Sampling strategy used in monitoring

Frequency of the sampling

Every month

Type of specimen taken

Caecal samples taken from domestic broiler chicken and fattening turkey

Methods of sampling (description of sampling techniques)

Caecum should be cut and dropped into a plastic bag, cooled +2-+8C, transported within 48h

Procedures for the selection of isolates for antimicrobial testing

Randomized manually

Methods used for collecting data

Paper form submitted with the samples containing the data regarding sampling and origin of sample

Laboratory methodology used for identification of the microbial isolates

Phenotyping (E. coli and Salmonella) and PCR (Campylobacter) and serotyping (Salmonella)

Laboratory used for detection for resistance

Antimicrobials included in monitoring

NRL-AMR

Cut-off values used in testing

Published by EFSA

Additional information

All of the available Salmonella isolates from carcasses samples were involved into antimicrobial susceptibility testing

3.3.2.2 Antimicrobial resistance in E.coli, non-pathogenic, unspecified Turkeys

Description of sampling designs

The number of caecal samples per animal population was planned to achieve the required number of Campylobacter jejuni. Prevalence was estimated based on the results of 2014.

Stratification procedures per animal populations and food categories

The sampling was stratified at slaughterhouse level based on the annual production data of the previous year (2015). Selection of slaughterhouses was made according to their production starting with higher throughput. So, bigger slaughterhouses produced together above the 60% of the total national production were involved into sampling. The number of samples had distributed per slaughterhouse proportionally to the annual throughput of the slaughterhouse.

Randomisation procedures per animal populations and food categories

Sampling days were defined for the availability of courier service by authority. After exclusion of epidemiological units already sampled in that year, samples were randomly collected at slaughterhouses on the day suitable for submission of samples in required time frame with even distribution by date. Samples were randomly collected from different suitable epidemiological units manually.

Sampling strategy used in monitoring

Frequency of the sampling

Every month

Type of specimen taken

Caecal samples taken from domestic broiler chicken and fattening turkey

Methods of sampling (description of sampling techniques)

Caecum should be cut and dropped into a plastic bag, cooled +2-+8C, transported within 48h

Procedures for the selection of isolates for antimicrobial testing

Randomized manually

Methods used for collecting data

Paper form submitted with the samples containing the data regarding sampling and origin of sample

Laboratory methodology used for identification of the microbial isolates

Phenotyping (*E. coli* and *Salmonella*) and PCR (*Campylobacter*) and serotyping (*Salmonella*)

Laboratory used for detection for resistance

Antimicrobials included in monitoring

NRL-AMR

Cut-off values used in testing

Published by EFSA

Additional information

All of the available *Salmonella* isolates from carcasses samples were involved into antimicrobial susceptibility testing

4 FOODBORNE OUTBREAKS

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.

4.1 Outbreaks

4.1.1 Foodborne outbreaks

System in place for identification, epidemiological investigations and reporting of foodborne outbreaks

The number of food-borne outbreaks registered by National Food Chain Safety Office was a bit more than in 2015 and the number of human cases was significantly more to the year prior. In 2016 there were 49 general food-borne events, there were 2684 human cases. One event is not included in the detailed table, because that relates to an outbreak where only one patient was affected. This patient had confirmed botulismus. The proportion of causative agents: 34,7 % (17) of the outbreaks were caused by *Salmonella enteritidis*, 4,1 % (2) *Salmonella typhimurium*, 4,1 % (2) *Salmonella* spp., *Campylobacter* 2,0 % (1), 6,1 % (3) *Clostridium perfringens*, 14,3 % (7) *Norovirus*, 2,0 % (1), Hepatitis A, and 18,4 % (9) high microbial count. 12,2 % (6) outbreaks had unknown etiology. The most food-borne outbreaks (49 %) were caused by kitchen ready meals. In 2015 ten events were caused by egg products. The most food-borne events occurred in catering services. The number of events more than in 2015 (2016: 53,1 %, 2015: 27,7 %). 38,8 % of the outbreaks occurred in public canteens, the number of cases reduced compared to the year prior. We did not register outbreak which was caused by the food industry.

National evaluation of the reported outbreaks in the country:

Trends in numbers of outbreaks and numbers of human cases involved

In 2016 there were 49 general food-borne events, there were 2684 human cases. One event is not included in the detailed table, because that relates to an outbreak where only one patient was affected. This patient had confirmed botulismus.

Relevance of the different causative agents, food categories and the agent/food category combinations

The proportion of causative agents: 34,7 % (17) of the outbreaks were caused by *Salmonella enteritidis*, 4,1 % (2) *Salmonella typhimurium*, 4,1 % (2) *Salmonella* spp., *Campylobacter* 2,0 % (1), 6,1 % (3) *Clostridium perfringens*, 14,3 % (7) *Norovirus*, 2,0 % (1), Hepatitis A, and 18,4 % (9) high microbial count. 12,2 % (6) outbreaks had unknown etiology.

Relevance of the different type of places of food production and preparation in outbreaks

The most food-borne outbreaks (49 %) were caused by kitchen ready meals. In 2015 ten events were caused by egg products. The most food-borne events occurred in catering services. The number of events more than in 2015 (2016: 53,1 %, 2015: 27,7 %). 38,8 % of the outbreaks occurred in public canteens, the number of cases reduced compared to the year prior. We did not register outbreak which was caused by the food industry.

ANIMAL POPULATION TABLES

Table Susceptible animal population

Animal species	Category of animals	Population
		animal
Cattle (bovine animals)	Cattle (bovine animals)	945,640
Pigs	Pigs - breeding animals - unspecified - boars	2,572
	Pigs - breeding animals - unspecified - gilts	61,141
	Pigs - breeding animals - unspecified - sows	187,933
	Pigs - fattening pigs - unspecified - piglets	727,391
	Pigs - fattening pigs - unspecified - weaners to growers	1,718,680
Poultry, unspecified	Poultry, unspecified	40,081,700
Rabbits	Rabbits - farmed	1,080,400
Sheep and goats	Sheep and goats	1,016,795
Solipeds, domestic	Solipeds, domestic	51,500

DISEASE STATUS TABLES

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

Region	Number of animals serologically tested under investigations of suspect cases	Number of suspended herds under investigations of suspect cases	Number of seropositive animals under investigations of suspect cases	Number of animals positive to BST under investigations of suspect cases	Number of animals positive in microbiological testing under investigations of suspect cases	Number of herds with status officially free	Number of infected herds	Total number of animals	Number of herds tested under surveillance	Number of animals tested under surveillance	Total number of herds	Number of infected herds tested under surveillance	Number of herds tested under surveillance by bulk milk	Number of animals or pools tested under surveillance by bulk milk	Number of infected herds tested under surveillance by bulk milk	Number of notified abortions whatever cause	Number of isolations of Brucella infections	Number of abortions due to Brucella abortus	Number of animals tested by microbiology under investigations of suspect cases
HUNGARY	0	0	0	0	0	16,355	0	945,640	12,672	443,831	16,377	0	37	5,595	0	570	0	0	0
Budapest	0	0	0	0	0	32	0	780	21	414	32	0	0	0	0	0	0	0	0
Pest	0	0	0	0	0	1,288	0	64,899	1,018	41,079	1,289	0	10	1,390	0	9	0	0	0
Fejér	0	0	0	0	0	475	0	53,368	300	21,828	475	0	0	0	0	129	0	0	0
Komárom-Esztergom	0	0	0	0	0	308	0	16,960	228	7,253	308	0	0	0	0	37	0	0	0
Veszprém	0	0	0	0	0	548	0	47,217	517	32,990	548	0	0	0	0	25	0	0	0
Győr-Moson-Sopron	0	0	0	0	0	798	0	58,203	448	28,254	798	0	0	0	0	110	0	0	0
Vas	0	0	0	0	0	564	0	31,490	410	14,674	564	0	3	383	0	20	0	0	0
Zala	0	0	0	0	0	564	0	31,179	455	12,873	564	0	0	0	0	3	0	0	0
Baranya	0	0	0	0	0	474	0	34,264	330	14,032	474	0	0	0	0	3	0	0	0
Somogy	0	0	0	0	0	655	0	43,788	505	20,425	668	0	0	0	0	8	0	0	0
Tolna	0	0	0	0	0	568	0	29,715	353	12,257	568	0	10	888	0	12	0	0	0
Borsod-Abaúj-Zemplén	0	0	0	0	0	888	0	51,941	750	28,127	888	0	0	0	0	33	0	0	0
Heves	0	0	0	0	0	332	0	18,182	325	10,548	337	0	2	1,814	0	15	0	0	0
Nógrád	0	0	0	0	0	411	0	22,259	323	12,095	411	0	0	0	0	5	0	0	0
Hajdú-Bihar	0	0	0	0	0	2,333	0	121,317	1,879	60,746	2,333	0	0	0	0	50	0	0	0
Jász-Nagykun-Szolnok	0	0	0	0	0	1,011	0	64,642	776	25,203	1,011	0	0	0	0	30	0	0	0
Szabolcs-Szatmár-Bereg	0	0	0	0	0	820	0	51,322	662	22,307	820	0	0	0	0	7	0	0	0
Bács-Kiskun	0	0	0	0	0	1,747	0	88,360	1,453	33,819	1,750	0	12	1,120	0	39	0	0	0
Békés	0	0	0	0	0	1,264	0	69,448	902	24,240	1,264	0	0	0	0	16	0	0	0
Csongrád	0	0	0	0	0	1,275	0	46,306	1,017	20,667	1,275	0	0	0	0	19	0	0	0

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

Region	Number of animals serologically tested under investigations of suspect cases	Number of suspended herds under investigations of suspect cases	Number of seropositive animals under investigations of suspect cases	Number of animals positive in microbiological testing under investigations of suspect cases	Number of herds with status officially free	Number of infected herds	Total number of animals	Number of herds tested under surveillance	Number of animals tested under surveillance	Total number of herds	Number of infected herds tested under surveillance	Number of animals tested by microbiology under investigations of suspect cases
HUNGARY	0	0	0	0	9,618	0	1,016,795	2,174	47,419	9,618	0	0
Pest	0	0	0	0	514	0	56,728	116	2,650	514	0	0
Fejér	0	0	0	0	278	0	37,828	24	1,624	278	0	0
Komárom-Esztergom	0	0	0	0	119	0	9,926	19	468	119	0	0
Veszprém	0	0	0	0	295	0	43,121	62	1,880	295	0	0
Győr-Moson-Sopron	0	0	0	0	236	0	9,350	14	417	236	0	0
Vas	0	0	0	0	65	0	2,764	6	136	65	0	0
Zala	0	0	0	0	161	0	9,838	14	443	161	0	0
Baranya	0	0	0	0	258	0	22,775	34	1,060	258	0	0
Somogy	0	0	0	0	303	0	24,439	26	1,102	303	0	0
Tolna	0	0	0	0	316	0	33,722	58	1,587	316	0	0
Borsod-Abaúj-Zemplén	0	0	0	0	509	0	61,109	181	2,846	509	0	0
Heves	0	0	0	0	216	0	19,138	94	809	216	0	0
Nógrád	0	0	0	0	235	0	18,487	33	879	235	0	0
Hajdú-Bihar	0	0	0	0	1,580	0	211,297	334	10,278	1,580	0	0
Jász-Nagykun-Szolnok	0	0	0	0	746	0	56,960	36	2,308	746	0	0
Szabolcs-Szatmár-Bereg	0	0	0	0	906	0	144,006	640	7,214	906	0	0
Bács-Kiskun	0	0	0	0	1,492	0	164,298	304	7,450	1,492	0	0
Békés	0	0	0	0	633	0	45,660	41	2,207	633	0	0
Csongrád	0	0	0	0	756	0	45,349	138	2,061	756	0	0

DISEASE STATUS TABLES

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

Region	Number of herds with status officially free	Number of infected herds	Total number of animals	Interval between routine tuberculin tests	Number of animals tested with tuberculin routine testing	Number of tuberculin tests carried out before the introduction into the herds	Number of animals with suspicious lesions of tuberculosis examined and submitted to histopathological and bacteriological examinations	Number of animals detected positive in bacteriological examination	Total number of herds
HUNGARY	16,367	1	945,640	12	803,704	34,929	106	3	16,377

PREVALENCE TABLES

Table CAMPYLOBACTER in animal

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Total units tested	Total units positive	Zoonoses	N of units positive
Not Available	Gallus gallus (fowl) - broilers - Slaughterhouse - Not Available - Not Available - Monitoring - Official sampling - Selective sampling	herd/flock	443	331	Campylobacter	1
					Campylobacter coli	159
					Campylobacter jejuni	171
	Turkeys - meat production flocks - Slaughterhouse - Not Available - Not Available - Monitoring - Official sampling - Selective sampling	herd/flock	747	533	Campylobacter coli	332
					Campylobacter jejuni	201

Table CAMPYLOBACTER in food

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Total units tested	Total units positive	Zoonoses	N of units positive
Not Available	Meat from bovine animals - fresh - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	68	0	Campylobacter	0
	Meat from bovine animals - fresh - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	100	0	Campylobacter	0
	Meat from bovine animals - minced meat - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	3	0	Campylobacter	0
	Meat from broilers (Gallus gallus) - carcase - Slaughterhouse - Not Available - food sample - neck skin - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	342	27	Campylobacter	27
	Meat from broilers (Gallus gallus) - fresh - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	222	19	Campylobacter	19
	Meat from broilers (Gallus gallus) - fresh - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	262	33	Campylobacter	33
	Meat from duck - fresh - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	12	0	Campylobacter	0
	Meat from duck - fresh - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	87	12	Campylobacter	12
	Meat from geese - fresh - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	4	0	Campylobacter	0
	Meat from geese - fresh - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	16	1	Campylobacter	1
	Meat from pig - fresh - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	155	6	Campylobacter	6
	Meat from pig - fresh - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	44	0	Campylobacter	0
	Meat from turkey - fresh - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	3	0	Campylobacter	0
	Meat from turkey - fresh - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	152	11	Campylobacter	11
	Milk, cows' - raw milk - Farm - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Millilitre	92	0	Campylobacter	0
	Milk, cows' - raw milk - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Millilitre	17	1	Campylobacter	1
	Milk, goats' - raw milk - Farm - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Millilitre	1	0	Campylobacter	0

Table COXIELLA in animal

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Total units tested	Total units positive	N of clinical affected herds	Zoonoses	N of units positive
Not Available	Cattle (bovine animals) - Farm - Not Available - animal sample - blood - Clinical investigations - Official sampling - Suspect sampling	animal	190	13		Coxiella burnetii	13
	Cattle (bovine animals) - Farm - Not Available - animal sample - blood - Clinical investigations - Official sampling - Suspect sampling	animal	185	42		Coxiella burnetii	42
	Cattle (bovine animals) - Farm - Not Available - animal sample - blood - Unspecified - Industry sampling - Other	animal	188	2		Coxiella burnetii	2
	Cattle (bovine animals) - Farm - Not Available - animal sample - blood - Unspecified - Industry sampling - Other	animal	828	17		Coxiella burnetii	17
	Goats - Farm - Not Available - animal sample - blood - Clinical investigations - Official sampling - Suspect sampling	animal	16	0		Coxiella	0
	Goats - Farm - Not Available - animal sample - blood - Unspecified - Industry sampling - Other	animal	17	0		Coxiella	0
	Sheep - Farm - Not Available - animal sample - blood - Clinical investigations - Official sampling - Suspect sampling	animal	15	0		Coxiella	0
	Sheep - Farm - Not Available - animal sample - blood - Clinical investigations - Official sampling - Suspect sampling	animal	25	2		Coxiella burnetii	2
	Sheep - Farm - Not Available - animal sample - blood - Unspecified - Industry sampling - Other	animal	8	0		Coxiella	0
	Sheep - Farm - Not Available - animal sample - organ/tissue - Clinical investigations - Official sampling - Suspect sampling	animal	2	0		Coxiella	0

Table CRONOBACTER in food

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Total units tested	Total units positive	Zoonoses	N of units positive
Not Available	Follow-on formulae - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed)	10	Gram	5	0	Cronobacter	0
	Foodstuffs intended for special nutritional uses - dried dietary foods for special medical purposes intended for infants below 6 months - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed)	10	Gram	39	0	Cronobacter	0
	Foodstuffs intended for special nutritional uses - processed cereal-based food for infants and young children - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed)	10	Gram	4	0	Cronobacter	0

Table ECHINOCOCCUS in animal

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Total units tested	Total units positive	Zoonoses	N of units positive
HUNGARY	Cattle (bovine animals) - Slaughterhouse - Not Available - Not Available - Surveillance - Official sampling - Suspect sampling	animal	3	3	Echinococcus granulosus	3
	Foxes - Hunting - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	animal	189	12	Echinococcus multilocularis	12
KÖZÉP-MAGYARORSZÁG (NUTS level 1)	Cattle (bovine animals) - Slaughterhouse - Not Available - Not Available - Surveillance - Official sampling - Suspect sampling	animal	1	1	Echinococcus granulosus	1
	Pigs - Slaughterhouse - Not Available - Not Available - Surveillance - Official sampling - Suspect sampling	animal	1	0	Echinococcus	0
	Sheep - Slaughterhouse - Not Available - Not Available - Surveillance - Official sampling - Suspect sampling	animal	3	3	Echinococcus granulosus	3
DUNÁNTÚL	Deer - wild - red deer - Hunting - Not Available - Not Available - Surveillance - Official sampling - Suspect sampling	animal	1	0	Echinococcus	0
	Pigs - Slaughterhouse - Not Available - Not Available - Surveillance - Official sampling - Suspect sampling	animal	6	0	Echinococcus	0
	Sheep - Slaughterhouse - Not Available - Not Available - Surveillance - Official sampling - Suspect sampling	animal	12	3	Echinococcus granulosus	3
ALFÖLD ÉS ÉSZAK	Cattle (bovine animals) - Slaughterhouse - Not Available - Not Available - Surveillance - Official sampling - Suspect sampling	animal	2	2	Echinococcus granulosus	2
	Deer - wild - roe deer - Hunting - Not Available - Not Available - Surveillance - Official sampling - Suspect sampling	animal	1	0	Echinococcus	0
	Pigs - Slaughterhouse - Not Available - Not Available - Surveillance - Official sampling - Suspect sampling	animal	38	8	Echinococcus granulosus	8
	Sheep - Slaughterhouse - Not Available - Not Available - Surveillance - Official sampling - Suspect sampling	animal	4	4	Echinococcus granulosus	4

Table ESCHERICHIA COLI in food

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Total units tested	Total units positive	Zoonoses	N of units positive
Not Available	Meat from bovine animals - fresh - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	92	0	Verocytotoxigenic E. coli (VTEC)	0
	Meat from bovine animals - meat products - raw but intended to be eaten cooked - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	35	0	Verocytotoxigenic E. coli (VTEC)	0
	Meat from bovine animals - minced meat - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	72	0	Verocytotoxigenic E. coli (VTEC)	0
	Meat, mixed meat - minced meat - intended to be eaten cooked - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	7	0	Verocytotoxigenic E. coli (VTEC)	0
	Milk, cows' - raw milk - Farm - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Millilitre	54	0	Verocytotoxigenic E. coli (VTEC)	0
	Milk, cows' - raw milk - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Millilitre	15	0	Verocytotoxigenic E. coli (VTEC)	0
	Seeds, sprouted - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	9	0	Verocytotoxigenic E. coli (VTEC)	0
	Seeds, sprouted - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	47	0	Verocytotoxigenic E. coli (VTEC)	0
	Vegetables - non-pre-cut - Farm - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	28	0	Verocytotoxigenic E. coli (VTEC)	0
	Vegetables - non-pre-cut - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	10	0	Verocytotoxigenic E. coli (VTEC)	0
	Vegetables - pre-cut - Catering - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	1	0	Verocytotoxigenic E. coli (VTEC)	0
	Vegetables - pre-cut - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	12	0	Verocytotoxigenic E. coli (VTEC)	0
	Vegetables - pre-cut - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	100	0	Verocytotoxigenic E. coli (VTEC)	0

Table FLAVIVIRUS in animal

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Vaccination status	Total units tested	Total units positive	Zoonoses	N of units positive
Not Available	Birds - wild - Natural habitat - Not Available - Not Available - Clinical investigations - Industry sampling - Suspect sampling	animal	Not Available	145	3	West Nile virus	3
	Birds - zoo animal - Zoo - Not Available - Not Available - Clinical investigations - Industry sampling - Suspect sampling	animal	Not Available	4	3	West Nile virus	3
	Solipeds, domestic - Farm - Not Available - Not Available - Clinical investigations - Industry sampling - Suspect sampling	animal	Not Available	310	54	West Nile virus	54

Table LISTERIA in animal

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Total units tested	Total units positive	Zoonoses	N of units positive
Not Available	Cattle (bovine animals) - Farm - Not Available - Not Available - Clinical investigations - Industry sampling - Suspect sampling	animal	1	0	Listeria monocytogenes	0
	Goats - Farm - Not Available - Not Available - Clinical investigations - Industry sampling - Suspect sampling	animal	2	0	Listeria monocytogenes	0
	Sheep - Farm - Not Available - Not Available - Clinical investigations - Industry sampling - Suspect sampling	animal	8	7	Listeria monocytogenes	7

Table LISTERIA in food

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Total units tested	Total units positive	Method	Zoonoses	N of units tested	N of units positive
Not Available	Bakery products - cakes - Catering - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed d)	10	Gram	67	2	<= 100	Listeria monocytogenes	2	1
							>100	Listeria monocytogenes	2	0
	Bakery products - cakes - Catering - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed d)	25	Gram	67	2	detection	Listeria monocytogenes	66	1
	Bakery products - cakes - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed d)	10	Gram	3	0	<= 100	Listeria monocytogenes	1	0
							>100	Listeria monocytogenes	1	0
	Bakery products - cakes - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed d)	25	Gram	3	0	detection	Listeria monocytogenes	2	0
	Bakery products - cakes - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed d)	10	Gram	95	0	<= 100	Listeria monocytogenes	7	0
							>100	Listeria monocytogenes	7	0
	Bakery products - cakes - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed d)	25	Gram	95	0	detection	Listeria monocytogenes	88	0
	Cereals and meals - flakes - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed d)	10	Gram	45	0	<= 100	Listeria monocytogenes	7	0
							>100	Listeria monocytogenes	7	0
	Cereals and meals - flakes - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed d)	25	Gram	45	0	detection	Listeria monocytogenes	38	0
	Cereals and meals - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed d)	10	Gram	6	0	<= 100	Listeria monocytogenes	3	0
							>100	Listeria monocytogenes	3	0
	Cereals and meals - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed d)	25	Gram	6	0	detection	Listeria monocytogenes	3	0
	Cheeses made from cows' milk - curd - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed d)	10	Gram	10	0	<= 100	Listeria monocytogenes	1	0
							>100	Listeria monocytogenes	1	0
	Cheeses made from cows' milk - curd - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed d)	25	Gram	10	0	detection	Listeria monocytogenes	9	0
	Cheeses made from cows' milk - curd - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed d)	10	Gram	39	0	<= 100	Listeria monocytogenes	5	0
							>100	Listeria monocytogenes	5	0
	Cheeses made from cows' milk - curd - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed d)	25	Gram	39	0	detection	Listeria monocytogenes	34	0
	Cheeses made from cows' milk - fresh - made from pasteurised milk - Border inspection activities - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed d)	25	Gram	1	0	detection	Listeria monocytogenes	1	0
	Cheeses made from cows' milk - fresh - made from pasteurised milk - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed d)	25	Gram	9	0	detection	Listeria monocytogenes	9	0
	Cheeses made from cows' milk - fresh - made from pasteurised milk - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed d)	10	Gram	50	0	<= 100	Listeria monocytogenes	5	0
							>100	Listeria monocytogenes	5	0

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Total units tested	Total units positive	Method	Zoonoses	N of units tested	N of units positive
Not Available	Cheeses made from cows' milk - fresh - made from pasteurised milk - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	50	0	detection	Listeria monocytogenes	45	0
	Cheeses made from cows' milk - fresh - made from raw or low heat-treated milk - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	1	0	detection	Listeria monocytogenes	1	0
	Cheeses made from cows' milk - soft and semi-soft - made from pasteurised milk - Catering - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	1	0	detection	Listeria monocytogenes	1	0
	Cheeses made from cows' milk - soft and semi-soft - made from pasteurised milk - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	25	0	detection	Listeria monocytogenes	25	0
	Cheeses made from cows' milk - soft and semi-soft - made from pasteurised milk - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	10	Gram	99	0	<= 100	Listeria monocytogenes	11	0
							>100	Listeria monocytogenes	11	0
	Cheeses made from cows' milk - soft and semi-soft - made from pasteurised milk - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	99	0	detection	Listeria monocytogenes	88	0
	Cheeses made from cows' milk - soft and semi-soft - made from raw or low heat-treated milk - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	2	0	detection	Listeria monocytogenes	2	0
	Cheeses made from cows' milk - soft and semi-soft - made from raw or low heat-treated milk - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	4	0	detection	Listeria monocytogenes	4	0
	Cheeses made from goats' milk - hard - made from pasteurised milk - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	10	Gram	5	0	<= 100	Listeria monocytogenes	3	0
							>100	Listeria monocytogenes	3	0
	Cheeses made from goats' milk - hard - made from pasteurised milk - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	5	0	detection	Listeria monocytogenes	2	0
	Cheeses made from goats' milk - hard - made from pasteurised milk - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	10	Gram	10	0	<= 100	Listeria monocytogenes	2	0
							>100	Listeria monocytogenes	2	0
	Cheeses made from goats' milk - hard - made from pasteurised milk - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	10	0	detection	Listeria monocytogenes	8	0
	Cheeses made from goats' milk - soft and semi-soft - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	4	0	detection	Listeria monocytogenes	4	0
	Cheeses made from goats' milk - soft and semi-soft - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	3	0	detection	Listeria monocytogenes	3	0
	Cheeses made from sheep's milk - fresh - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	2	0	detection	Listeria monocytogenes	2	0
	Cheeses made from sheep's milk - fresh - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	10	Gram	95	0	<= 100	Listeria monocytogenes	12	0
							>100	Listeria monocytogenes	12	0
	Cheeses made from sheep's milk - fresh - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	95	0	detection	Listeria monocytogenes	83	0
	Cheeses made from sheep's milk - soft and semi-soft - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	1	0	detection	Listeria monocytogenes	1	0

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Total units tested	Total units positive	Method	Zoonoses	N of units tested	N of units positive
Not Available	Cheeses made from sheep's milk - soft and semi-soft - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed d)	10	Gram	3	0	<= 100	Listeria monocytogenes	1	0
							>100	Listeria monocytogenes	1	0
	Cheeses made from sheep's milk - soft and semi-soft - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed d)	25	Gram	3	0	detection	Listeria monocytogenes	2	0
	Chocolate - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed d)	10	Gram	18	0	<= 100	Listeria monocytogenes	3	0
							>100	Listeria monocytogenes	3	0
	Chocolate - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed d)	25	Gram	18	0	detection	Listeria monocytogenes	15	0
	Chocolate - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed d)	10	Gram	101	0	<= 100	Listeria monocytogenes	30	0
							>100	Listeria monocytogenes	30	0
	Chocolate - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed d)	25	Gram	101	0	detection	Listeria monocytogenes	71	0
	Dairy products (excluding cheeses) - fermented dairy products - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed d)	10	Gram	45	0	<= 100	Listeria monocytogenes	2	0
							>100	Listeria monocytogenes	2	0
	Dairy products (excluding cheeses) - fermented dairy products - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed d)	25	Gram	45	0	detection	Listeria monocytogenes	43	0
	Dairy products (excluding cheeses) - fermented dairy products - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed d)	10	Gram	108	0	<= 100	Listeria monocytogenes	16	0
							>100	Listeria monocytogenes	16	0
	Dairy products (excluding cheeses) - fermented dairy products - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed d)	25	Gram	108	0	detection	Listeria monocytogenes	92	0
	Dairy products (excluding cheeses) - milk powder and whey powder - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed d)	10	Gram	4	0	<= 100	Listeria monocytogenes	1	0
							>100	Listeria monocytogenes	1	0
	Dairy products (excluding cheeses) - milk powder and whey powder - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed d)	25	Gram	4	0	detection	Listeria monocytogenes	3	0
	Dairy products (excluding cheeses) - milk powder and whey powder - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed d)	10	Gram	87	0	<= 100	Listeria monocytogenes	22	0
							>100	Listeria monocytogenes	22	0
	Dairy products (excluding cheeses) - milk powder and whey powder - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed d)	25	Gram	87	0	detection	Listeria monocytogenes	65	0
	Fish - cooked - Catering - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed d)	10	Gram	13	0	<= 100	Listeria monocytogenes	3	0
							>100	Listeria monocytogenes	3	0
	Fish - cooked - Catering - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed d)	25	Gram	13	0	detection	Listeria monocytogenes	10	0
	Fish - cooked - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed d)	25	Gram	1	0	detection	Listeria monocytogenes	1	0
	Fish - cooked - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed d)	25	Gram	2	0	detection	Listeria monocytogenes	2	0

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Total units tested	Total units positive	Method	Zoonoses	N of units tested	N of units positive
Not Available	Fish - marinated - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed)	10	Gram	44	1	<= 100	Listeria monocytogenes	3	1
							>100	Listeria monocytogenes	3	0
	Fish - marinated - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed)	25	Gram	44	1	detection	Listeria monocytogenes	42	1
	Fish - smoked - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed)	10	Gram	63	4	<= 100	Listeria monocytogenes	11	4
							>100	Listeria monocytogenes	11	0
	Fish - smoked - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed)	25	Gram	63	4	detection	Listeria monocytogenes	56	4
	Fishery products, unspecified - ready-to-eat - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed)	25	Gram	2	0	detection	Listeria monocytogenes	2	0
	Follow-on formulae - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed)	25	Gram	37	0	detection	Listeria monocytogenes	37	0
	Foodstuffs intended for special nutritional uses - dried dietary foods for special medical purposes intended for infants below 6 months - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed)	25	Gram	45	0	detection	Listeria monocytogenes	45	0
	Foodstuffs intended for special nutritional uses - ready-to-eat - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed)	25	Gram	42	0	detection	Listeria monocytogenes	42	0
	Foodstuffs intended for special nutritional uses - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed)	10	Gram	7	0	<= 100	Listeria monocytogenes	1	0
							>100	Listeria monocytogenes	1	0
	Foodstuffs intended for special nutritional uses - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed)	25	Gram	7	0	detection	Listeria monocytogenes	6	0
	Fruits - non-pre-cut - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed)	10	Gram	42	0	<= 100	Listeria monocytogenes	3	0
							>100	Listeria monocytogenes	3	0
	Fruits - non-pre-cut - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed)	25	Gram	42	0	detection	Listeria monocytogenes	39	0
	Fruits - pre-cut - frozen - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed)	25	Gram	7	0	detection	Listeria monocytogenes	7	0
	Juice - fruit juice - unpasteurised - Catering - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed)	25	Millilitre	10	0	detection	Listeria monocytogenes	10	0
	Meat from bovine animals - meat products - cooked, ready-to-eat - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed)	25	Gram	4	0	detection	Listeria monocytogenes	4	0
	Meat from bovine animals - meat products - cooked, ready-to-eat - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed)	25	Gram	32	0	detection	Listeria monocytogenes	32	0
	Meat from broilers (Gallus gallus) - meat products - cooked, ready-to-eat - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed)	10	Gram	16	0	<= 100	Listeria monocytogenes	2	0
							>100	Listeria monocytogenes	2	0
	Meat from broilers (Gallus gallus) - meat products - cooked, ready-to-eat - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed)	25	Gram	16	0	detection	Listeria monocytogenes	14	0

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Total units tested	Total units positive	Method	Zoonoses	N of units tested	N of units positive
Not Available	Meat from broilers (Gallus gallus) - meat products - cooked, ready-to-eat - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	10	Gram	86	0	<= 100	Listeria monocytogenes	9	0
							>100	Listeria monocytogenes	9	0
	Meat from broilers (Gallus gallus) - meat products - cooked, ready-to-eat - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	86	0	detection	Listeria monocytogenes	77	0
	Meat from deer (venison) - meat products - fermented sausages - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	10	Gram	3	0	<= 100	Listeria monocytogenes	1	0
							>100	Listeria monocytogenes	1	0
	Meat from deer (venison) - meat products - fermented sausages - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	3	0	detection	Listeria monocytogenes	2	0
	Meat from duck - meat products - cooked, ready-to-eat - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	4	0	detection	Listeria monocytogenes	4	0
	Meat from duck - meat products - raw and intended to be eaten raw - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	10	Gram	1	1	<= 100	Listeria monocytogenes	1	1
							>100	Listeria monocytogenes	1	0
	Meat from duck - meat products - raw and intended to be eaten raw - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	1	1	detection	Listeria monocytogenes	1	1
	Meat from geese - meat products - cooked, ready-to-eat - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	1	0	detection	Listeria monocytogenes	1	0
	Meat from pig - meat products - cooked, ready-to-eat - Border inspection activities - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	1	0	detection	Listeria monocytogenes	1	0
	Meat from pig - meat products - cooked, ready-to-eat - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	10	Gram	37	0	<= 100	Listeria monocytogenes	2	0
							>100	Listeria monocytogenes	2	0
	Meat from pig - meat products - cooked, ready-to-eat - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	37	0	detection	Listeria monocytogenes	35	0
	Meat from pig - meat products - cooked, ready-to-eat - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	10	Gram	195	1	<= 100	Listeria monocytogenes	38	1
							>100	Listeria monocytogenes	38	0
	Meat from pig - meat products - cooked, ready-to-eat - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	195	1	detection	Listeria monocytogenes	158	1
	Meat from pig - meat products - fermented sausages - Catering - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	1	0	detection	Listeria monocytogenes	1	0
	Meat from pig - meat products - fermented sausages - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	10	Gram	148	14	<= 100	Listeria monocytogenes	62	12
							>100	Listeria monocytogenes	62	2
	Meat from pig - meat products - fermented sausages - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	148	14	detection	Listeria monocytogenes	100	14
	Meat from pig - meat products - fermented sausages - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	10	Gram	551	10	<= 100	Listeria monocytogenes	163	9
							>100	Listeria monocytogenes	163	1
	Meat from pig - meat products - fermented sausages - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	551	10	detection	Listeria monocytogenes	398	10

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Total units tested	Total units positive	Method	Zoonoses	N of units tested	N of units positive
Not Available	Meat from pig - meat products - raw and intended to be eaten raw - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	10	Gram	62	2	<= 100	Listeria monocytogenes	14	2
							>100	Listeria monocytogenes	14	0
	Meat from pig - meat products - raw and intended to be eaten raw - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	62	2	detection	Listeria monocytogenes	50	2
	Meat from pig - meat products - raw and intended to be eaten raw - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	10	Gram	82	2	<= 100	Listeria monocytogenes	2	2
							>100	Listeria monocytogenes	2	0
	Meat from pig - meat products - raw and intended to be eaten raw - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	82	2	detection	Listeria monocytogenes	82	2
	Meat from pig - meat products - unspecified, ready-to-eat - Catering - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	10	Gram	30	0	<= 100	Listeria monocytogenes	3	0
							>100	Listeria monocytogenes	3	0
	Meat from pig - meat products - unspecified, ready-to-eat - Catering - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	30	0	detection	Listeria monocytogenes	27	0
	Meat from pig - meat products - unspecified, ready-to-eat - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	10	Gram	4	0	<= 100	Listeria monocytogenes	2	0
							>100	Listeria monocytogenes	2	0
	Meat from pig - meat products - unspecified, ready-to-eat - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	4	0	detection	Listeria monocytogenes	2	0
	Meat from poultry, unspecified - meat products - cooked, ready-to-eat - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	10	Gram	15	0	<= 100	Listeria monocytogenes	1	0
							>100	Listeria monocytogenes	1	0
	Meat from poultry, unspecified - meat products - cooked, ready-to-eat - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	15	0	detection	Listeria monocytogenes	14	0
	Meat from poultry, unspecified - meat products - cooked, ready-to-eat - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	10	Gram	109	0	<= 100	Listeria monocytogenes	10	0
							>100	Listeria monocytogenes	10	0
	Meat from poultry, unspecified - meat products - cooked, ready-to-eat - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	109	0	detection	Listeria monocytogenes	99	0
	Meat from turkey - meat products - cooked, ready-to-eat - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	17	0	detection	Listeria monocytogenes	17	0
	Meat from turkey - meat products - cooked, ready-to-eat - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	10	Gram	191	0	<= 100	Listeria monocytogenes	27	0
							>100	Listeria monocytogenes	27	0
	Meat from turkey - meat products - cooked, ready-to-eat - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	191	0	detection	Listeria monocytogenes	164	0
	Meat from turkey - meat products - raw and intended to be eaten raw - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	5	0	detection	Listeria monocytogenes	5	0
	Milk, cows' - raw milk - Farm - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	10	Millilitre	92	2	<= 100	Listeria monocytogenes	2	2
							>100	Listeria monocytogenes	2	0
	Milk, cows' - raw milk - Farm - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Millilitre	92	2	detection	Listeria monocytogenes	92	2

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Total units tested	Total units positive	Method	Zoonoses	N of units tested	N of units positive
Not Available	Milk, cows' - raw milk - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed d)	10	Millilitre	20	1	<= 100	Listeria monocytogenes	1	0
							>100	Listeria monocytogenes	1	1
	Milk, cows' - raw milk - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed d)	25	Millilitre	20	1	detection	Listeria monocytogenes	20	1
	Other processed food products and prepared dishes - Catering - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed d)	10	Gram	441	1	<= 100	Listeria monocytogenes	58	1
							>100	Listeria monocytogenes	58	0
	Other processed food products and prepared dishes - Catering - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed d)	25	Gram	441	1	detection	Listeria monocytogenes	384	1
	Other processed food products and prepared dishes - legumes based dishes - Catering - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed d)	10	Gram	101	2	<= 100	Listeria monocytogenes	15	2
							>100	Listeria monocytogenes	15	2
	Other processed food products and prepared dishes - legumes based dishes - Catering - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed d)	25	Gram	101	2	detection	Listeria monocytogenes	88	2
	Other processed food products and prepared dishes - legumes based dishes - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed d)	10	Gram	30	0	<= 100	Listeria monocytogenes	6	0
							>100	Listeria monocytogenes	6	0
	Other processed food products and prepared dishes - legumes based dishes - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed d)	25	Gram	30	0	detection	Listeria monocytogenes	24	0
	Other processed food products and prepared dishes - legumes based dishes - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed d)	10	Gram	191	4	<= 100	Listeria monocytogenes	23	3
							>100	Listeria monocytogenes	23	1
	Other processed food products and prepared dishes - legumes based dishes - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed d)	25	Gram	191	4	detection	Listeria monocytogenes	172	4
	Other processed food products and prepared dishes - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed d)	25	Gram	23	0	detection	Listeria monocytogenes	23	0
	Other processed food products and prepared dishes - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed d)	10	Gram	56	0	<= 100	Listeria monocytogenes	7	0
							>100	Listeria monocytogenes	7	0
	Other processed food products and prepared dishes - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed d)	25	Gram	56	0	detection	Listeria monocytogenes	49	0
	Other processed food products and prepared dishes - sandwiches - Catering - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed d)	25	Gram	43	0	detection	Listeria monocytogenes	43	0
	Other processed food products and prepared dishes - sandwiches - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed d)	10	Gram	32	0	<= 100	Listeria monocytogenes	6	0
							>100	Listeria monocytogenes	6	0
	Other processed food products and prepared dishes - sandwiches - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed d)	25	Gram	32	0	detection	Listeria monocytogenes	26	0
	Other processed food products and prepared dishes - sandwiches - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed d)	10	Gram	116	0	<= 100	Listeria monocytogenes	17	0
							>100	Listeria monocytogenes	17	0
	Other processed food products and prepared dishes - sandwiches - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed d)	25	Gram	116	0	detection	Listeria monocytogenes	99	0

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Total units tested	Total units positive	Method	Zoonoses	N of units tested	N of units positive
Not Available	Seeds, sprouted - ready-to-eat - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed)	25	Gram	9	0	detection	Listeria monocytogenes	9	0
	Seeds, sprouted - ready-to-eat - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed)	25	Gram	53	0	detection	Listeria monocytogenes	53	0
	Spices and herbs - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed)	10	Gram	1	0	<= 100	Listeria monocytogenes	1	0
							>100	Listeria monocytogenes	1	0

Table LYSSAVIRUS in animal

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Total units tested	Total units positive	Zoonoses	N of units positive
Not Available	Bats - wild - Natural habitat - Not Available - Not Available - Monitoring - passive - Official sampling - Suspect sampling	animal	18	0	Lyssavirus	0
	Cats - Veterinary clinics - Not Available - Not Available - Monitoring - passive - Official sampling - Suspect sampling	animal	381	0	Lyssavirus	0
	Cattle (bovine animals) - Farm - Not Available - Not Available - Monitoring - passive - Official sampling - Suspect sampling	animal	21	0	Lyssavirus	0
	Deer - wild - roe deer - Natural habitat - Not Available - Not Available - Monitoring - passive - Official sampling - Suspect sampling	animal	31	0	Lyssavirus	0
	Dogs - Veterinary clinics - Not Available - Not Available - Monitoring - passive - Official sampling - Suspect sampling	animal	176	0	Lyssavirus	0
	Foxes - wild - Hunting - Not Available - Not Available - Monitoring - active - Official sampling - Objective sampling	animal	3156	0	Lyssavirus	0
	Foxes - wild - Natural habitat - Not Available - Not Available - Monitoring - passive - Official sampling - Suspect sampling	animal	404	1	Lyssavirus	1
	Goats - Farm - Not Available - Not Available - Monitoring - passive - Official sampling - Suspect sampling	animal	3	0	Lyssavirus	0
	Jackals - wild - Hunting - Not Available - Not Available - Monitoring - active - Official sampling - Objective sampling	animal	53	0	Lyssavirus	0
	Jackals - wild - Natural habitat - Not Available - Not Available - Monitoring - passive - Official sampling - Suspect sampling	animal	7	0	Lyssavirus	0
	Sheep - Farm - Not Available - Not Available - Monitoring - passive - Official sampling - Suspect sampling	animal	29	0	Lyssavirus	0
	Solipeds, domestic - Farm - Not Available - Not Available - Monitoring - passive - Official sampling - Suspect sampling	animal	12	0	Lyssavirus	0
	Wild boars - Natural habitat - Not Available - Not Available - Monitoring - passive - Official sampling - Suspect sampling	animal	5	0	Lyssavirus	0

Table MYCOBACTERIUM in animal

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Total units tested	Total units positive	Zoonoses	N of units positive
Not Available	Badgers - wild - Natural habitat - Not Available - Not Available - Clinical investigations - Official sampling - Suspect sampling	animal	2	0	Mycobacterium	0
	Cattle (bovine animals) - Farm - Not Available - Not Available - Unspecified - Industry sampling - Other	animal	12	1	Mycobacterium spp., unspecified	1
	Cattle (bovine animals) - Slaughterhouse - Not Available - Not Available - Clinical investigations - Official sampling - Suspect sampling	animal	106	10	Mycobacterium avium subsp. hominissuis	1
					Mycobacterium avium subsp. paratuberculosis	4
					Mycobacterium caprae	3
					Mycobacterium spp., unspecified	2
	Cattle (bovine animals) - Slaughterhouse - Not Available - Not Available - Monitoring - Official sampling - Selective sampling	animal	96	15	Mycobacterium avium	1
					Mycobacterium avium subsp. paratuberculosis	12
					Mycobacterium spp., unspecified	2
	Deer - wild - red deer - Hunting - Not Available - Not Available - Monitoring - Official sampling - Selective sampling	animal	24	2	Mycobacterium caprae	2
	Dogs - Veterinary clinics - Not Available - Not Available - Clinical investigations - Industry sampling - Suspect sampling	animal	1	0	Mycobacterium	0
	Elephants - Zoo - Not Available - Not Available - Clinical investigations - Industry sampling - Suspect sampling	animal	8	1	Mycobacterium spp., unspecified	1
	Foxes - wild - Natural habitat - Not Available - Not Available - Clinical investigations - Official sampling - Suspect sampling	animal	3	2	Mycobacterium avium subsp. avium	2
	Goats - Farm - Not Available - Not Available - Clinical investigations - Official sampling - Suspect sampling	animal	3	1	Mycobacterium spp., unspecified	1
	Kangaroos - Zoo - Not Available - Not Available - Clinical investigations - Industry sampling - Suspect sampling	animal	1	0	Mycobacterium	0
	Mouflons - wild - Natural habitat - Not Available - Not Available - Clinical investigations - Official sampling - Suspect sampling	animal	2	2	Mycobacterium avium subsp. paratuberculosis	2
	Mouflons - wild - Zoo - Not Available - Not Available - Clinical investigations - Industry sampling - Suspect sampling	animal	1	0	Mycobacterium	0
	Penguin - Zoo - Not Available - Not Available - Clinical investigations - Industry sampling - Suspect sampling	animal	1	0	Mycobacterium	0
	Pigs - Slaughterhouse - Not Available - Not Available - Clinical investigations - Official sampling - Suspect sampling	animal	3	0	Mycobacterium	0
	Water buffalos - farmed - Slaughterhouse - Not Available - Not Available - Clinical investigations - Official sampling - Suspect sampling	animal	1	0	Mycobacterium	0
	Wild boars - Hunting - Not Available - Not Available - Clinical investigations - Industry sampling - Suspect sampling	animal	2	1	Mycobacterium caprae	1
	Wild boars - Hunting - Not Available - Not Available - Monitoring - Official sampling - Selective sampling	animal	175	35	Mycobacterium avium	1
					Mycobacterium avium subsp. avium	2
					Mycobacterium avium subsp. hominissuis	2
					Mycobacterium caprae	17
					Mycobacterium spp., unspecified	13

Table SALMONELLA in animal

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	N of flocks under control programme	Target verification	Total units tested	Total units positive	Zoonoses	N of units positive
Not Available	All animals - pet animals - Farm - Not Available - Not Available - Clinical investigations - Industry sampling - Suspect sampling	herd/flock		N_A	12	1	Salmonella	1
	Cattle (bovine animals) - Farm - Not Available - Not Available - Clinical investigations - Industry sampling - Suspect sampling	animal		N_A	90	21	Salmonella	21
	Ducks - Farm - Not Available - Not Available - Clinical investigations - Industry sampling - Suspect sampling	herd/flock		N_A	75	34	Salmonella	34
	Gallus gallus (fowl) - breeding flocks, unspecified - adult - Farm - Not Available - Not Available - Control and eradication programmes - Official and industry sampling - Census	herd/flock	654	Y	654	6	Salmonella Enteritidis	2
							Salmonella Infantis	1
							Salmonella Typhimurium, monophasic	3
	Gallus gallus (fowl) - breeding flocks, unspecified - Farm - Not Available - Not Available - Control and eradication programmes - Official and industry sampling - Census	herd/flock	941	N	941	19	Salmonella Bovismorbificans	4
							Salmonella Kedougou	1
							Salmonella Livingstone	3
							Salmonella Senftenberg	5
							Salmonella Wilhelmsburg	6
	Gallus gallus (fowl) - broilers - before slaughter - Farm - Not Available - Not Available - Control and eradication programmes - Industry sampling - Census	herd/flock	7698	N	7698	11	Salmonella Enteritidis	9
							Salmonella Typhimurium	2
	Gallus gallus (fowl) - broilers - before slaughter - Farm - Not Available - Not Available - Control and eradication programmes - Official and industry sampling - Census	herd/flock	7698	Y	7698	11	Salmonella Enteritidis	9
							Salmonella Typhimurium	2
				N	7698	1140	Salmonella Bredeney	5
							Salmonella Infantis	1,090
							Salmonella Mbandaka	10
							Salmonella Other serovars	21
							Salmonella Senftenberg	5
							Salmonella Thompson	9
	Gallus gallus (fowl) - broilers - before slaughter - Farm - Not Available - Not Available - Control and eradication programmes - Official sampling - Objective sampling	herd/flock	7698	N	201	0	Salmonella	0
	Gallus gallus (fowl) - laying hens - adult - Farm - Not Available - Not Available - Control and eradication programmes - Official and industry sampling - Census	herd/flock	847	Y	847	21	Salmonella Enteritidis	15
							Salmonella Typhimurium	5
							Salmonella Typhimurium, monophasic	1
	Gallus gallus (fowl) - laying hens - Farm - Not Available - Not Available - Control and eradication programmes - Official and industry sampling - Census	herd/flock	1089	N	1089	24	Salmonella Abony	2
							Salmonella Bovismorbificans	2
							Salmonella Braenderup	6
							Salmonella Derby	3
							Salmonella Infantis	4
							Salmonella Kedougou	2
							Salmonella Kentucky	2
							Salmonella Mbandaka	2
							Salmonella Newport	1
	Geese - Farm - Not Available - Not Available - Clinical investigations - Industry sampling - Suspect sampling	herd/flock		N_A	135	36	Salmonella	36
	Goats - Farm - Not Available - Not Available - Clinical investigations - Industry sampling - Suspect sampling	animal		N_A	1	0	Salmonella	0
	Ostriches - Farm - Not Available - Not Available - Clinical investigations - Industry sampling - Suspect sampling	herd/flock		N_A	1	0	Salmonella	0

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	N of flocks under control programme	Target verification	Total units tested	Total units positive	Zoonoses	N of units positive
Not Available	Partridges - Farm - Not Available - Not Available - Clinical investigations - Industry sampling - Suspect sampling	herd/flock		N_A	3	2	Salmonella	2
	Pheasants - Farm - Not Available - Not Available - Clinical investigations - Industry sampling - Suspect sampling	herd/flock		N_A	7	1	Salmonella	1
	Pigeons - Farm - Not Available - Not Available - Clinical investigations - Industry sampling - Suspect sampling	herd/flock		N_A	8	3	Salmonella	3
	Pigs - Farm - Not Available - Not Available - Clinical investigations - Industry sampling - Suspect sampling	herd/flock		N_A	27	12	Salmonella	12
	Quails - Farm - Not Available - Not Available - Clinical investigations - Industry sampling - Suspect sampling	herd/flock		N_A	4	2	Salmonella	2
	Sheep - Farm - Not Available - Not Available - Clinical investigations - Industry sampling - Suspect sampling	animal		N_A	1	0	Salmonella	0
	Turkeys - breeding flocks, unspecified - adult - Farm - Not Available - Not Available - Control and eradication programmes - Industry sampling - Census	herd/flock	154	N	154	1	Salmonella Typhimurium, monophasic	1
	Turkeys - breeding flocks, unspecified - adult - Farm - Not Available - Not Available - Control and eradication programmes - Official and industry sampling - Census	herd/flock	154	Y	154	1	Salmonella Typhimurium, monophasic	1
	Turkeys - breeding flocks, unspecified - adult - Farm - Not Available - Not Available - Control and eradication programmes - Official sampling - Objective sampling	herd/flock	154	N	79	0	Salmonella	0
	Turkeys - breeding flocks, unspecified - Farm - Not Available - Not Available - Control and eradication programmes - Official and industry sampling - Census	herd/flock	216	N	216	28	Salmonella Hadar	14
							Salmonella Kedougou	2
							Salmonella Newport	12
	Turkeys - fattening flocks - before slaughter - Farm - Not Available - Not Available - Control and eradication programmes - Industry sampling - Census	herd/flock	2927	N	2927	13	Salmonella Enteritidis	11
							Salmonella Typhimurium	2
	Turkeys - fattening flocks - before slaughter - Farm - Not Available - Not Available - Control and eradication programmes - Official and industry sampling - Census	herd/flock	2927	Y	2927	13	Salmonella Enteritidis	11
							Salmonella Typhimurium	2
				N	2927	665	Salmonella Bredeney	109
							Salmonella Hadar	18
							Salmonella Infantis	236
							Salmonella Kentucky	46
							Salmonella Newport	188
							Salmonella Other serovars	19
							Salmonella Stanley	49
	Turkeys - fattening flocks - before slaughter - Farm - Not Available - Not Available - Control and eradication programmes - Official sampling - Objective sampling	herd/flock	2927	N	144	0	Salmonella	0

Table SALMONELLA in food

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Total units tested	Total units positive	Zoonoses	N of units positive
HUNGARY	Bakery products - cakes - Catering - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	71	0	Salmonella	0
	Bakery products - cakes - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	7	0	Salmonella	0
	Bakery products - cakes - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	95	0	Salmonella	0
	Cereals and meals - flakes - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	45	0	Salmonella	0
	Cereals and meals - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	2	0	Salmonella	0
	Cereals and meals - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	8	0	Salmonella	0
	Cheeses made from cows' milk - curd - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Census	single (food/fee d)	25	Gram	10	0	Salmonella	0
	Cheeses made from cows' milk - curd - Retail - Not Available - food sample - Monitoring - active - Official sampling - Census	single (food/fee d)	25	Gram	39	0	Salmonella	0
	Cheeses made from cows' milk - fresh - made from pasteurised milk - Border inspection activities - Not Available - food sample - Monitoring - active - Official sampling - Census	single (food/fee d)	25	Gram	1	0	Salmonella	0
	Cheeses made from cows' milk - fresh - made from pasteurised milk - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Census	single (food/fee d)	25	Gram	11	0	Salmonella	0
	Cheeses made from cows' milk - fresh - made from pasteurised milk - Retail - Not Available - food sample - Monitoring - active - Official sampling - Census	single (food/fee d)	25	Gram	35	0	Salmonella	0
	Cheeses made from cows' milk - fresh - made from raw or low heat-treated milk - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Census	single (food/fee d)	25	Gram	1	0	Salmonella	0
	Cheeses made from cows' milk - soft and semi-soft - made from pasteurised milk - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Census	single (food/fee d)	25	Gram	24	0	Salmonella	0
	Cheeses made from cows' milk - soft and semi-soft - made from pasteurised milk - Retail - Not Available - food sample - Monitoring - active - Official sampling - Census	single (food/fee d)	25	Gram	100	0	Salmonella	0
	Cheeses made from cows' milk - soft and semi-soft - made from raw or low heat-treated milk - Retail - Not Available - food sample - Monitoring - active - Official sampling - Census	single (food/fee d)	25	Gram	3	0	Salmonella	0
	Cheeses made from goats' milk - hard - made from pasteurised milk - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Census	single (food/fee d)	25	Gram	6	0	Salmonella	0
	Cheeses made from goats' milk - hard - made from pasteurised milk - Retail - Not Available - food sample - Monitoring - active - Official sampling - Census	single (food/fee d)	25	Gram	10	0	Salmonella	0

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Total units tested	Total units positive	Zoonoses	N of units positive
HUNGARY	Cheeses made from goats' milk - soft and semi-soft - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Census	single (food/fee d)	25	Gram	4	0	Salmonella	0
	Cheeses made from goats' milk - soft and semi-soft - Retail - Not Available - food sample - Monitoring - active - Official sampling - Census	single (food/fee d)	25	Gram	3	0	Salmonella	0
	Cheeses made from sheep's milk - fresh - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Census	single (food/fee d)	25	Gram	2	0	Salmonella	0
	Cheeses made from sheep's milk - fresh - Retail - Not Available - food sample - Monitoring - active - Official sampling - Census	single (food/fee d)	25	Gram	96	0	Salmonella	0
	Cheeses made from sheep's milk - soft and semi-soft - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Census	single (food/fee d)	25	Gram	1	0	Salmonella	0
	Cheeses made from sheep's milk - soft and semi-soft - Retail - Not Available - food sample - Monitoring - active - Official sampling - Census	single (food/fee d)	25	Gram	2	0	Salmonella	0
	Chocolate - Catering - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	2	0	Salmonella	0
	Chocolate - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	18	0	Salmonella	0
	Chocolate - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	121	0	Salmonella	0
	Dairy products (excluding cheeses) - fermented dairy products - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	2	0	Salmonella	0
	Dairy products (excluding cheeses) - fermented dairy products - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	21	0	Salmonella	0
	Dairy products (excluding cheeses) - milk powder and whey powder - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Census	single (food/fee d)	25	Gram	6	0	Salmonella	0
	Dairy products (excluding cheeses) - milk powder and whey powder - Retail - Not Available - food sample - Monitoring - active - Official sampling - Census	single (food/fee d)	25	Gram	81	0	Salmonella	0
	Egg products - dried - Catering - Not Available - food sample - Monitoring - active - Official sampling - Census	single (food/fee d)	25	Gram	4	0	Salmonella	0
	Egg products - dried - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Census	single (food/fee d)	25	Gram	42	1	Salmonella Infantis	1
	Egg products - dried - Retail - Not Available - food sample - Monitoring - active - Official sampling - Census	single (food/fee d)	25	Gram	6	0	Salmonella	0
	Egg products - liquid - Catering - Not Available - food sample - Monitoring - active - Official sampling - Census	single (food/fee d)	25	Gram	14	1	Salmonella Enteritidis	1
	Egg products - liquid - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Census	single (food/fee d)	25	Gram	46	1	Salmonella Infantis	1

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Total units tested	Total units positive	Zoonoses	N of units positive
HUNGARY	Egg products - liquid - Retail - Not Available - food sample - Monitoring - active - Official sampling - Census	single (food/fee d)	25	Gram	11	0	Salmonella	0
	Eggs - table eggs - Catering - Not Available - food sample - Monitoring - active - Official sampling - Census	single (food/fee d)	25	Gram	4	0	Salmonella	0
	Eggs - table eggs - Retail - Not Available - food sample - Monitoring - active - Official sampling - Census	single (food/fee d)	25	Gram	621	1	Salmonella Enteritidis	1
	Fish - cooked - Catering - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	13	0	Salmonella	0
	Fish - cooked - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	3	0	Salmonella	0
	Fish - marinated - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	47	0	Salmonella	0
	Fish - raw - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	4	0	Salmonella	0
	Fish - raw - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	76	0	Salmonella	0
	Fish - smoked - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	64	0	Salmonella	0
	Fishery products, unspecified - non-ready-to-eat - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	11	0	Salmonella	0
	Fishery products, unspecified - raw - frozen - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	9	0	Salmonella	0
	Fishery products, unspecified - ready-to-eat - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	2	0	Salmonella	0
	Foodstuffs intended for special nutritional uses - Border inspection activities - New Zealand - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	1	0	Salmonella	0
	Foodstuffs intended for special nutritional uses - processed cereal-based food for infants and young children - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	43	0	Salmonella	0
	Foodstuffs intended for special nutritional uses - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	9	0	Salmonella	0
	Fruits - non-pre-cut - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	54	0	Salmonella	0
	Fruits - pre-cut - frozen - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	1	0	Salmonella	0
	Fruits - pre-cut - frozen - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	6	0	Salmonella	0

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Total units tested	Total units positive	Zoonoses	N of units positive
HUNGARY	Juice - fruit juice - unpasteurised - Catering - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	8	0	Salmonella	0
	Juice - fruit juice - unpasteurised - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	2	0	Salmonella	0
	Meat from bovine animals - carcase - Slaughterhouse - Not Available - food sample - carcase swabs - Monitoring - active - Official sampling - Census	single (food/fee d)	400	Square centimetre	152	0	Salmonella	0
	Meat from bovine animals - fresh - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Census	single (food/fee d)	25	Gram	71	2	Salmonella Derby	1
							Salmonella Infantis	1
	Meat from bovine animals - fresh - Retail - Not Available - food sample - Monitoring - active - Official sampling - Census	single (food/fee d)	25	Gram	109	1	Salmonella Bredeney	1
	Meat from bovine animals - meat preparation - intended to be eaten cooked - Catering - Not Available - food sample - Monitoring - active - Official sampling - Census	single (food/fee d)	25	Gram	2	0	Salmonella	0
	Meat from bovine animals - meat preparation - intended to be eaten cooked - Retail - Not Available - food sample - Monitoring - active - Official sampling - Census	single (food/fee d)	25	Gram	5	0	Salmonella	0
	Meat from bovine animals - meat products - cooked, ready-to-eat - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Census	single (food/fee d)	25	Gram	6	0	Salmonella	0
	Meat from bovine animals - meat products - cooked, ready-to-eat - Retail - Not Available - food sample - Monitoring - active - Official sampling - Census	single (food/fee d)	25	Gram	30	0	Salmonella	0
	Meat from bovine animals - meat products - raw but intended to be eaten cooked - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Census	single (food/fee d)	25	Gram	6	0	Salmonella	0
	Meat from bovine animals - meat products - raw but intended to be eaten cooked - Retail - Not Available - food sample - Monitoring - active - Official sampling - Census	single (food/fee d)	25	Gram	51	0	Salmonella	0
	Meat from bovine animals - minced meat - intended to be eaten cooked - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Census	single (food/fee d)	25	Gram	8	0	Salmonella	0
	Meat from bovine animals - minced meat - intended to be eaten cooked - Retail - Not Available - food sample - Monitoring - active - Official sampling - Census	single (food/fee d)	25	Gram	107	0	Salmonella	0
	Meat from broilers (Gallus gallus) - carcase - Slaughterhouse - Not Available - food sample - neck skin - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	318	53	Salmonella Infantis	53
	Meat from broilers (Gallus gallus) - fresh - Catering - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	2	0	Salmonella	0
	Meat from broilers (Gallus gallus) - fresh - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	231	27	Salmonella I 6,7:-:-	1
							Salmonella Infantis	25
							Salmonella Kentucky	1
	Meat from broilers (Gallus gallus) - fresh - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	284	46	Salmonella Enteritidis	1
							Salmonella Infantis	45
	Meat from broilers (Gallus gallus) - meat preparation - intended to be eaten cooked - Border inspection activities - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	1	0	Salmonella	0

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Total units tested	Total units positive	Zoonoses	N of units positive
HUNGARY	Meat from broilers (Gallus gallus) - meat preparation - intended to be eaten cooked - Catering - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	3	0	Salmonella	0
	Meat from broilers (Gallus gallus) - meat preparation - intended to be eaten cooked - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	5	2	Salmonella Infantis	2
	Meat from broilers (Gallus gallus) - meat preparation - intended to be eaten cooked - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	81	16	Salmonella Infantis	15
							Salmonella Montevideo	1
	Meat from broilers (Gallus gallus) - meat products - cooked, ready-to-eat - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	86	0	Salmonella	0
	Meat from broilers (Gallus gallus) - meat products - cooked, ready-to-eat - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	16	0	Salmonella	0
	Meat from broilers (Gallus gallus) - meat products - raw but intended to be eaten cooked - frozen - Border inspection activities - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	1	0	Salmonella	0
	Meat from broilers (Gallus gallus) - meat products - raw but intended to be eaten cooked - frozen - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	8	0	Salmonella	0
	Meat from broilers (Gallus gallus) - meat products - raw but intended to be eaten cooked - frozen - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	48	5	Salmonella Infantis	5
	Meat from broilers (Gallus gallus) - minced meat - intended to be eaten cooked - Catering - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	1	0	Salmonella	0
	Meat from broilers (Gallus gallus) - minced meat - intended to be eaten cooked - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	1	0	Salmonella	0
	Meat from deer (venison) - fresh - Catering - Not Available - food sample - Monitoring - active - Official sampling - Census	single (food/fee d)	25	Gram	2	0	Salmonella	0
	Meat from deer (venison) - fresh - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Census	single (food/fee d)	25	Gram	6	0	Salmonella	0
	Meat from deer (venison) - fresh - Retail - Not Available - food sample - Monitoring - active - Official sampling - Census	single (food/fee d)	25	Gram	39	0	Salmonella	0
	Meat from deer (venison) - meat products - fermented sausages - Retail - Not Available - food sample - Monitoring - active - Official sampling - Census	single (food/fee d)	25	Gram	3	0	Salmonella	0
	Meat from duck - fresh - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Census	single (food/fee d)	25	Gram	16	2	Salmonella Kentucky	1
							Salmonella Newport	1
	Meat from duck - fresh - Retail - Not Available - food sample - Monitoring - active - Official sampling - Census	single (food/fee d)	25	Gram	90	10	Salmonella Enteritidis	3
							Salmonella Indiana	2
							Salmonella Infantis	1
							Salmonella Kottbus	1
							Salmonella Livingstone	1
							Salmonella Typhimurium	1
							Salmonella Typhimurium, monophasic	1

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Total units tested	Total units positive	Zoonoses	N of units positive
HUNGARY	Meat from duck - meat products - cooked, ready-to-eat - Retail - Not Available - food sample - Monitoring - active - Official sampling - Census	single (food/feed d)	25	Gram	5	0	Salmonella	0
	Meat from geese - fresh - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Census	single (food/feed d)	25	Gram	4	1	Salmonella Thompson	1
	Meat from geese - fresh - Retail - Not Available - food sample - Monitoring - active - Official sampling - Census	single (food/feed d)	25	Gram	15	0	Salmonella	0
	Meat from geese - meat products - cooked, ready-to-eat - Retail - Not Available - food sample - Monitoring - active - Official sampling - Census	single (food/feed d)	25	Gram	2	0	Salmonella	0
	Meat from other poultry species - fresh - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed d)	25	Gram	1	1	Salmonella Infantis	1
	Meat from other poultry species - fresh - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed d)	25	Gram	13	0	Salmonella	0
	Meat from pig - carcase - Slaughterhouse - Not Available - food sample - carcase swabs - Control and eradication programmes - Official, based on Regulation 854/2004 - Other	single (food/feed d)	400	Square centimetre	2378	26	Salmonella 9,12:iv:-	1
							Salmonella Derby	4
							Salmonella Infantis	1
							Salmonella Typhimurium	1
							Salmonella Typhimurium, monophasic	19
	Meat from pig - fresh - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Census	single (food/feed d)	25	Gram	168	3	Salmonella Derby	1
							Salmonella Infantis	1
							Salmonella Typhimurium	1
	Meat from pig - fresh - Retail - Not Available - food sample - Monitoring - active - Official sampling - Census	single (food/feed d)	25	Gram	191	1	Salmonella I 6,7:-:-	1
	Meat from pig - meat preparation - intended to be eaten cooked - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Census	single (food/feed d)	25	Gram	34	0	Salmonella	0
	Meat from pig - meat preparation - intended to be eaten cooked - Retail - Not Available - food sample - Monitoring - active - Official sampling - Census	single (food/feed d)	25	Gram	213	6	Salmonella Derby	3
							Salmonella Infantis	1
							Salmonella Typhimurium	1
							Salmonella Typhimurium, monophasic	1
	Meat from pig - meat products - cooked, ready-to-eat - Border inspection activities - Not Available - food sample - Monitoring - active - Official sampling - Census	single (food/feed d)	25	Gram	1	0	Salmonella	0
	Meat from pig - meat products - cooked, ready-to-eat - Catering - Not Available - food sample - Monitoring - active - Official sampling - Census	single (food/feed d)	25	Gram	4	0	Salmonella	0
	Meat from pig - meat products - cooked, ready-to-eat - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Census	single (food/feed d)	25	Gram	96	0	Salmonella	0
	Meat from pig - meat products - cooked, ready-to-eat - Retail - Not Available - food sample - Monitoring - active - Official sampling - Census	single (food/feed d)	25	Gram	230	0	Salmonella	0
	Meat from pig - meat products - fermented sausages - Catering - Not Available - food sample - Monitoring - active - Official sampling - Census	single (food/feed d)	25	Gram	4	0	Salmonella	0

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Total units tested	Total units positive	Zoonoses	N of units positive
HUNGARY	Meat from pig - meat products - fermented sausages - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Census	single (food/fee d)	25	Gram	120	2	Salmonella Derby	1
							Salmonella Typhimurium	1
	Meat from pig - meat products - fermented sausages - Retail - Not Available - food sample - Monitoring - active - Official sampling - Census	single (food/fee d)	25	Gram	490	2	Salmonella Derby	1
							Salmonella Typhimurium	1
	Meat from pig - meat products - raw and intended to be eaten raw - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Census	single (food/fee d)	25	Gram	60	0	Salmonella	0
	Meat from pig - meat products - raw and intended to be eaten raw - Retail - Not Available - food sample - Monitoring - active - Official sampling - Census	single (food/fee d)	25	Gram	119	1	Salmonella Bredeney	1
	Meat from pig - meat products - raw but intended to be eaten cooked - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Census	single (food/fee d)	25	Gram	1	0	Salmonella	0
	Meat from pig - meat products - raw but intended to be eaten cooked - Retail - Not Available - food sample - Monitoring - active - Official sampling - Census	single (food/fee d)	25	Gram	14	0	Salmonella	0
	Meat from pig - meat products - unspecified, ready-to-eat - Catering - Not Available - food sample - Monitoring - active - Official sampling - Census	single (food/fee d)	25	Gram	39	0	Salmonella	0
	Meat from pig - meat products - unspecified, ready-to-eat - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Census	single (food/fee d)	25	Gram	2	0	Salmonella	0
	Meat from pig - meat products - unspecified, ready-to-eat - Retail - Not Available - food sample - Monitoring - active - Official sampling - Census	single (food/fee d)	25	Gram	11	0	Salmonella	0
	Meat from pig - mechanically separated meat (MSM) - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Census	single (food/fee d)	25	Gram	1	1	Salmonella Infantis	1
	Meat from pig - minced meat - intended to be eaten cooked - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Census	single (food/fee d)	25	Gram	18	0	Salmonella	0
	Meat from pig - minced meat - intended to be eaten cooked - Retail - Not Available - food sample - Monitoring - active - Official sampling - Census	single (food/fee d)	25	Gram	174	3	Salmonella Infantis	2
							Salmonella Typhimurium	1
	Meat from poultry, unspecified - meat products - cooked, ready-to-eat - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Census	single (food/fee d)	25	Gram	15	0	Salmonella	0
	Meat from poultry, unspecified - meat products - cooked, ready-to-eat - Retail - Not Available - food sample - Monitoring - active - Official sampling - Census	single (food/fee d)	25	Gram	110	0	Salmonella	0
	Meat from poultry, unspecified - meat products - raw but intended to be eaten cooked - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Census	single (food/fee d)	25	Gram	5	1	Salmonella Infantis	1
	Meat from poultry, unspecified - meat products - raw but intended to be eaten cooked - Retail - Not Available - food sample - Monitoring - active - Official sampling - Census	single (food/fee d)	25	Gram	13	0	Salmonella	0
	Meat from turkey - carcase - Slaughterhouse - Not Available - food sample - neck skin - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	213	25	Salmonella Bovismorbificans	1
							Salmonella Infantis	10
							Salmonella Kentucky	3
							Salmonella Newport	10
							Salmonella Stanley	1

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Total units tested	Total units positive	Zoonoses	N of units positive
HUNGARY	Meat from turkey - fresh - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	162	12	Salmonella Infantis	8
							Salmonella Kentucky	2
							Salmonella Newport	2
	Meat from turkey - fresh - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	183	13	Salmonella Bredeney	7
							Salmonella Newport	4
							Salmonella Stanley	2
	Meat from turkey - meat preparation - intended to be eaten cooked - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	4	0	Salmonella	0
	Meat from turkey - meat preparation - intended to be eaten cooked - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	2	0	Salmonella	0
	Meat from turkey - meat products - cooked, ready-to-eat - Catering - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	1	0	Salmonella	0
	Meat from turkey - meat products - cooked, ready-to-eat - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	15	0	Salmonella	0
	Meat from turkey - meat products - cooked, ready-to-eat - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	202	0	Salmonella	0
	Meat from turkey - meat products - raw and intended to be eaten raw - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	4	0	Salmonella	0
	Meat from turkey - minced meat - intended to be eaten cooked - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	5	1	Salmonella Newport	1
	Meat from turkey - minced meat - intended to be eaten cooked - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	52	12	Salmonella Bredeney	5
							Salmonella Infantis	1
							Salmonella Newport	3
							Salmonella Stanley	3
	Meat from wild boar - fresh - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Census	single (food/fee d)	25	Gram	11	2	Salmonella Abony	1
							Salmonella Choleraesuis var. Kunzendorf	1
	Meat from wild boar - fresh - Retail - Not Available - food sample - Monitoring - active - Official sampling - Census	single (food/fee d)	25	Gram	30	0	Salmonella	0
	Meat from wild boar - meat products - raw but intended to be eaten cooked - frozen - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	3	0	Salmonella	0
	Meat from wild boar - meat products - raw but intended to be eaten cooked - frozen - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	21	0	Salmonella	0
	Meat from wild game - birds - fresh - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	4	0	Salmonella	0
	Meat from wild game - birds - fresh - Retail - Not Available - food sample - Monitoring - active - Official sampling - Census	single (food/fee d)	25	Gram	4	1	Salmonella Typhimurium	1
	Meat from wild game - birds - fresh - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/fee d)	25	Gram	23	0	Salmonella	0

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Total units tested	Total units positive	Zoonoses	N of units positive
HUNGARY	Meat from wild game - land mammals - fresh - Catering - Not Available - food sample - Monitoring - active - Official sampling - Census	single (food/feed)	25	Gram	2	0	Salmonella	0
	Meat from wild game - land mammals - fresh - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Census	single (food/feed)	25	Gram	4	0	Salmonella	0
	Meat from wild game - land mammals - fresh - Retail - Not Available - food sample - Monitoring - active - Official sampling - Census	single (food/feed)	25	Gram	6	1	Salmonella Enteritidis	1
	Milk, cows' - raw milk - Farm - Not Available - food sample - milk - Monitoring - active - Official sampling - Census	single (food/feed)	25	Millilitre	90	0	Salmonella	0
	Milk, cows' - raw milk - Retail - Not Available - food sample - milk - Monitoring - active - Official sampling - Census	single (food/feed)	25	Millilitre	19	0	Salmonella	0
	Mushrooms - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed)	25	Gram	4	0	Salmonella	0
	Other processed food products and prepared dishes - pasta - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Census	single (food/feed)	25	Gram	44	2	Salmonella Braenderup	1
							Salmonella Enteritidis	1
	Other processed food products and prepared dishes - pasta - Retail - Not Available - food sample - Monitoring - active - Official sampling - Census	single (food/feed)	25	Gram	163	2	Salmonella Enteritidis	1
							Salmonella Infantis	1
	Seeds, sprouted - ready-to-eat - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed)	25	Gram	9	1	Salmonella Stanleyville	1
	Seeds, sprouted - ready-to-eat - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed)	25	Gram	53	0	Salmonella	0
	Spices and herbs - Catering - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed)	25	Gram	1	0	Salmonella	0
	Spices and herbs - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed)	25	Gram	12	0	Salmonella	0
	Spices and herbs - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed)	25	Gram	188	0	Salmonella	0

Table SALMONELLA in feed

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Total units tested	Total units positive	Zoonoses	N of units positive
Not Available	Compound feedingstuffs for cattle - Feed mill - Not Available - feed sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed d)	25	Gram	17	0	Salmonella	0
	Compound feedingstuffs for pigs - Feed mill - Not Available - feed sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed d)	25	Gram	26	0	Salmonella	0
	Compound feedingstuffs for poultry (non specified) - final product - Feed mill - Not Available - feed sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed d)	25	Gram	82	0	Salmonella	0
	Compound feedingstuffs for poultry, breeders - Feed mill - Not Available - feed sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed d)	25	Gram	5	0	Salmonella	0
	Compound feedingstuffs for poultry, broilers - Feed mill - Not Available - feed sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed d)	25	Gram	33	0	Salmonella	0
	Compound feedingstuffs for poultry, laying hens - Feed mill - Not Available - feed sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed d)	25	Gram	24	0	Salmonella	0
	Feed material of cereal grain origin - barley derived - Feed mill - Not Available - feed sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed d)	25	Gram	1	0	Salmonella	0
	Feed material of cereal grain origin - maize derived - Feed mill - Not Available - feed sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed d)	25	Gram	3	0	Salmonella	0
	Feed material of cereal grain origin - other cereal grain derived - Feed mill - Not Available - feed sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed d)	25	Gram	15	0	Salmonella	0
	Feed material of cereal grain origin - wheat derived - Feed mill - Not Available - feed sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed d)	25	Gram	8	0	Salmonella	0
	Feed material of land animal origin - meat meal - Feed mill - Not Available - feed sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed d)	25	Gram	5	0	Salmonella	0
	Feed material of marine animal origin - fish meal - Feed mill - Not Available - feed sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed d)	25	Gram	3	0	Salmonella	0
	Feed material of oil seed or fruit origin - rape seed derived - Feed mill - Not Available - feed sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed d)	25	Gram	3	0	Salmonella	0
	Feed material of oil seed or fruit origin - soya (bean) derived - Feed mill - Not Available - feed sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed d)	25	Gram	2	0	Salmonella	0

Table STAPHYLOCOCCAL ENTEROTOXINS in food

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Total units tested	Total units positive	Zoonoses	N of units positive
Not Available	Cheeses made from goats' milk - unspecified - Processing plant - Not Available - food sample - Clinical investigations - Official sampling - Suspect sampling	single (food/feed d)	25	Gram	3	0	Staphylococcal enterotoxins	0
	Cheeses, made from unspecified milk or other animal milk - fresh - Processing plant - Not Available - food sample - Clinical investigations - Official sampling - Suspect sampling	single (food/feed d)	25	Gram	1	0	Staphylococcal enterotoxins	0
	Cheeses, made from unspecified milk or other animal milk - soft and semi-soft - Catering - Not Available - food sample - Clinical investigations - Official sampling - Suspect sampling	single (food/feed d)	25	Gram	1	0	Staphylococcal enterotoxins	0
	Cheeses, made from unspecified milk or other animal milk - soft and semi-soft - Processing plant - Not Available - food sample - Clinical investigations - Official sampling - Suspect sampling	single (food/feed d)	25	Gram	3	0	Staphylococcal enterotoxins	0
	Cheeses, made from unspecified milk or other animal milk - soft and semi-soft - Processing plant - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed d)	25	Gram	1	0	Staphylococcal enterotoxins	0
	Dairy products (excluding cheeses) - ice-cream - Catering - Not Available - food sample - Clinical investigations - Official sampling - Suspect sampling	single (food/feed d)	25	Gram	1	0	Staphylococcal enterotoxins	0
	Other processed food products and prepared dishes - Catering - Not Available - food sample - Clinical investigations - Official sampling - Suspect sampling	single (food/feed d)	25	Gram	10	0	Staphylococcal enterotoxins	0
	Other processed food products and prepared dishes - legumes based dishes - Catering - Not Available - food sample - Clinical investigations - Official sampling - Suspect sampling	single (food/feed d)	25	Gram	1	0	Staphylococcal enterotoxins	0
	Other processed food products and prepared dishes - pasta - Catering - Not Available - food sample - Clinical investigations - Official sampling - Suspect sampling	single (food/feed d)	25	Gram	7	0	Staphylococcal enterotoxins	0

Table STAPHYLOCOCCUS AUREUS METICILLIN RESISTANT (MRSA) in animal

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Total units tested	Total units positive	Zoonoses	N of units positive
Not Available	Cattle (bovine animals) - Farm - Not Available - animal sample - milk - Survey - Industry sampling - Suspect sampling	herd/flock	67	26	Staphylococcus aureus	26
	Cattle (bovine animals) - Farm - Not Available - Not Available - Clinical investigations - Industry sampling - Suspect sampling	animal	8	1	Staphylococcus aureus	1
	Dogs - pet animals - Veterinary clinics - Not Available - Not Available - Clinical investigations - Industry sampling - Suspect sampling	animal	3	2	Staphylococcus aureus	2
	Ducks - Farm - Not Available - Not Available - Clinical investigations - Industry sampling - Suspect sampling	animal	1	1	Staphylococcus aureus	1
	Gallus gallus (fowl) - Farm - Not Available - Not Available - Clinical investigations - Industry sampling - Suspect sampling	animal	154	85	Staphylococcus aureus	85
	Geese - Farm - Not Available - Not Available - Clinical investigations - Industry sampling - Suspect sampling	animal	2	2	Staphylococcus aureus	2
	Goats - Farm - Not Available - Not Available - Clinical investigations - Industry sampling - Suspect sampling	animal	1	1	Staphylococcus aureus	1
	Pigs - Farm - Not Available - Not Available - Clinical investigations - Industry sampling - Suspect sampling	animal	22	16	Staphylococcus aureus	16
	Rabbits - farmed - Farm - Not Available - Not Available - Clinical investigations - Industry sampling - Suspect sampling	animal	2	2	Staphylococcus aureus	2
	Rodents - laboratory animal - Unspecified - Not Available - Not Available - Clinical investigations - Industry sampling - Suspect sampling	animal	6	4	Staphylococcus aureus	4
	Solipeds, domestic - Farm - Not Available - Not Available - Clinical investigations - Industry sampling - Suspect sampling	animal	9	8	Staphylococcus aureus	8
	Turkeys - Farm - Not Available - Not Available - Clinical investigations - Industry sampling - Suspect sampling	animal	36	17	Staphylococcus aureus	17

Table TOXOPLASMA in animal

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Total units tested	Total units positive	Zoonoses	N of units positive
Not Available	Cats - pet animals - Veterinary clinics - Not Available - animal sample - blood - Clinical investigations - Industry sampling - Suspect sampling	animal	1	0	Toxoplasma	0
	Goats - Farm - Not Available - animal sample - foetus/stillbirth - Clinical investigations - Industry sampling - Suspect sampling	animal	2	0	Toxoplasma	0
	Sheep - Farm - Not Available - animal sample - blood - Clinical investigations - Industry sampling - Suspect sampling	animal	2	0	Toxoplasma	0
	Sheep - Farm - Not Available - animal sample - foetus/stillbirth - Clinical investigations - Industry sampling - Suspect sampling	animal	6	0	Toxoplasma	0

Table TRICHINELLA in animal

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Total units tested	Total units positive	Zoonoses	N of units positive
HUNGARY	Foxes - wild - Hunting - Not Available - animal sample - organ/tissue - Monitoring - Official sampling - Convenient sampling	animal	13	0	Trichinella	0
	Jackals - wild - Hunting - Not Available - animal sample - organ/tissue - Monitoring - Official sampling - Convenient sampling	animal	2	0	Trichinella	0
	Pigs - breeding animals - not raised under controlled housing conditions - Slaughterhouse - Not Available - animal sample - organ/tissue - Surveillance - Official sampling - Census	animal	132608	0	Trichinella	0
	Pigs - fattening pigs - not raised under controlled housing conditions - Slaughterhouse - Not Available - animal sample - organ/tissue - Surveillance - Official sampling - Census	animal	4275004	0	Trichinella	0
	Solipeds, domestic - Slaughterhouse - Not Available - animal sample - organ/tissue - Surveillance - Official sampling - Census	animal	686	0	Trichinella	0
	Wild boars - wild - Game handling establishment - Not Available - animal sample - organ/tissue - Surveillance - Official sampling - Census	animal	67029	3	Trichinella britovi	3

Table YERSINIA in animal

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Total units tested	Total units positive	Zoonoses	N of units positive
Not Available	All animals - zoo animals - Zoo - Not Available - Not Available - Unspecified - Industry sampling - Other	animal	2	0	Yersinia	0
	Chinchillas - farmed - Farm - Not Available - Not Available - Clinical investigations - Industry sampling - Suspect sampling	animal	3	1	Yersinia	1
	Hares - Farm - Not Available - Not Available - Clinical investigations - Industry sampling - Suspect sampling	animal	3	1	Yersinia pseudotuberculosis	1
	Monkeys - Zoo - Not Available - Not Available - Clinical investigations - Industry sampling - Suspect sampling	animal	1	1	Yersinia enterocolitica	1
	Pigs - Farm - Not Available - Not Available - Clinical investigations - Industry sampling - Suspect sampling	animal	2	0	Yersinia	0
	Wild boars - farmed - Farm - Not Available - Not Available - Clinical investigations - Industry sampling - Suspect sampling	animal	2	2	Yersinia enterocolitica	2

FOODBORNE OUTBREAKS TABLES

Foodborne Outbreaks: summarized data

Causative agent	Food vehicle	Outbreak strenght							
		Strong				Weak			
		N outbreaks	N human cases	N hospitalized	N deaths	N outbreaks	N human cases	N hospitalized	N deaths
Bacillus cereus	Other foods					1	105	0	0
Campylobacter	Broiler meat (Gallus gallus) and products thereof					1	2	0	0
Clostridium perfringens	Broiler meat (Gallus gallus) and products thereof	16	637	0	0	1	6	0	0
	Other foods					1	62	0	0
Hepatitis A	Other foods	1	73	45	0				
Microorganisms	Other foods					4	60	4	0
Norovirus	Bovine meat and products thereof	1	114	1	0				
	Other foods	8	512	9	0	3	80	8	0
Salmonella Enteritidis	Eggs and egg products					4	86	9	0
	Other, mixed or unspecified poultry meat and products thereof					2	17	10	0
	Sweets and chocolate					1	11	1	0
	Other foods					4	236	5	0
Salmonella Enteritidis PT 2	Eggs and egg products	3	111	5	0				
Salmonella Enteritidis PT 8	Eggs and egg products	5	163	31	3				
Salmonella Enteritidis RDNC	Eggs and egg products	1	4	1	0	1	19	4	0
Salmonella spp., unspecified	Other foods					2	23	5	0
Salmonella Typhimurium	Other, mixed or unspecified poultry meat and products thereof	1	8	5	0	1	3	0	0
Staphylococcus aureus	Dairy products (other than cheeses)	1	14	0	0				
	Other foods					3	145	2	0
Unknown	Other, mixed or unspecified poultry meat and products thereof					1	3	0	0
	Other foods					9	189	11	0

Strong Foodborne Outbreaks: detailed data

Causative agent	Other Causative Agent	FBO nat. code	Outbreak type	Food vehicle	More food vehicle info	Nature of evidence	Setting	Place of origin of problem	Origin of food vehicle	Contributory factors	Comment	N outbreaks	N human cases	N hosp.	N deaths
Clostridium perfringens	unk	Étbi_11	General	Broiler meat (Gallus gallus) and products thereof	N_A	Detection of causative agent in food vehicle or its component - Detection of indistinguishable causative agent in humans	School or kindergarten	Canteen or workplace catering	Hungary	Inadequate heat treatment	N_A	16	637	0	0
Hepatitis A	unk	Étbi_47	General	Other foods	N_A	Descriptive epidemiological evidence	Restaurant or Cafe or Pub or Bar or Hotel or Catering service	Restaurant or Cafe or Pub or Bar or Hotel or Catering service	Hungary	Infected food handler	N_A	1	73	45	0
Norovirus	unk	Étbi_13	General	Bovine meat and products thereof	N_A	Descriptive epidemiological evidence	Restaurant or Cafe or Pub or Bar or Hotel or Catering service	Canteen or workplace catering	Hungary	Infected food handler	N_A	1	114	1	0
		Étbi_2	General	Other foods	N_A	Descriptive epidemiological evidence	School or kindergarten	Canteen or workplace catering	Hungary	Unknown	N_A	5	235	2	0
		Étbi_46	General	Other foods	N_A	Descriptive epidemiological evidence	School or kindergarten	Canteen or workplace catering	Hungary	Inadequate heat treatment	N_A	1	196	0	0
		Étbi_7	General	Other foods	N_A	Descriptive epidemiological evidence	Residential institution (nursing home or prison or boarding school)	Canteen or workplace catering	Hungary	Unknown	N_A	1	62	7	0

Causative agent	Other Causative Agent	FBO nat. code	Outbreak type	Food vehicle	More food vehicle info	Nature of evidence	Setting	Place of origin of problem	Origin of food vehicle	Contributory factors	Comment	N outbreaks	N human cases	N hosp.	N deaths
Norovirus	unk	Étbi_8	General	Other foods	N_A	Descriptive epidemiological evidence	Residential institution (nursing home or prison or boarding school)	Canteen or workplace catering	Hungary	Unknown	N_A	1	19	0	0
Salmonella Enteritidis PT 2	unk	Étbi_31	General	Eggs and egg products	N_A	Detection of causative agent in food vehicle or its component - Detection of indistinguishable causative agent in humans	School or kindergarten	Canteen or workplace catering	Hungary	Unprocessed contaminated ingredient	N_A	2	13	1	0
		Étbi_49	General	Eggs and egg products	N_A	Detection of causative agent in food vehicle or its component - Detection of indistinguishable causative agent in humans	School or kindergarten	Restaurant or Cafe or Pub or Bar or Hotel or Catering service	Hungary	Infected food handler	N_A	1	98	4	0
Salmonella Enteritidis PT 8	unk	Étbi_37	General	Eggs and egg products	N_A	Detection of causative agent in food vehicle or its component - Detection of indistinguishable causative agent in humans	Canteen or workplace catering	Canteen or workplace catering	Hungary	Unprocessed contaminated ingredient	N_A	1	44	12	0
		Étbi_38	General	Eggs and egg products	N_A	Detection of causative agent in food vehicle or its component - Detection of indistinguishable causative agent in humans	Restaurant or Cafe or Pub or Bar or Hotel or Catering service	Restaurant or Cafe or Pub or Bar or Hotel or Catering service	Hungary	Inadequate heat treatment	N_A	1	19	8	0
		Étbi_43	General	Eggs and egg products	N_A	Detection of causative agent in food vehicle or its component - Detection of indistinguishable causative agent in humans	Restaurant or Cafe or Pub or Bar or Hotel or Catering service	Canteen or workplace catering	Hungary	Unprocessed contaminated ingredient	N_A	1	41	7	2

Causative agent	Other Causative Agent	FBO nat. code	Outbreak type	Food vehicle	More food vehicle info	Nature of evidence	Setting	Place of origin of problem	Origin of food vehicle	Contributory factors	Comment	N outbreaks	N human cases	N hosp.	N deaths
Salmonella Enteritidis PT 8	unk	Étbi_4 4	General	Eggs and egg products	N_A	Analytical epidemiological evidence	Residential institution (nursing home or prison or boarding school)	Canteen or workplace catering	Hungary	Unprocessed contaminated ingredient	N_A	2	59	4	1
Salmonella Enteritidis RDNC	unk	Étbi_3 5	General	Eggs and egg products	N_A	Detection of causative agent in food vehicle or its component - Detection of indistinguishable causative agent in humans	School or kindergarten	Canteen or workplace catering	Hungary	Unprocessed contaminated ingredient	N_A	1	4	1	0
Salmonella Typhimurium	unk	Étbi_4	General	Other, mixed or unspecified poultry meat and products thereof	N_A	Detection of causative agent in food vehicle or its component - Detection of indistinguishable causative agent in humans	Household	Retail	Hungary	Cross-contamination	N_A	1	8	5	0
Staphylococcus aureus	unk	Étbi_1 2	General	Dairy products (other than cheeses)	N_A	Detection of causative agent in food vehicle or its component - Symptoms and onset of illness pathognomonic to causative agent	Household	Farm (not specified)	Hungary	Infected food handler	N_A	1	14	0	0

Weak Foodborne Outbreaks: detailed data

Causative agent	Other Causative Agent	FBO nat. code	Outbreak type	Food vehicle	More food vehicle info	Nature of evidence	Setting	Place of origin of problem	Origin of food vehicle	Contributory factors	Comment	N outbreaks	N human cases	N hosp.	N deaths
Bacillus cereus	unk	Étbi_5	General	Other foods	N_A	Unknown	School or kindergarten	Canteen or workplace catering	Hungary	Unknown	N_A	1	105	0	0
Campylobacter	unk	Étbi_29	General	Broiler meat (Gallus gallus) and products thereof	N_A	Unknown	Restaurant or Cafe or Pub or Bar or Hotel or Catering service	Restaurant or Cafe or Pub or Bar or Hotel or Catering service	Hungary	Inadequate heat treatment	N_A	1	2	0	0
Clostridium perfringens	unk	Étbi_10	General	Broiler meat (Gallus gallus) and products thereof	N_A	Unknown	Restaurant or Cafe or Pub or Bar or Hotel or Catering service	Canteen or workplace catering	Hungary	Inadequate heat treatment	N_A	1	6	0	0
		Étbi_42	General	Other foods	N_A	Unknown	Catering on aircraft or ship or train	Restaurant or Cafe or Pub or Bar or Hotel or Catering service	Hungary	Infected food handler	N_A	1	62	0	0
Microorganisms	unk	Étbi_1	General	Other foods	N_A	Unknown	Restaurant or Cafe or Pub or Bar or Hotel or Catering service	Restaurant or Cafe or Pub or Bar or Hotel or Catering service	Hungary	Unknown	N_A	1	5	0	0
		Étbi_34	General	Other foods	N_A	Unknown	Residential institution (nursing home or prison or boarding school)	Canteen or workplace catering	Hungary	Inadequate heat treatment	N_A	2	19	1	0
		Étbi_9	General	Other foods	N_A	Unknown	Restaurant or Cafe or Pub or Bar or Hotel or Catering service	Canteen or workplace catering	Hungary	Cross-contamination	N_A	1	36	3	0

Causative agent	Other Causative Agent	FBO nat. code	Outbreak type	Food vehicle	More food vehicle info	Nature of evidence	Setting	Place of origin of problem	Origin of food vehicle	Contributory factors	Comment	N outbreaks	N human cases	N hosp. deaths	N deaths
Norovirus	unk	Étbi_28	General	Other foods	N_A	Unknown	Residential institution (nursing home or prison or boarding school)	Others	Hungary	Cross-contamination	N_A	1	58	0	0
		Étbi_32	General	Other foods	N_A	Unknown	Restaurant or Cafe or Pub or Bar or Hotel or Catering service	Restaurant or Cafe or Pub or Bar or Hotel or Catering service	Hungary	Unknown	N_A	1	3	0	0
		Étbi_36	General	Other foods	N_A	Unknown	Restaurant or Cafe or Pub or Bar or Hotel or Catering service	Restaurant or Cafe or Pub or Bar or Hotel or Catering service	Hungary	Inadequate heat treatment	N_A	1	19	8	0
Salmonella Enteritidis	unk	Étbi_14	General	Other foods	N_A	Unknown	Restaurant or Cafe or Pub or Bar or Hotel or Catering service	Canteen or workplace catering	Hungary	Inadequate chilling	N_A	1	17	0	0
		Étbi_18	General	Eggs and egg products	N_A	Unknown	School or kindergarten	Canteen or workplace catering	Hungary	Infected food handler	N_A	2	58	0	0
		Étbi_19	General	Sweets and chocolate	N_A	Unknown	Restaurant or Cafe or Pub or Bar or Hotel or Catering service	Unknown	Hungary	Infected food handler	N_A	1	11	1	0
		Étbi_21	General	Other, mixed or unspecified poultry meat and products thereof	N_A	Unknown	Restaurant or Cafe or Pub or Bar or Hotel or Catering service	Canteen or workplace catering	Hungary	Unknown	N_A	1	2	0	0

Causative agent	Other Causative Agent	FBO nat. code	Outbreak type	Food vehicle	More food vehicle info	Nature of evidence	Setting	Place of origin of problem	Origin of food vehicle	Contributory factors	Comment	N outbreaks	N human cases	N hosp. deaths	N deaths
Salmonella Enteritidis	unk	Étbi_24	General	Other foods	N_A	Unknown	Restaurant or Cafe or Pub or Bar or Hotel or Catering service	Restaurant or Cafe or Pub or Bar or Hotel or Catering service	Hungary	Unknown	N_A	1	24	0	0
		Étbi_26	General	Other foods	N_A	Unknown	School or kindergarten	Canteen or workplace catering	Hungary	Infected food handler	N_A	1	178	3	0
		Étbi_27	General	Other foods	N_A	Unknown	Restaurant or Cafe or Pub or Bar or Hotel or Catering service	Restaurant or Cafe or Pub or Bar or Hotel or Catering service	Hungary	Infected food handler	N_A	1	17	2	0
		Étbi_40	General	Other, mixed or unspecified poultry meat and products thereof	N_A	Unknown	Restaurant or Cafe or Pub or Bar or Hotel or Catering service	Restaurant or Cafe or Pub or Bar or Hotel or Catering service	Hungary	Infected food handler	N_A	1	15	10	0
		Étbi_6	General	Eggs and egg products	N_A	Unknown	School or kindergarten	Canteen or workplace catering	Hungary	Unknown	N_A	2	28	9	0
Salmonella Enteritidis RDNC	unk	Étbi_48	General	Eggs and egg products	N_A	Unknown	Restaurant or Cafe or Pub or Bar or Hotel or Catering service	Restaurant or Cafe or Pub or Bar or Hotel or Catering service	Hungary	Unknown	N_A	1	19	4	0
Salmonella spp., unspecified	unk	Étbi_39	General	Other foods	N_A	Unknown	Restaurant or Cafe or Pub or Bar or Hotel or Catering service	Restaurant or Cafe or Pub or Bar or Hotel or Catering service	Hungary	Unknown	N_A	1	5	3	0
		Étbi_41	General	Other foods	N_A	Unknown	Restaurant or Cafe or Pub or Bar or Hotel or Catering service	Restaurant or Cafe or Pub or Bar or Hotel or Catering service	Hungary	Inadequate heat treatment	N_A	1	18	2	0

Causative agent	Other Causative Agent	FBO nat. code	Outbreak type	Food vehicle	More food vehicle info	Nature of evidence	Setting	Place of origin of problem	Origin of food vehicle	Contributory factors	Comment	N outbreaks	N human cases	N hosp.	N deaths
Salmonella Typhimurium	unk	Étbi_33	General	Other, mixed or unspecified poultry meat and products thereof	N_A	Unknown	Restaurant or Cafe or Pub or Bar or Hotel or Catering service	Restaurant or Cafe or Pub or Bar or Hotel or Catering service	Hungary	Unknown	N_A	1	3	0	0
Staphylococcus aureus	unk	Étbi_25	General	Other foods	N_A	Unknown	Residential institution (nursing home or prison or boarding school)	Canteen or workplace catering	Hungary	Infected food handler	N_A	2	34	0	0
		Étbi_45	General	Other foods	N_A	Unknown	School or kindergarten	Canteen or workplace catering	Hungary	Infected food handler	N_A	1	111	2	0
Unknown	unk	Étbi_15	General	Other foods	N_A	Unknown	School or kindergarten	Canteen or workplace catering	Hungary	Unknown	N_A	2	112	0	0
		Étbi_16	General	Other foods	N_A	Unknown	Restaurant or Cafe or Pub or Bar or Hotel or Catering service	Canteen or workplace catering	Hungary	Unknown	N_A	1	8	0	0
		Étbi_17	General	Other foods	N_A	Unknown	Household	Restaurant or Cafe or Pub or Bar or Hotel or Catering service	Hungary	Unknown	N_A	1	5	0	0
		Étbi_20	General	Other, mixed or unspecified poultry meat and products thereof	N_A	Unknown	Restaurant or Cafe or Pub or Bar or Hotel or Catering service	Canteen or workplace catering	Hungary	Unknown	N_A	1	3	0	0

Causative agent	Other Causative Agent	FBO nat. code	Outbreak type	Food vehicle	More food vehicle info	Nature of evidence	Setting	Place of origin of problem	Origin of food vehicle	Contributory factors	Comment	N outbreaks	N human cases	N hosp.	N deaths
Unknown	unk	Étbi_22	General	Other foods	N_A	Unknown	School or kindergarten	Canteen or workplace catering	Hungary	Unknown	N_A	1	12	10	0
		Étbi_23	General	Other foods	N_A	Unknown	School or kindergarten	Canteen or workplace catering	Hungary	Inadequate heat treatment	N_A	2	15	0	0
		Étbi_3	General	Other foods	N_A	Unknown	Canteen or workplace catering	Canteen or workplace catering	Hungary	Unknown	N_A	2	37	1	0

ANTIMICROBIAL RESISTANCE TABLES FOR CAMPYLOBACTER

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

Sampling Stage: Slaughterhouse		Sampling Type: animal sample - caecum		Sampling Context: Monitoring		
Sampler: Official sampling		Sampling Strategy: Objective sampling		Programme Code: AMR MON		
Analytical Method: Dilution - sensititre						
Country of Origin: Hungary						
Sampling details: N_A						
AM substance						
ECOFF	0.5	4	2	16	4	1
Lowest limit	0.12	1	0.12	1	0.25	0.5
Highest limit	16	128	16	64	16	64
N of tested isolates	170	170	170	170	170	170
N of resistant isolates	154	0	0	148	4	89
MIC						
<=0.12	15		10			
0.25	1		60			
<=0.5						81
0.5			99		4	
<=1		169				
1			1		71	
2		1			89	1
4	5			7	2	
8	110			13		
16	35			2		2
>16	4					5
32					4	
64				2		11
>64				33		34
				113		36

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

Sampling Stage: Slaughterhouse

Sampler: Official sampling

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

Sampling details: N_A

Sampling Type: animal sample - caecum

Sampling Strategy: Objective sampling

Sampling Context: Monitoring

Programme Code: AMR MON

MIC	AM substance	Ciprofloxacin	Erythromycin (Erythromycin A)	Gentamicin	Nalidixic acid	Streptomycin	Tetracycline
	ECOFF	0.5	4	2	16	4	1
	Lowest limit	0.12	1	0.12	1	0.25	0.5
	Highest limit	16	128	16	64	16	64
	N of tested isolates	170	170	170	170	170	170
	N of resistant isolates	145	0	0	142	7	69
<=0.12		25		9			
<=0.25						1	
0.25				63			
<=0.5							99
0.5				91		11	
<=1			168		1		
1				7		67	2
2			2		3	82	
4		6			21	2	
8		96			3		
16		33					1
>16		10				7	
32					2		10
64					25		30
>64					115		28

ANTIMICROBIAL RESISTANCE TABLES FOR SALMONELLA

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

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs

Sampling Context: Control and eradication programmes

Sampler: Industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

Sampling Details: N_A

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

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

Sampling Stage: Farm

Sampler: Industry sampling

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

Sampling Details: N_A

Sampling Type: environmental sample - boot swabs

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

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

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

Sampling Stage: Slaughterhouse

Sampling Type: food sample - neck skin

Sampling Context: Monitoring

Sampler: HACCP and own check

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

Sampling Details: N_A

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

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

Sampling Stage: Farm

Sampler: Industry sampling

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

Sampling Details: N_A

Sampling Type: environmental sample - boot swabs

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

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

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

Sampling Stage: Farm

Sampler: Official sampling

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

Sampling Details: N_A

Sampling Type: environmental sample - boot swabs

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

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

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

Sampling Stage: Farm

Sampler: Industry sampling

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

Sampling Details: N_A

Sampling Type: environmental sample - boot swabs

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

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

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

Sampling Details: N_A

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

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

Sampling Details: N_A

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

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

Sampling Stage: Farm

Sampler: Official sampling

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

Sampling Details: N_A

Sampling Type: animal sample - faeces

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

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

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

Sampling Stage: Farm

Sampler: Industry sampling

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

Sampling Details: N_A

Sampling Type: environmental sample - boot swabs

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

MIC	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	8	16	0.5	2	16	0.064	2	2	0.125	16	256	8	1	2
	Lowest limit	1	2	0.25	0.5	8	0.015	1	0.5	0.03	4	8	2	0.25	0.25
	Highest limit	64	64	4	8	128	8	16	32	16	128	1024	64	8	32
	N of tested isolates	28	28	28	28	28	28	28	28	28	28	28	28	28	28
	N of resistant isolates	27	2	0	0	0	28	0	1	0	28	5	28	11	21
<=0.03															
0.12															
<=0.25															
0.25															
<=0.5															
0.5															
<=1															
1															
2															
<=8															
8															
16															
32															
>32															
64															
>64															
128															
>128															
256															
>1024															

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

Sampling Stage: Farm

Sampler: Official sampling

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

Sampling Details: N_A

Sampling Type: environmental sample - boot swabs

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

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

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

Sampling Stage: Farm

Sampler: Industry sampling

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

Sampling Details: N_A

Sampling Type: animal sample - faeces

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

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

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

Sampling Stage: Farm

Sampler: Official sampling

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

Sampling Details: N_A

Sampling Type: animal sample - faeces

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

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

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

Sampling Stage: Farm

Sampler: Industry sampling

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

Sampling Details: N_A

Sampling Type: environmental sample - boot swabs

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

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

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

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

Sampler: Official sampling

Sampling Strategy: Census

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

Sampling Details: N_A

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

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

Sampling Stage: Farm

Sampler: Industry sampling

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

Sampling Details: N_A

Sampling Type: environmental sample - boot swabs

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

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

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

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

Sampler: Official sampling

Sampling Strategy: Census

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

Sampling Details: N_A

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

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

Sampling Stage: Farm

Sampler: Industry sampling

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

Sampling Details: N_A

Sampling Type: environmental sample - boot swabs

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

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

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

Sampling Stage: Farm

Sampler: Official sampling

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

Sampling Details: N_A

Sampling Type: environmental sample - boot swabs

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

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

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

Sampling Stage: Farm

Sampling Type: animal sample - organ/tissue

Sampling Context: Control and eradication programmes

Sampler: Industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

Sampling Details: N_A

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

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

Sampling Stage: Farm

Sampler: Industry sampling

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

Sampling Details: N_A

Sampling Type: animal sample - faeces

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

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

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

Sampling Stage: Farm

Sampler: Official sampling

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

Sampling Details: N_A

Sampling Type: animal sample - faeces

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

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

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

Sampling Stage: Slaughterhouse

Sampling Type: food sample - neck skin

Sampling Context: Monitoring

Sampler: HACCP and own check

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

Sampling Details: N_A

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

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

Sampling Stage: Farm

Sampler: Industry sampling

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

Sampling Details: N_A

Sampling Type: environmental sample - boot swabs

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

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

Table Antimicrobial susceptibility testing of Salmonella I, group O:7 in Meat from turkey - carcase - chilled

Sampling Stage: Slaughterhouse

Sampling Type: food sample - neck skin

Sampling Context: Monitoring

Sampler: HACCP and own check

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

Sampling Details: N_A

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

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

Sampling Stage: Slaughterhouse

Sampler: HACCP and own check

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

Sampling Details: N_A

Sampling Type: food sample - neck skin

Sampling Strategy: Objective sampling

Sampling Context: Monitoring

Programme Code: AMR MON

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

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

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs

Sampling Context: Control and eradication programmes

Sampler: Industry sampling

Sampling Strategy: Census

Programme Code: AMR MON pnl2

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

Sampling Details: N_A

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

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

Sampling Stage: Farm

Sampler: Industry sampling

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

Sampling Details: N_A

Sampling Type: environmental sample - boot swabs

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

MIC	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim	
	ECOFF	8	16	0.5	2	16	0.064	2	2	0.125	16	256	8	1	2	
	Lowest limit	1	2	0.25	0.5	8	0.015	1	0.5	0.03	4	8	2	0.25	0.25	
	Highest limit	64	64	4	8	128	8	16	32	16	128	1024	64	8	32	
	N of tested isolates	137	137	137	137	137	137	137	137	137	137	137	137	137	137	
	N of resistant isolates	15	1	2	2	0	137	0	0	0	137	116	121	13	0	
<=0.03										135						
0.064										2						
0.12							1									
<=0.25				122										4		109
0.25							15									
<=0.5					97					134						
0.5				13			92		37						27	
<=1		13			136											
1		36				23		2		83					1	
<=2			2		7											
2		66		2		2		1		1		13				
4		41		14		2		4		8						
>4				2												
<=8						104										
8		2		53		1										
16		67		33			1									
32		1		1		2					17	1				
64		4										12				
>64		14			107											
128											1					
>128											134					
512												1				

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	8	16	0.5	2	16	0.064	2	2	0.125	16	256	8	1	2
	Lowest limit	1	2	0.25	0.5	8	0.015	1	0.5	0.03	4	8	2	0.25	0.25
	Highest limit	64	64	4	8	128	8	16	32	16	128	1024	64	8	32
	N of tested isolates	137	137	137	137	137	137	137	137	137	137	137	137	137	137
MIC	N of resistant isolates	15	1	2	2	0	137	0	0	0	137	116	121	13	0
	1024											2			
	>1024											113			

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

Sampling Stage: Farm

Sampler: Official sampling

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

Sampling Details: N_A

Sampling Type: environmental sample - boot swabs

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

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

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

Sampling Details: N_A

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

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

Sampling Stage: Farm

Sampler: Industry sampling

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

Sampling Details: N_A

Sampling Type: environmental sample - boot swabs

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

MIC	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim				
	ECOFF	8	16	0.5	2	16	0.064	2	2	0.125	16	256	8	1	2				
	Lowest limit	1	2	0.25	0.5	8	0.015	1	0.5	0.03	4	8	2	0.25	0.25				
	Highest limit	64	64	4	8	128	8	16	32	16	128	1024	64	8	32				
	N of tested isolates	45	45	45	45	45	45	45	45	45	45	45	45	45	45				
	N of resistant isolates	9	0	0	0	1	45	0	3	0	44	44	45	4	1				
<=0.03										45									
<=0.25										42					39				
0.25							1												
<=0.5					37					41									
0.5				3				31				2						4	
<=1		1		45															
1				8				8				1				39		1	
2		15		2										4					
4		19		3															
<=8						33													
8		1		8		3				2									
16			34			11						1							
32						1			1			1							
>32															1				
64		1																	
>64		8												45					
>128											44								
>1024												44							

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

Sampling Stage: Farm

Sampler: Official sampling

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

Sampling Details: N_A

Sampling Type: environmental sample - boot swabs

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

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

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

Sampling Stage: Farm

Sampling Type: animal sample - organ/tissue

Sampling Context: Control and eradication programmes

Sampler: Industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

Sampling Details: N_A

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

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

Sampling Stage: Farm

Sampler: Industry sampling

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

Sampling Details: N_A

Sampling Type: environmental sample - boot swabs

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

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

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

Sampling Stage: Farm

Sampler: Industry sampling

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

Sampling Details: N_A

Sampling Type: animal sample - organ/tissue

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

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

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

Sampling Stage: Farm

Sampler: Industry sampling

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

Sampling Details: N_A

Sampling Type: animal sample - faeces

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

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

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

Sampling Stage: Slaughterhouse

Sampling Type: food sample - neck skin

Sampling Context: Monitoring

Sampler: HACCP and own check

Sampling Strategy: Objective sampling

Programme Code: AMR MON pnl2

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

Sampling Details: N_A

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

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

Sampling Stage: Slaughterhouse

Sampling Type: food sample - neck skin

Sampling Context: Monitoring

Sampler: HACCP and own check

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

Sampling Details: N_A

MIC	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	8	16	0.5	2	16	0.064	2	2	0.125	16	256	8	1	2
	Lowest limit	1	2	0.25	0.5	8	0.015	1	0.5	0.03	4	8	2	0.25	0.25
	Highest limit	64	64	4	8	128	8	16	32	16	128	1024	64	8	32
	N of tested isolates	65	65	65	65	65	65	65	65	65	65	65	65	65	65
	N of resistant isolates	3	0	0	1	0	62	0	1	0	62	57	57	6	0
<=0.03										65					
0.03							3								
<=0.25				57										1	61
0.25							12								
<=0.5					57				64						
0.5				8			37							24	4
<=1	10							63							
1					7		11							34	
<=2													5		
2	28						1	2						6	
<=4											3				
4	21	7			1		1						3		
<=8						55									
8	3	32													
16		26				10									
32									1			5			
64												3	7		
>64	3												50		
128											1				
>128											61				
>1024												57			

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

Sampling Stage: Farm

Sampler: Industry sampling

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

Sampling Details: N_A

Sampling Type: environmental sample - boot swabs

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

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

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

Sampling Stage: Farm

Sampler: Industry sampling

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

Sampling Details: N_A

Sampling Type: environmental sample - boot swabs

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

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

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

Sampling Stage: Farm

Sampler: Industry sampling

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

Sampling Details: N_A

Sampling Type: animal sample - organ/tissue

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

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

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

Sampling Stage: Farm

Sampler: Official sampling

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

Sampling Details: N_A

Sampling Type: animal sample - faeces

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

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

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

Sampling Stage: Slaughterhouse

Sampler: HACCP and own check

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

Sampling Details: N_A

Sampling Type: food sample - neck skin

Sampling Strategy: Objective sampling

Sampling Context: Monitoring

Programme Code: AMR MON

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

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

Sampling Stage: Farm

Sampler: Industry sampling

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

Sampling Details: N_A

Sampling Type: environmental sample - boot swabs

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

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

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

Sampling Stage: Farm

Sampler: Industry sampling

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

Sampling Details: N_A

Sampling Type: animal sample - faeces

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

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

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

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs

Sampling Context: Control and eradication programmes

Sampler: Industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

Sampling Details: N_A

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

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

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

Sampling Details: N_A

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

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

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs

Sampling Context: Control and eradication programmes

Sampler: Industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

Sampling Details: N_A

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

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

Sampling Stage: Farm

Sampler: Official sampling

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

Sampling Details: N_A

Sampling Type: animal sample - faeces

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

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

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

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs

Sampling Context: Control and eradication programmes

Sampler: Industry sampling

Sampling Strategy: Census

Programme Code: AMR MON pn12

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

Sampling Details: N_A

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

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

Sampling Stage: Farm

Sampler: Industry sampling

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

Sampling Details: N_A

Sampling Type: environmental sample - boot swabs

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

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

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

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

Sampling Details: N_A

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

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

Sampling Stage: Farm

Sampler: Official sampling

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

Sampling Details: N_A

Sampling Type: animal sample - faeces

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

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

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

Sampling Stage: Slaughterhouse

Sampling Type: food sample - neck skin

Sampling Context: Monitoring

Sampler: HACCP and own check

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

Sampling Details: N_A

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

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

Sampling Stage: Slaughterhouse

Sampling Type: food sample - neck skin

Sampling Context: Monitoring

Sampler: HACCP and own check

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

Sampling Details: N_A

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

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

Sampling Stage: Farm

Sampler: Industry sampling

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

Sampling Details: N_A

Sampling Type: environmental sample - boot swabs

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

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

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

Sampling Stage: Farm

Sampler: Industry sampling

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

Sampling Details: N_A

Sampling Type: animal sample - organ/tissue

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

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

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

Sampling Stage: Farm

Sampler: Industry sampling

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

Sampling Details: N_A

Sampling Type: animal sample - faeces

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

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

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

Sampling Stage: Farm

Sampler: Industry sampling

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

Sampling Details: N_A

Sampling Type: environmental sample - boot swabs

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

MIC	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	8	16	0.5	2	16	0.064	2	2	0.125	16	256	8	1	2
	Lowest limit	1	2	0.25	0.5	8	0.015	1	0.5	0.03	4	8	2	0.25	0.25
	Highest limit	64	64	4	8	128	8	16	32	16	128	1024	64	8	32
	N of tested isolates	44	44	44	44	44	44	44	44	44	44	44	44	44	44
	N of resistant isolates	22	0	0	0	0	42	0	0	0	12	2	23	1	1
<=0.015															
<=0.03															
0.064															
0.12															
<=0.25															
0.25															
<=0.5															
0.5															
<=1															
1															
<=2															
2															
<=4															
4															
<=8															
8															
16															
32															
>32															
64															
>64															
128															

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	8	16	0.5	2	16	0.064	2	2	0.125	16	256	8	1	2
	Lowest limit	1	2	0.25	0.5	8	0.015	1	0.5	0.03	4	8	2	0.25	0.25
	Highest limit	64	64	4	8	128	8	16	32	16	128	1024	64	8	32
	N of tested isolates	44	44	44	44	44	44	44	44	44	44	44	44	44	44
MIC	N of resistant isolates	22	0	0	0	0	42	0	0	0	12	2	23	1	1
	>128										1				
	>1024											2			

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

Sampling Stage: Farm

Sampler: Official sampling

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

Sampling Details: N_A

Sampling Type: environmental sample - boot swabs

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

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

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

Sampling Stage: Farm

Sampler: Industry sampling

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

Sampling Details: N_A

Sampling Type: environmental sample - boot swabs

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

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

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

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs

Sampling Context: Control and eradication programmes

Sampler: Industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

Sampling Details: N_A

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

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

Sampling Stage: Farm

Sampler: Industry sampling

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

Sampling Details: N_A

Sampling Type: environmental sample - delivery box liner

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

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

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

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs

Sampling Context: Control and eradication programmes

Sampler: Industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

Sampling Details: N_A

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

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

Sampling Stage: Farm

Sampling Type: environmental sample - delivery box liner

Sampling Context: Control and eradication programmes

Sampler: Industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

Sampling Details: N_A

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

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

Sampling Stage: Farm

Sampler: Industry sampling

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

Sampling Details: N_A

Sampling Type: environmental sample - boot swabs

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

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

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

Sampling Details: N_A

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

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

Sampling Stage: Slaughterhouse

Sampling Type: food sample - neck skin

Sampling Context: Monitoring

Sampler: HACCP and own check

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

Sampling Details: N_A

AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
ECOFF	8	16	0.5	2	16	0.064	2	2	0.125	16	256	8	1	2
Lowest limit	1	2	0.25	0.5	8	0.015	1	0.5	0.03	4	8	2	0.25	0.25
Highest limit	64	64	4	8	128	8	16	32	16	128	1024	64	8	32
N of tested isolates	2	2	2	2	2	2	2	2	2	2	2	2	2	2
N of resistant isolates	0	0	0	0	0	2	0	0	0	2	0	0	0	0
MIC														
<=0.03	2													
<=0.25	212													
0.25	2													
<=0.5	22													
0.5	1													
<=1	22													
<=2	2													
4	2													
<=8	2													
32	1													
64	1													
>128	2													

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

Sampling Stage: Farm

Sampler: Industry sampling

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

Sampling Details: N_A

Sampling Type: environmental sample - boot swabs

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

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

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

Sampling Stage: Farm

Sampler: Industry sampling

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

Sampling Details: N_A

Sampling Type: environmental sample - boot swabs

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

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

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

Sampling Stage: Farm

Sampler: Industry sampling

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

Sampling Details: N_A

Sampling Type: environmental sample - boot swabs

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

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

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

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

Sampler: Industry sampling

Sampling Strategy: Census

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

Sampling Details: N_A

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

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

Sampling Stage: Farm

Sampler: Industry sampling

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

Sampling Details: N_A

Sampling Type: environmental sample - boot swabs

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

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

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

Sampling Stage: Farm

Sampler: Official sampling

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

Sampling Details: N_A

Sampling Type: environmental sample - boot swabs

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

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

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

Sampling Stage: Farm

Sampler: Industry sampling

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

Sampling Details: N_A

Sampling Type: environmental sample - boot swabs

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

MIC	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	8	16	0.5	2	16	0.064	2	2	0.125	16	256	8	1	2
	Lowest limit	1	2	0.25	0.5	8	0.015	1	0.5	0.03	4	8	2	0.25	0.25
	Highest limit	64	64	4	8	128	8	16	32	16	128	1024	64	8	32
	N of tested isolates	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	N of resistant isolates	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<=0.015		1													
<=0.03		5													
0.03		4													
<=0.25		525													
<=0.5		54													
0.5		2													
<=1		25													
1		11													
<=2		5													
2		3													
<=4		5													
4		3													
<=8		51													
8		2													
32		4													

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

Sampling Stage: Farm

Sampler: Official sampling

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

Sampling Details: N_A

Sampling Type: environmental sample - boot swabs

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

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

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

Sampling Stage: Farm

Sampler: Industry sampling

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

Sampling Details: N_A

Sampling Type: animal sample - faeces

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

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

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

Sampling Stage: Slaughterhouse

Sampling Type: food sample - neck skin

Sampling Context: Monitoring

Sampler: HACCP and own check

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

Sampling Details: N_A

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

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

Sampling Stage: Farm

Sampler: Official sampling

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

Sampling Details: N_A

Sampling Type: environmental sample - boot swabs

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

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

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

Sampling Stage: Farm

Sampler: Industry sampling

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

Sampling Details: N_A

Sampling Type: animal sample - organ/tissue

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

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

ANTIMICROBIAL RESISTANCE TABLES FOR INDICATOR ESCHERICHIA COLI

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

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

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

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

Sampling Details: N_A

AM substance	Cefepime	Cefotaxim	Cefotaxime + Clavulanic acid		Cefoxitin	Ceftazidim	Ceftazidime + Clavulanic acid		Ertapenem	Imipenem	Meropenem	Temocillin		
	Cefotaxime synergy test	Not Available	Not Available	Positive/Pres ent	Negative/Abs ent	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available		
	Ceftazidime synergy test	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Positive/Pres ent	Negative/Abs ent	Not Available	Not Available	Not Available	Not Available	
	ECOFF	0.125	0.25	0.25	0.25	8	0.5	0.5	0.5	0.06	0.5	0.125	32	
	Lowest limit	0.064	0.25	0.064	0.064	0.5	0.25	0.12	0.12	0.015	0.12	0.03	0.5	
	Highest limit	32	64	64	64	64	128	128	128	2	16	16	64	
	N of tested isolates	237	237	237	237	237	237	237	237	237	237	237	237	
	N of resistant isolates	171	237	199	199	201	226	199	199	9	0	0	0	
MIC	<=0.015	90												
	<=0.03	234												
	0.03	100												
	<=0.064	2	37											
	0.064	38												
	<=0.12	24												
	0.12	64	1											
	<=0.25	2												
	0.25	118	3											
	0.5	14	9											
	1	4	3											

AM substance	Cefepime	Cefotaxim	Cefotaxime + Clavulanic acid		Cefoxitin	Ceftazidim	Ceftazidime + Clavulanic acid		Ertapenem	Imipenem	Meropenem	Temocillin
			Positive/Pres ent	Negative/Abs ent			Positive/Pres ent	Negative/Abs ent				
Cefotaxime synergy test	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available
Ceftazidime synergy test	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available
ECOFF	0.125	0.25	0.25	0.25	8	0.5	0.5	0.5	0.06	0.5	0.125	32
Lowest limit	0.064	0.25	0.064	0.064	0.5	0.25	0.12	0.12	0.015	0.12	0.03	0.5
Highest limit	32	64	64	64	64	128	128	128	2	16	16	64
N of tested isolates	237	237	237	237	237	237	237	237	237	237	237	237
N of resistant isolates	171	237	199	199	201	226	199	199	9	0	0	0
MIC	11	4		13	3	6		25				14
2	17	35		87	16	31		86				120
4	7	135		92	17	109		79				94
8		47		3	2	65		9				6
16		13		1	29	1						3
32		3			120							
64												
>64					50							

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

Sampling Stage: Retail

Sampler: Official and industry sampling

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

Sampling Type: food sample - meat

Sampling Strategy: Objective sampling

Sampling Context: Monitoring

Programme Code: ESBL MON

Sampling Details: N_A

MIC	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Collistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	8	16	0.25	0.5	16	0.064	2	2	0.125	16	64	8	1	2
	Lowest limit	1	2	0.25	0.5	8	0.015	1	0.5	0.03	4	8	2	0.25	0.25
	Highest limit	64	64	4	8	128	8	16	32	16	128	1024	64	8	32
	N of tested isolates	237	237	237	237	237	237	237	237	237	237	237	237	237	237
	N of resistant isolates	237	7	237	227	36	187	0	43	0	173	113	127	0	58
<=0.015							45								
<=0.03										227					
0.03							4								
0.064							1			9					
0.12							8			1					
<=0.25														164	139
0.25							43								
<=0.5					10				164						
0.5							12							70	37
<=1								236							
1					13		9		29					3	3
<=2			26										107		
2				6	8		3	1	1						
<=4											55				
4			149	42	27		22						2		1
>4				189											
<=8						199						66			
8			51		113		66				5		1		
>8					66		24								
16			4			2			11		4	45			
32		1	3			2			20		3	13	9		

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	8	16	0.25	0.5	16	0.064	2	2	0.125	16	64	8	1	2
	Lowest limit	1	2	0.25	0.5	8	0.015	1	0.5	0.03	4	8	2	0.25	0.25
	Highest limit	64	64	4	8	128	8	16	32	16	128	1024	64	8	32
	N of tested isolates	237	237	237	237	237	237	237	237	237	237	237	237	237	237
MIC	N of resistant isolates	237	7	237	227	36	187	0	43	0	173	113	127	0	58
	>32								12						57
	64	4	3			6					16		58		
	>64	232	1										60		
	128					17					30				
	>128					11					124				
	>1024											113			

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

Sampling Stage: Slaughterhouse

Sampling Type: animal sample - caecum

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: AMR MON pnl2

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

Sampling Details: N_A

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

AM substance	Cefepime	Cefotaxim	Cefotaxime + Clavulanic acid		Cefoxitin	Ceftazidim	Ceftazidime + Clavulanic acid		Ertapenem	Imipenem	Meropenem	Temocillin
			Positive/Pres ent	Negative/Abs ent			Positive/Pres ent	Negative/Abs ent				
Cefotaxime synergy test	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available
Ceftazidime synergy test	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available
ECOFF	0.125	0.25	0.25	0.25	8	0.5	0.5	0.5	0.06	0.5	0.125	32
Lowest limit	0.064	0.25	0.064	0.064	0.5	0.25	0.12	0.12	0.015	0.12	0.03	0.5
Highest limit	32	64	64	64	64	128	128	128	2	16	16	64
N of tested isolates	12	12	12	12	12	12	12	12	12	12	12	12
N of resistant isolates	10	12	8	8	8	12	8	8	0	0	0	0
MIC												
64					7							
>64					1							

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

Sampling Stage: Slaughterhouse

Sampling Type: animal sample - caecum

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

Sampling Details: N_A

MIC	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Collistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	8	16	0.25	0.5	16	0.064	2	2	0.125	16	64	8	1	2
	Lowest limit	1	2	0.25	0.5	8	0.015	1	0.5	0.03	4	8	2	0.25	0.25
	Highest limit	64	64	4	8	128	8	16	32	16	128	1024	64	8	32
	N of tested isolates	170	170	170	170	170	170	170	170	170	170	170	170	170	170
	N of resistant isolates	97	4	12	12	20	138	0	7	0	126	66	62	0	41
<=0.015							26								
<=0.03										169					
0.03							2								
0.064							4								
0.12							8			1					
<=0.25				158										149	79
0.25							18								
<=0.5					158				122						
0.5							22							10	46
<=1		4						170							
1				1			19		39					11	3
<=2			8										98		
2		25		2	1		14		2						1
<=4											28				
4		37	48	1	2		13		1				10		1
>4				8											
<=8						138						44			
8		7	81		6		33		1		11				1
>8					3		11								
16		1	29			12			1		5	35	2		
32		1	2			3			2		3	24	1		

MIC	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim	
	ECOFF	8	16	0.25	0.5	16	0.064	2	2	0.125	16	64	8	1	2	
	Lowest limit	1	2	0.25	0.5	8	0.015	1	0.5	0.03	4	8	2	0.25	0.25	
	Highest limit	64	64	4	8	128	8	16	32	16	128	1024	64	8	32	
	N of tested isolates	170	170	170	170	170	170	170	170	170	170	170	170	170	170	
	N of resistant isolates	97	4	12	12	20	138	0	7	0	126	66	62	0	41	
>32	2														39	
64	4	2	7							13	1	23				
>64	91										36					
128						6					18					
>128						4					92					
1024												1				
>1024												65				

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

Sampling Stage: Slaughterhouse

Sampler: Official sampling

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

Sampling Details: N_A

Sampling Type: animal sample - caecum

Sampling Strategy: Objective sampling

Sampling Context: Monitoring

Programme Code: ESBL MON pnI2

AM substance	Cefepime	Cefotaxim	Cefotaxime + Clavulanic acid		Cefoxitin	Ceftazidim	Ceftazidime + Clavulanic acid		Ertapenem	Imipenem	Meropenem	Temocillin	
	Cefotaxime synergy test	Not Available	Not Available	Positive/Pres ent	Negative/Abs ent	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	
MIC	Ceftazidime synergy test	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Positive/Pres ent	Negative/Abs ent	Not Available	Not Available	Not Available	Not Available
	ECOFF	0.125	0.25	0.25	0.25	8	0.5	0.5	0.5	0.06	0.5	0.125	32
	Lowest limit	0.064	0.25	0.064	0.064	0.5	0.25	0.12	0.12	0.015	0.12	0.03	0.5
	Highest limit	32	64	64	64	64	128	128	128	2	16	16	64
	N of tested isolates	229	229	229	229	229	229	229	229	229	229	229	229
	N of resistant isolates	182	229	176	176	177	226	175	175	0	0	0	0
	<=0.015	89											
	<=0.03	228											
	0.03	89											
	<=0.064	6	52										
0.064	51										1		
<=0.12	42								3	185			
0.12	41	1											
<=0.25	1												
0.25	102	7							2	44			
0.5	29						2						
1	12	6				9	3						
2	10	19	1	9	4	15	17						17
4	19	31	2	70	27	28	1	69	112				
8	9	89	78		21	98	74						95

AM substance	Cefepime	Cefotaxim	Cefotaxime + Clavulanic acid		Cefoxitin	Ceftazidim	Ceftazidime + Clavulanic acid		Ertapenem	Imipenem	Meropenem	Temocillin
			Positive/Pres ent	Negative/Abs ent			Positive/Pres ent	Negative/Abs ent				
Cefotaxime synergy test	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available
Ceftazidime synergy test	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available
ECOFF	0.125	0.25	0.25	0.25	8	0.5	0.5	0.5	0.06	0.5	0.125	32
Lowest limit	0.064	0.25	0.064	0.064	0.5	0.25	0.12	0.12	0.015	0.12	0.03	0.5
Highest limit	32	64	64	64	64	128	128	128	2	16	16	64
N of tested isolates	229	229	229	229	229	229	229	229	229	229	229	229
N of resistant isolates	182	229	176	176	177	226	175	175	0	0	0	0
MIC												
16	1	75		10	4	63		11				5
32		11			30	13						
64		4			104							
>64					39							

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

Sampling Stage: Slaughterhouse

Sampling Type: animal sample - caecum

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: ESBL MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

Sampling Details: N_A

MIC	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Collistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	8	16	0.25	0.5	16	0.064	2	2	0.125	16	64	8	1	2
	Lowest limit	1	2	0.25	0.5	8	0.015	1	0.5	0.03	4	8	2	0.25	0.25
	Highest limit	64	64	4	8	128	8	16	32	16	128	1024	64	8	32
	N of tested isolates	229	229	229	229	229	229	229	229	229	229	229	229	229	229
	N of resistant isolates	229	8	229	227	48	197	0	36	0	175	119	108	0	68
<=0.015							27								
<=0.03										227					
0.03							5								
0.064										1					
0.12							4			1					
<=0.25														211	100
0.25							35								
<=0.5					2				160						
0.5							22							17	59
<=1								228							
1					11		10		31					1	2
<=2			9										115		
2				22	17		10	1	2						
<=4											36				
4			89	38	30		11						4		1
>4				169											
<=8						176						51			
8			114		123		66				11		2		
>8					46		39								
16			9			5			8		7	40	2		
32		1	4			11			14		4	18	4		

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	8	16	0.25	0.5	16	0.064	2	2	0.125	16	64	8	1	2
	Lowest limit	1	2	0.25	0.5	8	0.015	1	0.5	0.03	4	8	2	0.25	0.25
	Highest limit	64	64	4	8	128	8	16	32	16	128	1024	64	8	32
	N of tested isolates	229	229	229	229	229	229	229	229	229	229	229	229	229	229
MIC	N of resistant isolates	229	8	229	227	48	197	0	36	0	175	119	108	0	68
	>32								14						67
	64	17	3			11					16	1	50		
	>64	211	1										52		
	128					21					33				
	>128					5					122				
	1024											2			
	>1024											117			

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

Sampling Stage: Slaughterhouse

Sampler: Official sampling

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

Sampling Details: N_A

Sampling Type: animal sample - caecum

Sampling Strategy: Objective sampling

Sampling Context: Monitoring

Programme Code: AMR MON pnl2

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

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

Sampling Stage: Slaughterhouse

Sampler: Official sampling

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

Sampling Details: N_A

Sampling Type: animal sample - caecum

Sampling Strategy: Objective sampling

Sampling Context: Monitoring

Programme Code: AMR MON

MIC	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Collistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	8	16	0.25	0.5	16	0.064	2	2	0.125	16	64	8	1	2
	Lowest limit	1	2	0.25	0.5	8	0.015	1	0.5	0.03	4	8	2	0.25	0.25
	Highest limit	64	64	4	8	128	8	16	32	16	128	1024	64	8	32
	N of tested isolates	170	170	170	170	170	170	170	170	170	170	170	170	170	170
	N of resistant isolates	86	6	2	2	31	114	0	5	0	82	52	109	0	41
<=0.015							49								
<=0.03										170					
0.03							6								
0.064							1								
0.12							11								
<=0.25				168										139	81
0.25							31								
<=0.5					168				135						
0.5							21							19	46
<=1		3						170							
1							10		29					12	2
<=2			13										59		
2		24		1			3		1						
<=4											58				
4		56	58		1		4						2		
>4				1											
<=8						135						41			
8		1	78		1		13				24				
>8							21								
16		1	15			4			2		6	43	2		
32			2			5					5	29	5		1

MIC	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	8	16	0.25	0.5	16	0.064	2	2	0.125	16	64	8	1	2
	Lowest limit	1	2	0.25	0.5	8	0.015	1	0.5	0.03	4	8	2	0.25	0.25
	Highest limit	64	64	4	8	128	8	16	32	16	128	1024	64	8	32
	N of tested isolates	170	170	170	170	170	170	170	170	170	170	170	170	170	170
	N of resistant isolates	86	6	2	2	31	114	0	5	0	82	52	109	0	41
>32		3													40
64		2	4			4					15	5	35		
>64		83											67		
128						14					13	2			
>128						8					49				
>1024												50			

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

Sampling Stage: Slaughterhouse

Sampling Type: animal sample - caecum

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: ESBL MON pnl2

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

Sampling Details: N_A

AM substance	Cefepime	Cefotaxim	Cefotaxime + Clavulanic acid		Cefoxitin	Ceftazidim	Ceftazidime + Clavulanic acid		Ertapenem	Imipenem	Meropenem	Temocillin						
	Cefotaxime synergy test	Not Available	Not Available	Positive/Pres ent	Negative/Abs ent	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available						
MIC	Ceftazidime synergy test	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Positive/Pres ent	Negative/Abs ent	Not Available	Not Available	Not Available	Not Available					
	ECOFF	0.125	0.25	0.25	0.25	8	0.5	0.5	0.5	0.06	0.5	0.125	32					
	Lowest limit	0.064	0.25	0.064	0.064	0.5	0.25	0.12	0.12	0.015	0.12	0.03	0.5					
	Highest limit	32	64	64	64	64	128	128	128	2	16	16	64					
	N of tested isolates	84	84	84	84	84	84	84	84	84	84	84	84					
	N of resistant isolates	72	84	37	37	37	82	36	36	0	0	0	0					
	<=0.015	43																
	<=0.03	84																
	0.03	34																
	<=0.064	3	32															
	0.064	7																
<=0.12	37											2	70					
0.12	9	15																
0.25	13	8											14					
0.5	7	1											2	1				
1	2	1											3	4	2			
2	10	3	1	4	1	27	6											4
4	17	10	2	10	21	22	15											42
8	23	15	13											25	22	11	36	
16		17	2											1	7	2	1	

AM substance	Cefepime	Cefotaxim	Cefotaxime + Clavulanic acid		Cefoxitin	Ceftazidim	Ceftazidime + Clavulanic acid		Ertapenem	Imipenem	Meropenem	Temocillin
			Positive/Pres ent	Negative/Abs ent			Positive/Pres ent	Negative/Abs ent				
Cefotaxime synergy test	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available
Ceftazidime synergy test	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available
ECOFF	0.125	0.25	0.25	0.25	8	0.5	0.5	0.5	0.06	0.5	0.125	32
Lowest limit	0.064	0.25	0.064	0.064	0.5	0.25	0.12	0.12	0.015	0.12	0.03	0.5
Highest limit	32	64	64	64	64	128	128	128	2	16	16	64
N of tested isolates	84	84	84	84	84	84	84	84	84	84	84	84
N of resistant isolates	72	84	37	37	37	82	36	36	0	0	0	0
MIC												
32		27			7							1
64		12			20							
>64					9							

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

Sampling Stage: Slaughterhouse

Sampling Type: animal sample - caecum

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: ESBL MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

Sampling Details: N_A

MIC	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim	
	ECOFF	8	16	0.25	0.5	16	0.064	2	2	0.125	16	64	8	1	2	
	Lowest limit	1	2	0.25	0.5	8	0.015	1	0.5	0.03	4	8	2	0.25	0.25	
	Highest limit	64	64	4	8	128	8	16	32	16	128	1024	64	8	32	
	N of tested isolates	84	84	84	84	84	84	84	84	84	84	84	84	84	84	
	N of resistant isolates	84	0	84	82	27	76	2	6	0	65	70	61	0	44	
	<=0.015	5														
<=0.03	84															
0.03	1															
0.064	2															
0.12	2															
<=0.25														73	29	
0.25	16															
<=0.5	2				62											
0.5	17						11									11
<=1	80															
1	2				16											
<=2	4			21												
2	4			31	1		2									
<=4												14				
4	46		7	17	2		2								1	
>4	73															
<=8	54					6										
8	29			24		16		1		2						
>8	8				22											
16	5		3			3		5		6	2					
32	2					1		2		4		1				

MIC	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	8	16	0.25	0.5	16	0.064	2	2	0.125	16	64	8	1	2
	Lowest limit	1	2	0.25	0.5	8	0.015	1	0.5	0.03	4	8	2	0.25	0.25
	Highest limit	64	64	4	8	128	8	16	32	16	128	1024	64	8	32
	N of tested isolates	84	84	84	84	84	84	84	84	84	84	84	84	84	84
	N of resistant isolates	84	0	84	82	27	76	2	6	0	65	70	61	0	44
>32		1													42
64		3				11					3		16		
>64		81				39									
128						10					22				
>128						4					40				
>1024												70			

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

Programme Code	Matrix Detailed	Zoonotic Agent Detailed	Sampling Strategy	Sampling Stage	Sampling Details	Sampling Context	Sampler	Sample Type	Sampling Unit Type	Sample Origin	Comment	Total Units Tested	Total Units Positive
CARBA MON	Gallus gallus (fowl) - broilers	Escherichia coli, non-pathogenic, unspecified	Objective sampling	Slaughterhouse	N_A	Monitoring	Official sampling	animal sample - caecum	slaughter animal batch	Hungary	N_A	206	0
	Meat from broilers (Gallus gallus) - fresh	Escherichia coli, non-pathogenic, unspecified	Objective sampling	Retail	N_A	Monitoring	Official sampling	food sample - meat	batch (food/feed)	Hungary	N_A	233	0
	Turkeys - fattening flocks	Escherichia coli, non-pathogenic, unspecified	Objective sampling	Slaughterhouse	N_A	Monitoring	Official sampling	animal sample - caecum	slaughter animal batch	Hungary	N_A	223	0

Latest Transmission set

Table Name	Last submitted dataset transmission date
Antimicrobial Resistance	07-Jul-2017
Animal Population	07-Jul-2017
Disease Status	07-Jul-2017
Food Borne Outbreaks	07-Jul-2017
Prevalence	07-Jul-2017
Text Forms	05-Jul-2017