European Food Safety Authority

ZOONOSES MONITORING

Sweden

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

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

IN 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 Sweden 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.

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

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1 ANTIMICROBIAL RESISTANCE INFORMATION ON SPECIFIC ZOONOSES AND ZOONOTIC AGENTS

1.1 SALMONELLOSIS

1.1.1 Salmonella in animals

1.1.1.1 Antimicrobial resistance in Salmonella All animals

Description of sampling designs

Salmonellosis in animals is a notifiable disease in Sweden and isolates from each notified incident are confirmed at SVA. Data presented are from susceptibility testing of these isolates. The summary for each year includes one isolate of each serovar from each warm-blooded animal species in notified incidents. An exception is isolates from cats and wildlife from which a subset of isolates is selected by convenience. Isolates from incidents previously notified and still under restrictions are included in the yearly statistics. Also included are isolates obtained in the salmonella surveillance programme from samples collected at slaughter (carcass swabs, neck skins and lymph nodes).

Stratification procedures per animal populations and food categories

See above.

Randomisation procedures per animal populations and food categories

See above.

Sampling strategy used in monitoring

Frequency of the sampling

Not relevant

Type of specimen taken

Several different types depending on context (clinical submission, control programme).

Methods of sampling (description of sampling techniques)

Several different types depending on context (clinical submission, control programme).

Procedures for the selection of isolates for antimicrobial testing

Salmonellosis in animals is a notifiable disease in Sweden and one isolate from each notified incident must be confirmed at SVA. Data on antimicrobial resistance presented in the zoonosis report include one isolate of each serovar, and when appropriate from each phage-type. These isolates are from cattle, pigs and poultry in incidents notified during 2016 and in incidents previously notified and still under restrictions in 2016. Isolates are also included that were obtained in 2016 in the Salmonella surveillance programme from samples collected at slaughter (carcass swabs, neck skins and lymph nodes).

Methods used for collecting data

Data for each submitted sample is stored in a data base.

Laboratory methodology used for identification of the microbial isolates

Salmonella was isolated and identified at the Dept. of Microbiology, SVA or at regional laboratories in accordance with standard procedures. All samples within official control programmes are cultured according to the procedures detailed by the MSRV (ISO-EN 6579:2002/ Amd 1:2007). Confirmatory identification and serotyping was performed according to the procedures of Kaufmann and White.

Laboratory used for detection for resistance

Antimicrobials included in monitoring

Antimicrobial susceptibility was tested by a dilution method using cation adjusted Mueller Hinton broth (CAMBH). The tests were performed following the standards for microdilution of the National Committee of Clinical Laboratory Standards (CLSI, 2013) using VetMIC panels produced by SVA were used. Tests were performed at the National Veterinary Institute. Antimicrobials tested: ampicillin, cefotaxime, ceftazidime, chloramphemicol, ciprofloxacin, colistin, florfenicol, gentamicin, kanamycin, nalidixic acid, streptomycin, sulphamethoxazole, tetracycline, trimethoprim.

Cut-off values used in testing

Epidemiological cut-off values issued by EUCAST were used.

Additional information

Salmonella is rare in animals in Sweden, and few incidents involve antibiotic-resistant strains. Strains with ESBL resistance have never been found in isolates from animals in Sweden, and resistance to fluoroquinolones is rare. Isolates from human invasive infections are markedly more resistant, which makes animals in Sweden an unlikely source for these infections. In 2016, altogether, 77 isolates were tested for AMR of which 56 were S. Typhimurium. The majority of isolates (86%) were susceptible to all antibiotics tested, but eleven isolates were resistant to at least one substance and four isolates (5%) were multiresistant. In the subset of S. Typhimurium resistance was overall low but has varied over the years due to occurrence of multiresistant strains in individual years. One isolate of S. Mbandaka from poultry was phenotypically resistant to colistin (MIC 4 mg/L) but was negative for the mcr-1 and mcr-2 genes on testing with PCR. No isolate was resistant to extended spectrum cephalosporins. All the four multiresistant isolates were S. Typhimurium, of which two were from dogs and two from cattle. The two isolates from cattle were resistant to ampicillin, streptomycin, sulphonamide and trimethoprim. One of the isolates from dogs was resistant to ampicillin, streptomycin, sulphonamide and tetracycline and the other was resistant to quinolones (ciprofloxacin and nalidixic acid), streptomycin and sulphonamide.

1.2 CAMPYLOBACTERIOSIS

1.2.1 Campylobacter in animals

1.2.1.1 Antimicrobial resistance in C. jejuni Gallus gallus (fowl)

Description of sampling designs

Isolates reported are from the Swedish broiler Campylobacter programme. The programme includes seven abattoirs and covers 99% of slaughtered broilers. All flocks in the programme are sampled at slaughter. The programme is financed by the Swedish Board of Agriculture and the Poultry Meat Association.

Stratification procedures per animal populations and food categories

All flocks of broilers were sampled. Each sample is from a unique flock but not nessecarily from a unique production site.

Randomisation procedures per animal populations and food categories

Ten birds from each slaughtered flock are randomly sampled at slaughter.

Sampling strategy used in monitoring

Frequency of the sampling

From every flock of broliers slaughtered in 2016, the caecum of ten birds is taken and pooled to form one composite sample.

Type of specimen taken

Caecum samples

Methods of sampling (description of sampling techniques)

From every flock, the caecum of ten birds is taken at slaughter by slaughterhouse personnel and pooled to form one composite sample.

Procedures for the selection of isolates for antimicrobial testing

In January 2017, 170 isolates were randomly selected from the Campylobacter jejuni isolates recovered in the Campylobacter programme during 2016 (n=633).

Methods used for collecting data

Results of antimicrobial susceptibility testing and information on the origin of isolates from submission forms were stored in a database at SVA. For summary statistics, the relevant data were extracted from the database.

Laboratory methodology used for identification of the microbial isolates

ISO/DIS 10272:2014 part 1 and 2. Isolation was performed at the National Veterinary Institute.

Laboratory used for detection for resistance

Antimicrobials included in monitoring

Antimicrobial susceptibility was tested using dilution methods in cation adjusted Mueller Hinton broth (CAMBH). The tests were performed following the standards for microdilution of the National Committee of Clinical Laboratory Standards according to the CLSI standard M45-3rd ed. for fastidious bacteria using VetMIC panels produced by the National Veterinary Institute. Antimicrobials tested are those advised by EFSA (ciprofloxacin, nalidixic acid, erythromycin, tetracycline, gentamicin, streptomycin).

Cut-off values used in testing

Epidemiological cut-off values issued by EUCAST were used.

Additional information

Of the 170 isolates tested, 127 (75%) were susceptible to all six antibiotics. Resistance to tetracycline (16%) only was the most common phenotype and this is new for 2016. Resistance to fluoroquinolones only (ciprofloxacin and nalidixic acid) was the second most common phenotype (13%). Seven isolates (4%) were resistant to both fluoroquinolones and tetracycline. All isolates were susceptible to erythromycin and gentamicin. In comparison to previous years, quinolone resistance increased notably in 2010 but has declined since then and in 2016 there is a slight increase again. The reasons for the quinolone and tetracycline resistance are not known but selection through use of antibiotics is unlikely since antibiotics are most rarely are used in broiler production in Sweden.

1.3 ESCHERICHIA COLI, NON-PATHOGENIC

1.3.1 Escherichia coli, non-pathogenic in foodstuffs

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

Description of sampling designs

Samples of fresh broiler meat were collected throughout the year by municipal environmental departments in twelve different cities in Sweden. In each city, a proportional number of samples in relation to the human population was collected

Stratification procedures per animal populations and food categories

Fresh broiler meat was collected at retail by personnel at municipal environmental departments. No stratification by country of origin was made.

Randomisation procedures per animal populations and food categories

No formal randomisation was made but municipal officers were instructed to at on each sampling occasion collect up to five samples meeting the inclusion criteria (fresh broiler meat) and to at each retail store select only one sample of each available brand.

Sampling strategy used in monitoring

Frequency of the sampling

The sampling was conducted between January and December 2016 and divided on 60 different occasions. According to the sampling plan 300 samples were to be collected but only 269 of these were finally analysed becase of delayed transportation to the laboratory resulting in a to high temperature on arrival. Of the 269 samples 243 were of Swedish origin and 26 from abroad.

Type of specimen taken

Fresh broiler meat

Methods of sampling (description of sampling techniques)

Samples were collected fresh in their own package and sent to the laboratory by mail in refrigerated boxes.

Procedures for the selection of isolates for antimicrobial testing

From each sample cultured, one isolate of the relevant bacterial species from each selective plate (MacConkey agar with cefotaxime (1 mg/L), CHROMID CARBA agar and CHROMID OXA 48 agar) was randomly selected for antimicrobial susceptibility testing.

Methods used for collecting data

Results of antimicrobial susceptibility testing and information on the origin of isolates, from packages, were stored in a database at the Swedish National Veterinary Institute (SVA). For summary statistics, the relevant data were extracted from the database.

Laboratory methodology used for identification of the microbial isolates

25 g of surface meat was homogenized in 225 ml BPW and incubated at 37°C overnight. From the BPW homogenate 10 µL per agar plate was spread on MacConkey agar with cefotaxime (1 mg/L), CHROMID CARBA agar and CHROMID OXA 48 agar and incubated overnight at 44°C for MacConkey agar and 37°C for the chromagar. One lactose positive colony with morphology typical for E. coli was sub-cultured on horse-blood agar (5% v/v), after which the isolate was tested for production of tryptophanase (indole). Only lactose and indole positive isolates with typical morphology were selected for susceptibility tests and further tested for ESBL detection.

Laboratory used for detection for resistance

Antimicrobials included in monitoring

Antimicrobial susceptibility was tested using dilution methods in cation adjusted Mueller Hinton broth (CAMBH). The tests were performed following the standards for microdilution of the National Committee of Clinical Laboratory Standards (CLSI, 2013). For E. coli Sensititre panels (Panel 1 and 2) produced by Trek Diagnostics LTD were used. Antimicrobials tested are those advised by EFSA.

Cut-off values used in testing

Epidemiological cut-off values issued by EUCAST were used.

Additional information

In 119 of 269 samples ESC resistant E. coli were found. Separated by origin, ESC resistant E. coli were detected in 107 (44%) of the samples from broiler meat originating from Sweden and 10 (38%) of the samples from broiler meat originating from other countries. In 117 of the isolates transmissible genes conferring ESC-resistance were found but in 2 isolates no genes were detected by PCR. Of the 117 isolates with transmissible genes, 72 carried a gene in the CTX-M-1-group, 44 a gene in the CIT-group and 1 a TEM-gene. The exact gene was determined by sequencing for twelve isolates (six with a gene in the CTX-M-1-group, five with a gene in the CIT-group and the one isolate with a TEM-gene). Five of the isolates with a gene in the CTX-M-1-group were confirmed to carry the gene blaCTX-M-1 and the last of them carried the gene blaCTX-M-15. The five isolates with a gene in the CIT-group were all confirmed to carry the gene blaCMY-2. The isolate with a TEM-gene was confirmed to carry the gene blaTEM-52. Carbapenem resistant E. coli was not detected in any sample.

1.3.2 Escherichia coli, non-pathogenic in animals

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

Description of sampling designs

Samples from broilers were collected at slaughter within the Swedish Campylobacter programme in which whole caeca are collected from each batch of broilers slaughtered. From these samples, 149 were selected in January-June and 153 in August-November. Each sample was from a unique flock but not always from a unique production site. Samples cultured were collected at eight abattoirs that in 2016 accounted for approximately 98% of the total volume of broilers slaughtered. The number of samples from each abattoir was roughly proportional to the annual slaughter volume of the abattoir.

Stratification procedures per animal populations and food categories

See above.

Randomisation procedures per animal populations and food categories

No formal randomisation was made in the selection of samples for culture but since all flocks slaughterd are sampled in the Campylobacter programme the selection was made from a census sample of flocks.

Sampling strategy used in monitoring

Frequency of the sampling

Samples were collected in two periods: Jannuray-June and August-November.

Type of specimen taken

Whole caeca were sampled.

Methods of sampling (description of sampling techniques)

From every flock, the caecum of ten birds is taken at slaughter by slaughterhouse personnel.

Procedures for the selection of isolates for antimicrobial testing

From each sample cultured, one isolate of the relevant bacterial species (E. coli) was randomly selected for antimicrobial susceptibility testing.

Methods used for collecting data

Results of antimicrobial susceptibility testing and information on the origin of isolates, collected from the slaughterhouse, were stored in a database at the Swedish National Veterinary Institute (SVA). For summary statistics, the relevant data were extracted from the database.

Laboratory methodology used for identification of the microbial isolates

Isolation was performed at SVA. One gramme of caecum content was diluted in 9 ml buffered peptone water (BPW). 10 µL of the suspension was extracted and spread on a plate of MacConkey agar and incubated overnight at 44°C. The remaining suspension was incubated at 37°C overnight. From the BPW solution 10 µL was spread each on a plate of MacConkey agar with cefotaxime (1 mg/L), CHROMID CARBA agar and CHROMID OXA 48 agar. The plates were incubated overnight at 44°C (MacConkey agar) or 37°C (chromagar). One lactose positive colony with morphology typical of E. coli was sub-cultured onto horse-blood agar (5% v/v), after which the isolate was tested for production of tryptophanase (indole). Only lactose and indol positive isolates with typical morphology were selected for susceptibility tests. Colonies growing on MacConkey agar with cefotaxime were sub-cultured on horse-blood agar (5% v/v) and further tested for ESBL/AmpC production.

Laboratory used for detection for resistance

Antimicrobials included in monitoring

Antimicrobial susceptibility was tested using dilution methods in cation adjusted Mueller Hinton broth (CAMBH). The tests were performed following the standards for microdilution of the National Committee of Clinical Laboratory Standards (CLSI, 2013). For E. coli Sensititre panels (Panel 1 and 2) produced by Trek Diagnostics LTD were used. Antimicrobials tested are those advised by EFSA.

Cut-off values used in testing

Epidemiological cut-off values issued by EUCAST were used.

Additional information

Non selective culture: Escherichia coli was isolated from 175 (84%) of 208 samples cultured. The majority of the isolates (71%) was susceptible to all antibiotics tested (Table 4.34). Resistance to sulphonamides (13%), ampicillin (13%) and tetracycline (11%) were the most common traits. Fourteen isolates (8%) were multiresistant and all of these had resistance to sulphonamides and ampicillin in their phenotype. Twelve of these isolates were resistant also to trimethoprim. Three isolates were resistant to cefotaxime and ceftazidime and all carried a blaCTX-M-1 gene (PCR). Since the start of the monitoring in year 2000, resistance to each specific antibiotic tested has been below 15%. This favorable situation is likely due to the limited use of antibiotics in broiler production in Sweden (see Sales of antibiotics for animals). Resistance to sulphonamides, tetracycline, ampicillin and trimethoprim has, however, gradually increased in recent years whereas resistance to quinolones has decreased again after an increase in previous years. The reasons for these changes are not known. Selective culture: ESC resistant E. coli was isolated from 130 (43%) of 302 samples of intestinal content from broilers. Ninety-three isolates had resistance genes of the CTX-M-1 group and 34 isolates genes of the CIT-group (PCR). In the remaining three isolates, no transferrable genes were detected. For fifteen of the isolates the exact gene was determined by sequencing. Ten isolates were confirmed to carry the gene blaCTX-M-1 (ESBLA) and five to carry the gene blaCMY-2 (ESBLM). In previous years, isolates with blaCMY-2 have dominated among ESBL-producing E. coli from broilers even if a shift towards blaCTX-M-1 could be seen already in 2015.

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

Description of sampling designs

Caecal samples from healthy turkeys were collected at slaughter. Sampling was performed by convenience at two abattoirs in Sweden, from January to December 2016. Each sample is from a unique flock but not always from a unique production site. In total 86 samples were collected and analysed. The turkey production in Sweden is small and in 2016 only 527 000 were slaughtered. No specific assessment of the sample size was made.

Stratification procedures per animal populations and food categories

The study focused on turkeys at slaughter. Two slaughterhouses participated in collection of the samples.

Randomisation procedures per animal populations and food categories

No formal randomisation was made in the collection of the samples but each sampling day only one sample per flock of turkeys was collected by convenience by slaughterhouse personnel.

Sampling strategy used in monitoring

Frequency of the sampling

Samples were collected from January to December 2016.

Type of specimen taken

Whole caeca were sampled.

Methods of sampling (description of sampling techniques)

Intestinal contents (caecas) from healthy turkeys were sampled by convenience by slaughterhouse personnel at slaughter. Each sample is from a unique flock but not always from a unique production site.

Procedures for the selection of isolates for antimicrobial testing

From each sample cultured, one isolate of the relevant bacterial species (E. coli) was randomly selected for antimicrobial susceptibility testing.

Methods used for collecting data

Results of antimicrobial susceptibility testing and information on the origin of isolates from submission forms, collected from the slaughterhouse, were stored in a database at the Swedish National Veterinary Institute (SVA). For summary statistics, the relevant data were extracted from the database.

Laboratory methodology used for identification of the microbial isolates

Isolation was performed at SVA. One gramme of caecum content was diluted in 9 ml buffered peptone water (BPW). 10 µL of the suspension was extracted and spread on a plate of MacConkey agar and incubated overnight at 44°C. The remaining suspension was incubated at 37°C overnight. From the BPW solution 10 µL was spread each on a plate of MacConkey agar with cefotaxime (1 mg/L), CHROMID CARBA agar and CHROMID OXA 48 agar. The plates were incubated overnight at 44°C (MacConkey agar) or 37°C (chromagar). One lactose positive colony with morphology typical of E. coli was sub-cultured onto horse-blood agar (5% v/v), after which the isolate was tested for production of tryptophanase (indole). Only lactose and indol positive isolates with typical morphology were selected for susceptibility tests. Colonies growing on MacConkey agar with cefotaxime were sub-cultured on horse-blood agar (5% v/v) and further tested forESBL/AmpC production.

Laboratory used for detection for resistance

Antimicrobials included in monitoring

Antimicrobial susceptibility was tested using dilution methods in cation adjusted Mueller Hinton broth (CAMBH). The tests were performed following the standards for microdilution of the National Committee of Clinical Laboratory Standards (CLSI, 2013). For E. coli Sensititre panels (Panel 1 and 2) produced by Trek Diagnostics LTD were used. Antimicrobials tested are those advised by EFSA.

Cut-off values used in testing

Epidemiological cut-off values issued by EUCAST were used.

Additional information

Isolates of indicator E. coli were obtained from 85 of the 86 samples cultured and isolates of E. coli resistant to third generation cephalosporins from 1 sample (selective culture). The isolate resistant to third generation cephalosporins carried the gene blaCTX-M-1 (sequencing). This is the first time that an isolate with ESBL has been reported from turkeys in Sweden. No isolates of E. coli resistant to carbapenems were obtained.

1.4 ENTEROCOCCUS, NON-PATHOGENIC

1.4.1 Enterococcus, non-pathogenic in animals

1.4.1.1 Antimicrobial resistance in Enterococcus spp., unspecified Turkeys

Description of sampling designs

Caecal samples from healthy turkeys were collected at slaughter. Sampling was performed by convenience at two abattoirs in Sweden, from January to December 2016. Each sample is from a unique flock but not always from a unique production site. In total 86 samples were collected and analysed. The turkey production in Sweden is small and in 2016 only 527 000 were slaughtered. No specific assessment of the sample size was made.

Stratification procedures per animal populations and food categories

The study focused on turkeys at slaughter. Two slaughterhouses participated in collection of the samples.

Randomisation procedures per animal populations and food categories

No formal randomisation was made in the collection of the samples but each sampling day only one sample per flock of turkeys was collected by convenience by slaughterhouse personnel.

Sampling strategy used in monitoring

Frequency of the sampling

Samples were collected from January to December 2016.

Type of specimen taken

Whole caeca were sampled.

Methods of sampling (description of sampling techniques)

Intestinal contents (caecas) from healthy turkeys were sampled by convenience by slaughterhouse personnel at slaughter. Each sample is from a unique flock but not always from a unique production site.

Procedures for the selection of isolates for antimicrobial testing

From each sample cultured, one isolate of the relevant bacterial species (E. faecalis and E. faecium) was randomly selected for antimicrobial susceptibility testing.

Methods used for collecting data

Results of antimicrobial susceptibility testing and information on the origin of isolates from submission forms, collected from the slaughterhouse, were stored in a database at the Swedish National Veterinary Institute (SVA). For summary statistics, the relevant data were extracted from the database.

Laboratory methodology used for identification of the microbial isolates

Isolation was performed at SVA. One gramme of caecum content was diluted in 9 ml buffered peptone water (BPW). Subsequently, 0.1 mL of the suspension was spread on Slanetz-Bartley (SlaBa) agar and incubated at 37°C for 48 h. Two colonies, randomly chosen, were sub-cultured on horse-blood agar (5% v/v; 37°C, 24 h). Colonies with morphology consistent with enterococci were identified to species level by MALDI-TOF MS. If available, one isolate of Enterococcus faecalis (RF-00000113-MCG) and one isolate of E. faecium (RF-00000114-MCG) from each sample were tested for antibiotic susceptibility.

Laboratory used for detection for resistance

Antimicrobials included in monitoring

Antimicrobial susceptibility was tested by a dilution method using cation adjusted Mueller Hinton broth (CAMBH). The tests were performed following the standards for microdilution of the National Committee of Clinical Laboratory Standards (CLSI, 2013). For Enterococci VetMIC panels produced by SVA were used. Antimicrobials tested: ampicillin, bacitracin, chloramphenicol, erythromycin, gentamicin, kanamycin, linezolid, narasin, streptomycin, tetracycline, vancomycin.

Cut-off values used in testing

Epidemiological cut-off values issued by EUCAST were used.

Additional information

This is the first time, enterococci from turkeys in Sweden were investigated. From 86 samples cultured, a total of 41 isolates of Enterococcus faecalis and 70 isolates of Enterococcus faecium were obtained. In E. faecalis the majority of isolates (93%) was resistant to at least one antibiotic and nineteen (46%) isolates were multiresistant. Resistance to tetracycline (80%), narasin (61%), erythromycin (49%) and bacitracin (17%) were the most common traits. No resistance to vancomycin was detected. The number of isolates tested is small and conclusions on occurrence of resistance must be made with caution. In E. faecium the majority of isolates (93%) was resistant to at least one antibiotic and five isolates (7%) were multiresistant. Resistance to narasin (79%), erythromycin (33%) and tetracycline (24%) were the most common traits. No resistance to vancomycin was detected. The number of isolates tested is small and conclusions on occurrence of resistance must be made with caution. The high occurrence of resistance to narasin in both E. faecalis and E. faecium is interesting as narasin is not used as coccidiostat for turkeys. The ionophore monensin is however used and cross resistance between the two substances could be an explanation. Notably resistance to narasin in enterococci from other animals, where narasin is not used, is rarely found in Sweden.

1.5 STAPHYLOCOCCUS AUREUS METICILLIN RESISTANT (MRSA) INFECTION

1.5.1 Staphylococcus in animals

1.5.1.1 Antimicrobial resistance in S. aureus, meticillin resistant (MRSA) All animals

Description of sampling designs

In Sweden MRSA in all types of animals is notifiable and index isolates are to be confirmed by molecular at the National Veterinary institute. The data reported relates to these index isolates.

Stratification procedures per animal populations and food categories

No stratification was made (see above).

Randomisation procedures per animal populations and food categories

Not relevant (see above).

Sampling strategy used in monitoring

Frequency of the sampling

No specific monitoring of MRSA in animals was performed in 2016. Reported isolates are notified cases from clinical submissions and contact tracings in 2016.

Type of specimen taken

Different types of samples are included (wounds, nostrils etc).

Methods of sampling (description of sampling techniques)

Variable depending on the clinical presentation of the animal (see above).

Procedures for the selection of isolates for antimicrobial testing

No selection was made – all notified index isolates available were included.

Methods used for collecting data

Available data from submission forms were recorded.

Laboratory methodology used for identification of the microbial isolates

Isolates are from different laboratories but were all confirmed as MRSA at the National Veterinary Institute where Maldi-TOF was used for species identification of isolates and PCR for detection of mec-genes.

Laboratory used for detection for resistance

Antimicrobials included in monitoring

The isolates were tested for susceptibility by micro-dilution at the National Veterinary Institute. Antimicrobials tested: ciprofloxacin, penicillin, oxacillin, cephalothin, chloramphenicol, Erythromycin (Erythromycin A), tetracycline, gentamicin, fusidic acid, trimethoprim, kanamycin, cefoxitin, clindamycin. EUCAST ECOFFs were used for interpretation of MICs.

Cut-off values used in testing

Epidemiological cut-off values issued by EUCAST were used.

Additional information

There are reasons to believe that the MRSA situation in Sweden is favourable since few cases are notified each year. In 2016 MRSA mecA were reported in 1 horse, 2 dogs and 2 cats. In addition, MRSA mecC was reported in 1 hedgehog, 19 goats and 4 sheep. The cases in goats and sheep (index case reported here) relates to a group of animals at a zoo were one goat with dermatitis was identified as an MRSA carrier and subsequent contact tracings. These animals were all destroyed. The situation regarding MRSA mecA in animals is stable at a low level. As for MRSA mecC this variant is increasingly found in animals and appears to be common in wild hedgehogs in Sweden. Still, the total number of cases in animals and humans is low but the epidemiology of this variant is unclear and deserves further study. The few findings of MRSA in animals is not likely to have an important impact on the general situation in humans. Also, the number of cases of LA-MRSA in humans is low indicating that there is no large reservoir among farm animals in Sweden.

2 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.

2.1 Outbreaks

2.1.1 Foodborne outbreaks

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

The municipal environmental and public health authorities are responsible for detection and prevention of food and waterborne diseases. Epidemiological investigation and treatment of individuals are the responsibilities of County Medical Officers and the general practitioners. The Public Health Agency of Sweden is responsible for outbreak investigations at the national level. The municipal authorities are obliged to send a report on the results of outbreak investigations to the Swedish National Food Agency (NFA). Based on the reports received, and completed with information from The Public Health Agency of Sweden, NFA prepares a yearly report. The reporting system is mainly web based.

Description of the types of outbreaks covered by the reporting:

The reporting system covers both general and household outbreaks, and outbreaks caused by toxins. The system also includes chemicals, but if such agents are identified they are removed from the dataset submitted to Efsa.

National evaluation of the reported outbreaks in the country:

Trends in numbers of outbreaks and numbers of human cases involved

With the current reporting system it is difficult to detect any significant trends, because of difficulties in obtaining comparable data from all local authorities. In 2017, the National Food Agency is planning to launch a new web based template for reporting of food-borne outbreaks. For reports from earlier years, please see
https://www.livsmedelsverket.se/sok/Search/?q=rapporterade+misst%C3%A4nkta+matf%C3%B6rgiftningar

Additional information

No additional information for 2016

ANIMAL POPULATION TABLES

Table Susceptible animal population

		Population			
Animal species	**Category of animals**	**holding**	**animal**	**slaughter animal (heads)**	**herd/flock**
Cattle (bovine animals)	Cattle (bovine animals)	17,046	1,488,904	411,020	
	Cattle (bovine animals) - calves (under 1 year)	14,839	475,197	16,200	
	Cattle (bovine animals) - dairy cows and heifers	3,872	330,833		
	Cattle (bovine animals) - meat production animals	10,349	193,657		
Deer	Deer - farmed	279	24,231	5,774	
	Deer - farmed - fallow deer		18,563	4,545	
	Deer - farmed - red deer		5,668	1,229	
Ducks	Ducks			2,806	
	Ducks - meat production flocks - before slaughter				16
Gallus gallus (fowl)	Gallus gallus (fowl) - broilers	198	9,002,683	101,322,264	4,248
	Gallus gallus (fowl) - laying hens	2,897	8,174,310	3,292,937	
	Gallus gallus (fowl) - laying hens - adult				673
Geese	Geese			15,649	
	Geese - meat production flocks - before slaughter				24
Goats	Goats	3,945	15,967	1,218	
Pigs	Pigs	1,252	1,354,286	2,526,500	
	Pigs - breeding animals	1,336	140,464		
	Pigs - fattening pigs	1,019	835,323		
Reindeers	Reindeers - semi-domesticated	1,031	247,466	54,745	
Sheep	Sheep	8,724	578,174	284,410	
	Sheep - animals over 1 year	8,669	281,327	33,210	
	Sheep - animals under 1 year (lambs)	7,230	296,847	217,980	
Solipeds, domestic	Solipeds, domestic	76,800	355,500	2,670	
Turkeys	Turkeys			526,525	
	Turkeys - meat production flocks				236
Wild boars	Wild boars - farmed			1,469	

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
SWEDEN	0	0	0	0	0	17,046	0	1,488,904	4,300	4,300	17,046	0	1,100	1,100	0	34	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
SWEDEN	0	0	0	0	12,669	0	594,141	409	2,000	12,669	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
SWEDEN	17,046	0	1,488,904	(1)	0	0	4	0	17,046

Table Tuberculosis in farmed deer

Region	Number of infected herds	Number of herds with status free	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
SWEDEN	0	279	24,231	(1)	0	0	2	0	279

PREVALENCE TABLES

Table BRUCELLA 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	Alpacas - farmed - Farm - Not Available - animal sample - organ/tissue - Surveillance - Official sampling - Suspect sampling	animal	1	0	Brucella	0
	Bison - farmed - Farm - Not Available - animal sample - organ/tissue - Surveillance - Official sampling - Suspect sampling	animal	1	0	Brucella	0
	Pigs - unspecified - Farm - Not Available - animal sample - organ/tissue - Surveillance - Official sampling - Suspect sampling	animal	43	0	Brucella	0

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
SWEDEN	Gallus gallus (fowl) - broilers - Slaughterhouse - Sweden - animal sample - caecum - Monitoring - active - Official sampling - Objective sampling	slaughter animal batch	4389	678	Campylobacter jejuni	633
					thermotolerant Campylobacter, unspecified	45

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	Cereals and meals - flour/meal or finely ground powder - Unspecified - Not Available - food sample - Monitoring - passive - Official sampling - Suspect sampling	single (food/feed)	25	Gram	2	0	Campylobacter	0
	Crustaceans - Unspecified - Not Available - food sample - Monitoring - passive - Official sampling - Suspect sampling	single (food/feed)	25	Gram	1	0	Campylobacter	0
	Dairy products (excluding cheeses) - ice-cream - Unspecified - Not Available - food sample - Monitoring - passive - Official sampling - Suspect sampling	single (food/feed)	25	Gram	1	0	Campylobacter	0
	Fruits and vegetables - Unspecified - Not Available - food sample - Monitoring - passive - Official sampling - Suspect sampling	single (food/feed)	25	Gram	6	0	Campylobacter	0
	Meat from bovine animals - meat products - Unspecified - Not Available - food sample - meat - Monitoring - passive - Official sampling - Suspect sampling	single (food/feed)	25	Gram	1	0	Campylobacter	0
	Meat from bovine animals - minced meat - Unspecified - Not Available - food sample - meat - Monitoring - passive - Official sampling - Suspect sampling	single (food/feed)	25	Gram	1	0	Campylobacter	0
	Meat from broilers (Gallus gallus) - fresh - Unspecified - Not Available - food sample - meat - Monitoring - passive - Official sampling - Suspect sampling	single (food/feed)	25	Gram	6	0	Campylobacter	0
	Meat from broilers (Gallus gallus) - meat products - Retail - Not Available - food sample - meat - Monitoring - passive - Official sampling - Suspect sampling	single (food/feed)	25	Gram	5	0	Campylobacter	0
	Meat from pig - fresh - Unspecified - Not Available - food sample - meat - Monitoring - passive - Official sampling - Suspect sampling	single (food/feed)	25	Gram	1	0	Campylobacter	0
	Meat from pig - meat preparation - Unspecified - Not Available - food sample - meat - Monitoring - passive - Official sampling - Suspect sampling	single (food/feed)	25	Gram	1	0	Campylobacter	0
	Meat from wild game - birds - Unspecified - Not Available - food sample - meat - Monitoring - passive - Official sampling - Suspect sampling	single (food/feed)	25	Gram	1	0	Campylobacter	0
	Mushrooms - Retail - Not Available - food sample - Monitoring - passive - Official sampling - Suspect sampling	single (food/feed)	25	Gram	3	0	Campylobacter	0
	Other processed food products and prepared dishes - Unspecified - Not Available - food sample - Monitoring - passive - Official sampling - Suspect sampling	single (food/feed)	25	Gram	15	0	Campylobacter	0
	Other processed food products and prepared dishes - Unspecified - Not Available - food sample - Monitoring - passive - Official sampling - Suspect sampling	single (food/feed)	25	Gram	3	0	Campylobacter	0
	Ready-to-eat salads - Unspecified - Not Available - food sample - Monitoring - passive - Official sampling - Suspect sampling	single (food/feed)	25	Gram	10	0	Campylobacter	0
	Sauce and dressings - Unspecified - Not Available - food sample - Monitoring - passive - Official sampling - Suspect sampling	single (food/feed)	25	Gram	11	0	Campylobacter	0
	Spices and herbs - Unspecified - Not Available - food sample - Monitoring - passive - Official sampling - Suspect sampling	single (food/feed)	25	Gram	1	0	Campylobacter	0

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Total units tested	Total units positive	Zoonoses	N of units positive
Not Available	Spices and herbs - Unspecified - Not Available - food sample - Monitoring - passive - Official sampling - Suspect sampling	single (food/feed)	25	Gram	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	All animals - farmed - Farm - Sweden - animal sample - blood - Monitoring - Official sampling - Selective sampling	animal	10	0		Coxiella	0
	Cattle (bovine animals) - breeding bulls - Artificial insemination station - Sweden - animal sample - blood - Monitoring - Official sampling - Selective sampling	animal	10	0		Coxiella	0
	Cattle (bovine animals) - breeding bulls - Artificial insemination station - Sweden - animal sample - blood - Monitoring - Official sampling - Selective sampling	animal	16	0		Coxiella	0
	Cattle (bovine animals) - dairy cows - Farm - Sweden - animal sample - milk - Clinical investigations - Official sampling - Suspect sampling	animal	7	1		Coxiella burnetii	1
		holding	1	1		Coxiella burnetii	1
	Cattle (bovine animals) - dairy cows - Farm - Sweden - animal sample - organ/tissue - Clinical investigations - Official sampling - Suspect sampling	animal	1	0		Coxiella	0

Table CYSTICERCUS 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
SWEDEN	Cattle (bovine animals) - unspecified - Slaughterhouse - Sweden - animal sample - organ/tissue - Surveillance - Official sampling - Census	animal	411020	0	Cysticercus	0
	Pigs - unspecified - Slaughterhouse - Sweden - animal sample - organ/tissue - Surveillance - Official sampling - Census	animal	2526500	0	Cysticercus	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
SWEDEN	Cattle (bovine animals) - unspecified - Slaughterhouse - Sweden - animal sample - organ/tissue - Surveillance - Official sampling - Census	animal	411020	0	Echinococcus	0
	Deer - farmed - Slaughterhouse - Sweden - animal sample - organ/tissue - Surveillance - Official sampling - Census	animal	5774	0	Echinococcus	0
	Dogs - pet animals - Veterinary clinics - Sweden - animal sample - faeces - Monitoring - passive - Official sampling - Suspect sampling	animal	5	0	Echinococcus	0
	Foxes - wild - Natural habitat - Sweden - animal sample - organ/tissue - Survey - national survey - Official sampling - Selective sampling	animal	12	0	Echinococcus	0
	Goats - Slaughterhouse - Sweden - animal sample - organ/tissue - Surveillance - Official sampling - Census	animal	1218	0	Echinococcus	0
	Pigs - unspecified - Slaughterhouse - Sweden - animal sample - organ/tissue - Surveillance - Official sampling - Census	animal	2526500	0	Echinococcus	0
	Reindeers - semi-domesticated - Slaughterhouse - Sweden - animal sample - organ/tissue - Surveillance - Official sampling - Census	animal	54745	0	Echinococcus	0
	Sheep - meat production animals - Slaughterhouse - Sweden - animal sample - organ/tissue - Surveillance - Official sampling - Census	animal	217980	0	Echinococcus	0
	Solipeds, domestic - horses - Slaughterhouse - Sweden - animal sample - organ/tissue - Surveillance - Official sampling - Census	animal	2670	0	Echinococcus	0
	Wild boars - wild - Slaughterhouse - Sweden - animal sample - organ/tissue - Surveillance - Official sampling - Census	animal	15670	0	Echinococcus	0
	Wolves - wild - Natural habitat - Sweden - animal sample - organ/tissue - Survey - national survey - Official sampling - Selective sampling	animal	41	0	Echinococcus	0

Table ESCHERICHIA COLI 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 - Sweden - animal sample - faeces - Monitoring - Official sampling - Suspect sampling	holding	7	4	VTEC O157	4
	Cattle (bovine animals) - mixed herds - Farm - Sweden - animal sample - faeces - Monitoring - Official sampling - Suspect sampling	holding	1	0	Verocytotoxigenic E. coli (VTEC)	0
	Goats - Farm - Sweden - animal sample - faeces - Monitoring - Official sampling - Suspect sampling	holding	1	0	Verocytotoxigenic E. coli (VTEC)	0
	Sheep - Farm - Sweden - animal sample - faeces - Monitoring - Official sampling - Suspect sampling	holding	5	1	VTEC O157	1
	Sheep - mixed herds - Farm - Sweden - animal sample - faeces - Monitoring - Official sampling - Suspect sampling	holding	2	0	Verocytotoxigenic E. coli (VTEC)	0

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	All foodstuffs - Unspecified - Not Available - food sample - Monitoring - passive - Official sampling - Not specified	single (food/feed)	25	Gram	17	2	VTEC, unspecified	2
	Fruits - Unspecified - Not Available - food sample - Monitoring - passive - Official sampling - Not specified	single (food/feed)	25	Gram	13	0	Verocytotoxigenic E. coli (VTEC)	0
	Meat from bovine animals - Border inspection activities - Not Available - food sample - meat - Surveillance - Official sampling - Not specified	single (food/feed)	25	Gram	11	0	Verocytotoxigenic E. coli (VTEC)	0
	Meat from bovine animals - meat preparation - Unspecified - Not Available - food sample - meat - Monitoring - Official sampling - Suspect sampling	single (food/feed)	25	Gram	2	0	Verocytotoxigenic E. coli (VTEC)	0
	Meat from bovine animals - minced meat - Unspecified - Not Available - food sample - meat - Monitoring - Official sampling - Suspect sampling	single (food/feed)	25	Gram	3	0	Verocytotoxigenic E. coli (VTEC)	0
	Meat from sheep - fresh - frozen - Border inspection activities - Not Available - food sample - meat - Surveillance - Official sampling - Not specified	single (food/feed)	25	Gram	5	0	Verocytotoxigenic E. coli (VTEC)	0
	Ready-to-eat salads - Retail - Not Available - food sample - Survey - Official sampling - Objective sampling	single (food/feed)	25	Gram	24	0	Verocytotoxigenic E. coli (VTEC)	0
	Ready-to-eat salads - Unspecified - Not Available - food sample - Monitoring - Official sampling - Suspect sampling	single (food/feed)	25	Gram	1	0	Verocytotoxigenic E. coli (VTEC)	0
	Ready-to-eat salads - Unspecified - Not Available - food sample - Survey - Official sampling - Not specified	single (food/feed)	25	Gram	14	0	Verocytotoxigenic E. coli (VTEC)	0
	Spices and herbs - Unspecified - Not Available - food sample - Monitoring - Official sampling - Suspect sampling	single (food/feed)	25	Gram	2	0	Verocytotoxigenic E. coli (VTEC)	0

Table FRANCISELLA 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
SWEDEN	Hares - wild - Natural habitat - Sweden - animal sample - organ/tissue - Monitoring - passive - Official sampling - Suspect sampling	animal	41	6	Francisella tularensis	6

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	All foodstuffs - Retail - Not Available - food sample - Monitoring - active - Official sampling - Not specified	single (food/feed)	25	Gram	5	0	detection	Listeria monocytogenes	5	0
	All foodstuffs - Unspecified - Not Available - environmental sample - fabric swab - Monitoring - active - Official sampling - Not specified	single (food/feed)	25	Gram	243	16	detection	Listeria monocytogenes	243	16
	All foodstuffs - Unspecified - Not Available - food sample - Monitoring - active - Official sampling - Not specified	single (food/feed)	25	Gram	91	4	detection	Listeria monocytogenes	91	4
	Cheeses, made from unspecified milk or other animal milk - Unspecified - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed)	25	Gram	9	0	detection	Listeria monocytogenes	9	0
	Fish - gravad /slightly salted - Unspecified - Not Available - food sample - Survey - national survey - Official sampling - Objective sampling	single (food/feed)	10	Gram	130	9	<= 100	Listeria monocytogenes	130	8
							>100	Listeria monocytogenes	130	1
	Fish - gravad /slightly salted - Unspecified - Not Available - food sample - Survey - national survey - Official sampling - Objective sampling	single (food/feed)	25	Gram	130	9	detection	Listeria monocytogenes	130	9
	Fishery products, unspecified - Retail - Not Available - food sample - Monitoring - active - Official sampling - Not specified	single (food/feed)	25	Gram	6	0	detection	Listeria monocytogenes	6	0
	Fishery products, unspecified - smoked - Unspecified - Not Available - food sample - Survey - national survey - Official sampling - Not specified	single (food/feed)	10	Gram	140	2	<= 100	Listeria monocytogenes	140	1
							>100	Listeria monocytogenes	140	1
	Fishery products, unspecified - smoked - Unspecified - Not Available - food sample - Survey - national survey - Official sampling - Objective sampling	single (food/feed)	25	Gram	140	2	detection	Listeria monocytogenes	140	2
	Fishery products, unspecified - Unspecified - Not Available - food sample - Monitoring - active - Official sampling - Not specified	single (food/feed)	25	Gram	17	0	detection	Listeria monocytogenes	17	0
	Meat from bovine animals - meat products - cooked, ready-to-eat - Unspecified - Not Available - food sample - meat - Survey - national survey - Official sampling - Objective sampling	single (food/feed)	25	Gram	13	0	detection	Listeria monocytogenes	13	0
	Meat from broilers (Gallus gallus) - meat products - cooked, ready-to-eat - Retail - Not Available - food sample - meat - Monitoring - active - Official sampling - Not specified	single (food/feed)	25	Gram	12	0	detection	Listeria monocytogenes	12	0
	Meat from broilers (Gallus gallus) - meat products - cooked, ready-to-eat - Unspecified - Not Available - food sample - meat - Survey - national survey - Official sampling - Objective sampling	single (food/feed)	25	Gram	10	0	detection	Listeria monocytogenes	10	0
	Meat from broilers (Gallus gallus) - meat products - Unspecified - Not Available - food sample - meat - Monitoring - active - Official sampling - Objective sampling	single (food/feed)	25	Gram	6	0	detection	Listeria monocytogenes	6	0
	Meat from other animal species or not specified - meat products - pâté - Unspecified - Not Available - food sample - meat - Survey - national survey - Official sampling - Objective sampling	single (food/feed)	25	Gram	6	0	detection	Listeria monocytogenes	6	0
	Meat from other animal species or not specified - meat products - Unspecified - Not Available - food sample - meat - Monitoring - active - Official sampling - Not specified	single (food/feed)	10	Gram	53	4	<= 100	Listeria monocytogenes	53	3
							>100	Listeria monocytogenes	53	1
	Meat from other animal species or not specified - meat products - Unspecified - Not Available - food sample - meat - Monitoring - active - Official sampling - Not specified	single (food/feed)	25	Gram	53	4	detection	Listeria monocytogenes	53	4

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 - cooked, ready-to-eat - Retail - Not Available - food sample - meat - Monitoring - active - Official sampling - Objective sampling	single (food/feed)	25	Gram	16	0	detection	Listeria monocytogenes	16	0
	Meat from pig - meat products - cooked, ready-to-eat - Unspecified - Not Available - food sample - meat - Survey - national survey - Official sampling - Not specified	single (food/feed)	25	Gram	156	1	detection	Listeria monocytogenes	156	1
	Meat from pig - meat products - Unspecified - Not Available - food sample - meat - Survey - national survey - Official sampling - Objective sampling	single (food/feed)	25	Gram	17	0	detection	Listeria monocytogenes	17	0
	Meat from turkey - meat products - Unspecified - Not Available - food sample - meat - Survey - national survey - Official sampling - Objective sampling	single (food/feed)	25	Gram	44	2	detection	Listeria monocytogenes	44	2
	Other processed food products and prepared dishes - Retail - Not Available - food sample - Survey - national survey - Official sampling - Not specified	single (food/feed)	25	Gram	132	1	detection	Listeria monocytogenes	132	1
	Other processed food products and prepared dishes - sandwiches - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed)	25	Gram	12	0	detection	Listeria monocytogenes	12	0
	Other processed food products and prepared dishes - sandwiches - Unspecified - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed)	25	Gram	6	0	detection	Listeria monocytogenes	6	0
	Other processed food products and prepared dishes - sushi - Retail - Not Available - food sample - Monitoring - active - Official sampling - Not specified	single (food/feed)	25	Gram	5	0	detection	Listeria monocytogenes	5	0
	Other processed food products and prepared dishes - Unspecified - Not Available - food sample - Monitoring - active - Official sampling - Not specified	single (food/feed)	25	Gram	30	0	detection	Listeria monocytogenes	30	0
	Ready-to-eat salads - Retail - Not Available - food sample - Monitoring - active - Official sampling - Objective sampling	single (food/feed)	25	Gram	14	1	detection	Listeria monocytogenes	14	1
	Sauce and dressings - Retail - Not Available - food sample - Monitoring - active - Official sampling - Not specified	single (food/feed)	25	Gram	39	0	detection	Listeria monocytogenes	39	0
	Sauce and dressings - Unspecified - Not Available - food sample - Monitoring - active - Official sampling - Not specified	single (food/feed)	25	Gram	10	0	detection	Listeria monocytogenes	10	0
	Soups - Retail - Not Available - food sample - Monitoring - active - Official sampling - Not specified	single (food/feed)	25	Gram	8	0	detection	Listeria monocytogenes	8	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	Cats - pet animals - Veterinary clinics - Not Available - animal sample - brain - Surveillance - Official sampling - Suspect sampling	animal	4	0	Lyssavirus	0
	Dogs - pet animals - Veterinary clinics - Not Available - animal sample - brain - Surveillance - Official sampling - Suspect sampling	animal	33	0	Lyssavirus	0
	Foxes - wild - Natural habitat - Not Available - animal sample - brain - Surveillance - Official sampling - Suspect sampling	animal	1	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	Alpacas - farmed - Farm - Not Available - animal sample - organ/tissue - Surveillance - Official sampling - Objective sampling	animal	341	0	Mycobacterium	0
	Alpacas - farmed - Farm - Not Available - animal sample - organ/tissue - Surveillance - Official sampling - Selective sampling	animal	18	0	Mycobacterium	0
	Cats - pet animals - Veterinary clinics - Not Available - animal sample - organ/tissue - Surveillance - Official sampling - Suspect sampling	animal	2	1	Mycobacterium avium complex	1
	Dogs - pet animals - Veterinary clinics - Not Available - animal sample - organ/tissue - Surveillance - Official sampling - Suspect sampling	animal	1	1	Mycobacterium avium complex	1
	Pigs - unspecified - Slaughterhouse - Not Available - animal sample - organ/tissue - Surveillance - Official sampling - Suspect sampling	animal	24	17	Mycobacterium avium complex	17
	Sheep - meat production animals - Slaughterhouse - Not Available - animal sample - organ/tissue - Surveillance - Official sampling - Suspect sampling	animal	1	0	Mycobacterium	0

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	Ducks - meat production flocks - before slaughter - Farm - Sweden - environmental sample - boot swabs - Control and eradication programmes - Official sampling - Census	herd/flock		N_A	16	0	Salmonella	0
	Gallus gallus (fowl) - broilers - before slaughter - Farm - Sweden - environmental sample - boot swabs - Control and eradication programmes - Industry sampling - Census	herd/flock	3680	N_A	3557	9	Salmonella Mbandaka	1
							Salmonella Typhimurium	8
	Gallus gallus (fowl) - broilers - before slaughter - Farm - Sweden - environmental sample - boot swabs - Control and eradication programmes - Official and industry sampling - Census	herd/flock	3680	Y	3680	9	Salmonella Mbandaka	1
							Salmonella Typhimurium	8
	Gallus gallus (fowl) - broilers - before slaughter - Farm - Sweden - environmental sample - boot swabs - Control and eradication programmes - Official sampling - Objective sampling	herd/flock	3680	N_A	123	0	Salmonella	0
	Gallus gallus (fowl) - grandparent breeding flocks for broiler production line - adult - Farm - Sweden - environmental sample - boot swabs - Control and eradication programmes - Official and industry sampling - Census	herd/flock	22	Y	22	0	Salmonella	0
	Gallus gallus (fowl) - grandparent breeding flocks for broiler production line - during rearing period - Farm - Sweden - environmental sample - boot swabs - Control and eradication programmes - Official and industry sampling - Census	herd/flock		N_A	18	0	Salmonella	0
	Gallus gallus (fowl) - laying hens - adult - Farm - Sweden - environmental sample - boot swabs - Control and eradication programmes - Official and industry sampling - Census	herd/flock	673	Y	673	4	Salmonella Cerro	2
							Salmonella Livingstone	1
							Salmonella Typhimurium	1
	Gallus gallus (fowl) - laying hens - during rearing period - Farm - Sweden - environmental sample - boot swabs - Control and eradication programmes - Official and industry sampling - Census	herd/flock		N_A	147	0	Salmonella	0
	Gallus gallus (fowl) - parent breeding flocks for broiler production line - adult - Farm - Sweden - environmental sample - boot swabs - Control and eradication programmes - Official and industry sampling - Census	herd/flock	120	Y	120	1	Salmonella Typhimurium	1
	Gallus gallus (fowl) - parent breeding flocks for broiler production line - during rearing period - Farm - Sweden - environmental sample - boot swabs - Control and eradication programmes - Official and industry sampling - Census	herd/flock		N_A	93	0	Salmonella	0
	Gallus gallus (fowl) - parent breeding flocks for egg production line - adult - Farm - Sweden - environmental sample - boot swabs - Control and eradication programmes - Official and industry sampling - Census	herd/flock	17	Y	17	0	Salmonella	0
	Gallus gallus (fowl) - parent breeding flocks for egg production line - during rearing period - Farm - Sweden - environmental sample - boot swabs - Control and eradication programmes - Official and industry sampling - Census	herd/flock		N_A	5	0	Salmonella	0
	Geese - meat production flocks - before slaughter - Farm - Sweden - environmental sample - boot swabs - Control and eradication programmes - Official sampling - Census	herd/flock		N_A	24	1	Salmonella Typhimurium	1
	Ostriches - farmed - Farm - Sweden - animal sample - faeces - Control and eradication programmes - Official sampling - Census	animal		N_A	104	0	Salmonella	0
	Turkeys - fattening flocks - before slaughter - Farm - Sweden - environmental sample - boot swabs - Control and eradication programmes - Industry sampling - Census	herd/flock	182	N_A	150	0	Salmonella	0
	Turkeys - fattening flocks - before slaughter - Farm - Sweden - environmental sample - boot swabs - Control and eradication programmes - Official and industry sampling - Census	herd/flock	182	Y	182	0	Salmonella	0
	Turkeys - fattening flocks - before slaughter - Farm - Sweden - environmental sample - boot swabs - Control and eradication programmes - Official sampling - Objective sampling	herd/flock	182	N_A	32	0	Salmonella	0
	Turkeys - parent breeding flocks - adult - Farm - Sweden - environmental sample - boot swabs - Control and eradication programmes - Official and industry sampling - Census	herd/flock	3	Y	3	0	Salmonella	0
	Turkeys - parent breeding flocks - during rearing period - Farm - Sweden - environmental sample - boot swabs - Control and eradication programmes - Official and industry sampling - Census	herd/flock		N_A	3	0	Salmonella	0
SWEDEN	Birds - wild - Natural habitat - Sweden - animal sample - organ/tissue - Monitoring - passive - Official sampling - Suspect sampling	animal		N_A	41	33	Salmonella 4,5,12:-:1,5	2
							Salmonella Newport	1
							Salmonella Typhimurium	31
	Cats - pet animals - Veterinary clinics - Sweden - animal sample - faeces - Clinical investigations - Official sampling - Suspect sampling	animal		N_A	902	489	Salmonella Enterica, unspecified	233

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
SWEDEN	Cats - pet animals - Veterinary clinics - Sweden - animal sample - faeces - Clinical investigations - Official sampling - Suspect sampling	animal		N_A	902	489	Salmonella group O:4	111
							Salmonella Typhimurium	145
	Cattle (bovine animals) - unspecified - Farm - Sweden - animal sample - faeces - Surveillance - Official sampling - Suspect sampling	holding		N_A	37	8	Salmonella Aarhus	1
							Salmonella Dublin	3
							Salmonella Typhimurium	4
	Cattle (bovine animals) - unspecified - Slaughterhouse - Sweden - animal sample - lymph nodes - Surveillance - Official sampling - Objective sampling	animal		N_A	3627	4	Salmonella Dublin	1
							Salmonella Duesseldorf	1
							Salmonella Typhimurium	2
	Dogs - pet animals - Veterinary clinics - Sweden - animal sample - Clinical investigations - Official sampling - Suspect sampling	animal		N_A	2	2	Salmonella Indiana	1
							Salmonella Mbandaka	1
	Dogs - pet animals - Veterinary clinics - Sweden - animal sample - faeces - Clinical investigations - Official sampling - Suspect sampling	animal		N_A	187	7	Salmonella Agona	1
							Salmonella Typhimurium	6
	Hedgehogs - wild - Natural habitat - Sweden - animal sample - organ/tissue - Monitoring - passive - Official sampling - Suspect sampling	animal		N_A	5	2	Salmonella Enteritidis	1
							Salmonella Fulica	1
	Pigs - breeding animals - unspecified - Slaughterhouse - Sweden - animal sample - lymph nodes - Surveillance - Official sampling - Objective sampling	animal		N_A	1548	1	Salmonella Typhimurium	1
	Pigs - fattening pigs - unspecified - Slaughterhouse - Sweden - animal sample - lymph nodes - Surveillance - Official sampling - Objective sampling	animal		N_A	2364	2	Salmonella Typhimurium	2
	Sheep - Farm - Sweden - animal sample - Monitoring - active - Official sampling - Suspect sampling	holding		N_A	31	3	Salmonella enterica, subspecies diarizonae	3

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
Not Available	All foodstuffs - Retail - Not Available - food sample - Surveillance - Official sampling - Not specified	single (food/feed)	25	Gram	4	0	Salmonella	0
	All foodstuffs - Unspecified - Not Available - food sample - Surveillance - Official sampling - Not specified	single (food/feed)	25	Gram	7	0	Salmonella	0
	Bakery products - bread - Unspecified - Not Available - food sample - Surveillance - Official sampling - Suspect sampling	single (food/feed)	25	Gram	2	0	Salmonella	0
	Bakery products - cakes - Unspecified - Not Available - food sample - Surveillance - Official sampling - Suspect sampling	single (food/feed)	25	Gram	2	0	Salmonella	0
	Bakery products - desserts - Retail - Not Available - food sample - Surveillance - Official sampling - Suspect sampling	single (food/feed)	25	Gram	1	0	Salmonella	0
	Bakery products - desserts - Unspecified - Not Available - food sample - Surveillance - Official sampling - Suspect sampling	single (food/feed)	25	Gram	3	0	Salmonella	0
	Cereals and meals - flour/meal or finely ground powder - Unspecified - Not Available - food sample - Surveillance - Official sampling - Not specified	single (food/feed)	25	Gram	2	0	Salmonella	0
	Cheeses, made from unspecified milk or other animal milk - hard - Unspecified - Not Available - food sample - Surveillance - Official sampling - Suspect sampling	single (food/feed)	25	Gram	4	0	Salmonella	0
	Cheeses, made from unspecified milk or other animal milk - soft and semi-soft - Unspecified - Not Available - food sample - Surveillance - Official sampling - Suspect sampling	single (food/feed)	25	Gram	2	0	Salmonella	0
	Cheeses, made from unspecified milk or other animal milk - Unspecified - Not Available - food sample - Surveillance - Official sampling - Suspect sampling	single (food/feed)	25	Gram	2	0	Salmonella	0
	Coconut - coconut products - Retail - Not Available - food sample - Surveillance - Official sampling - Suspect sampling	single (food/feed)	25	Gram	1	0	Salmonella	0
	Crustaceans - shrimps - Border inspection activities - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	3	0	Salmonella	0
	Crustaceans - shrimps - Unspecified - Not Available - food sample - Surveillance - Official sampling - Suspect sampling	single (food/feed)	25	Gram	9	0	Salmonella	0
	Crustaceans - Unspecified - Not Available - food sample - Surveillance - Official sampling - Not specified	single (food/feed)	25	Gram	1	0	Salmonella	0
	Crustaceans - Unspecified - Not Available - food sample - Surveillance - Official sampling - Suspect sampling	single (food/feed)	25	Gram	2	0	Salmonella	0
	Crustaceans - unspecified - Retail - Not Available - food sample - Surveillance - Official sampling - Suspect sampling	single (food/feed)	25	Gram	1	0	Salmonella	0
	Crustaceans - unspecified - Unspecified - Not Available - food sample - Surveillance - Official sampling - Suspect sampling	single (food/feed)	25	Gram	3	0	Salmonella	0

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Total units tested	Total units positive	Zoonoses	N of units positive
Not Available	Dairy products (excluding cheeses) - cream - Unspecified - Not Available - food sample - Surveillance - Official sampling - Suspect sampling	single (food/feed)	25	Gram	1	0	Salmonella	0
	Dairy products (excluding cheeses) - ice-cream - Retail - Not Available - food sample - Surveillance - Official sampling - Suspect sampling	single (food/feed)	25	Gram	1	0	Salmonella	0
	Eggs - Retail - Not Available - food sample - Survey - Official sampling - Objective sampling	single (food/feed)	25	Gram	6	0	Salmonella	0
	Eggs - Unspecified - Not Available - food sample - Survey - Official sampling - Objective sampling	single (food/feed)	25	Gram	2	0	Salmonella	0
	Fish - gravad /slightly salted - Unspecified - Not Available - food sample - Surveillance - Official sampling - Suspect sampling	single (food/feed)	25	Gram	2	0	Salmonella	0
	Fish - raw - Border inspection activities - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	125	Gram	6	0	Salmonella	0
	Fish - raw - frozen - Border inspection activities - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	125	Gram	6	0	Salmonella	0
	Fish - raw - Unspecified - Not Available - food sample - Surveillance - Official sampling - Suspect sampling	single (food/feed)	25	Gram	3	0	Salmonella	0
	Fish - raw - Unspecified - Not Available - food sample - Surveillance - Official sampling - Suspect sampling	single (food/feed)	25	Gram	2	0	Salmonella	0
	Fish - unspecified - frozen - Unspecified - Not Available - food sample - Surveillance - Official sampling - Suspect sampling	single (food/feed)	25	Gram	1	0	Salmonella	0
	Fishery products, unspecified - ready-to-eat - Unspecified - Not Available - food sample - Surveillance - Official sampling - Suspect sampling	single (food/feed)	25	Gram	1	0	Salmonella	0
	Fishery products, unspecified - Retail - Not Available - food sample - Surveillance - Official sampling - Suspect sampling	single (food/feed)	25	Gram	3	0	Salmonella	0
	Fishery products, unspecified - Retail - Not Available - food sample - Surveillance - Official sampling - Suspect sampling	single (food/feed)	25	Gram	3	0	Salmonella	0
	Fishery products, unspecified - smoked - Unspecified - Not Available - food sample - Survey - Official sampling - Objective sampling	single (food/feed)	25	Gram	8	0	Salmonella	0
	Fishery products, unspecified - Unspecified - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	3	0	Salmonella	0
	Fishery products, unspecified - Unspecified - Not Available - food sample - Surveillance - Official sampling - Suspect sampling	single (food/feed)	25	Gram	2	0	Salmonella	0
	Fruits - products - Unspecified - Not Available - food sample - Surveillance - Official sampling - Suspect sampling	single (food/feed)	25	Gram	1	0	Salmonella	0
	Meat from bovine animals - fresh - Retail - Not Available - food sample - meat - Survey - Official sampling - Objective sampling	single (food/feed)	25	Gram	8	0	Salmonella	0

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Total units tested	Total units positive	Zoonoses	N of units positive
Not Available	Meat from bovine animals - fresh - Unspecified - Not Available - food sample - meat - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	2	0	Salmonella	0
	Meat from bovine animals - meat preparation - Retail - Not Available - food sample - meat - Surveillance - Official sampling - Suspect sampling	single (food/feed)	25	Gram	5	0	Salmonella	0
	Meat from bovine animals - meat preparation - Unspecified - Not Available - food sample - meat - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	1	0	Salmonella	0
	Meat from bovine animals - meat products - Retail - Not Available - food sample - meat - Surveillance - Official sampling - Not specified	single (food/feed)	25	Gram	1	0	Salmonella	0
	Meat from bovine animals - meat products - Unspecified - Not Available - food sample - meat - Surveillance - Official sampling - Not specified	single (food/feed)	25	Gram	2	0	Salmonella	0
	Meat from bovine animals - meat products - Unspecified - Not Available - food sample - meat - Surveillance - Official sampling - Not specified	single (food/feed)	25	Gram	3	0	Salmonella	0
	Meat from bovine animals - minced meat - Unspecified - Not Available - food sample - meat - Surveillance - Official sampling - Not specified	single (food/feed)	25	Gram	22	0	Salmonella	0
	Meat from bovine animals - Retail - Not Available - food sample - meat - Surveillance - Official sampling - Not specified	single (food/feed)	25	Gram	1	0	Salmonella	0
	Meat from bovine animals and pig - Unspecified - Not Available - food sample - meat - Surveillance - Official sampling - Not specified	single (food/feed)	25	Gram	13	0	Salmonella	0
	Meat from broilers (Gallus gallus) - fresh - frozen - Border inspection activities - Thailand - food sample - meat - Surveillance - Official sampling - Objective sampling	single (food/feed)	125	Gram	2	1	Salmonella Bovismorbificans	1
	Meat from broilers (Gallus gallus) - fresh - frozen - Unspecified - Not Available - food sample - meat - Surveillance - Official sampling - Not specified	single (food/feed)	25	Gram	1	0	Salmonella	0
	Meat from broilers (Gallus gallus) - fresh - Unspecified - Not Available - food sample - meat - Surveillance - Official sampling - Not specified	single (food/feed)	25	Gram	5	0	Salmonella	0
	Meat from broilers (Gallus gallus) - meat preparation - Unspecified - Not Available - food sample - meat - Surveillance - Official sampling - Not specified	single (food/feed)	25	Gram	3	0	Salmonella	0
	Meat from broilers (Gallus gallus) - meat products - cooked, ready-to-eat - Border inspection activities - Not Available - food sample - meat - Surveillance - Official sampling - Objective sampling	single (food/feed)	125	Gram	1	0	Salmonella	0
	Meat from broilers (Gallus gallus) - meat products - cooked, ready-to-eat - Retail - Not Available - food sample - meat - Surveillance - Official sampling - Not specified	single (food/feed)	25	Gram	8	0	Salmonella	0
	Meat from broilers (Gallus gallus) - meat products - cooked, ready-to-eat - Unspecified - Not Available - food sample - meat - Surveillance - Official sampling - Not specified	single (food/feed)	25	Gram	10	0	Salmonella	0
	Meat from broilers (Gallus gallus) - meat products - Retail - Not Available - food sample - meat - Surveillance - Official sampling - Not specified	single (food/feed)	25	Gram	6	0	Salmonella	0
	Meat from broilers (Gallus gallus) - meat products - Unspecified - Not Available - food sample - meat - Surveillance - Official sampling - Not specified	single (food/feed)	25	Gram	12	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
Not Available	Meat from broilers (Gallus gallus) - Unspecified - Not Available - food sample - meat - Surveillance - Official sampling - Not specified	single (food/feed)	25	Gram	3	0	Salmonella	0
	Meat from duck - meat products - cooked, ready-to-eat - Border inspection activities - Not Available - food sample - meat - Surveillance - Official sampling - Objective sampling	single (food/feed)	125	Gram	1	0	Salmonella	0
	Meat from other animal species or not specified - meat products - pâté - Unspecified - Not Available - food sample - meat - Surveillance - Official sampling - Not specified	single (food/feed)	25	Gram	1	0	Salmonella	0
	Meat from other animal species or not specified - minced meat - Unspecified - Not Available - food sample - meat - Surveillance - Official sampling - Not specified	single (food/feed)	25	Gram	5	0	Salmonella	0
	Meat from other poultry species - meat products - cooked, ready-to-eat - Unspecified - Not Available - food sample - meat - Surveillance - Official sampling - Not specified	single (food/feed)	25	Gram	2	0	Salmonella	0
	Meat from pig - fresh - Unspecified - Not Available - food sample - meat - Surveillance - Official sampling - Not specified	single (food/feed)	25	Gram	2	0	Salmonella	0
	Meat from pig - meat preparation - Unspecified - Not Available - food sample - meat - Surveillance - Official sampling - Not specified	single (food/feed)	25	Gram	5	0	Salmonella	0
	Meat from pig - meat products - cooked ham - Unspecified - Not Available - food sample - meat - Surveillance - Official sampling - Not specified	single (food/feed)	25	Gram	2	0	Salmonella	0
	Meat from pig - meat products - cooked, ready-to-eat - Retail - Italy - food sample - meat - Surveillance - Official sampling - Suspect sampling	single (food/feed)	25	Gram	11	1	Salmonella Typhimurium, monophasic	1
	Meat from pig - meat products - cooked, ready-to-eat - Retail - Not Available - food sample - meat - Surveillance - Official sampling - Not specified	single (food/feed)	25	Gram	4	0	Salmonella	0
	Meat from pig - meat products - cooked, ready-to-eat - Retail - Poland - food sample - meat - Surveillance - Official sampling - Suspect sampling	single (food/feed)	25	Gram	36	3	Salmonella Typhimurium, monophasic	3
	Meat from pig - meat products - cooked, ready-to-eat - Retail - Spain - food sample - meat - Surveillance - Official sampling - Suspect sampling	single (food/feed)	25	Gram	15	1	Salmonella Typhimurium, monophasic	1
	Meat from pig - meat products - Retail - Not Available - food sample - meat - Surveillance - Official sampling - Not specified	single (food/feed)	25	Gram	6	0	Salmonella	0
	Meat from pig - Unspecified - Not Available - food sample - meat - Surveillance - Official sampling - Not specified	single (food/feed)	25	Gram	1	0	Salmonella	0
	Meat from sheep - fresh - frozen - Border inspection activities - Not Available - food sample - meat - Surveillance - Official sampling - Objective sampling	single (food/feed)	125	Gram	2	0	Salmonella	0
	Meat from sheep - minced meat - Unspecified - Not Available - food sample - meat - Surveillance - Official sampling - Not specified	single (food/feed)	25	Gram	2	0	Salmonella	0
	Meat from wild game - land mammals - Unspecified - Not Available - food sample - meat - Surveillance - Official sampling - Not specified	single (food/feed)	25	Gram	1	0	Salmonella	0
	Milk from other animal species or unspecified - pasteurised milk - Unspecified - Not Available - food sample - milk - Surveillance - Official sampling - Not specified	single (food/feed)	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
Not Available	Milk from other animal species or unspecified - raw milk - Unspecified - Not Available - food sample - milk - Surveillance - Official sampling - Not specified	single (food/feed)	25	Gram	1	0	Salmonella	0
	Mushrooms - Retail - Not Available - food sample - Surveillance - Official sampling - Not specified	single (food/feed)	25	Gram	1	0	Salmonella	0
	Mushrooms - Unspecified - Not Available - food sample - Surveillance - Official sampling - Not specified	single (food/feed)	25	Gram	5	0	Salmonella	0
	Other processed food products and prepared dishes - ices and similar frozen desserts - water-based ice creams - Retail - Not Available - food sample - Surveillance - Official sampling - Not specified	single (food/feed)	25	Gram	1	0	Salmonella	0
	Other processed food products and prepared dishes - pasta/rice salad - Unspecified - Not Available - food sample - Surveillance - Official sampling - Not specified	single (food/feed)	25	Gram	1	0	Salmonella	0
	Other processed food products and prepared dishes - Retail - Not Available - food sample - Surveillance - Official sampling - Not specified	single (food/feed)	25	Gram	86	0	Salmonella	0
	Other processed food products and prepared dishes - sandwiches - Retail - Not Available - food sample - Surveillance - Official sampling - Not specified	single (food/feed)	25	Gram	4	0	Salmonella	0
	Other processed food products and prepared dishes - sandwiches - Unspecified - Not Available - food sample - Surveillance - Official sampling - Not specified	single (food/feed)	25	Gram	2	0	Salmonella	0
	Other processed food products and prepared dishes - sushi - Unspecified - Not Available - food sample - Surveillance - Official sampling - Not specified	single (food/feed)	25	Gram	1	0	Salmonella	0
	Other processed food products and prepared dishes - Unspecified - Not Available - food sample - Surveillance - Official sampling - Not specified	single (food/feed)	25	Gram	69	0	Salmonella	0
	Ready-to-eat salads - Retail - Not Available - food sample - Surveillance - Official sampling - Not specified	single (food/feed)	25	Gram	25	0	Salmonella	0
	Ready-to-eat salads - Unspecified - Not Available - food sample - Surveillance - Official sampling - Not specified	single (food/feed)	25	Gram	27	0	Salmonella	0
	Sauce and dressings - mayonnaise - Retail - Not Available - food sample - Surveillance - Official sampling - Suspect sampling	single (food/feed)	25	Gram	1	0	Salmonella	0
	Sauce and dressings - mayonnaise - Unspecified - Not Available - food sample - Surveillance - Official sampling - Suspect sampling	single (food/feed)	25	Gram	1	0	Salmonella	0
	Sauce and dressings - Retail - Not Available - food sample - Surveillance - Official sampling - Not specified	single (food/feed)	25	Gram	32	0	Salmonella	0
	Sauce and dressings - Retail - Not Available - food sample - Surveillance - Official sampling - Suspect sampling	single (food/feed)	25	Gram	27	0	Salmonella	0
	Sauce and dressings - Unspecified - Not Available - food sample - Surveillance - Official sampling - Suspect sampling	single (food/feed)	25	Gram	39	0	Salmonella	0
	Seeds, dried - Border inspection activities - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	30	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
Not Available	Seeds, dried - Unspecified - Not Available - food sample - Surveillance - Official sampling - Not specified	single (food/fee d)	25	Gram	10	0	Salmonella	0
	Soups - Retail - Not Available - food sample - Surveillance - Official sampling - Not specified	single (food/fee d)	25	Gram	4	0	Salmonella	0
	Spices and herbs - Retail - Not Available - food sample - Surveillance - Official sampling - Suspect sampling	single (food/fee d)	25	Gram	2	0	Salmonella	0
	Spices and herbs - Unspecified - Not Available - food sample - Surveillance - Official sampling - Suspect sampling	single (food/fee d)	25	Gram	1	0	Salmonella	0
	Spices and herbs - Unspecified - Not Available - food sample - Surveillance - Official sampling - Suspect sampling	single (food/fee d)	25	Gram	13	0	Salmonella	0
	Vegetables - Retail - Not Available - food sample - Surveillance - Official sampling - Suspect sampling	single (food/fee d)	25	Gram	3	0	Salmonella	0
	Vegetables - Unspecified - Not Available - food sample - Surveillance - Official sampling - Suspect sampling	single (food/fee d)	25	Gram	13	0	Salmonella	0
SWEDEN	Meat from bovine animals - carcase - Slaughterhouse - Sweden - food sample - carcase swabs - Control and eradication programmes - Official sampling - Objective sampling	single (food/fee d)	25	Gram	3661	0	Salmonella	0
	Meat from bovine animals and pig - Cutting plant - Sweden - food sample - meat - Control and eradication programmes - Official sampling - Objective sampling	batch (food/fee d)	25	Gram	4955	0	Salmonella	0
	Meat from broilers (Gallus gallus) - carcase - Slaughterhouse - Sweden - food sample - neck skin - Control and eradication programmes - Official sampling - Objective sampling	single (food/fee d)	25	Gram	2916	0	Salmonella	0
	Meat from broilers (Gallus gallus) - carcase - spent hens - Slaughterhouse - Sweden - food sample - neck skin - Control and eradication programmes - Official sampling - Objective sampling	single (food/fee d)	25	Gram	150	0	Salmonella	0
	Meat from broilers (Gallus gallus) - fresh - Cutting plant - Sweden - food sample - meat - Control and eradication programmes - Official sampling - Objective sampling	batch (food/fee d)	25	Gram	764	0	Salmonella	0
	Meat from pig - carcase - Slaughterhouse - Sweden - food sample - carcase swabs - Control and eradication programmes - Official sampling - Objective sampling	single (food/fee d)	25	Gram	1624	1	Salmonella Typhimurium	1
					2333	1	Salmonella Typhimurium	1
	Meat from poultry, unspecified - Cutting plant - Sweden - food sample - meat - Control and eradication programmes - Official sampling - Objective sampling	batch (food/fee d)	25	Gram	88	0	Salmonella	0
	Meat from poultry, unspecified - Slaughterhouse - Sweden - food sample - neck skin - Control and eradication programmes - Official sampling - Objective sampling	single (food/fee d)	25	Gram	1160	0	Salmonella	0
	Meat from turkey - carcase - Slaughterhouse - Sweden - food sample - neck skin - Control and eradication programmes - Official sampling - Objective sampling	single (food/fee d)	25	Gram	60	0	Salmonella	0
	Meat from turkey - fresh - Cutting plant - Sweden - food sample - meat - Control and eradication programmes - Official sampling - Objective sampling	batch (food/fee d)	25	Gram	56	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	Complementary feedingstuffs - process control - Processing plant - Sweden - environmental sample - fabric swab - Surveillance - HACCP and own check - Objective sampling	single (food/feed)	25	Gram	56	0	Salmonella	0
	Compound feedingstuffs for fur animal - process control - Processing plant - Sweden - environmental sample - fabric swab - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	23	0	Salmonella	0
	Compound feedingstuffs for horses - process control - Processing plant - Sweden - environmental sample - fabric swab - Surveillance - HACCP and own check - Objective sampling	single (food/feed)	25	Gram	2	0	Salmonella	0
	Compound feedingstuffs for horses - process control - Processing plant - Sweden - environmental sample - fabric swab - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	6	0	Salmonella	0
	Compound feedingstuffs for poultry (non specified) - process control - Processing plant - Sweden - environmental sample - fabric swab - Surveillance - HACCP and own check - Objective sampling	single (food/feed)	25	Gram	25	0	Salmonella	0
	Compound feedingstuffs for rabbits - process control - Processing plant - Sweden - environmental sample - fabric swab - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	7	0	Salmonella	0
	Compound feedingstuffs, not specified - final product - Feed mill - Sweden - feed sample - Surveillance - HACCP and own check - Objective sampling	batch (food/feed)	25	Gram	53	0	Salmonella	0
	Compound feedingstuffs, not specified - final product - Unspecified - European Union - feed sample - Surveillance - HACCP and own check - Objective sampling	batch (food/feed)	25	Gram	3	0	Salmonella	0
	Compound feedingstuffs, not specified - final product - Unspecified - Unknown - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	8	0	Salmonella	0
	Compound feedingstuffs, not specified - process control - Feed mill - Sweden - environmental sample - fabric swab - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	169	1	Salmonella Typhimurium	1
	Compound feedingstuffs, not specified - process control - Feed mill - Sweden - environmental sample - Surveillance - HACCP and own check - Objective sampling	single (food/feed)	25	Gram	8212	17	Salmonella Amsterdam	1
							Salmonella Duesseldorf	1
							Salmonella Havana	5
							Salmonella Kedougou	2
							Salmonella Lexington	1
							Salmonella Livingstone	1
							Salmonella Mbandaka	2
							Salmonella Oranienburg	1
							Salmonella Senftenberg	1
							Salmonella Tennessee	1
							Salmonella Typhimurium	1
	Feed material of cereal grain origin - barley derived - Processing plant - Sweden - environmental sample - fabric swab - Surveillance - HACCP and own check - Objective sampling	single (food/feed)	25	Gram	6	0	Salmonella	0
	Feed material of cereal grain origin - maize derived - Unspecified - European Union - feed sample - Surveillance - HACCP and own check - Objective sampling	batch (food/feed)	25	Gram	36	0	Salmonella	0
	Feed material of cereal grain origin - oat derived - Processing plant - Sweden - environmental sample - fabric swab - Surveillance - HACCP and own check - Objective sampling	single (food/feed)	25	Gram	50	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
Not Available	Feed material of cereal grain origin - oat derived - Unspecified - Sweden - feed sample - Surveillance - HACCP and own check - Objective sampling	batch (food/feed)	25	Gram	77	0	Salmonella	0
	Feed material of cereal grain origin - other cereal grain derived - by-products of brewing and distilling - Processing plant - Sweden - environmental sample - fabric swab - Surveillance - HACCP and own check - Objective sampling	single (food/feed)	25	Gram	1400	38	Salmonella Agona	1
							Salmonella Amsterdam	7
							Salmonella enterica, subspecies enterica	9
							Salmonella Kedougou	21
	Feed material of cereal grain origin - other cereal grain derived - by-products of brewing and distilling - Processing plant - Sweden - environmental sample - fabric swab - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	29	2	Salmonella Amsterdam	2
	Feed material of cereal grain origin - other cereal grain derived - by-products of brewing and distilling - Unspecified - Sweden - feed sample - Surveillance - HACCP and own check - Objective sampling	batch (food/feed)	25	Gram	222	0	Salmonella	0
	Feed material of cereal grain origin - other cereal grain derived - Processing plant - Sweden - environmental sample - fabric swab - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	11	1	Salmonella Typhimurium	1
	Feed material of cereal grain origin - rice derived - Unspecified - European Union - feed sample - Surveillance - HACCP and own check - Objective sampling	batch (food/feed)	25	Gram	4	0	Salmonella	0
	Feed material of cereal grain origin - wheat derived - Unspecified - European Union - feed sample - Surveillance - HACCP and own check - Objective sampling	batch (food/feed)	25	Gram	80	0	Salmonella	0
	Feed material of cereal grain origin - wheat derived - Unspecified - Sweden - feed sample - Surveillance - HACCP and own check - Objective sampling	batch (food/feed)	25	Gram	38	0	Salmonella	0
	Feed material of land animal origin - animal fat - Unspecified - Sweden - feed sample - Surveillance - HACCP and own check - Objective sampling	batch (food/feed)	25	Gram	16	0	Salmonella	0
	Feed material of land animal origin - blood meal - Unspecified - Sweden - feed sample - Surveillance - HACCP and own check - Objective sampling	batch (food/feed)	25	Gram	12	0	Salmonella	0
	Feed material of land animal origin - dairy products - Processing plant - Sweden - environmental sample - fabric swab - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	1	0	Salmonella	0
	Feed material of land animal origin - dairy products - Unspecified - European Union - feed sample - Surveillance - HACCP and own check - Objective sampling	batch (food/feed)	25	Gram	4	0	Salmonella	0
	Feed material of land animal origin - dairy products - Unspecified - Sweden - feed sample - Surveillance - HACCP and own check - Objective sampling	batch (food/feed)	25	Gram	5	0	Salmonella	0
	Feed material of land animal origin - greaves - Unspecified - Sweden - feed sample - Surveillance - HACCP and own check - Objective sampling	batch (food/feed)	25	Gram	193	0	Salmonella	0
	Feed material of land animal origin - meat and bone meal - Unspecified - European Union - feed sample - Surveillance - HACCP and own check - Objective sampling	batch (food/feed)	25	Gram	13	0	Salmonella	0
	Feed material of land animal origin - meat meal - Unspecified - European Union - feed sample - Surveillance - HACCP and own check - Objective sampling	batch (food/feed)	25	Gram	15	0	Salmonella	0
	Feed material of land animal origin - poultry offal meal - Unspecified - European Union - feed sample - Surveillance - HACCP and own check - Objective sampling	batch (food/feed)	25	Gram	18	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
Not Available	Feed material of land animal origin - Processing plant - Sweden - environmental sample - fabric swab - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	37	1	Salmonella Livingstone	1
	Feed material of land animal origin - protein meal - Processing plant - Sweden - environmental sample - fabric swab - Surveillance - HACCP and own check - Objective sampling	single (food/feed)	25	Gram	870	0	Salmonella	0
	Feed material of land animal origin - protein meal - Unspecified - Sweden - feed sample - Surveillance - HACCP and own check - Objective sampling	batch (food/feed)	25	Gram	690	0	Salmonella	0
	Feed material of land animal origin - Unspecified - European Union - feed sample - Surveillance - HACCP and own check - Objective sampling	batch (food/feed)	25	Gram	3	0	Salmonella	0
	Feed material of land animal origin - Unspecified - Sweden - feed sample - Surveillance - HACCP and own check - Objective sampling	batch (food/feed)	25	Gram	54	0	Salmonella	0
	Feed material of marine animal origin - fish meal - Unspecified - European Union - feed sample - Surveillance - HACCP and own check - Objective sampling	batch (food/feed)	25	Gram	42	0	Salmonella	0
	Feed material of oil seed or fruit origin - groundnut derived - Unspecified - Non European Union - feed sample - Surveillance - HACCP and own check - Objective sampling	batch (food/feed)	25	Gram	6	0	Salmonella	0
	Feed material of oil seed or fruit origin - linseed derived - Unspecified - Sweden - feed sample - Surveillance - HACCP and own check - Objective sampling	batch (food/feed)	25	Gram	2	0	Salmonella	0
	Feed material of oil seed or fruit origin - palm kernel derived - Unspecified - Non European Union - feed sample - Surveillance - HACCP and own check - Objective sampling	batch (food/feed)	25	Gram	24	0	Salmonella	0
	Feed material of oil seed or fruit origin - Processing plant - Sweden - environmental sample - fabric swab - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	5	0	Salmonella	0
	Feed material of oil seed or fruit origin - rape seed derived - Processing plant - Sweden - environmental sample - fabric swab - Surveillance - HACCP and own check - Objective sampling	single (food/feed)	25	Gram	818	0	Salmonella	0
	Feed material of oil seed or fruit origin - rape seed derived - Processing plant - Sweden - environmental sample - fabric swab - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	4	0	Salmonella	0
	Feed material of oil seed or fruit origin - rape seed derived - Unspecified - European Union - feed sample - Surveillance - HACCP and own check - Objective sampling	batch (food/feed)	25	Gram	191	6	Salmonella Senftenberg	5
							Salmonella Tennessee	1
	Feed material of oil seed or fruit origin - rape seed derived - Unspecified - Non European Union - feed sample - Surveillance - HACCP and own check - Objective sampling	batch (food/feed)	25	Gram	12	0	Salmonella	0
	Feed material of oil seed or fruit origin - rape seed derived - Unspecified - Sweden - feed sample - Surveillance - HACCP and own check - Objective sampling	batch (food/feed)	25	Gram	365	0	Salmonella	0
	Feed material of oil seed or fruit origin - rape seed derived - Unspecified - Unknown - feed sample - Surveillance - HACCP and own check - Objective sampling	batch (food/feed)	25	Gram	15	0	Salmonella	0
	Feed material of oil seed or fruit origin - soya (bean) derived - Unspecified - European Union - feed sample - Surveillance - HACCP and own check - Objective sampling	batch (food/feed)	25	Gram	103	4	Salmonella Mbandaka	3
							Salmonella Senftenberg	2
	Feed material of oil seed or fruit origin - soya (bean) derived - Unspecified - Non European Union - feed sample - Surveillance - HACCP and own check - Objective sampling	batch (food/feed)	25	Gram	186	8	Salmonella enterica, subspecies enterica	1
							Salmonella Kedougou	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
Not Available	Feed material of oil seed or fruit origin - soya (bean) derived - Unspecified - Non European Union - feed sample - Surveillance - HACCP and own check - Objective sampling	batch (food/feed)	25	Gram	186	8	Salmonella Mbandaka	5
							Salmonella Nyborg	1
							Salmonella Senftenberg	1
	Feed material of oil seed or fruit origin - soya (bean) derived - Unspecified - Unknown - feed sample - Surveillance - HACCP and own check - Objective sampling	batch (food/feed)	25	Gram	50	0	Salmonella	0
	Feed material of oil seed or fruit origin - sunflower seed derived - Unspecified - European Union - feed sample - Surveillance - HACCP and own check - Objective sampling	batch (food/feed)	25	Gram	30	2	Salmonella Mbandaka	2
	Feed material of oil seed or fruit origin - sunflower seed derived - Unspecified - Non European Union - feed sample - Surveillance - HACCP and own check - Objective sampling	batch (food/feed)	25	Gram	33	0	Salmonella	0
	Other feed material - beet - Processing plant - Sweden - environmental sample - fabric swab - Surveillance - HACCP and own check - Objective sampling	single (food/feed)	25	Gram	3	0	Salmonella	0
	Other feed material - beet - Unspecified - Non European Union - feed sample - Surveillance - HACCP and own check - Objective sampling	batch (food/feed)	25	Gram	10	0	Salmonella	0
	Other feed material - beet - Unspecified - Sweden - feed sample - Surveillance - HACCP and own check - Objective sampling	batch (food/feed)	25	Gram	9	0	Salmonella	0
	Other feed material - legume seeds and similar products - Unspecified - Sweden - feed sample - Surveillance - HACCP and own check - Objective sampling	batch (food/feed)	25	Gram	7	0	Salmonella	0
	Other feed material - minerals - Unspecified - Sweden - feed sample - Surveillance - HACCP and own check - Objective sampling	batch (food/feed)	25	Gram	10	0	Salmonella	0
	Other feed material - other plants - Processing plant - Sweden - environmental sample - fabric swab - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	2	0	Salmonella	0
	Other feed material - other plants - Unspecified - Sweden - feed sample - Surveillance - HACCP and own check - Objective sampling	batch (food/feed)	25	Gram	26	0	Salmonella	0
	Other feed material - other plants - Unspecified - Unknown - feed sample - Surveillance - HACCP and own check - Objective sampling	batch (food/feed)	25	Gram	5	0	Salmonella	0
	Other feed material - tubers, roots and similar products - Processing plant - Sweden - environmental sample - fabric swab - Surveillance - HACCP and own check - Objective sampling	single (food/feed)	25	Gram	67	0	Salmonella	0
	Other feed material - tubers, roots and similar products - Processing plant - Sweden - environmental sample - fabric swab - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	2	0	Salmonella	0
	Other feed material - tubers, roots and similar products - Unspecified - Sweden - feed sample - Surveillance - HACCP and own check - Objective sampling	batch (food/feed)	25	Gram	1	0	Salmonella	0
	Other feed material - Unspecified - Sweden - feed sample - Surveillance - HACCP and own check - Objective sampling	batch (food/feed)	25	Gram	24	0	Salmonella	0
	Other feed material - vegetable - Processing plant - Sweden - environmental sample - fabric swab - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	6	0	Salmonella	0
	Other feed material - yeast - Unspecified - Sweden - feed sample - Surveillance - HACCP and own check - Objective sampling	batch (food/feed)	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
Not Available	Pet food - dog snacks (pig ears, chewing bones) - Unspecified - European Union - feed sample - Surveillance - HACCP and own check - Objective sampling	batch (food/feed)	25	Gram	9	0	Salmonella	0
	Pet food - dog snacks (pig ears, chewing bones) - Unspecified - Unknown - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	36	1	Salmonella Thompson	1
	Pet food - final product - Unspecified - European Union - feed sample - Surveillance - HACCP and own check - Objective sampling	batch (food/feed)	25	Gram	1	0	Salmonella	0
	Pet food - final product - Unspecified - Sweden - feed sample - Surveillance - HACCP and own check - Objective sampling	batch (food/feed)	25	Gram	137	0	Salmonella	0
	Pet food - final product - Unspecified - Unknown - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	16	0	Salmonella	0
	Pet food - process control - Processing plant - Sweden - environmental sample - fabric swab - Surveillance - HACCP and own check - Objective sampling	single (food/feed)	25	Gram	628	3	Salmonella enterica, subspecies enterica	1
							Salmonella Montevideo	2
	Pet food - process control - Processing plant - Sweden - environmental sample - fabric swab - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	61	0	Salmonella	0
	Premixtures - final product - Unspecified - Unknown - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	2	0	Salmonella	0
	Premixtures - process control - Feed mill - Sweden - environmental sample - fabric swab - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	4	0	Salmonella	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
SWEDEN	All animals - zoo animals - Zoo - Sweden - animal sample - organ/tissue - Monitoring - passive - Official sampling - Convenient sampling	animal	1	0	Trichinella	0
	Badgers - wild - Natural habitat - Sweden - animal sample - organ/tissue - Monitoring - passive - Official sampling - Convenient sampling	animal	13	0	Trichinella	0
	Bears - wild - Hunting - Sweden - animal sample - organ/tissue - Monitoring - Official sampling - Convenient sampling	animal	225	1	Trichinella nativa	1
	Beavers - wild - Natural habitat - Sweden - animal sample - organ/tissue - Monitoring - passive - Official sampling - Convenient sampling	animal	15	0	Trichinella	0
	Birds - wild - Natural habitat - Sweden - animal sample - organ/tissue - Monitoring - passive - Official sampling - Convenient sampling	animal	33	0	Trichinella	0
	Deer - wild - fallow deer - Natural habitat - Sweden - animal sample - organ/tissue - Monitoring - passive - Official sampling - Convenient sampling	animal	1	0	Trichinella	0
	Foxes - wild - Natural habitat - Sweden - animal sample - organ/tissue - Monitoring - passive - Official sampling - Convenient sampling	animal	55	1	Trichinella britovi	1
	Lion - zoo animals - Zoo - Sweden - animal sample - organ/tissue - Monitoring - passive - Official sampling - Convenient sampling	animal	1	0	Trichinella	0
	Lynx - wild - Natural habitat - Sweden - animal sample - organ/tissue - Monitoring - passive - Official sampling - Convenient sampling	animal	103	7	Trichinella britovi	1
					Trichinella nativa	7
	Marten - wild - Natural habitat - Sweden - animal sample - organ/tissue - Monitoring - passive - Official sampling - Convenient sampling	animal	1	0	Trichinella	0
	Moose - wild - Natural habitat - Sweden - animal sample - organ/tissue - Monitoring - passive - Official sampling - Convenient sampling	animal	3	0	Trichinella	0
	Otter - wild - Natural habitat - Sweden - animal sample - organ/tissue - Monitoring - passive - Official sampling - Convenient sampling	animal	20	0	Trichinella	0
	Pigs - breeding animals - not raised under controlled housing conditions - boars - Slaughterhouse - Sweden - animal sample - organ/tissue - Surveillance - Official sampling - Census	animal	671	0	Trichinella	0
	Pigs - breeding animals - not raised under controlled housing conditions - sows - Slaughterhouse - Sweden - animal sample - organ/tissue - Surveillance - Official sampling - Census	animal	18699	0	Trichinella	0
	Pigs - breeding animals - raised under controlled housing conditions - boars - Slaughterhouse - Sweden - animal sample - organ/tissue - Surveillance - Official sampling - Census	animal	731	0	Trichinella	0
	Pigs - breeding animals - raised under controlled housing conditions - sows - Slaughterhouse - Sweden - animal sample - organ/tissue - Surveillance - Official sampling - Census	animal	26697	0	Trichinella	0
	Pigs - fattening pigs - not raised under controlled housing conditions - Slaughterhouse - Sweden - animal sample - organ/tissue - Surveillance - Official sampling - Census	animal	416950	0	Trichinella	0
	Pigs - fattening pigs - raised under controlled housing conditions - Slaughterhouse - Sweden - animal sample - organ/tissue - Surveillance - Official sampling - Objective sampling	animal	860609	0	Trichinella	0
	Seals - wild - Natural habitat - Sweden - animal sample - organ/tissue - Monitoring - passive - Official sampling - Convenient sampling	animal	10	0	Trichinella	0
	Wild boars - wild - Hunting - Sweden - animal sample - organ/tissue - Monitoring - Official sampling - Objective sampling	animal	91289	3	Trichinella britovi	2
					Trichinella pseudospiralis	1
	Wolverine - wild - Natural habitat - Sweden - animal sample - organ/tissue - Monitoring - passive - Official sampling - Convenient sampling	animal	1	0	Trichinella	0
	Wolves - wild - Natural habitat - Sweden - animal sample - organ/tissue - Monitoring - passive - Official sampling - Convenient sampling	animal	43	3	Trichinella britovi	1
					Trichinella nativa	3

FOODBORNE OUTBREAKS TABLES

Foodborne Outbreaks: summarized data

		Outbreak strenght	Strong			Weak			
Causative agent	**Food vehicle**	**N outbreaks**	**N human cases**	**N hospitalized**	**N deaths**	**N outbreaks**	**N human cases**	**N hospitalized**	**N deaths**
Bacillus cereus	Bovine meat and products thereof	1	33	0	0				
Calicivirus	Eggs and egg products					1	48	0	0
	Crustaceans, shellfish, molluscs and products thereof	1	42	0	0	1	35	0	0
	Vegetables and juices and other products thereof	1	400	0	0	3	77	0	0
	Other foods					1	54	0	0
	Mixed food					1	62	0	0
	Unknown					7	192	0	0
Campylobacter	Other, mixed or unspecified poultry meat and products thereof					1	9	0	0
	Unknown					6	45	0	0
Campylobacter jejuni	Broiler meat (Gallus gallus) and products thereof	1	3,000	0	0				
Cryptosporidium parvum	Vegetables and juices and other products thereof	1	50	0	0				
Histamine	Fish and fish products	2	6	0	0	1	2	0	0
	Unknown					1	2	0	0
Salmonella	Pig meat and products thereof	1	11	0	0				
	Unknown					1	2	0	0
	Meat and meat products	1	44	0	0				
Salmonella Typhimurium	Unknown					3	37	0	0
Shigella flexneri	Unknown					1	7	0	0
Staphylococcus aureus	Other foods					1	3	0	0
	Unknown					1	4	0	0
Streptococcus	Vegetables and juices and other products thereof					1	8	0	0
Unknown	Pig meat and products thereof					1	3	0	0
	Broiler meat (Gallus gallus) and products thereof					2	6	0	0
	Fish and fish products					6	14	0	0
	Other foods					6	54	0	0
	Mixed food					6	65	0	0
	Buffet meals	1	26	0	0	3	21	0	0
	Unknown					259	1,080	0	0
VTEC O145	Unknown					1	12	0	0
VTEC O157	Bovine meat and products thereof	1	26	0	0				

Strong Foodborne Outbreaks: detailed data

Causative agent	Other Causative Agent	FBO nat. code	Outbreak type	Food vehicle	More food vehicle info	Nature of evidence	Setting	Place of origin of problem	Origin of food vehicle	Contributory factors	Comment	N outbreaks	N human cases	N hosp.	N deaths
Bacillus cereus	unk	16/04 19	Not Available	Bovine meat and products thereof	Flank	Descriptive epidemiological evidence	Not Available	unk	Not Available	NOT AVAILABLE	N_A	1	33	0	0
Calicivirus	unk	16/04 36	Not Available	Vegetables and juices and other products thereof	Mixed salad	Descriptive epidemiological evidence	Not Available	unk	Not Available	NOT AVAILABLE	N_A	1	400	0	0
		17/01 02	Not Available	Crustaceans, shellfish, molluscs and products thereof	Oysters	Detection of causative agent in food chain or its environment - Detection of indistinguishable causative agent in humans	Not Available	unk	Non domestic, import	Inadequate heat treatment	Norovirus GGII was detected in oysters	1	42	0	0
Campylobacter jejuni	unk	17/02 64	General	Broiler meat (Gallus gallus) and products thereof	N_A	Descriptive epidemiological evidence$Descriptive environmental evidence	Not Available	unk	Sweden	Cross-contamination	The increase in domestic cases was most likely due to a corresponding increase in the proportion of Campylobacter infected poultry flocks from one of the major slaughterhouses. The number 3000 is an estimation compared to normal. A failure in a cleaning facility was one of the causes of the increase in broilers.	1	3,000	0	0
Cryptosporidium parvum	unk	17/00 95	Not Available	Vegetables and juices and other products thereof	Salad	Product-tracing investigations	Not Available	unk	Sweden	Unprocessed contaminated ingredient	C. parvum IIdA24G1	1	50	0	0
Histamine	unk	16/04 30	Not Available	Fish and fish products	Tuna	Detection of causative agent in food vehicle or its component - Symptoms and onset of illness pathognomonic to causative agent	Not Available	unk	Not Available	NOT AVAILABLE	N_A	1	4	0	0
		17/00 39	Not Available	Fish and fish products	Canned tuna	Detection of causative agent in food vehicle or its component - Symptoms and onset of illness pathognomonic to causative agent	Not Available	unk	Not Available	NOT AVAILABLE	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.	N deaths
Salmonella	unk	16/0384	General	Pig meat and products thereof	Cacciatore	Detection of causative agent in food chain or its environment - Detection of indistinguishable causative agent in humans	Not Available	unk	Spain	Inadequate heat treatment	Monophasic Typhimurium 3-14-9-N-211	1	11	0	0
		17/0240	General	Meat and meat products	Sausage	Detection of causative agent in food chain or its environment - Detection of indistinguishable causative agent in humans	Not Available	unk	Poland	Inadequate heat treatment	3-12-8-N-211 or 3 of 3-12-9-N-211	1	44	0	0
Unknown	unk	17/0227	Not Available	Buffet meals	N_A	Analytical epidemiological evidence	Not Available	unk	Not Available	NOT AVAILABLE	N_A	1	26	0	0
VTEC O157	unk	17/0239	General	Bovine meat and products thereof	Minced meat	Detection of causative agent in food chain or its environment - Detection of indistinguishable causative agent in humans$Product-tracing investigations	Not Available	unk	Sweden	Cross-contamination	Ehec O157:H7 stx2a, stx2c, eae+ klad 8	1	26	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
Calicivirus	unk	16/02 70	Not Available	Unknown	N_A	Unknown	Not Available	unk	Not Available	NOT AVAILABLE	N_A	1	20	0	0
		16/02 77	Not Available	Mixed food	School lunch	Descriptive epidemiological evidence	Not Available	unk	Not Available	NOT AVAILABLE	N_A	1	62	0	0
		16/02 93	Not Available	Unknown	N_A	Unknown	Not Available	unk	Not Available	NOT AVAILABLE	N_A	1	20	0	0
		16/02 94	Not Available	Unknown	N_A	Unknown	Not Available	unk	Not Available	NOT AVAILABLE	N_A	1	4	0	0
		16/03 14	Not Available	Vegetables and juices and other products thereof	Salad	Descriptive epidemiological evidence$Descriptive environmental evidence	Not Available	unk	Not Available	Infected food handler	N_A	1	30	0	0
		16/03 90	Not Available	Unknown	N_A	Unknown	Not Available	unk	Not Available	NOT AVAILABLE	N_A	1	100	0	0
		16/03 96	Not Available	Other foods	Sandwich	Descriptive epidemiological evidence	Not Available	unk	Not Available	NOT AVAILABLE	N_A	1	54	0	0
		16/04 23	Not Available	Unknown	N_A	Unknown	Not Available	unk	Not Available	NOT AVAILABLE	N_A	1	10	0	0
		16/04 27	Not Available	Vegetables and juices and other products thereof	Salad	Descriptive epidemiological evidence	Not Available	unk	Not Available	NOT AVAILABLE	N_A	1	23	0	0
		17/00 12	Not Available	Eggs and egg products	boiled eggs in halfs on buffet	Descriptive epidemiological evidence	Not Available	unk	Not Available	NOT AVAILABLE	N_A	1	48	0	0
		17/00 28	Not Available	Crustaceans, shellfish, molluscs and products thereof	N_A	Unknown	Not Available	unk	Not Available	NOT AVAILABLE	N_A	1	35	0	0
		17/00 74	Not Available	Unknown	N_A	Unknown	Not Available	unk	Not Available	NOT AVAILABLE	N_A	1	30	0	0
		17/00 94	Not Available	Unknown	N_A	Unknown	Not Available	unk	Not Available	NOT AVAILABLE	N_A	1	8	0	0
		17/01 72	Not Available	Vegetables and juices and other products thereof	Raspberry dessert	Descriptive epidemiological evidence	Not Available	unk	Not Available	NOT AVAILABLE	N_A	1	24	0	0

Causative agent	Other Causative Agent	FBO nat. code	Outbreak type	Food vehicle	More food vehicle info	Nature of evidence	Setting	Place of origin of problem	Origin of food vehicle	Contributory factors	Comment	N outbreaks	N human cases	N hosp.	N deaths
Campylobacter	unk	16/0208	Not Available	Other, mixed or unspecified poultry meat and products thereof	Duck	Descriptive epidemiological evidence	Not Available	unk	Not Available	NOT AVAILABLE	N_A	1	9	0	0
		16/0329	Not Available	Unknown	N_A	Unknown	Not Available	unk	Not Available	NOT AVAILABLE	N_A	1	2	0	0
		16/0359	Not Available	Unknown	N_A	Unknown	Not Available	unk	Not Available	NOT AVAILABLE	N_A	1	33	0	0
		16/0383	Not Available	Unknown	N_A	Unknown	Not Available	unk	Not Available	NOT AVAILABLE	N_A	1	3	0	0
		17/0027	Not Available	Unknown	N_A	Unknown	Not Available	unk	Not Available	NOT AVAILABLE	N_A	1	2	0	0
		17/0088	Not Available	Unknown	N_A	Unknown	Not Available	unk	Not Available	NOT AVAILABLE	N_A	1	2	0	0
		17/0175	Not Available	Unknown	N_A	Unknown	Not Available	unk	Not Available	NOT AVAILABLE	N_A	1	3	0	0
Histamine	unk	16/0300	Not Available	Fish and fish products	Tuna	Detection of causative agent in food vehicle or its component - Symptoms and onset of illness pathognomonic to causative agent	Not Available	unk	Not Available	NOT AVAILABLE	N_A	1	2	0	0
		16/0351	Not Available	Unknown	N_A	Unknown	Not Available	unk	Not Available	NOT AVAILABLE	N_A	1	2	0	0
Salmonella	unk	17/0096	Not Available	Unknown	N_A	Unknown	Not Available	unk	Not Available	NOT AVAILABLE	Heidelberg 1.4-5.12,3,1.2	1	2	0	0
Salmonella Typhimurium	unk	17/0228	Not Available	Unknown	N_A	Descriptive epidemiological evidence	Not Available	unk	Not Available	NOT AVAILABLE	N_A	1	2	0	0
		17/0231	Not Available	Unknown	N_A	Unknown	Not Available	unk	Not Available	NOT AVAILABLE	N_A	1	22	0	0
		17/0236	Not Available	Unknown	N_A	Unknown	Not Available	unk	Not Available	NOT AVAILABLE	N_A	1	13	0	0
Shigella flexneri	unk	17/0113	Not Available	Unknown	N_A	Unknown	Not Available	unk	Not Available	NOT AVAILABLE	N_A	1	7	0	0
Staphylococcus aureus	unk	17/0032	Not Available	Unknown	N_A	Unknown	Not Available	unk	Not Available	NOT AVAILABLE	N_A	1	4	0	0
		17/0033	Not Available	Other foods	Bearnaisesauce	Descriptive epidemiological evidence$Descriptive environmental evidence	Not Available	unk	Not Available	NOT AVAILABLE	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
Streptococcus	unk	17/0066	Not Available	Vegetables and juices and other products thereof	salad	Descriptive epidemiological evidence	Not Available	unk	Not Available	NOT AVAILABLE	N_A	1	8	0	0
Unknown	unk	16/0269	Not Available	Mixed food	N_A	Descriptive epidemiological evidence$Descriptive environmental evidence	Not Available	unk	Not Available	NOT AVAILABLE	N_A	1	3	0	0
		16/0286	Not Available	Buffet meals	salad	Descriptive epidemiological evidence	Not Available	unk	Not Available	Infected food handler	N_A	1	5	0	0
		16/0299	Not Available	Other foods	stew	Descriptive epidemiological evidence$Descriptive environmental evidence	Not Available	unk	Not Available	NOT AVAILABLE	N_A	1	41	0	0
		16/0305	Not Available	Fish and fish products	Fish stew	Descriptive epidemiological evidence$Descriptive environmental evidence	Not Available	unk	Not Available	NOT AVAILABLE	N_A	1	3	0	0
		16/0309	Not Available	Broiler meat (Gallus gallus) and products thereof	Chicken	Descriptive environmental evidence	Not Available	unk	Not Available	NOT AVAILABLE	N_A	1	2	0	0
		16/0375	Not Available	Broiler meat (Gallus gallus) and products thereof	Chicken in bread	Descriptive environmental evidence	Not Available	unk	Not Available	NOT AVAILABLE	N_A	1	4	0	0
		16/0379	Not Available	Mixed food	N_A	Descriptive environmental evidence	Not Available	unk	Not Available	NOT AVAILABLE	N_A	1	2	0	0
		16/0382	Not Available	Mixed food	N_A	Descriptive environmental evidence	Not Available	unk	Not Available	NOT AVAILABLE	N_A	1	3	0	0
		16/0392	Not Available	Fish and fish products	tuna	Descriptive epidemiological evidence	Not Available	unk	Not Available	NOT AVAILABLE	N_A	1	2	0	0
		16/0405	Not Available	Fish and fish products	Fish and chips	Descriptive epidemiological evidence$Descriptive environmental evidence	Not Available	unk	Not Available	NOT AVAILABLE	N_A	1	2	0	0
		16/0406	Not Available	Other foods	pizza	Descriptive epidemiological evidence$Descriptive environmental evidence	Not Available	unk	Not Available	NOT AVAILABLE	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	16/04 40	Not Available	Mixed food	N_A	Descriptive environmental evidence	Not Available	unk	Not Available	NOT AVAILABLE	N_A	1	2	0	0
		16/04 45	Not Available	Other foods	Pizza	Descriptive epidemiological evidence$Descriptive environmental evidence	Not Available	unk	Not Available	NOT AVAILABLE	N_A	1	3	0	0
		16/04 46	Not Available	Other foods	Noodles	Descriptive environmental evidence	Not Available	unk	Not Available	NOT AVAILABLE	N_A	1	3	0	0
		17/00 34	Not Available	Mixed food	pulled pork, salad, bread	Descriptive environmental evidence	Not Available	unk	Not Available	NOT AVAILABLE	N_A	1	30	0	0
		17/00 65	Not Available	Buffet meals	Indian buffet	Descriptive epidemiological evidence$Descriptive environmental evidence	Not Available	unk	Not Available	NOT AVAILABLE	N_A	1	5	0	0
		17/00 85	Not Available	Mixed food	oyster and meat from pig	Descriptive epidemiological evidence	Not Available	unk	Not Available	NOT AVAILABLE	N_A	1	25	0	0
		17/01 01	Not Available	Other foods	Hamburger	Descriptive environmental evidence	Not Available	unk	Not Available	NOT AVAILABLE	N_A	1	2	0	0
		17/01 08	Not Available	Other foods	sauce	Descriptive environmental evidence	Not Available	unk	Not Available	NOT AVAILABLE	N_A	1	2	0	0
		17/01 29	Not Available	Fish and fish products	sushi	Descriptive environmental evidence	Not Available	unk	Not Available	NOT AVAILABLE	N_A	1	3	0	0
		17/01 34	Not Available	Fish and fish products	tuna	Descriptive epidemiological evidence	Not Available	unk	Not Available	NOT AVAILABLE	N_A	1	2	0	0
		17/01 48	Not Available	Fish and fish products	sushi	Descriptive epidemiological evidence	Not Available	unk	Not Available	NOT AVAILABLE	N_A	1	2	0	0
		17/01 49	Not Available	Buffet meals	N_A	Descriptive epidemiological evidence	Not Available	unk	Not Available	NOT AVAILABLE	N_A	1	11	0	0
		17/01 68	Not Available	Pig meat and products thereof	Hamburger	Descriptive environmental evidence	Not Available	unk	Not Available	NOT AVAILABLE	N_A	1	3	0	0
		N_A	Not Available	Unknown	N_A	Unknown	Not Available	unk	Not Available	NOT AVAILABLE	N_A	259	1,080	0	0
VTEC O145	unk	17/02 37	Not Available	Unknown	N_A	Unknown	Not Available	unk	Not Available	NOT AVAILABLE	N_A	1	12	0	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 - active

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

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Sweden

Sampling details: N_A

	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**	**32**	**64**
	N of tested isolates	**170**	**170**	**170**	**170**	**170**	**170**
MIC	**N of resistant isolates**	**22**	**0**	**0**	**22**	**1**	**27**
<=0.12		142					
0.25		6		91			
<=0.5							141
0.5				77		39	
<=1			170				
1				2		102	2
2					1	21	
4		14			116	7	1
8		6			30		
16		2			1		1
32							24
>32						1	
64					1		1
>64					21		

ANTIMICROBIAL RESISTANCE TABLES FOR SALMONELLA

Table Antimicrobial susceptibility testing of Salmonella 4,5,12:-:1,5 in Birds - wild

Sampling Stage: Natural habitat

Sampling Type: animal sample - organ/tissue

Sampling Context: Monitoring - passive

Sampler: Official sampling

Sampling Strategy: Suspect sampling

Programme Code: OTHER AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Sweden

Sampling Details: N_A

	AM substance	Ampicillin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Florfenicol	Gentamicin	Kanamycin	Nalidixic acid	Streptomycin	Sulfamethoxazole	Tetracycline	Trimethoprim
	ECOFF	**8**	**0.5**	**2**	**16**	**0.064**	**2**	**16**	**2**	**16**	**16**	**16**	**256**	**8**	**2**
	Lowest limit	**1**	**0.016**	**0.25**	**2**	**0.008**	**0.5**	**4**	**0.12**	**8**	**1**	**2**	**8**	**1**	**0.12**
	Highest limit	**128**	**2**	**16**	**64**	**1**	**4**	**32**	**16**	**16**	**128**	**256**	**1024**	**128**	**16**
	N of tested isolates	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
0.03						1									
0.064						1									
0.12			2												
0.25															2
0.5				2					2						
<=1		2													
1							2								
<=2												1			
2														2	
<=4								2							
4					2						2	1			
<=8										2					
64													2		

Table Antimicrobial susceptibility testing of Salmonella Aarhus in Cattle (bovine animals) - unspecified

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Surveillance

Sampler: Official sampling

Sampling Strategy: Suspect sampling

Programme Code: OTHER AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Sweden

Sampling Details: N_A

	AM substance	Ampicillin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Florfenicol	Gentamicin	Kanamycin	Nalidixic acid	Streptomycin	Sulfamethoxazole	Tetracycline	Trimethoprim
	ECOFF	**8**	**0.5**	**2**	**16**	**0.064**	**2**	**16**	**2**	**16**	**16**	**16**	**256**	**8**	**2**
	Lowest limit	**1**	**0.016**	**0.25**	**2**	**0.008**	**0.5**	**4**	**0.12**	**8**	**1**	**2**	**8**	**1**	**0.12**
	Highest limit	**128**	**2**	**16**	**64**	**1**	**4**	**32**	**16**	**16**	**128**	**256**	**1024**	**128**	**16**
	N of tested isolates	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
0.064						1									
0.12			1												
<=0.25				1											
0.25															1
0.5									1						
<=1		1												1	
2							1								
<=4								1							
4					1										
<=8										1					
8											1	1			
64													1		

Table Antimicrobial susceptibility testing of Salmonella Agona in Dogs - pet animals

Sampling Stage: Veterinary clinics

Sampling Type: animal sample

Sampling Context: Clinical investigations

Sampler: Official sampling

Sampling Strategy: Suspect sampling

Programme Code: OTHER AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Sweden

Sampling Details: Urine

	AM substance	Ampicillin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Florfenicol	Gentamicin	Kanamycin	Nalidixic acid	Streptomycin	Sulfamethoxazole	Tetracycline	Trimethoprim
	ECOFF	**8**	**0.5**	**2**	**16**	**0.064**	**2**	**16**	**2**	**16**	**16**	**16**	**256**	**8**	**2**
	Lowest limit	**1**	**0.016**	**0.25**	**2**	**0.008**	**0.5**	**4**	**0.12**	**8**	**1**	**2**	**8**	**1**	**0.12**
	Highest limit	**128**	**2**	**16**	**64**	**1**	**4**	**32**	**16**	**16**	**128**	**256**	**1024**	**128**	**16**
	N of tested isolates	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
0.03						1									
<=0.12															1
0.25			1												
0.5				1					1						
<=1		1												1	
2							1								
<=4								1							
4					1						1				
<=8										1					
8												1			
256													1		

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

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs

Sampling Context: Control and eradication programmes

Sampler: Official and industry sampling

Sampling Strategy: Census

Programme Code: OTHER AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Sweden

Sampling Details: N_A

	AM substance	Ampicillin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Florfenicol	Gentamicin	Kanamycin	Nalidixic acid	Streptomycin	Sulfamethoxazole	Tetracycline	Trimethoprim
	ECOFF	**8**	**0.5**	**2**	**16**	**0.064**	**2**	**16**	**2**	**16**	**16**	**16**	**256**	**8**	**2**
	Lowest limit	**1**	**0.016**	**0.25**	**2**	**0.008**	**0.5**	**4**	**0.12**	**8**	**1**	**2**	**8**	**1**	**0.12**
	Highest limit	**128**	**2**	**16**	**64**	**1**	**4**	**32**	**16**	**16**	**128**	**256**	**1024**	**128**	**16**
	N of tested isolates	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
0.064			1			2									
0.12			1												
<=0.25				1											
0.5				1					1						2
<=1		2												2	
1							1		1						
2							1								
<=4								2							
4					2						2				
<=8										2					
8												2			
64													1		
128													1		

Table Antimicrobial susceptibility testing of Salmonella Dublin in Cattle (bovine animals) - unspecified

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Surveillance

Sampler: Official sampling

Sampling Strategy: Suspect sampling

Programme Code: OTHER AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Sweden

Sampling Details: N_A

	AM substance	Ampicillin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Florfenicol	Gentamicin	Kanamycin	Nalidixic acid	Streptomycin	Sulfamethoxazole	Tetracycline	Trimethoprim
	ECOFF	**8**	**0.5**	**2**	**16**	**0.064**	**2**	**16**	**2**	**16**	**16**	**16**	**256**	**8**	**2**
	Lowest limit	**1**	**0.016**	**0.25**	**2**	**0.008**	**0.5**	**4**	**0.12**	**8**	**1**	**2**	**8**	**1**	**0.12**
	Highest limit	**128**	**2**	**16**	**64**	**1**	**4**	**32**	**16**	**16**	**128**	**256**	**1024**	**128**	**16**
	N of tested isolates	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
0.03			2			1									
0.064			1			2									
<=0.25				3											
0.5									3						3
<=1		3												3	
<=2					1										
2							3								
<=4								3							
4					2						3				
<=8										3					
16												3			
64													3		

Table Antimicrobial susceptibility testing of Salmonella Dublin in Cattle (bovine animals) - unspecified

Sampling Stage: Slaughterhouse

Sampling Type: animal sample - lymph nodes

Sampling Context: Surveillance

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Sweden

Sampling Details: N_A

	AM substance	Ampicillin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Florfenicol	Gentamicin	Kanamycin	Nalidixic acid	Streptomycin	Sulfamethoxazole	Tetracycline	Trimethoprim
	ECOFF	**8**	**0.5**	**2**	**16**	**0.064**	**2**	**16**	**2**	**16**	**16**	**16**	**256**	**8**	**2**
	Lowest limit	**1**	**0.016**	**0.25**	**2**	**0.008**	**0.5**	**4**	**0.12**	**8**	**1**	**2**	**8**	**1**	**0.12**
	Highest limit	**128**	**2**	**16**	**64**	**1**	**4**	**32**	**16**	**16**	**128**	**256**	**1024**	**128**	**16**
	N of tested isolates	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
0.03			1			1									
<=0.25				1											
0.5									1						1
<=1		1												1	
1							1								
<=2					1										
<=4								1							
4											1				
<=8										1					
16												1			
64													1		

Table Antimicrobial susceptibility testing of Salmonella Duesseldorf in Cattle (bovine animals) - unspecified

Sampling Stage: Slaughterhouse

Sampling Type: animal sample - lymph nodes

Sampling Context: Surveillance

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Sweden

Sampling Details: N_A

	AM substance	Ampicillin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Florfenicol	Gentamicin	Kanamycin	Nalidixic acid	Streptomycin	Sulfamethoxazole	Tetracycline	Trimethoprim
	ECOFF	**8**	**0.5**	**2**	**16**	**0.064**	**2**	**16**	**2**	**16**	**16**	**16**	**256**	**8**	**2**
	Lowest limit	**1**	**0.016**	**0.25**	**2**	**0.008**	**0.5**	**4**	**0.12**	**8**	**1**	**2**	**8**	**1**	**0.12**
	Highest limit	**128**	**2**	**16**	**64**	**1**	**4**	**32**	**16**	**16**	**128**	**256**	**1024**	**128**	**16**
	N of tested isolates	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
0.03						1									
0.12			1												
0.25															1
0.5				1					1						
<=1		1												1	
2							1								
<=4								1							
4					1						1				
<=8										1					
16												1			
64													1		

Table Antimicrobial susceptibility testing of Salmonella enterica, subspecies diarizonae in Sheep

Sampling Stage: Farm

Sampling Type: animal sample

Sampling Context: Monitoring - active

Sampler: Official sampling

Sampling Strategy: Suspect sampling

Programme Code: OTHER AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Sweden

Sampling Details: N_A

	AM substance	Ampicillin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Florfenicol	Gentamicin	Kanamycin	Nalidixic acid	Streptomycin	Sulfamethoxazole	Tetracycline	Trimethoprim
	ECOFF	**8**	**0.5**	**2**	**16**	**0.064**	**2**	**16**	**2**	**16**	**16**	**16**	**256**	**8**	**2**
	Lowest limit	**1**	**0.016**	**0.25**	**2**	**0.008**	**0.5**	**4**	**0.12**	**8**	**1**	**2**	**8**	**1**	**0.12**
	Highest limit	**128**	**2**	**16**	**64**	**1**	**4**	**32**	**16**	**16**	**128**	**256**	**1024**	**128**	**16**
	N of tested isolates	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
0.03			1			2									
0.064			1			1									
0.12			1												
<=0.25				3											
0.25									3						2
0.5															1
<=1		3												3	
1							3								
<=2					3										
<=4								3							
4											3				
<=8										3					
8												3			
64													3		

Table Antimicrobial susceptibility testing of Salmonella Enteritidis in Hedgehogs - wild

Sampling Stage: Natural habitat

Sampling Type: animal sample

Sampling Context: Monitoring - passive

Sampler: Official sampling

Sampling Strategy: Suspect sampling

Programme Code: OTHER AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Sweden

Sampling Details: N_A

	AM substance	Ampicillin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Florfenicol	Gentamicin	Kanamycin	Nalidixic acid	Streptomycin	Sulfamethoxazole	Tetracycline	Trimethoprim
	ECOFF	**8**	**0.5**	**2**	**16**	**0.064**	**2**	**16**	**2**	**16**	**16**	**16**	**256**	**8**	**2**
	Lowest limit	**1**	**0.016**	**0.25**	**2**	**0.008**	**0.5**	**4**	**0.12**	**8**	**1**	**2**	**8**	**1**	**0.12**
	Highest limit	**128**	**2**	**16**	**64**	**1**	**4**	**32**	**16**	**16**	**128**	**256**	**1024**	**128**	**16**
	N of tested isolates	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
0.03						1									
0.12			1												
<=0.25				1											
0.25															1
0.5									1						
<=1		1												1	
<=2					1										
2							1								
<=4								1							
4											1				
<=8										1					
16												1			
32													1		

Table Antimicrobial susceptibility testing of Salmonella Fulica in Hedgehogs - wild

Sampling Stage: Natural habitat

Sampling Type: animal sample

Sampling Context: Monitoring - passive

Sampler: Official sampling

Sampling Strategy: Suspect sampling

Programme Code: OTHER AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Sweden

Sampling Details: N_A

	AM substance	Ampicillin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Florfenicol	Gentamicin	Kanamycin	Nalidixic acid	Streptomycin	Sulfamethoxazole	Tetracycline	Trimethoprim
	ECOFF	**8**	**0.5**	**2**	**16**	**0.064**	**2**	**16**	**2**	**16**	**16**	**16**	**256**	**8**	**2**
	Lowest limit	**1**	**0.016**	**0.25**	**2**	**0.008**	**0.5**	**4**	**0.12**	**8**	**1**	**2**	**8**	**1**	**0.12**
	Highest limit	**128**	**2**	**16**	**64**	**1**	**4**	**32**	**16**	**16**	**128**	**256**	**1024**	**128**	**16**
	N of tested isolates	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
0.064						1									
0.12			1												
0.5				1					1						1
<=1		1													
2							1							1	
<=4								1							
4					1						1	1			
<=8										1					
128													1		

Table Antimicrobial susceptibility testing of Salmonella Indiana in Dogs - pet animals

Sampling Stage: Veterinary clinics

Sampling Type: animal sample

Sampling Context: Clinical investigations

Sampler: Official sampling

Sampling Strategy: Suspect sampling

Programme Code: OTHER AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Sweden

Sampling Details: Urine

	AM substance	Ampicillin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Florfenicol	Gentamicin	Kanamycin	Nalidixic acid	Streptomycin	Sulfamethoxazole	Tetracycline	Trimethoprim
	ECOFF	**8**	**0.5**	**2**	**16**	**0.064**	**2**	**16**	**2**	**16**	**16**	**16**	**256**	**8**	**2**
	Lowest limit	**1**	**0.016**	**0.25**	**2**	**0.008**	**0.5**	**4**	**0.12**	**8**	**1**	**2**	**8**	**1**	**0.12**
	Highest limit	**128**	**2**	**16**	**64**	**1**	**4**	**32**	**16**	**16**	**128**	**256**	**1024**	**128**	**16**
	N of tested isolates	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
0.064						1									
0.12			1												
<=0.25				1											
0.25															1
0.5									1						
<=1		1												1	
2							1								
<=4								1							
4					1						1				
<=8										1					
16												1			
128													1		

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

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs

Sampling Context: Control and eradication programmes

Sampler: Official and industry sampling

Sampling Strategy: Census

Programme Code: OTHER AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Sweden

Sampling Details: N_A

	AM substance	Ampicillin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Florfenicol	Gentamicin	Kanamycin	Nalidixic acid	Streptomycin	Sulfamethoxazole	Tetracycline	Trimethoprim
	ECOFF	**8**	**0.5**	**2**	**16**	**0.064**	**2**	**16**	**2**	**16**	**16**	**16**	**256**	**8**	**2**
	Lowest limit	**1**	**0.016**	**0.25**	**2**	**0.008**	**0.5**	**4**	**0.12**	**8**	**1**	**2**	**8**	**1**	**0.12**
	Highest limit	**128**	**2**	**16**	**64**	**1**	**4**	**32**	**16**	**16**	**128**	**256**	**1024**	**128**	**16**
	N of tested isolates	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
0.064			1			1									
<=0.25				1											
0.25															1
0.5									1						
<=1		1												1	
2							1								
<=4								1							
4					1						1	1			
<=8										1					
64													1		

Table Antimicrobial susceptibility testing of Salmonella Mbandaka in Dogs - pet animals

Sampling Stage: Veterinary clinics

Sampling Type: animal sample - faeces

Sampling Context: Clinical investigations

Sampler: Official sampling

Sampling Strategy: Suspect sampling

Programme Code: OTHER AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Sweden

Sampling Details: N_A

	AM substance	Ampicillin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Florfenicol	Gentamicin	Kanamycin	Nalidixic acid	Streptomycin	Sulfamethoxazole	Tetracycline	Trimethoprim
	ECOFF	**8**	**0.5**	**2**	**16**	**0.064**	**2**	**16**	**2**	**16**	**16**	**16**	**256**	**8**	**2**
	Lowest limit	**1**	**0.016**	**0.25**	**2**	**0.008**	**0.5**	**4**	**0.12**	**8**	**1**	**2**	**8**	**1**	**0.12**
	Highest limit	**128**	**2**	**16**	**64**	**1**	**4**	**32**	**16**	**16**	**128**	**256**	**1024**	**128**	**16**
	N of tested isolates	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
0.03						1									
0.12			1												
0.25															1
0.5									1						
<=1		1												1	
2				1			1								
4					1						1				
<=8										1					
8								1							
16												1			
128													1		

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

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs

Sampling Context: Control and eradication programmes

Sampler: Official and industry sampling

Sampling Strategy: Census

Programme Code: OTHER AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Sweden

Sampling Details: N_A

	AM substance	Ampicillin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Florfenicol	Gentamicin	Kanamycin	Nalidixic acid	Streptomycin	Sulfamethoxazole	Tetracycline	Trimethoprim
	ECOFF	**8**	**0.5**	**2**	**16**	**0.064**	**2**	**16**	**2**	**16**	**16**	**16**	**256**	**8**	**2**
	Lowest limit	**1**	**0.016**	**0.25**	**2**	**0.008**	**0.5**	**4**	**0.12**	**8**	**1**	**2**	**8**	**1**	**0.12**
	Highest limit	**128**	**2**	**16**	**64**	**1**	**4**	**32**	**16**	**16**	**128**	**256**	**1024**	**128**	**16**
	N of tested isolates	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
0.064						1									
0.12			1												
0.25															1
0.5				1											
<=1		1													
1									1						
2														1	
<=4								1							
4							1								
<=8										1					
8					1						1				
16												1			
64													1		

Table Antimicrobial susceptibility testing of Salmonella Newport in Birds - wild

Sampling Stage: Natural habitat

Sampling Type: animal sample - organ/tissue

Sampling Context: Monitoring - passive

Sampler: Official sampling

Sampling Strategy: Suspect sampling

Programme Code: OTHER AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Sweden

Sampling Details: N_A

	AM substance	Ampicillin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Florfenicol	Gentamicin	Kanamycin	Nalidixic acid	Streptomycin	Sulfamethoxazole	Tetracycline	Trimethoprim
	ECOFF	**8**	**0.5**	**2**	**16**	**0.064**	**2**	**16**	**2**	**16**	**16**	**16**	**256**	**8**	**2**
	Lowest limit	**1**	**0.016**	**0.25**	**2**	**0.008**	**0.5**	**4**	**0.12**	**8**	**1**	**2**	**8**	**1**	**0.12**
	Highest limit	**128**	**2**	**16**	**64**	**1**	**4**	**32**	**16**	**16**	**128**	**256**	**1024**	**128**	**16**
	N of tested isolates	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
0.03						1									
0.064			1												
<=0.25				1											
0.25															1
0.5									1						
<=1		1												1	
2							1								
<=4								1							
4					1						1				
<=8										1					
16												1			
32													1		

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

Sampling Stage: Slaughterhouse

Sampling Type: food sample - carcase swabs

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Sweden

Sampling Details: Breeding pig

	AM substance	Ampicillin	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Florfenicol	Gentamicin	Kanamycin	Nalidixic acid	Streptomycin	Sulfamethoxazole	Tetracycline	Trimethoprim
	ECOFF	**8**	**2**	**16**	**0.064**	**2**	**16**	**2**	**16**	**16**	**16**	**256**	**8**	**2**
	Lowest limit	**1**	**0.25**	**2**	**0.008**	**0.5**	**4**	**0.12**	**8**	**1**	**2**	**8**	**1**	**0.12**
	Highest limit	**128**	**16**	**64**	**1**	**4**	**32**	**16**	**16**	**128**	**256**	**1024**	**128**	**16**
	N of tested isolates	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**
0.064					1									
0.5			1											
<=1		1											1	
1								1						
2						1								
<=4							1							
4				1						1				
<=8									1					
16											1			
>16														1
>1024												1		

MIC	AM substance	Ampicillin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Florfenicol	Gentamicin	Kanamycin	Nalidixic acid	Streptomycin	Sulfamethoxazole	Tetracycline	Trimethoprim
	ECOFF	**8**	**0.5**	**2**	**16**	**0.064**	**2**	**16**	**2**	**16**	**16**	**16**	**256**	**8**	**2**
	Lowest limit	**1**	**0.016**	**0.25**	**2**	**0.008**	**0.5**	**4**	**0.12**	**8**	**1**	**2**	**8**	**1**	**0.12**
	Highest limit	**128**	**2**	**16**	**64**	**1**	**4**	**32**	**16**	**16**	**128**	**256**	**1024**	**128**	**16**
	N of tested isolates	**1**	**2**	**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									
0.064			1												
<=0.25				1											
0.25			1												1
0.5									1						
<=1		1												1	
<=2					1										
2							1				1				
<=4								1							
<=8										1					
8												1			
128													1		

Table Antimicrobial susceptibility testing of Salmonella Typhimurium in Birds - wild

Sampling Stage: Natural habitat

Sampling Type: animal sample - organ/tissue

Sampling Context: Monitoring - passive

Sampler: Official sampling

Sampling Strategy: Suspect sampling

Programme Code: OTHER AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Sweden

Sampling Details: N_A

	AM substance	Ampicillin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Florfenicol	Gentamicin	Kanamycin	Nalidixic acid	Streptomycin	Sulfamethoxazole	Tetracycline	Trimethoprim
	ECOFF	**8**	**0.5**	**2**	**16**	**0.064**	**2**	**16**	**2**	**16**	**16**	**16**	**256**	**8**	**2**
	Lowest limit	**1**	**0.016**	**0.25**	**2**	**0.008**	**0.5**	**4**	**0.12**	**8**	**1**	**2**	**8**	**1**	**0.12**
	Highest limit	**128**	**2**	**16**	**64**	**1**	**4**	**32**	**16**	**16**	**128**	**256**	**1024**	**128**	**16**
	N of tested isolates	**15**	**15**	**15**	**15**	**15**	**15**	**15**	**15**	**15**	**15**	**15**	**15**	**15**	**15**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**
0.064			1			15									
0.12			14												
<=0.25				6											
0.25															3
<=0.5							2								
0.5				9					11						10
<=1		15												9	
1							6		4						2
<=2					4										
2							7							6	
<=4								15							
4					11						13				
<=8										15					
8											2	1			
16												13			
32												1	2		
64													12		
128													1		

Table Antimicrobial susceptibility testing of Salmonella Typhimurium in Cats - pet animals

Sampling Stage: Veterinary clinics

Sampling Type: animal sample - faeces

Sampling Context: Clinical investigations

Sampler: Official sampling

Sampling Strategy: Suspect sampling

Programme Code: OTHER AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Sweden

Sampling Details: N_A

	AM substance	Ampicillin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Florfenicol	Gentamicin	Kanamycin	Nalidixic acid	Streptomycin	Sulfamethoxazole	Tetracycline	Trimethoprim
	ECOFF	**8**	**0.5**	**2**	**16**	**0.064**	**2**	**16**	**2**	**16**	**16**	**16**	**256**	**8**	**2**
	Lowest limit	**1**	**0.016**	**0.25**	**2**	**0.008**	**0.5**	**4**	**0.12**	**8**	**1**	**2**	**8**	**1**	**0.12**
	Highest limit	**128**	**2**	**16**	**64**	**1**	**4**	**32**	**16**	**16**	**128**	**256**	**1024**	**128**	**16**
	N of tested isolates	**12**	**12**	**12**	**12**	**12**	**12**	**12**	**12**	**12**	**12**	**12**	**12**	**12**	**12**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**
0.03						2									
0.064			3			10									
0.12			9												
<=0.25				7											
0.5				5					11						10
<=1		12												3	
1							7		1						2
<=2					2										
2							5							9	
<=4								12							
4					10						12				
<=8										12					
8												2			
16												9			
32												1	1		
64													8		
128													3		

Table Antimicrobial susceptibility testing of Salmonella Typhimurium in Pigs - breeding animals - unspecified

Sampling Stage: Slaughterhouse

Sampling Type: animal sample - lymph nodes

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Sweden

Sampling Details: N_A

	AM substance	Ampicillin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Florfenicol	Gentamicin	Kanamycin	Nalidixic acid	Streptomycin	Sulfamethoxazole	Tetracycline	Trimethoprim
	ECOFF	**8**	**0.5**	**2**	**16**	**0.064**	**2**	**16**	**2**	**16**	**16**	**16**	**256**	**8**	**2**
	Lowest limit	**1**	**0.016**	**0.25**	**2**	**0.008**	**0.5**	**4**	**0.12**	**8**	**1**	**2**	**8**	**1**	**0.12**
	Highest limit	**128**	**2**	**16**	**64**	**1**	**4**	**32**	**16**	**16**	**128**	**256**	**1024**	**128**	**16**
	N of tested isolates	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
0.064			1			1									
<=0.25				1											
0.5															1
<=1		1													
1									1						
2							1							1	
<=4								1							
4					1						1				
<=8										1					
16												1			
64													1		

Table Antimicrobial susceptibility testing of Salmonella Typhimurium in Cattle (bovine animals) - unspecified

Sampling Stage: Farm

Sampling Type: animal sample - organ/tissue

Sampling Context: Surveillance

Sampler: Official sampling

Sampling Strategy: Suspect sampling

Programme Code: OTHER AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Sweden

Sampling Details: N_A

	AM substance	Ampicillin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Florfenicol	Gentamicin	Kanamycin	Nalidixic acid	Streptomycin	Sulfamethoxazole	Tetracycline	Trimethoprim
	ECOFF	**8**	**0.5**	**2**	**16**	**0.064**	**2**	**16**	**2**	**16**	**16**	**16**	**256**	**8**	**2**
	Lowest limit	**1**	**0.016**	**0.25**	**2**	**0.008**	**0.5**	**4**	**0.12**	**8**	**1**	**2**	**8**	**1**	**0.12**
	Highest limit	**128**	**2**	**16**	**64**	**1**	**4**	**32**	**16**	**16**	**128**	**256**	**1024**	**128**	**16**
	N of tested isolates	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**
0.064			1			2									
0.12			1												
<=0.25				1											
0.5				1					1						1
<=1		2												2	
1							1		1						
2							1								
<=4								1							
4					2						2				
<=8										2					
8								1				1			
16												1			
>16															1
128													1		
>1024													1		

Table Antimicrobial susceptibility testing of Salmonella Typhimurium in Cattle (bovine animals) - unspecified

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Surveillance

Sampler: Official sampling

Sampling Strategy: Suspect sampling

Programme Code: OTHER AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Sweden

Sampling Details: A new MLVA type

	AM substance	Ampicillin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Florfenicol	Gentamicin	Kanamycin	Nalidixic acid	Streptomycin	Sulfamethoxazole	Tetracycline	Trimethoprim
	ECOFF	**8**	**0.5**	**2**	**16**	**0.064**	**2**	**16**	**2**	**16**	**16**	**16**	**256**	**8**	**2**
	Lowest limit	**1**	**0.016**	**0.25**	**2**	**0.008**	**0.5**	**4**	**0.12**	**8**	**1**	**2**	**8**	**1**	**0.12**
	Highest limit	**128**	**2**	**16**	**64**	**1**	**4**	**32**	**16**	**16**	**128**	**256**	**1024**	**128**	**16**
	N of tested isolates	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
0.03						1									
0.064			1												
<=0.25				1											
0.25															1
<=1		1												1	
1									1						
2							1								
<=4								1							
4					1						1				
<=8										1					
16												1			
64													1		

Sampling Details: N_A

MIC	AM substance	Ampicillin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Florfenicol	Gentamicin	Kanamycin	Nalidixic acid	Streptomycin	Sulfamethoxazole	Tetracycline	Trimethoprim
	ECOFF	**8**	**0.5**	**2**	**16**	**0.064**	**2**	**16**	**2**	**16**	**16**	**16**	**256**	**8**	**2**
	Lowest limit	**1**	**0.016**	**0.25**	**2**	**0.008**	**0.5**	**4**	**0.12**	**8**	**1**	**2**	**8**	**1**	**0.12**
	Highest limit	**128**	**2**	**16**	**64**	**1**	**4**	**32**	**16**	**16**	**128**	**256**	**1024**	**128**	**16**
	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**	**0**	**0**	**0**	**0**	**0**	**3**	**2**	**0**	**2**
0.03						2									
0.064			2			2									
0.12			1												
<=0.25				4											
0.25			1												1
0.5									2						1
<=1		2												2	
1							1		2						
2							3				1			2	
<=4								3							
4					4						3				
<=8										4					
8								1							
16												1			
>16															2
32												1			
64													2		
128												1			
>128		2													
256												1			
512													1		
>1024													1		

Table Antimicrobial susceptibility testing of Salmonella Typhimurium in Cattle (bovine animals) - unspecified

Sampling Stage: Slaughterhouse

Sampling Type: animal sample - lymph nodes

Sampling Context: Surveillance

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Sweden

Sampling Details: N_A

	AM substance	Ampicillin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Florfenicol	Gentamicin	Kanamycin	Nalidixic acid	Streptomycin	Sulfamethoxazole	Tetracycline	Trimethoprim
	ECOFF	**8**	**0.5**	**2**	**16**	**0.064**	**2**	**16**	**2**	**16**	**16**	**16**	**256**	**8**	**2**
	Lowest limit	**1**	**0.016**	**0.25**	**2**	**0.008**	**0.5**	**4**	**0.12**	**8**	**1**	**2**	**8**	**1**	**0.12**
	Highest limit	**128**	**2**	**16**	**64**	**1**	**4**	**32**	**16**	**16**	**128**	**256**	**1024**	**128**	**16**
	N of tested isolates	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
0.064			1			1									
<=0.25				1											
0.25															1
0.5									1						
<=1		1												1	
1							1								
<=4								1							
4					1						1				
<=8										1					
16												1			
128													1		

Table Antimicrobial susceptibility testing of Salmonella Typhimurium in Pigs - fattening pigs - unspecified

Sampling Stage: Slaughterhouse

Sampling Type: animal sample - lymph nodes

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Sweden

Sampling Details: N_A

	AM substance	Ampicillin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Florfenicol	Gentamicin	Kanamycin	Nalidixic acid	Streptomycin	Sulfamethoxazole	Tetracycline	Trimethoprim
	ECOFF	**8**	**0.5**	**2**	**16**	**0.064**	**2**	**16**	**2**	**16**	**16**	**16**	**256**	**8**	**2**
	Lowest limit	**1**	**0.016**	**0.25**	**2**	**0.008**	**0.5**	**4**	**0.12**	**8**	**1**	**2**	**8**	**1**	**0.12**
	Highest limit	**128**	**2**	**16**	**64**	**1**	**4**	**32**	**16**	**16**	**128**	**256**	**1024**	**128**	**16**
	N of tested isolates	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
0.064			1			2									
0.12			1												
<=0.25				2											
0.5									1						2
<=1		2												2	
1							2		1						
<=4								2							
4					2						2				
<=8										2					
16												2			
64													2		

Table Antimicrobial susceptibility testing of Salmonella Typhimurium in Dogs - pet animals

Sampling Stage: Veterinary clinics

Sampling Type: animal sample - faeces

Sampling Context: Clinical investigations

Sampler: Official sampling

Sampling Strategy: Suspect sampling

Programme Code: OTHER AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Sweden

Sampling Details: N_A

	AM substance	Ampicillin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Florfenicol	Gentamicin	Kanamycin	Nalidixic acid	Streptomycin	Sulfamethoxazole	Tetracycline	Trimethoprim
	ECOFF	**8**	**0.5**	**2**	**16**	**0.064**	**2**	**16**	**2**	**16**	**16**	**16**	**256**	**8**	**2**
	Lowest limit	**1**	**0.016**	**0.25**	**2**	**0.008**	**0.5**	**4**	**0.12**	**8**	**1**	**2**	**8**	**1**	**0.12**
	Highest limit	**128**	**2**	**16**	**64**	**1**	**4**	**32**	**16**	**16**	**128**	**256**	**1024**	**128**	**16**
	N of tested isolates	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**
MIC	**N of resistant isolates**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**2**	**3**	**1**	**1**
0.03						1									
0.064						4									
0.12			5												
<=0.25				3											
0.25			1												5
0.5				3		1			5						
<=1		5												5	
1							6		1						
<=2					1										
<=4								5							
4					5						3				
<=8										6					
8								1			2	2			
16												2			
>16															1
32													1		
64												1	2	1	
>128		1									1				
256												1			
>1024													3		

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

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs

Sampling Context: Control and eradication programmes

Sampler: Official and industry sampling

Sampling Strategy: Census

Programme Code: OTHER AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Sweden

Sampling Details: N_A

	AM substance	Ampicillin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Florfenicol	Gentamicin	Kanamycin	Nalidixic acid	Streptomycin	Sulfamethoxazole	Tetracycline	Trimethoprim
	ECOFF	**8**	**0.5**	**2**	**16**	**0.064**	**2**	**16**	**2**	**16**	**16**	**16**	**256**	**8**	**2**
	Lowest limit	**1**	**0.016**	**0.25**	**2**	**0.008**	**0.5**	**4**	**0.12**	**8**	**1**	**2**	**8**	**1**	**0.12**
	Highest limit	**128**	**2**	**16**	**64**	**1**	**4**	**32**	**16**	**16**	**128**	**256**	**1024**	**128**	**16**
	N of tested isolates	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
0.03						2									
0.064			4			5									
0.12			3												
<=0.25				6											
0.25															5
<=0.5							2								
0.5				1					2						2
<=1		7												6	
1							3		5						
<=2					3										
2							2				2			1	
<=4								7							
4					4						5				
<=8										7					
16												7			
32													3		
64													4		

Table Antimicrobial susceptibility testing of Salmonella Typhimurium in Gallus gallus (fowl) - parent breeding flocks for broiler production line - adult

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs

Sampling Context: Control and eradication programmes

Sampler: Official and industry sampling

Sampling Strategy: Census

Programme Code: OTHER AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Sweden

Sampling Details: N_A

	AM substance	Ampicillin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Florfenicol	Gentamicin	Kanamycin	Nalidixic acid	Streptomycin	Sulfamethoxazole	Tetracycline	Trimethoprim
	ECOFF	**8**	**0.5**	**2**	**16**	**0.064**	**2**	**16**	**2**	**16**	**16**	**16**	**256**	**8**	**2**
	Lowest limit	**1**	**0.016**	**0.25**	**2**	**0.008**	**0.5**	**4**	**0.12**	**8**	**1**	**2**	**8**	**1**	**0.12**
	Highest limit	**128**	**2**	**16**	**64**	**1**	**4**	**32**	**16**	**16**	**128**	**256**	**1024**	**128**	**16**
	N of tested isolates	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
0.064						1									
0.12			1												
<=0.25				1											
0.25															1
0.5									1						
<=1		1												1	
<=2					1										
2							1				1				
<=4								1							
<=8										1					
16												1			
64													1		

Table Antimicrobial susceptibility testing of Salmonella Typhimurium in Geese - meat production flocks - before slaughter

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs

Sampling Context: Control and eradication programmes

Sampler: Official and industry sampling

Sampling Strategy: Census

Programme Code: OTHER AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Sweden

Sampling Details: N_A

	AM substance	Ampicillin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Florfenicol	Gentamicin	Kanamycin	Nalidixic acid	Streptomycin	Sulfamethoxazole	Tetracycline	Trimethoprim
	ECOFF	**8**	**0.5**	**2**	**16**	**0.064**	**2**	**16**	**2**	**16**	**16**	**16**	**256**	**8**	**2**
	Lowest limit	**1**	**0.016**	**0.25**	**2**	**0.008**	**0.5**	**4**	**0.12**	**8**	**1**	**2**	**8**	**1**	**0.12**
	Highest limit	**128**	**2**	**16**	**64**	**1**	**4**	**32**	**16**	**16**	**128**	**256**	**1024**	**128**	**16**
	N of tested isolates	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
0.03						1									
0.12			1												
0.5															1
<=1		1												1	
1				1					1						
2							1								
<=4								1							
4					1						1				
<=8										1					
16												1			
32													1		

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

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs

Sampling Context: Control and eradication programmes

Sampler: Official and industry sampling

Sampling Strategy: Census

Programme Code: OTHER AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Sweden

Sampling Details: N_A

	AM substance	Ampicillin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Florfenicol	Gentamicin	Kanamycin	Nalidixic acid	Streptomycin	Sulfamethoxazole	Tetracycline	Trimethoprim
	ECOFF	**8**	**0.5**	**2**	**16**	**0.064**	**2**	**16**	**2**	**16**	**16**	**16**	**256**	**8**	**2**
	Lowest limit	**1**	**0.016**	**0.25**	**2**	**0.008**	**0.5**	**4**	**0.12**	**8**	**1**	**2**	**8**	**1**	**0.12**
	Highest limit	**128**	**2**	**16**	**64**	**1**	**4**	**32**	**16**	**16**	**128**	**256**	**1024**	**128**	**16**
	N of tested isolates	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
0.03						1									
0.12			1												
<=0.25				1											
0.25															1
0.5									1						
<=1		1												1	
1							1								
<=4								1							
4					1						1				
<=8										1					
16												1			
64													1		

ANTIMICROBIAL RESISTANCE TABLES FOR INDICATOR ESCHERICHIA COLI

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

Sampling Stage: Retail

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: ESBL MON pnl2

Analytical Method: Dilution - sensititre

Country of Origin: Sweden

Sampling Details: N_A

AM substance		Cefepime		Cefotaxim		Cefotaxime + Clavulanic acid		Cefoxitin		Ceftazidim		Ceftazidime + Clavulanic acid		Ertapenem		Imipenem		Meropenem		Temocillin	
	Cefotaxime synergy test	Positive/Present	Negative/Absent	Positive/Present	Negative/Absent	Positive/Present	Negative/Absent	Positive/Present	Negative/Absent	Positive/Present	Negative/Absent	Positive/Present	Negative/Absent	Positive/Present	Negative/Absent	Positive/Present	Negative/Absent	Positive/Present	Negative/Absent	Positive/Present	Negative/Absent
	Ceftazidime synergy test	Positive/Present	Negative/Absent	Positive/Present	Negative/Absent	Positive/Present	Negative/Absent	Positive/Present	Negative/Absent	Positive/Present	Negative/Absent	Positive/Present	Negative/Absent	Positive/Present	Negative/Absent	Positive/Present	Negative/Absent	Positive/Present	Negative/Absent	Positive/Present	Negative/Absent
	ECOFF	0.125	0.125	0.25	0.25	0.25	0.25	8	8	0.5	0.5	0.5	0.5	0.064	0.064	0.5	0.5	0.125	0.125	32	32
	Lowest limit	0.064	0.064	0.25	0.25	0.064	0.064	0.5	0.5	0.25	0.25	0.12	0.12	0.015	0.015	0.12	0.12	0.03	0.03	0.5	0.5
	Highest limit	32	32	64	64	64	64	64	64	128	128	128	128	2	2	16	16	16	16	64	64
	N of tested isolates	109	109	109	109	109	109	109	109	109	109	109	109	109	109	109	109	109	109	109	109
MIC	N of resistant isolates	84	84	109	109	42	42	42	42	104	104	42	42	0	0	0	0	0	0	1	1
<=0.015														66	22						
<=0.03																		66	42		
0.03														1	20						
<=0.064			6			63															
0.064																		1			
<=0.12												58				67	36				
0.12			19			4															
0.25			15									9					6				
0.5			2							5											
1							2			38											
2		4			2		5	2		21			10							4	
4		27			9		28	51		2	4		23							47	14
8		22			28		7	14		1	26		8							14	25
16		7		7	3						11		1							2	2
32		1		36					10		1										
>32		6																			
64				22					31												1
>64				2					1												

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

Sampling Stage: Retail

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: ESBL MON

Analytical Method: Dilution - sensititre

Country of Origin: Sweden

Sampling Details: N_A

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.25**	**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	**109**	**109**	**109**	**109**	**109**	**109**	**109**	**109**	**109**	**109**	**109**	**109**	**109**	**109**
MIC	**N of resistant isolates**	**109**	**0**	**109**	**106**	**2**	**8**	**0**	**7**	**0**	**8**	**69**	**21**	**0**	**2**
<=0.015							92								
<=0.03										108					
0.03							9								
0.064										1					
0.12							1								
<=0.25														109	57
0.25							5								
<=0.5					3				79						
0.5							2								44
<=1								109							
1					41				21						6
<=2			2										88		
2				3	21				2						
<=4											100				
4			61	7	8										
>4				99											
<=8						107						1			
8			46		19						1				
>8					17										
16									4			20			
32									3		1	16	1		
>32															2
64		4										3	18		
>64		105											2		
128						2					7	1			
512												1			
1024												1			
>1024												66			

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

Sampling Stage: Retail

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: ESBL MON pnl2

Analytical Method: Dilution - sensititre

Country of Origin: European Union

Sampling Details: N_A

AM substance		Cefepime		Cefotaxim		Cefotaxime + Clavulanic acid		Cefoxitin		Ceftazidim		Ceftazidime + Clavulanic acid		Ertapenem		Imipenem		Meropenem		Temocillin	
	Cefotaxime synergy test	Positive/Present	Negative/Absent	Positive/Present	Negative/Absent	Positive/Present	Negative/Absent	Positive/Present	Negative/Absent	Positive/Present	Negative/Absent	Positive/Present	Negative/Absent	Positive/Present	Negative/Absent	Positive/Present	Negative/Absent	Positive/Present	Negative/Absent	Positive/Present	Negative/Absent
	Ceftazidime synergy test	Positive/Present	Negative/Absent	Positive/Present	Negative/Absent	Positive/Present	Negative/Absent	Positive/Present	Negative/Absent	Positive/Present	Negative/Absent	Positive/Present	Negative/Absent	Positive/Present	Negative/Absent	Positive/Present	Negative/Absent	Positive/Present	Negative/Absent	Positive/Present	Negative/Absent
	ECOFF	0.125	0.125	0.25	0.25	0.25	0.25	8	8	0.5	0.5	0.5	0.5	0.064	0.064	0.5	0.5	0.125	0.125	32	32
	Lowest limit	0.064	0.064	0.25	0.25	0.064	0.064	0.5	0.5	0.25	0.25	0.12	0.12	0.015	0.015	0.12	0.12	0.03	0.03	0.5	0.5
	Highest limit	32	32	64	64	64	64	64	64	128	128	128	128	2	2	16	16	16	16	64	64
	N of tested isolates	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
MIC	N of resistant isolates	8	8	10	10	4	4	4	4	10	10	4	4	0	0	0	0	0	0	0	0
<=0.015														5	1						
<=0.03																		6	4		
0.03															3						
<=0.064						5															
0.064														1							
<=0.12												5				6	3				
0.12			2			1															
0.25			2														1				
0.5		1										1									
1										2											
2										2											
4		1		1			3	5		1			3							4	1
8		3			4		1	1		1	2		1							2	3
16				1							2										
32				2																	
>32		1																			
64				1					4												
>64				1																	

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

Sampling Stage: Retail

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: ESBL MON

Analytical Method: Dilution - sensititre

Country of Origin: European Union

Sampling Details: N_A

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

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: Sweden

Sampling Details: N_A

	AM substance	Cefepime	Cefotaxim	Cefotaxime + Clavulanic acid	Cefoxitin	Ceftazidim	Ceftazidime + Clavulanic acid	Ertapenem	Imipenem	Meropenem	Temocillin
	Cefotaxime synergy test	**Positive/Present**	**Positive/Present**	**Positive/Present**	**Positive/Present**	**Positive/Present**	**Positive/Present**	**Positive/Present**	**Positive/Present**	**Positive/Present**	**Positive/Present**
	Ceftazidime synergy test	**Positive/Present**	**Positive/Present**	**Positive/Present**	**Positive/Present**	**Positive/Present**	**Positive/Present**	**Positive/Present**	**Positive/Present**	**Positive/Present**	**Positive/Present**
	ECOFF	**0.125**	**0.25**	**0.25**	**8**	**0.5**	**0.5**	**0.064**	**0.5**	**0.125**	**32**
	Lowest limit	**0.064**	**0.25**	**0.064**	**0.5**	**0.25**	**0.12**	**0.015**	**0.12**	**0.03**	**0.5**
	Highest limit	**32**	**64**	**64**	**64**	**128**	**128**	**2**	**16**	**16**	**64**
	N of tested isolates	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**
MIC	**N of resistant isolates**	**3**	**3**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**
<=0.015								3			
<=0.03										3	
<=0.064				2							
<=0.12							2		3		
0.12				1							
0.25							1				
1						2					
2						1					2
4		1			1						
8		2			2						1
32			2								
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: Sweden

Sampling Details: N_A

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.25**	**0.5**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**64**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**175**	**175**	**175**	**175**	**175**	**175**	**175**	**175**	**175**	**175**	**175**	**175**	**175**	**175**
MIC	**N of resistant isolates**	**23**	**0**	**3**	**3**	**0**	**10**	**0**	**1**	**0**	**11**	**23**	**20**	**0**	**13**
<=0.015							147								
<=0.03										175					
0.03							17								
0.064							1								
0.12							5								
<=0.25				172										175	77
0.25							5								
<=0.5					172				132						
0.5															80
<=1		11						175							
1					2				35						4
<=2			2										155		
2		81			1				7						1
<=4											163				
4		59	84												
>4				3											
<=8						174						24			
8		1	87								1				
16			2			1						89			
32											3	33			
>32									1						13
64											4	6	7		
>64		23											13		
128											3				
>128											1				
256												1			
>1024												22			

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

Sampling Stage: Slaughterhouse

Sampling Type: animal sample - caecum

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: ESBL MON pnl2

Analytical Method: Dilution - sensititre

Country of Origin: Sweden

Sampling Details: N_A

AM substance		Cefepime		Cefotaxim		Cefotaxime + Clavulanic acid		Cefoxitin		Ceftazidim		Ceftazidime + Clavulanic acid		Ertapenem		Imipenem		Meropenem		Temocillin	
	Cefotaxime synergy test	Positive/Present	Negative/Absent	Positive/Present	Negative/Absent	Positive/Present	Negative/Absent	Positive/Present	Negative/Absent	Positive/Present	Negative/Absent	Positive/Present	Negative/Absent	Positive/Present	Negative/Absent	Positive/Present	Negative/Absent	Positive/Present	Negative/Absent	Positive/Present	Negative/Absent
	Ceftazidime synergy test	Positive/Present	Negative/Absent	Positive/Present	Negative/Absent	Positive/Present	Negative/Absent	Positive/Present	Negative/Absent	Positive/Present	Negative/Absent	Positive/Present	Negative/Absent	Positive/Present	Negative/Absent	Positive/Present	Negative/Absent	Positive/Present	Negative/Absent	Positive/Present	Negative/Absent
	ECOFF	0.125	0.125	0.25	0.25	0.25	0.25	8	8	0.5	0.5	0.5	0.5	0.064	0.064	0.5	0.5	0.125	0.125	32	32
	Lowest limit	0.064	0.064	0.25	0.25	0.064	0.064	0.5	0.5	0.25	0.25	0.12	0.12	0.015	0.015	0.12	0.12	0.03	0.03	0.5	0.5
	Highest limit	32	32	64	64	64	64	64	64	128	128	128	128	2	2	16	16	16	16	64	64
	N of tested isolates	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130
MIC	N of resistant isolates	110	110	130	130	37	37	39	39	128	128	37	37	0	0	0	0	0	0	0	0
<=0.015														90	25						
<=0.03																		92	36		
0.03														2	12						
<=0.064			3			87															
0.064														1				1	1		
<=0.12												84				89	35				
0.12			17			6															
0.25			15									7				4	1				
0.5			2		1		1			2		2					1				
1							1			61			1								
2		1			1		1	2		28	1		4							11	
4		45			9		32	63		2	6		26							53	15
8		27			25		2	26			24		5							28	19
16		16		16	1			2	1		5		1							1	3
32		3		42					6		1										
>32		1																			
64				29					27												
>64				6					3												

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

Sampling Stage: Slaughterhouse

Sampling Type: animal sample - caecum

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: ESBL MON

Analytical Method: Dilution - sensititre

Country of Origin: Sweden

Sampling Details: N_A

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.25**	**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	**130**	**130**	**130**	**130**	**130**	**130**	**130**	**130**	**130**	**130**	**130**	**130**	**130**	**130**
MIC	**N of resistant isolates**	**130**	**0**	**130**	**128**	**7**	**8**	**0**	**5**	**0**	**8**	**96**	**36**	**0**	**0**
<=0.015							111								
<=0.03										128					
0.03							11								
0.064										2					
<=0.25														126	56
0.25							5								
<=0.5					2				89						
0.5							3							4	62
<=1								130							
1				1	58				33						12
<=2			2										92		
2				2	32				3						
<=4											122				
4			70	9	10				1				2		
>4				118											
<=8						123						3			
8			54		20										
>8					8										
16			4						3			15			
32									1			14	5		
64		2									1	2	26		
>64		128											5		
128						7					5				
>128											2				
1024												1			
>1024												95			

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: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Sweden

Sampling Details: N_A

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.25**	**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	**85**	**85**	**85**	**85**	**85**	**85**	**85**	**85**	**85**	**85**	**85**	**85**	**85**	**85**
MIC	**N of resistant isolates**	**7**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**5**	**14**	**0**	**3**
<=0.015							81								
<=0.03										85					
0.03							3								
<=0.25				85										85	43
0.25							1								
<=0.5					85				61						
0.5															37
<=1		6						85							
1									23						2
<=2			3										71		
2		46							1						
<=4											83				
4		26	49												
<=8						85						11			
8			31								1				
16			2									35			
32												30	1		
>32															3
64												4	7		
>64		7											6		
128											1				
1024												1			
>1024												4			

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: Sweden

Sampling Details: N_A

	AM substance	Cefepime	Cefotaxim	Cefotaxime + Clavulanic acid	Cefoxitin	Ceftazidim	Ceftazidime + Clavulanic acid	Ertapenem	Imipenem	Meropenem	Temocillin
	Cefotaxime synergy test	Positive/Present	Positive/Present	Positive/Present	Positive/Present	Positive/Present	Positive/Present	Positive/Present	Positive/Present	Positive/Present	Positive/Present
	Ceftazidime synergy test	Positive/Present	Positive/Present	Positive/Present	Positive/Present	Positive/Present	Positive/Present	Positive/Present	Positive/Present	Positive/Present	Positive/Present
	ECOFF	0.125	0.25	0.25	8	0.5	0.5	0.064	0.5	0.125	32
	Lowest limit	0.064	0.25	0.064	0.5	0.25	0.12	0.015	0.12	0.03	0.5
	Highest limit	32	64	64	64	128	128	2	16	16	64
	N of tested isolates	1	1	1	1	1	1	1	1	1	1
MIC	N of resistant isolates	1	1	0	0	1	0	0	0	0	0
<=0.015								1			
<=0.03										1	
<=0.064				1							
<=0.12							1		1		
1						1					
4					1						1
16		1									
32			1								

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

Sampling Stage: Slaughterhouse

Sampling Type: animal sample - caecum

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: ESBL MON

Analytical Method: Dilution - sensititre

Country of Origin: Sweden

Sampling Details: N_A

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

OTHER ANTIMICROBIAL RESISTANCE TABLES

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

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

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

Analytical Method: Micromethod dilution (in microtiter plate)

Country Of Origin:Sweden

Sampling Details:N_A

	AM substance	Ampicillin	Bacitracin	Chloramphenicol	Erythromycin (Erythromycin A)	Gentamicin	Kanamycin	Linezolid	Narasin	Streptomycin	Tetracycline	Vancomycin	Virginiamycin (M1+S1)
	ECOFF	**4**	**32**	**32**	**4**	**32**	**1024**	**4**	**2**	**512**	**4**	**4**	**32**
	Lowest limit	**0.25**	**1**	**0.5**	**0.5**	**2**	**16**	**0.5**	**0.12**	**8**	**0.5**	**1**	**0.5**
MIC	**Highest limit**	**32**	**128**	**64**	**64**	**256**	**2048**	**16**	**16**	**1024**	**64**	**128**	**64**
<=0.12									1				
<=0.25		1											
0.25									6				
<=0.5					9			3			1		
0.5		9							9				
<=1												35	
1		30			1			25			7		
2					4			13				6	1
4		1	1	14	7				17				
8			8	23	2	13			8				5
16			24	1		28							32
32			1				7				13		3
64				3			31			4	20		
>64					18								
128			3				3			34			
>128			4										
256										2			
>1024										1			

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

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

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

Analytical Method: Micromethod dilution (in microtiter plate)

Country Of Origin:Sweden

Sampling Details:N_A

	AM substance	Ampicillin	Bacitracin	Chloramphenicol	Erythromycin (Erythromycin A)	Gentamicin	Kanamycin	Linezolid	Narasin	Streptomycin	Tetracycline	Vancomycin	Virginiamycin (M1+S1)
	ECOFF	**4**	**32**	**32**	**4**	**32**	**1024**	**4**	**4**	**128**	**4**	**4**	**4**
	Lowest limit	**0.25**	**1**	**0.5**	**0.5**	**2**	**16**	**0.5**	**0.12**	**8**	**0.5**	**1**	**0.5**
MIC	**Highest limit**	**32**	**128**	**64**	**64**	**256**	**2048**	**16**	**16**	**1024**	**64**	**128**	**64**
<=0.25		10											
<=0.5					6			1			37		17
0.5		16							10				
<=1			10									68	
1		11			29			11			13		12
<=2						1							
2		16	5	2	8			57	5			2	36
4		12	5	40	4	17		1	44				2
8		5	21	28	14	47			11		1		
16			19		2	5							3
32			4				3			6	8		
64			4				30			57	11		
>64					7								
128							28			5			
>128			2										
256							7						
512							2			1			
1024										1			

Table Antimicrobial susceptibility testing of Methicillin resistant Staphylococcus aureus (MRSA) in Cats - pet animals

Sampling Stage: Veterinary clinics

Sampling Type: animal sample

Sampling Context: Clinical investigations

Sampler: Not applicable

Sampling Strategy: Suspect sampling

Programme Code: OTHER AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country Of Origin:Sweden

Sampling Details:N_A

	AM Substance	Cefoxitin	Cephalothin	Chloramphenicol	Ciprofloxacin	Clindamycin	Erythromycin (Erythromycin A)	Fusidic acid	Gentamicin	Kanamycin	Oxacillin	Penicillin	Tetracycline	Trimethoprim
	Performed CC MRSA characterisation	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available
	Performed MLST MRSA characterisation	Not Available	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	4	1	16	1	0.25	1	0.5	2	8	2	0.12	1	2
	Lowest limit	0.12	0.064	0.5	0.064	0.25	0.25	0.064	0.5	0.25	0.12	0.03	0.5	0.5
MIC	Highest limit	16	8	64	4	32	32	8	64	32	16	4	64	32
<=0.064								1						
0.12					1									
<=0.25						2	1							
<=0.5									2				2	1
0.5								1						
1											1			
2			2		1					2				1
4				1										
>4												2		
8				1										
16		1									1			
>16		1												
>32							1							

Table Antimicrobial susceptibility testing of Methicillin resistant Staphylococcus aureus (MRSA) in Dogs - pet animals

Sampling Stage: Veterinary clinics

Sampling Type: animal sample

Sampling Context: Clinical investigations

Sampler: Not applicable

Sampling Strategy: Suspect sampling

Programme Code: OTHER AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country Of Origin:Sweden

Sampling Details:N_A

	AM Substance	Cefoxitin	Cephalothin	Chloramphenicol	Ciprofloxacin	Clindamycin	Erythromycin (Erythromycin A)	Fusidic acid	Gentamicin	Kanamycin	Oxacillin	Penicillin	Tetracycline	Trimethoprim
	Performed CC MRSA characterisation	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available
	Performed MLST MRSA characterisation	Not Available	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	4	1	16	1	0.25	1	0.5	2	8	2	0.12	1	2
	Lowest limit	0.12	0.064	0.5	0.064	0.25	0.25	0.064	0.5	0.25	0.12	0.03	0.5	0.5
MIC	Highest limit	16	8	64	4	32	32	8	64	32	16	4	64	32
<=0.25						1	1							
<=0.5									1					
0.5					1			1						
1			1											
2			1											
4								1		1	1			1
>4					1							2		
8				1									1	
16		2				1			1					
>16											1			
32													1	
>32							1			1				1
64				1										

Table Antimicrobial susceptibility testing of Methicillin resistant Staphylococcus aureus (MRSA) in Solipeds, domestic - horses

Sampling Stage: Veterinary clinics

Sampling Type: animal sample

Sampling Context: Clinical investigations

Sampler: Not applicable

Sampling Strategy: Suspect sampling

Programme Code: OTHER AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country Of Origin:Sweden

Sampling Details:N_A

	AM Substance	Cephalothin	Chloramphenicol	Ciprofloxacin	Clindamycin	Erythromycin (Erythromycin A)	Fusidic acid	Gentamicin	Kanamycin	Oxacillin	Penicillin	Tetracycline	Trimethoprim
	Performed CC MRSA characterisation	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available
	Performed MLST MRSA characterisation	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	1	16	1	0.25	1	0.5	2	8	2	0.12	1	2
	Lowest limit	0.064	0.5	0.064	0.25	0.25	0.064	0.5	0.25	0.12	0.03	0.5	0.5
MIC	Highest limit	8	64	4	32	32	8	64	32	16	4	64	32
0.12							1						
<=0.25					1	1							
0.25				1									
4		1											
>4											1		
8			1										
>16										1			
32												1	
>32									1				1
64								1					

Table Antimicrobial susceptibility testing of Methicillin resistant Staphylococcus aureus (MRSA) in Goats

Sampling Stage: Zoo

Sampling Type: animal sample

Sampling Context: Clinical investigations

Sampler: Not applicable

Sampling Strategy: Suspect sampling

Programme Code: OTHER AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country Of Origin:Sweden

Sampling Details:N_A

	AM Substance	Cefoxitin	Cephalothin	Chloramphenicol	Ciprofloxacin	Clindamycin	Erythromycin (Erythromycin A)	Fusidic acid	Gentamicin	Kanamycin	Oxacillin	Penicillin	Tetracycline	Trimethoprim
	Performed CC MRSA characterisation	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available
	Performed MLST MRSA characterisation	Not Available	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	4	1	16	1	0.25	1	0.5	2	8	2	0.12	1	2
	Lowest limit	0.12	0.064	0.5	0.064	0.25	0.25	0.064	0.5	0.25	0.12	0.03	0.5	0.5
MIC	Highest limit	16	8	64	4	32	32	8	64	32	16	4	64	32
0.12								1						
<=0.25						1	1							
<=0.5									1				1	1
1			1		1									
2											2	1		
4										1	1			
8				1										
16		2												
>16		1												

Table Antimicrobial susceptibility testing of Methicillin resistant Staphylococcus aureus (MRSA) in Hedgehogs - wild

Sampling Stage: Natural habitat

Sampling Type: animal sample

Sampling Context: Clinical investigations

Sampler: Not applicable

Sampling Strategy: Suspect sampling

Programme Code: OTHER AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country Of Origin:Sweden

Sampling Details:N_A

	AM Substance	Cefoxitin	Cephalothin	Chloramphenicol	Ciprofloxacin	Clindamycin	Erythromycin (Erythromycin A)	Fusidic acid	Gentamicin	Kanamycin	Oxacillin	Penicillin	Tetracycline	Trimethoprim
	Performed CC MRSA characterisation	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available
	Performed MLST MRSA characterisation	Not Available	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	4	1	16	1	0.25	1	0.5	2	8	2	0.12	1	2
	Lowest limit	0.12	0.064	0.5	0.064	0.25	0.25	0.064	0.5	0.25	0.12	0.03	0.5	0.5
MIC	Highest limit	16	8	64	4	32	32	8	64	32	16	4	64	32
0.12								1						
<=0.25						1	1							
0.25					1									
<=0.5									1				1	
1														1
2			1							1		1		
8											1			
16				1										
>16		1												

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

Programme Code	Matrix Detailed	Zoonotic Agent Detailed	Sampling Strategy	Sampling Stage	Sampling Details	Sampling Context	Sampler	Sample Type	Sampling Unit Type	Sample Origin	Comment	Total Units Tested	Total Units Positive
CARBA MON	Gallus gallus (fowl) - broilers	Escherichia coli, non-pathogenic, unspecified	Objective sampling	Slaughterhouse	N_A	Monitoring	Official sampling	animal sample - caecum	herd/flock	Sweden	N_A	301	0
	Meat from broilers (Gallus gallus) - fresh	Escherichia coli, non-pathogenic, unspecified	Objective sampling	Retail	N_A	Monitoring	Official sampling	food sample - meat	single (food/feed)	European Union	N_A	26	0
										Sweden	N_A	243	0
	Turkeys - fattening flocks	Escherichia coli, non-pathogenic, unspecified	Objective sampling	Slaughterhouse	N_A	Monitoring	Official sampling	animal sample - caecum	herd/flock	Sweden	N_A	86	0

European Food Safety Authority

Latest Transmission set

Table Name	Last submitted dataset transmission date
Antimicrobial Resistance	12-Oct-2017
Animal Population	07-Jul-2017
Disease Status	19-May-2017
Food Borne Outbreaks	05-Jul-2017
Prevalence	07-Jul-2017
Text Forms	06-Jul-2017